Usenet Newsgroup Archive: rec.radio.amateur.antenna

2003-09 - 2003-12

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Date span: 2003-09-01 through 2003-12-31

Source text: rec.radio.amateur.antenna.txt

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Messages included in this PDF: 6,606

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Comet VA30 (base loaded tri-band dipole 40/15/10)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 00:59:59 UTC
From: Tom Coates <tecoates@comcast.net>
Message-ID: <y0GdncZ_-tCQB8-iXTWJjg@comcast.com>
Source record: 109117

The maker might respond to an e-mail. They have a website at
http://www.comet-ant.co.jp

Tom, N3IJ

"PA3HHO" <billyrocksagain@hotmail.com> wrote in message
news:bitnon$783$1@reader1.tiscali.nl...
> Hi OM's
>
> Last year during a Dutch Ham fair I bought myself a Comet VA30. This is a
> shortened base loaded multiband dipole for 7/21/28 MHz. The manual that
was
> included was Japanese. I was able to figure out the correct dimensions
> (depending on how you setup the antenna e.g. as a horizontal dipole or (3
> x) vertical with one (3 x) radial per band.
>
> The instructions about a capacitor that's supposed to be in parallel with
> the feedpoint is unreadable. I know that (heavily) shortened dipoles need
> some kind of adaption to get a VSWR of 1:1 @ 50 Ohm. Two caps (small
ceramic
> disc type, probably in 100's of pF range) are included but I'm not sure
> which one to use. I've used one, the other, both and none, but VSWR is
> terrible on all three bands.
>
> I know I can't expect micacles from a 2 x 9 ft dipole on 40 meters, but I
> should do OK on 15 and 10 I guess. Because of it's size it's ideal for on
> holidays but last one was no success at all. Anyone has any experience
with
> this antenna and/or maybe has an English (German, French or Dutch OK too)
> manual for the Comet VA30?!
>
> Thanks!
>
> Rgrds, Pleun (PA3HHO)
>
>

2. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 01:37:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl58mncj1fc222@corp.supernews.com>
Source record: 109118

Ok, let's look at a one-port analysis at the load. In your previous posting you said that the reflection coefficient (which you equate to s11) isn't defined as the ratio of forward to reflected voltage (which you imply is a/b), except for a2 = 0. But a2 doesn't exist in a one port analysis. So, for a one port analysis at the load, which of the three assumptions I posted isn't true?

The results you get shouldn't be different when you do an analysis with a different method. If they are, then the analysis methods aren't equivalent.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I tried really hard to say clearly that I'm speaking of transmission
>> lines and not one- or two-port analysis. How could I have phrased that
>> in a way it would be understood?
>
>
> You can speak of anything you want. But a transmission line analysis
> including a tuner and reflected waves *IS* a two-port analysis at the
> tuner. It *IS* a one-port analysis at the load. There's just no getting
> around it. Your transmission line analysis resembles a Z-parameter
> analysis of one-port and two-port systems.

3. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 01:46:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <biu8csfog1@hercules.btinternet.com>
Source record: 109119

```
"Tarmo Tammaru" wrote
> "Reg Edwards" wrote
>
> > What's the problem?
> >
> > You have just designed the PA.
> >
> > You are familiar with its very simple internal
> > circuitry.
> >
> > You have its component values, including the active
> > ones.
> >
> > Hasn't it yet occurred to you engineering Ph.D's
all
> > you have to do is calculate it? [Source
resistance].
>
> Reg,
>
> I am *not* a PhD, but, I can tell you what the
problem is. You don't know
> what the transistor's Norton equivalent collector
(drain) resistance is at
> DC, let alone RF. It is generally not on data sheets.
They will often
> specify an "output impedance". This is a convenience
for people who *think*
> they are doing conjugate matching. The real component
of this has absolutely
> nothing to do with a particular device, outside of
second order effects
> caused by series lead inductances.
>
> Check out Motorola application notes AN282A, 721, and
1033. The following is
> a quote from AN1033:
>
> "The output impedance of a microwave power transistor
is usually defined as
> the conjugate of the load impedance required to
achieve the desired
> performance. A typical output equivalent circuit is
shown in Fig1. { Shows
```

> current source in parallel with Cout and resistor
labeled <transformed load
> impedance>. From these two nodes there are inductor
Lc and Lcom going to the
> output terminals}. The capacitor Cout is nearly
equal to the collector -
> base capacitance Cob specified for the selected
transistor. Lc is the
> inductance of the bond wire used to bridge from the
collector metallization
> area to the package output lead, and Lcom represents
the inductive effects
> of the common element bond wire"
>
> "For correct operation of the transistor, the
ultimate load impedance must
> be transformed to a real impedance across the current
generator. This real
> impedance is determined by
>
> RL = (Vcc - VCEsat)^2/(2Pout)
>
> The load impedance presented to the package terminals
will contain the real
> impedance at the current generator, transformed to a
lower value by the low
> pass section formed by Cout and the parasitic
inductances Lc and Lcom.
> Usually the reactive part of the load impedance is
made inductive to tune
> out the residual capacitance of the device."
>
> One of the other ap notes mentioned collector
resistance to the extent that
> it is "high". This kind of analysis is not limited
to transistors. For
> kicks, I calculated the load for an 813 tube, and got
the same value as a
> book I was reading, which used a roundabout method.
The other ap note also
> made a point of the fact that if you were actually
conjugate matched, the
> efficiency could never be more than 50%.
==========

Tam,

The only problem is that caused by entirely unnecessary
complications introduced by people being too clever.

First design a single-ended, class-A, audio amplifier like a 6V6 beam-tetrode tube plus a transformer to drive an 8-ohm speaker.

Then calculate the source resistance seen from the speaker looking back into the amplifier.

To save time searching for manufacturers data, assume:

DC plate supply is 250 volts.
Peak signal at plate 200 volts.
Internal plate resistance, from mnfr's curves, is 100 K-ohms.
Audio power output = 5watts into 8-ohms load.
Peak volts across load = 8.944 volts peak.
Transformer turns ratio = 22.36

Then ask yourself "Is the source resistance of the amplifier in the same ball-park as the 8-ohm speaker ?"

Is there anything like a conjugate match ?

Which is what it's all about.

For Class-B and Class-C conditions, just multiply internal plate resistance by a constant which depends on plate current operating angle. Curvature of tube characteristics can be taken into account for a higher order of accuracy. And all this was sorted out in the early 1920's.

Modern Western radio engineers' education seems to have been sadly neglected. The next generation's primary education is taking place in the rat-ridden sewers of Rio and in the medicine-less, water-less and electricity-less ruins of Baghdad.

Cecil, in the meantime I'm looking forward to the day when Texas vintages appear on the shelves of my local supermarket. ;o)

Reg.

4. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:01:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl5a505mjigg3a@corp.supernews.com>
Source record: 109120

The problem here is that the answers being obtained by the different methods aren't the same. I'll patiently wait for someone to post an analysis of the same example case I did, getting the same forward and reverse voltages and currents, and the same voltages and currents at the ends of the line, by another method. I'm not at all saying it can't be done -- I'd just like to see how it is.

I maintain, and so far haven't seen evidence to the contrary, that if you define forward and reflected voltages and currents the same as they traditionally are defined on a transmission line, you inevitably come to the conventional formula for the reflection coefficient. Methods arriving at a different formula have done so by using an alternate set of forward and reflected voltages and currents.

Because superposition applies, we can decompose the actual voltage and current on a transmission line into an infinite number of pairs, or triplets, or quadruplets. . . of voltages and currents traveling in the two directions, and still get the same end result for the total voltage and current. However, these alternative sets of forward and reverese voltages and currents don't have, to me, the nice intuitive feel of the ones traditionally used. The traditional set of forward and reverse voltages and currents can easily be derived by beginning with the first transient, and allowing each successive reflection to superimpose on the previous ones. It's not obvious to me that this can be done with an alternative set, but I'd be very interested in seeing it done, if it's possible.

Using an alternate set of forward and reflected voltages and currents that still sum to the correct value would have the added benefit of providing great entertainment as people try to make their assumed individual average powers add up to the total power. Of course, it's going to be entertaining if not enlightening to see this done even with the conventional set of traveling voltages and currents for a line with complex Z0, if the proponents of this art can be goaded into attempting it.

Roy Lewallen, W7EL

Reg Edwards wrote:
> "Roy Lewallen" wrote
>
>>I tried really hard to say clearly that I'm speaking
>
> of transmission
>
>>lines and not one- or two-port analysis.
>

>
> ========================
>
> There's no difference between the two. If you produce
> the symetrical S-matrix for a length of transmission
> line, its 4 parameters contain complex hyperbolic
> functions like (Ro+jXo)*Cosh(A+jB) . . . . . where A
> is nepers and B is radians.
>
> Whichever way you go, matrix-algebra or Heaviside, you
> perform exactly the same set of calculations and, not
> surpisingly, you end up with the same answers -
> provided Zo in one place only is not followed with an
> askerisk just to obtain another answer which is thought
> to be more preferable.
> ---
> Reg, G4FGQ
>
>

5. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:06:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl5ad0e8mj44d0@corp.supernews.com>
Source record: 109121

Texas has a long, proud history of producing fine fermented beverages. Perhaps you can find a sample in a specialty shop. Ask for Pearl or Lone Star beer.

Roy Lewallen, W7EL

Reg Edwards wrote:
> . . .
> Cecil, in the meantime I'm looking forward to the day
> when Texas vintages appear on the shelves of my local
> supermarket. ;o)

6. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:09:27 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <biu9on$h7o$1@hercules.btinternet.com>
Source record: 109122

> I challenge anyone to find a reflectometer
> calculator that shows rho > 1.
>

First of all, please define precisely what is a
'reflectometer calculator' ?

Is it hardware or is it software?

7. Re: EZ Way tower sheared hinge pin conclusion(?)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:17:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f52ad42_2@news1.prserv.net>
Source record: 109123

"Dan Lanciani" <ddl@danlan.*com> wrote in message
news:1156198@news1.IPSWITCHS.CMM...
>
<snip>
> Unfortunately, the pin appears to be a non-standard size between 5/8" and
> 3/4" (maybe a little more than 11/16").

18mm

A machine shop was able to turn down
> some 3/4" stainless rod, but it may be a bit too small and it isn't clear
what
> stress it can take.

You need 4130 steel, probably, and a new tube of the same material. That
will make it easy to match sizes. Go bigger if necessary. Then, look for a
welder certified to weld 4130 to pipeline code or boiler code.
--
Crazy George
Remove NO and SPAM from return address

8. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:51:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f52b5c8_2@corp.newsgroups.com>
Source record: 109124

Roy Lewallen wrote:
> Ok, let's look at a one-port analysis at the load. In your previous
> posting you said that the reflection coefficient (which you equate to
> s11) isn't defined as the ratio of forward to reflected voltage (which
> you imply is a/b), except for a2 = 0. But a2 doesn't exist in a one port
> analysis. So, for a one port analysis at the load, which of the three
> assumptions I posted isn't true?

Here's what you said. Nowhere did you say - "assume a one port analysis
at the load". So I assumed you were making a generalized statement. I'm
sorry if I misunderstood. I didn't read your earlier posting.

> A few days ago I posted a derviation of the (non-conjugate) formula for voltage
reflection coefficient on a transmission line. It required only a few assumptions:
>
> 1. That the voltage reflection coefficient is the ratio of reverse to forward voltage.
> 2. That the voltage at any point along the line, including the ends, is the sum of the
forward and reverse voltages, and that the current is the sum of forward and reverse
currents.
> 3. That the ratio of forward voltage to forward current, and the ratio of reverse voltage
to reverse current, equal the characteristic impedance of the transmission line.

For 2., I would add "That the *total net* voltage at any point ..."

> The results you get shouldn't be different when you do an analysis with
> a different method. If they are, then the analysis methods aren't
> equivalent.

That's right, the results shouldn't be different even if the reflection
coefficient has a different definition depending on the method chosen.
For instance, the 2-port result at a Z0-match is the same for s-parameters
as for z-parameters.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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9. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:55:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f52b69d_2@corp.newsgroups.com>
Source record: 109125

Reg Edwards wrote:
> Cecil, in the meantime I'm looking forward to the day
> when Texas vintages appear on the shelves of my local
> supermarket. ;o)

Want me to have the Texas winery send you a bottle, Reg?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

10. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 02:57:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f52b71e_2@corp.newsgroups.com>
Source record: 109126

Reg Edwards wrote:

>>I challenge anyone to find a reflectometer
>>calculator that shows rho > 1.
>>
> First of all, please define precisely what is a
> 'reflectometer calculator' ?
>
> Is it hardware or is it software?

Heh, heh, if it's software, Reg will have one by tomorrow. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

11. Re: Calculus not needed (was: Reflection Coefficient Smoke Clears a Bit)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 03:31:00 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <U3z4b.14247$Om1.14@newsread2.news.atl.earthlink.net>
Source record: 109127

Roy:

[snip]
> Do the "vibrations" of electromagnetic waves you referred to in your
> previous post have another name?
>
> Roy Lewallen, W7EL
[snip]

Oscillations perhpaps?

I don't really understand your question... do you object to the term "vibrations"? What would you prefer, oscillations, or...

It is well known by Physicists that lectromagnetic waves [at least in free space and isotropic media] are generally consist of only transverse vibrations,. this type of vibration is inherent in the formulation and solutions to the Maxwell-Heaviside equations.

For examples of longitudinal or compressive vibratons for instance in a taught wire like a guitar string, transverse vibrations or oscillations are side to side, but longitudinal or compressional vibrations would be the very tiny vibrations in the length of the guitar string. In systems where longitudinal vibrations are supported, generally the velocity of propagation of longitudinal vibrations will not be the same as that of transverse vibrations.

For a detailed explantation of compressional-dilutive or longitudinal waves in a variety of physical systems, cfr:

William C. Elmore, and Mark A. Heald, "Physics of Waves", McGraw-Hill, New York, 1969.

--
Peter K1PO
Indialantic By-the-Sea, FL.

12. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 03:44:11 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <fgz4b.14319$Om1.9085@newsread2.news.atl.earthlink.net>
Source record: 109128

Reg:

[snip]
> > Amen Brother!
> >
> > --
> > Peter K1PO
> > Indialatic By-the-Sea, FL.
> >
> ==========
>
> Amen ?
>
> Peter, does "Amen" imply worship of Terman and the ARRL
> Handbook has now been heretically switched to a mere
> box of electronics ? Heaven help us!
> ----
> Reg, G4FGQ
[snip]

Not if you work it all out from first principles and write the computer programs yourself!

:-)

Reg, I seldom use "store bought" or "downloaded" computer programs where I can know neither
the underlying Physics nor the numerical methods in use...

But when I do use "store bought" or "downloaded" computer programs, like President Regan, I "trust but verify"!

Like you,I write most of my design programs myself, and I have an extensive lot of such... some of which have been sold commercially by my former employees. Unlike you, I however use trusty proven Fortran, not that modern computer scientists abortion Pascal. :-)

Fortran is proven technology not obsolete junk.... and in the newer releases, Fortran 90/95 has only the "new" stuff that you really need, and not a lot of "fashionable" computer science features.

--
Peter K1PO
Indialantic By-the-Sea, FL.

13. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 03:52:07 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <Hnz4b.14367$Om1.9289@newsread2.news.atl.earthlink.net>
Source record: 109129

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl4mngtl4auh15@corp.supernews.com...
> I tried really hard to say clearly that I'm speaking of transmission
> lines and not one- or two-port analysis. How could I have phrased that
> in a way it would be understood?
[snip]

!!!

Your phrasing is clear, but it is you that does not understand.

Since when has a transmission line NOT been a two port network?

A transmission line has two ports, period, end of story!

Why are you being so picayune about this issue? Something else must be
bothering
you here... I just can't figure out where you are coming from.

What is your purpose in differentiating between networks and transmission
lines?

As far as I understand an electrical network may consist of nothing more
than a simple transmission line, if so, what's your point?

--
Peter K1PO
Indialantic By-the-Sea, FL.

14. Re: QST & Antenna Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 04:40:29 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <3F52CDBD.EFDA4750@agilent.com>
Source record: 109130

W1RFI wrote:
>
> Very few antenna manufacturers have provided the required models of their
> antennas.
>
> 73,
> Ed Hare, W1RFI

This may be an ironic inversion of the condition we had years ago, where antenna manufacturers claimed all kinds of gain numbers for their products because they knew they were essentially unverifiable. Now, with the new policy in place and a better means of verifying antenna gains through modeling software, it is almost as if no one-- or, rather, very few-- want to step forward and put their claimed antenna gains on the line. Interesting.

It looks like ARRL has done its job well, at least to weed out the ridiculous numbers from the rest.

Al W6LX

15. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 06:31:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jfo5lvov80qmo67bk1efq0msthhgq3i92u@4ax.com>
Source record: 109131

On Sun, 31 Aug 2003 19:42:42 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:
>
>Sorry, I don't have an engineering PhD... but if *you* think it's so
>simple, then lay your money down: show us.

Hi Ian,

This will no doubt provoke another chorus of "neighs" and is hardly a novel introduction to this forum.

Motorola publishes the equivalent series (or parallel) resistance for the MRF-xxx (pick your own that corresponds to the actual device used for the finals in your own transmitter). Device is probably specified around 2 Ohms over a significant frequency range. This device is in turn driving a long established binocular core transformer design with a 1:5 winding ratio. Again, through simple inspection of your own rig you can confirm or deny this particular evidence directly. This binocular core transformer, in turn, drives a low pass filter with a characteristic Z (this would be hard to escape as an unknown, but many here hide behind this appeal). It would surprise me if your rig wandered far from technology that has been commercially hammered down to this least common denominator for 20-30 years now.

The math is trivial from this point, and within an order of two, no one here is going to find much difference to offer and in fact no one has ever argued these specifics of conventional designs in conventional rigs, but instead wandered into trivial details of the "unknowable" due to modulation. Modulation may well cause a deviation, around a mean they refuse to acknowledge when modulating was their own mischief injected to create the "unknowable" defense.

In short, this is more smoke that escapes discussion of the simpler question of how much loss in the line with known conditions. Stick with waiting arrival of Chipman.

Hi George. I have observed no objection from you about my reading of Chipman to these matters. A simple flick of the key should send me teacup over teakettle, right? Or would confirmation of my reading be embarrassing? You have a copy in hand, I have offered page and paragraph to observe. Do you have an observation? Do you only respond to satire?

The quality of "peer review" within this group seems to be reserved for easy targets and simpletons. And all in the name of educating lurkers. By now they know the quality of tutelage being served.

73's
Richard Clark, KB7QHC

16. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 07:53:03 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <biutsv$9iu$1@208.206.142.68>
Source record: 109132
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Tim wrote:

> "Airy R Bean" <SPAM@trap> wrote in message
> news:3f0a7c6a$1_3@mk-nntp-1.news.uk.worldonline.com...
> > Oops - must have been a lazy acceptance of the spelling chequer's
> > suggestion...
> > The original post definitely referred to control of your
> > transceiver.
> >
> > Airy R Bean <SPAM@trap> wrote in message news:...
> > > The original post definitely climaxed to control your
> > > transceiver.
> > > Hank Oredson <horedson@att.net> wrote in message
> > > news:6EjOa.43125$0v4.2962203@bgtnsc04-news.ops.worldnet.att.net...
> > > > > If the DX is going to be identified and
> > > > > tracked for you, with your rig being tuned for you, as was implied,
> > > > Seems like you have no clue what you are talking about.
> >
> >
> >
> as a detested 'CBER' who has been looking at joining the HAM ranks now for
> quite a few years but never had the cash I must say I am tempted to say on
> the Muppet band where at least everyone behaves with some sense of
> understanding of live & let live if this conversation is a showing of the
> true HAM colours then I think perhaps the roles a reversing. This has
> certainly made me think three or four times weather to bother taking the
> exams and taking up a HAM callsign.

As a former VE who has tested many "CBers" into ham radio I would only observe that if you want in, you'll get in.
As a 14 year old in the mid-1950's I sure didn't "have the cash" but I got in without it, and it didn't take "years"..

Dick

17. Re: Attic antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 08:16:53 UTC
From: "Mike M." <notme@invalid.email.net>
Message-ID: <vcu5lv8a6v80s33q048urv2eh0ckndv7a9@4ax.com>
Source record: 109134

On Sat, 30 Aug 2003 20:03:40 -0400, "Bob" <bob@agawamnet.com> wrotF:

>The stock indoor seems fine for local VHF but not too good on the 800 mhz
>trunked system. How does the dicone work on the 800 mhz band?
>
One thing to be aware of for the 800 MHz band. Transmission line
losses can defeat the advantage of a better antenna in a better
location. Use low loss coax and keep the length as short as possible.

I'd be inclined toward some type of 800 MHz collinear gain antenna not
too far from the receiver. You might be able to find gain cell phone
mobile antennas that could be adapted at a good price. I picked up a
couple trunk lid mount cell phone antennas at a dollar store for $2
each. I wish I would have bought more, but I didn't realize they were
NMO mounts until much later.

18. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 08:18:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl6079m1i1lod7@corp.supernews.com>
Source record: 109133

I'm sorry I'm having such a hard time communicating, and maybe the trouble is that I've been misunderstanding what has been said. Here's how it looks to me.

Someone, I don't even recall who now, noticed that the formula used for calculating transmission line reflection coefficient allows a magnitude greater than one when Z0 is complex. From there, the claim was made that a reflection coefficient greater than one is impossible for a passive network, since (they said) it implies the creation of energy. A couple of friendlier equations for reflection coeffficient were then produced which prevent this uncomfortable state of affairs from happening.

So what's bothering me is that I'm completely unable to start with what I believe to be true about the relationships between voltages, currents, and characteristic impedance of a transmission line (itemized as three assumptions in a recent posting), and arrive at anything but the classical equation which is universally used for transmission line analysis. I've asked where my dervivation is in error, and have gotten in response only a number of different equations involving S parameters, with the posters claiming that they're the same thing as the transmission line analysis. The same thing, but giving different results. I simply can't hold those two contradictory notions in my head at the same time.

I also have yet to see it demonstrated that a reflection coefficient magnitude greater than one results in any violation of the law of conservation of energy.

I've posted both a detailed derivation of the formula for reflection coefficient and a numerical example of a terminated transmission line with complex Z0. So far, no one has pointed out an error in either one, yet a number of people continue to claim that the results are wrong, i.e., that a reflection coefficient (meaning the ratio of reflected to forward voltage) of greater than one isn't possible, and to produce various alternate equations with derivation involving either lumped elements or "semi-infinite" transmission lines -- or no derivation at all. The alternate dervivations, it seems, can't for some reason withstand the condition that a simple, finite length transmission line be involved. Rather than presenting a simple analysis of a system with a transmission line (as I did), all I've seen in response is lumped element or "semi-infinite" transmission line analyses with indignant protestations if I question the possibility that the presented models don't accurately represent a finite transmission line.

I really think that by now, anyone who is able to benefit from the discussion has done so, and those who remain will continue to hold their

views no matter what. So I won't further waste the time of either group
by continuing to question the issue. I hope that the derivations I've
posted are helpful to those people who are interested in seeing where
the common formulas and equations come from.

Roy Lewallen, W7EL

Peter O. Brackett wrote:
> Roy:
>
> [snip]
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vl4mngtl4auh15@corp.supernews.com...
>
>>I tried really hard to say clearly that I'm speaking of transmission
>>lines and not one- or two-port analysis. How could I have phrased that
>>in a way it would be understood?
>
> [snip]
>
> !!!
>
> Your phrasing is clear, but it is you that does not understand.
>
> Since when has a transmission line NOT been a two port network?
>
> A transmission line has two ports, period, end of story!
>
> Why are you being so picayune about this issue? Something else must be
> bothering
> you here... I just can't figure out where you are coming from.
>
> What is your purpose in differentiating between networks and transmission
> lines?
>
> As far as I understand an electrical network may consist of nothing more
> than a simple transmission line, if so, what's your point?
>
> --
> Peter K1PO
> Indialantic By-the-Sea, FL.
>
>

19. Re: Calculus not needed (was: Reflection Coefficient Smoke Clears a Bit)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 08:33:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl612tb0b138b6@corp.supernews.com>
Source record: 109135

No, I'm just trying to figure out how an EM wave can have E and/or H fields whose directions aren't transverse to the direction of propagation (as in a lossy medium or in a hollow waveguide) can have another property of "vibrations" or "oscillations" that *are* always transverse. The properties of E and H fields that I'm familiar with include orientation of the field in space, and change in amplitude with time (which is what I'd normally call oscillations). And, of course, the orientation can change in time also, as in elliptically or circularly polarized waves. The property of "vibrations" or "oscillations" that have a direction different from the direction of the field is new to me.

I notice that you're now qualifying your statement to free space and isotropic media. Does this perhaps leave open the possibility that waves in a lossy medium, or bounded within a hollow waveguide, could have "vibrations" that *aren't* transverse to the direction of propagation? My original question was in response to your statement that EM waves were always transverse, regardless of the medium.

Do you perhaps have Krus' _Electromagnetics_, or electromagnetics texts by Holt, Johnk, Skilling, Magid, Magnusson, or Jordan & Balmain? If so, perhaps you could direct me to a section which addresses this.

Roy Lewallen, W7EL

Peter O. Brackett wrote:
> Roy:
>
> [snip]
>
>>Do the "vibrations" of electromagnetic waves you referred to in your
>>previous post have another name?
>>
>>Roy Lewallen, W7EL
>
> [snip]
>
> Oscillations perhpaps?
>
> I don't really understand your question... do you object to the term
> "vibrations"? What would you prefer, oscillations, or...
>
> It is well known by Physicists that lectromagnetic waves [at least in free
> space and isotropic media] are generally consist of only transverse
> vibrations,. this type of vibration is inherent in the formulation and
> solutions to the Maxwell-Heaviside equations.

>
> For examples of longitudinal or compressive vibratons for instance in a
> taught wire like a guitar string, transverse vibrations or oscillations are
> side to side, but longitudinal or compressional vibrations would be the very
> tiny vibrations in the length of the guitar string. In systems where
> longitudinal vibrations are supported, generally the velocity of propagation
> of longitudinal vibrations will not be the same as that of transverse
> vibrations.
>
> For a detailed explantation of compressional-dilutive or longitudinal waves
> in a variety of physical systems, cfr:
>
> William C. Elmore, and Mark A. Heald, "Physics of Waves", McGraw-Hill, New
> York, 1969.
>
> --
> Peter K1PO
> Indialantic By-the-Sea, FL.
>
>
>

20. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 08:39:56 UTC
From: Young Nick <hothere@pit.com>
Message-ID: <4fl4b.2718$4L1.478370@wards.force9.net>
Source record: 109144
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

<huff snipped>

>This has certainly made me think three or four times weather to bother taking the
> exams and taking up a HAM callsign.

I hope it rains on you, you illiterate CB pratt.

Young Nick

21. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 09:19:39 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <tILxNxJr8wU$EAR2@ifwtech.co.uk>
Source record: 109138

Richard Clark wrote:
>On Sun, 31 Aug 2003 19:42:42 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.co.uk> wrote:

>
>This will no doubt provoke another chorus of "neighs" and is hardly a
>novel introduction to this forum.
>
You are so right... :-)

"Neigh" - but if you want to spell it that way, you are entirely
responsible for any further horse metaphors that occur...

>Motorola publishes the equivalent series (or parallel) resistance for
>the MRF-xxx (pick your own that corresponds to the actual device used
>for the finals in your own transmitter).

Sorry, that horse won't run. RF power transistor data sheets specify the
load impedance that needs to be presented *to* the transistor from the
outside world, in order for the device to function as specified.
Sometimes they state the conjugate of the required load impedance, and
sometimes they don't say which.

That is not the output impedance *of* the transistor itself (except in
certain special cases). However, the data sheets sometimes do
ambiguously call it the "output impedance". It's a confusing mess.

However, I'd hoped by now that we were all agreed about this particular
dead horse. It's buried somewhere in the Google archives of this
newsgroup.

The rest of the argument about transforming the impedance from the
device collector/drain anode to the output socket is correct, but it's
being applied to the wrong impedance. The answer you'll find at the
output socket will always be 50 ohms, because all you've done is lead
your horse around in a very tight circle.

I'd better stop now, before some seriously tasteless horse metaphors
come to mind.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

22. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 09:47:20 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309010147.4aeb4f03@posting.google.com>
Source record: 109136

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<ltGcnV0RDp1jk8-iU-KYgg@comcast.com>...
> Let's start all over on this.
>
> 1. You have a transmission line of Zo= 1 - j1
> 2. Zo* = 1 + j1
> 3 Short the end of the line
> 4. By the classic formula RC= (0 - (1 - j1))/(0 + (1 - j1))
> = -(1 - j1)/(1 - j1) = -1
> 5. By Besser's formula RC = (0 - (1 + j1))/(0 + (1 - j1))
> which is (-1 -j1)/(1 - j1)
> 6. The above is SQRT(2)/_-135 / SQRT(2) /_-45 = 1/_-90
> 7. Note that RC has angle -90, not 180.
> 8. Reflected voltage is now (V+) x (1/_-90). This is in quadrature with V+,
> not in opposition with.
> 9. This won't meet the boundary condition that (V+) + (V-) = 0
> 10. You can use a different phase angle for Zo if you like, but the only Zo
> phase angle that will give you RC = 1/_180 is 0.
>
> Tam/WB2TT

You are correct. But please note that the rho is 1 in both cases.

And i believe that the conjugate equation is correct, that the
reflected voltage will have a phase shift of twice the phase of the
Zo, which in this case would be 45 degrees.

And you bring up an excellent point Tam, that the only Zo that
will give you a RC=-1 (or 1 /_ 180), with an ideal short as a Zload,
would be a purely REAL Zo, with no reactance.

So again, the "normal" equation fails in this respect. I'll state
once again that the normal equation assumes a purely real Zo.

Besser and Kurokawa and the ARRL are all correct.

Slick

23. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 09:53:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <8IS1d3OPcxU$EAD0@ifwtech.co.uk>
Source record: 109139

Reg Edwards wrote:
>
>The only problem is that caused by entirely unnecessary complications
>introduced by people being too clever.
>
>First design a single-ended, class-A, audio amplifier like a 6V6
>beam-tetrode tube plus a transformer to drive an 8-ohm speaker.
>
>Then calculate the source resistance seen from the speaker looking back
>into the amplifier.
>
>To save time searching for manufacturers data, assume:
>
>DC plate supply is 250 volts.
>Peak signal at plate 200 volts.
>Internal plate resistance, from mnfr's curves, is 100 K-ohms. Audio
>power output = 5watts into 8-ohms load. Peak volts across load = 8.944
>volts peak. Transformer turns ratio = 22.36
>
>Then ask yourself "Is the source resistance of the amplifier in the
>same ball-park as the 8-ohm speaker ?"
>
>Is there anything like a conjugate match ?
>
>Which is what it's all about.
>
>For Class-B and Class-C conditions, just multiply internal plate
>resistance by a constant which depends on plate current operating
>angle. Curvature of tube characteristics can be taken into account for
>a higher order of accuracy.

Kind of as expected: Reg chops the problem down to the easy bit,
explains that in detail, and airily dismisses the hard part in one final
paragraph.

>And all this was sorted out in the early 1920's.

And that problem-solving method - make the problem fit the solution, and
chop the rest off - was invented even longer ago, by an ancient Greek
bandit.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

24. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 09:58:47 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309010158.1f189739@posting.google.com>
Source record: 109137

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<biu9on$h7o$1@hercules.btinternet.com>...
> > I challenge anyone to find a reflectometer
> > calculator that shows rho > 1.
> >
>
> First of all, please define precisely what is a
> 'reflectometer calculator' ?
>
> Is it hardware or is it software?

Hehe, well, this really is an amateur group,
isn't it! Sorry, i keep forgetting.

If you work in the RF field long enough,
you eventually come across these cardboard slide-rules
that will give you SWR versus rho versus mismatch loss.

Every one that i have seen (HP, Roos, etc.) have a
scale for rho that goes from zero to one.

Also, i have never see a negative SWR in my life.

Besser does mention that when you have an active
device, that you can have a rho > 1, and actually
a Return GAIN instead of a Return Loss.

Some people here seem to incorrectly think you can
have a return gain with a passive network...

Slick

25. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 11:04:41 UTC
From: Tim <tim.mcc@tesco.net>
Message-ID: <3f532787_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 109140
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

```
"Dick Carroll;" <dixie@townsqr.com> wrote in message
news:biutsv$9iu$1@208.206.142.68...
>
>
> Tim wrote:
>
> > "Airy R Bean" <SPAM@trap> wrote in message
> > news:3f0a7c6a$1_3@mk-nntp-1.news.uk.worldonline.com...
> > > Oops - must have been a lazy acceptance of the spelling chequer's
> > > suggestion...
> > > The original post definitely referred to control of your
> > > transceiver.
> > >
> > > Airy R Bean <SPAM@trap> wrote in message news:...
> > > > The original post definitely climaxed to control your
> > > > transceiver.
> > > > Hank Oredson <horedson@att.net> wrote in message
> > > > news:6EjOa.43125$0v4.2962203@bgtnsc04-news.ops.worldnet.att.net...
> > > > > > If the DX is going to be identified and
> > > > > > tracked for you, with your rig being tuned for you, as was
implied,
> > > > > Seems like you have no clue what you are talking about.
> > >
> > >
> > >
> > as a detested 'CBER' who has been looking at joining the HAM ranks now
for
> > quite a few years but never had the cash I must say I am tempted to say
on
> > the Muppet band where at least everyone behaves with some sense of
> > understanding of live & let live if this conversation is a showing of
the
> > true HAM colours then I think perhaps the roles a reversing. This has
> > certainly made me think three or four times weather to bother taking the
> > exams and taking up a HAM callsign.
>
> As a former VE who has tested many "CBers" into ham radio I would only
observe that if
> you want in, you'll get in.
> As a 14 year old in the mid-1950's I sure didn't "have the cash" but I
got in without it,
> and it didn't take "years"..
>
```

> Dick
>
>
My biggest problem has been finding someone to test me. Although that now seems to be solved after some e-mails I have received from this posting. hopefully I will be tested soon and can start off on my way into amateur radio. I am very much looking forward to copying some of the people on this group EVEN the ones who insist that as a soon to ex CBer I am not welcome just to prove to them that we are not all a bunch of monkeys who drag our knuckles on the ground. Thanks for the support those who have offered it.

26. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 11:39:40 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <I4edndQMjeierc6iU-KYgg@crocker.com>
Source record: 109141

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl6079m1i1lod7@corp.supernews.com...
> I really think that by now, anyone who is able to benefit from the
> discussion has done so, and those who remain will continue to hold their
> views no matter what. So I won't further waste the time of either group
> by continuing to question the issue. I hope that the derivations I've
> posted are helpful to those people who are interested in seeing where
> the common formulas and equations come from.
>
amen.

27. Re: Someone else using my antenna ((M321I58DNU 09/06/2003)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 12:23:41 UTC
From: w1rfi@aol.com
Message-ID: <20030901082341.17885.00000346@mb-m05.aol.com>
Source record: 109142

>My surveillance camera happened to snag a picture of someone using my
>antenna (obviously without my permission). He is probably not licensed,
>not transmitting, he is still using MY STUFF!

He is obviously cross polarized with your antenna, so I would just let this one go.

73,
Ed Hare, W1RFI

28. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 13:34:48 UTC
From: kd1@sympatico.ca
Message-ID: <3F534AF8.5509AF1A@sympatico.ca>
Source record: 109143

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
>
> > Cecil Moore wrote:
> >>Should have said |rho|. |rho| is often used without its Gamma angle.
> >
> > It still remains incomplete. The sign is needed to know Vr.
>
> The point was that Pref=0 and therefore, there is no sign to deal
> with for rho=Sqrt(Pref/Pfwd). +0 = -0

I assume, then, that from now on you will constrain the use
rho=Sqrt(Pref/Pfwd) to situations where Pref is zero?

> > If you wish to claim that there are no NET reflections at some
> > impedance discontinuities, then, for consistency, we should also
> > be able to claim that there are NET reflections when there is
> > no impedance discontinuity.
>
> I suggest you study and understand the difference between a logically
> inclusive statement and a logically exclusive statement. The difference
> lies in the use of the word "some" Vs "all". Above you performed a
> logical switcharoo when you went from "some" to an implication of "all".
> That is known in logic as an "argumentum ad absurdum".

My gosh, you work hard to find disagreement. In my sentence above,
please update "there are NET reflections" with "there may be NET
reflections".

Have you ever noticed how readers spend most of their effort looking
for disagreement to which they can respond? If there are two ways to
interpret a sentence, it will almost always be interpreted to
imply disagreement.

If readers spent just a small fraction of their effort interpreting
for agreement instead, discussion would flow so much more smoothly.

> Sometimes, there are net reflections existing where there is no
> impedance discontinuity.

Excellent. Agreement.

...Keith

29. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 13:56:50 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <RxmdnSAnyKO6zc6iXTWJhQ@comcast.com>
Source record: 109145

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309010147.4aeb4f03@posting.google.com...
> "Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<ltGcnV0RDp1jk8-iU-KYgg@comcast.com>...
> > Let's start all over on this.
> >
> > 1. You have a transmission line of Zo= 1 - j1
> > 2. Zo* = 1 + j1
> > 3 Short the end of the line
> > 4. By the classic formula RC= (0 - (1 - j1))/(0 + (1 - j1))
> > = -(1 - j1)/(1 - j1) = -1
> > 5. By Besser's formula RC = (0 - (1 + j1))/(0 + (1 - j1))
> > which is (-1 -j1)/(1 - j1)
> > 6. The above is SQRT(2)/_-135 / SQRT(2) /_-45 = 1/_-90
> > 7. Note that RC has angle -90, not 180.
> > 8. Reflected voltage is now (V+) x (1/_-90). This is in quadrature with
V+,
> > not in opposition with.
> > 9. This won't meet the boundary condition that (V+) + (V-) = 0
> > 10. You can use a different phase angle for Zo if you like, but the only
Zo
> > phase angle that will give you RC = 1/_180 is 0.
> >
> > Tam/WB2TT
>
>
> You are correct. But please note that the rho is 1 in both cases.
>
> And i believe that the conjugate equation is correct, that the
> reflected voltage will have a phase shift of twice the phase of the
> Zo, which in this case would be 45 degrees.
>
> And you bring up an excellent point Tam, that the only Zo that
> will give you a RC=-1 (or 1 /_ 180), with an ideal short as a Zload,
> would be a purely REAL Zo, with no reactance.
>
> So again, the "normal" equation fails in this respect. I'll state
> once again that the normal equation assumes a purely real Zo.
>
> Besser and Kurokawa and the ARRL are all correct.

****

Read this again. The *normal* equation works. It is the ARRL/Besser equation
that does not.

Tam

****
>
>
> Slick

30. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 13:59:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bivjcl$4fm$1@titan.btinternet.com>
Source record: 109146

"Ian White, G3SEK" wrote
> Reg Edwards wrote:
> >
> >The only problem is that caused by entirely
unnecessary complications
> >introduced by people being too clever.
> >
> >First design a single-ended, class-A, audio
amplifier like a 6V6
> >beam-tetrode tube plus a transformer to drive an
8-ohm speaker.
> >
> >Then calculate the source resistance seen from the
speaker looking back
> >into the amplifier.
> >
> >To save time searching for manufacturers data,
assume:
> >
> >DC plate supply is 250 volts.
> >Peak signal at plate 200 volts.
> >Internal plate resistance, from mnfr's curves, is
100 K-ohms. Audio
> >power output = 5watts into 8-ohms load. Peak volts
across load = 8.944
> >volts peak. Transformer turns ratio = 22.36
> >
> >Then ask yourself "Is the source resistance of the
amplifier in the
> >same ball-park as the 8-ohm speaker ?"
> >
> >Is there anything like a conjugate match ?
> >
> >Which is what it's all about.
> >
> >For Class-B and Class-C conditions, just multiply
internal plate
> >resistance by a constant which depends on plate
current operating
> >angle. Curvature of tube characteristics can be
taken into account for
> >a higher order of accuracy.
>
>

> Kind of as expected: Reg chops the problem down to
the easy bit,
> explains that in detail, and airily dismisses the
hard part in one final
> paragraph.
>
> >And all this was sorted out in the early 1920's.
>
> And that problem-solving method - make the problem
fit the solution, and
> chop the rest off - was invented even longer ago, by
an ancient Greek
> bandit.
==========

Life would have been made less complicated for you if I had stopped at "Which is what it (the foregoing) is all about."

After all the years of haggling on this newsgroup are you not yet convinced the internal resistance of radio transmitters is not 50 ohms?

31. Check my site

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:10:36 UTC
From: Sgordon <noshoes2@yahoo.com>
Message-ID: <wrl4b.36461$Vx2.15997970@newssvr28.news.prodigy.com>
Source record: 109147

I have much info on my website about Sky Loops http://www.kq8rp.com

I am using open wire feedline and operate 10-80m with great results..

--
Sincerely,
Scott Gordon
Phone: 1-888-428-6622
Pre-Recorded Call 1-888-295-2806
Yahoo Chat ID scott1gordon
AOL ID scott1gordon
http://best.justsaycash.com/ Just Say Cash
http://best.toxicfreehomes.com/ Is Your Home A Healthy Home?
http://best.smilestarters.com/ FREE e-Greeting Cards
==========

32. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:27:10 UTC
From: Gary Danaher <gdanaher@comcast.net>
Message-ID: <2HI4b.246112$It4.115261@rwcrnsc51.ops.asp.att.net>
Source record: 109148
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Amateur radio is the study of electronics and the application to real world situations. The license is only the beginning, not the goal. If the intent is to be licensed merely so you can call in the pizza order and nothing more-no education-then you still don't get it. There is no excuse for not getting a license--no excuse for not finding a VE team. The testing is dumbed down and all it takes is $12 and your zip code and you get tested.

Tim wrote:

> My biggest problem has been finding someone to test me. Although that now
> seems to be solved after some e-mails I have received from this posting.
> hopefully I will be tested soon and can start off on my way into amateur
> radio. I am very much looking forward to copying some of the people on this
> group EVEN the ones who insist that as a soon to ex CBer I am not welcome
> just to prove to them that we are not all a bunch of monkeys who drag our
> knuckles on the ground. Thanks for the support those who have offered it.
>
>

33. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:36:04 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <oJ2cnYpuG9_ExM6iXTWJig@comcast.com>
Source record: 109152

Reg,

A truly wonderful example. If you don't mind, I would like to add to this.
See below.

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:biu8csfog1@hercules.btinternet.com...
> "Tarmo Tammaru" wrote
> > "Reg Edwards" wrote
> Tam,
>
> The only problem is that caused by entirely unnecessary
> complications introduced by people being too clever.
>
> First design a single-ended, class-A, audio amplifier
> like a 6V6 beam-tetrode tube plus a transformer to
> drive an 8-ohm speaker.
>
> Then calculate the source resistance seen from the
> speaker looking back into the amplifier.
>
> To save time searching for manufacturers data, assume:
>
> DC plate supply is 250 volts.
> Peak signal at plate 200 volts.
> Internal plate resistance, from mnfr's curves, is 100
> K-ohms.
> Audio power output = 5watts into 8-ohms load.
> Peak volts across load = 8.944 volts peak.
> Transformer turns ratio = 22.36

Now, let's see what would happen if Reg had tried to "conjugate Match" the
speaker to the 6V6.

Given that the plate resistance is 100K, and desired Po is 5 W, The voltage
required to generate 5W across 100K can easily be shown to be

VDC = 50 + SQRT (5 x 2 x 100000) = 50 + 1000 = 1050V

This is about 3 times the rated maximum plate voltage.

The efficiency of an amplifier, based on using the Norton equivalence, is
reduced by the amount

(1 + Rs/Rl) = 1 + 100K/100K = 2

Note that in Reg'd design the load impedance was

8 x 22.36 x22.36 = 4000 Ohms, and his efficiency was reduced by only

1 + 4000/100000 = 1.04

So, by matching, the efficiency has neen reduced by 2/1.04 =1.923.

Anybody for going down to the local power company and conjugate matching all thouse pesky AC generators?

Tam/WB2TT
>

34. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:37:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <We6fY1Hum1U$EAGb@ifwtech.co.uk>
Source record: 109157

Reg Edwards wrote:
>
>Life would have been made less complicated for you if I had stopped at
>"Which is what it (the foregoing) is all about."
>
>After all the years of haggling on this newsgroup are you not yet
>convinced the internal resistance of radio transmitters is not 50 ohms?
>

If you look back, you'll find that I have been one of those *doing* the convincing, that:

1. The internal resistance (or output impedance) of most transmitters is *not* 50 ohms - except by design in a few special cases, or by coincidence.

2. It doesn't matter much anyway, because we don't need to know what it is (except in some of those special cases).

3. If you insist on knowing it, you're going to have a hard time either calculating it accurately or measuring accurately.

We had been discussing only point 3.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

35. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:39:46 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <SSl4b.169$vj4.28751@nnrp1.ptd.net>
Source record: 109149
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

```
Don't let the curmudgeons here dissuade you. They are NOT representative
of ALL hams ... there are many of us who welcome newcomers and want
to help them become active, productive hams.

Carl - wk3c

"Tim" <tim.mcc@tesco.net> wrote in message
news:3f51ecd4$1_2@mk-nntp-2.news.uk.tiscali.com...
>
> "Airy R Bean" <SPAM@trap> wrote in message
> news:3f0a7c6a$1_3@mk-nntp-1.news.uk.worldonline.com...
> > Oops - must have been a lazy acceptance of the spelling chequer's
> > suggestion...
> > The original post definitely referred to control of your
> > transceiver.
> >
> > Airy R Bean <SPAM@trap> wrote in message news:...
> > > The original post definitely climaxed to control your
> > > transceiver.
> > > Hank Oredson <horedson@att.net> wrote in message
> > > news:6EjOa.43125$0v4.2962203@bgtnsc04-news.ops.worldnet.att.net...
> > > > > If the DX is going to be identified and
> > > > > tracked for you, with your rig being tuned for you, as was
implied,
> > > > Seems like you have no clue what you are talking about.
> >
> >
> >
> as a detested 'CBER' who has been looking at joining the HAM ranks now for
> quite a few years but never had the cash I must say I am tempted to say on
> the Muppet band where at least everyone behaves with some sense of
> understanding of live & let live if this conversation is a showing of the
> true HAM colours then I think perhaps the roles a reversing. This has
> certainly made me think three or four times weather to bother taking the
> exams and taking up a HAM callsign.
>
>
```

36. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:41:45 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <JUI4b.170$vj4.28848@nnrp1.ptd.net>
Source record: 109150
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Perfect example of a curmudgeon ... follow my previous advice.
Those of us who WANT more hams simply ask that you behave
in an acceptable manner (polite, courteous, follow the rules, etc.)

Carl - wk3c

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:jnu3lvkftq3o4ma9de6to88eqlhecvre67@4ax.com...
> On Sun, 31 Aug 2003 13:41:37 +0100, "Tim" <tim.mcc@tesco.net> wrote:
>
> > This has
> >certainly made me think three or four times weather to bother taking the
> >exams and taking up a HAM callsign.
>
> Excellent news.
>
> Don't bother.
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

37. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:42:14 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <aVI4b.171$vj4.28866@nnrp1.ptd.net>
Source record: 109151
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Another perfect example of a curmudgeon ... follow my previous advice.
Those of us who WANT more hams simply ask that you behave
in an acceptable manner (polite, courteous, follow the rules, etc.)

Carl - wk3c

"W7TI" <noway@nohow.com> wrote in message
news:a824lv8itm1fkc919t8ke8tslnn57fkt8f@4ax.com...
> On Sun, 31 Aug 2003 13:41:37 +0100, "Tim" <tim.mcc@tesco.net> wrote:
>
> >I must say I am tempted to say on
> >the Muppet band where at least everyone behaves with some sense of
> >understanding of live & let live
>
> ----------
>
> Absolutely correct. Please stay with the Muppets. Thanks!
>
> BT

38. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:43:39 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <vWI4b.174$vj4.28762@nnrp1.ptd.net>
Source record: 109153
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Perfect example of a curmudgeon ... follow my previous advice.
Those of us who WANT more hams simply ask that you behave
in an acceptable manner (polite, courteous, follow the rules, etc.)

Carl - wk3c

"Airy R. Bean" <me@privacy.net> wrote in message
news:3f522a1c_1@mk-nntp-1.news.uk.worldonline.com...
> Yes. Stay in CB where you belong.
>
> Unless you have an interest in technical matters, which
> will to a large extent remove any need to spend a lot of money,
> then you don't have the makings of a Radio Ham anyway.
>
> Tim <tim.mcc@tesco.net> wrote in message
> news:3f51ecd4$1_2@mk-nntp-2.news.uk.tiscali.com...
> > as a detested 'CBER' who has been looking at joining the HAM ranks now
for
> > quite a few years but never had the cash I must say I am tempted to say
on
> > the Muppet band where at least everyone behaves with some sense of
> > understanding of live & let live if this conversation is a showing of
the
> > true HAM colours then I think perhaps the roles a reversing. This has
> > certainly made me think three or four times weather to bother taking the
> > exams and taking up a HAM callsign.
>
>
>

39. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 14:45:58 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <GYI4b.175$vj4.28890@nnrp1.ptd.net>
Source record: 109154
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Perfect example of a curmudgeon ... follow my previous advice.
Those of us who WANT more hams simply ask that you behave
in an acceptable manner (polite, courteous, follow the rules, etc.)

Carl - wk3c

"Young Nick" <hothere@pit.com> wrote in message
news:4fI4b.2718$4L1.478370@wards.force9.net...
> <huff snipped>
>
> >This has certainly made me think three or four times weather to bother
taking the
> > exams and taking up a HAM callsign.
>
> I hope it rains on you, you illiterate CB pratt.
>
>
> Young Nick
>
>
>
>

40. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 15:04:35 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <oXidnZaIHZhgws6iXTWJhw@comcast.com>
Source record: 109155
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:SSI4b.169$vj4.28751@nnrp1.ptd.net...
> Don't let the curmudgeons here dissuade you. They are NOT representative
> of ALL hams ... there are many of us who welcome newcomers and want
> to help them become active, productive hams.
>
> Carl - wk3c

Hey Carl, where are you at these days, physically?
Haven't seen you since the SPN days on W6FXN.

41. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 15:07:26 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <yQ6dnW-84MQ1_c6iXTWJjg@comcast.com>
Source record: 109156
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:aVI4b.171$vj4.28866@nnrp1.ptd.net...
> Another perfect example of a curmudgeon ... follow my previous advice.
> Those of us who WANT more hams simply ask that you behave
> in an acceptable manner (polite, courteous, follow the rules, etc.)

Back in the old days in LA, Carl and some other folks on the SPN were the
thing that finally got me motivated enough to study and finally get the code
down, so I could get my ticket.

42. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 16:28:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53754f_4@corp.newsgroups.com>
Source record: 109158

Roy Lewallen wrote:
> Someone, I don't even recall who now, noticed that the formula used for
> calculating transmission line reflection coefficient allows a magnitude
> greater than one when Z0 is complex. From there, the claim was made that
> a reflection coefficient greater than one is impossible for a passive
> network, since (they said) it implies the creation of energy.

I suspect the problem probably has something to do with squaring
the absolute magnitude of a complex voltage reflection coefficient.
Maybe only the real part should be squared to obtain the power
reflection coefficient?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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43. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 16:37:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f537752$1_4@corp.newsgroups.com>
Source record: 109159

Dr. Slick wrote:
> Some people here seem to incorrectly think you can
> have a return gain with a passive network...

Does anyone remember what is the absolute value of a
complex number?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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44. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 16:41:33 UTC
From: tater schuld <taters1@maps.charter.net>
Message-ID: <vl6u6f6kjng6b6@corp.supernews.com>
Source record: 109160
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"helmsman" <helmsman@mindspring.com> wrote in message
news:qkm6lvoa5pv3c4cv92hpd9i6smkeikikg5@4ax.com...
>
> For anyone not wanting to learn CW, just get a verison ptt. And on top
> of that there is NO TEST at all!!!

can someone expand on this? or did i just flag myself as a newbie by not
knowing what "a verison ptt" is?

--
Tater
President of MARS Club
www.treece.org/mars.htm
NAR #79654 L1
AMA #747769
EAA #703312
remove spam spelled backwards to reply

45. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:01:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f537cdb_4@corp.newsgroups.com>
Source record: 109161

kd1@sympatico.ca wrote:
> I assume, then, that from now on you will constrain the use
> rho=Sqrt(Pref/Pfwd) to situations where Pref is zero?

No, the equation from Ramo & Whinnery from which the above
is developed is

Pz-/Pz+ = |rho|^2 and take the square root of each side.

Like I said at first, I made a boo-boo and should have put absolute
value signs around 'rho'. You are completely ignoring that response
of mine.

> My gosh, you work hard to find disagreement. In my sentence above,
> please update "there are NET reflections" with "there may be NET
> reflections".

Shirley, you can understand that the first statement is an absolute-
exclusive and the second statement is a conditional-inclusive and
are logically opposite statements, one false and the other true.

> If readers spent just a small fraction of their effort interpreting
> for agreement instead, discussion would flow so much more smoothly.

Interpreting an exclusive statement as an inclusive statement is
logically invalid.

>>Sometimes, there are net reflections existing where there is no
>>impedance discontinuity.
>
> Excellent. Agreement.

Nope, not agreement. Your absolute statement was false. My conditional
statement is true. If you had said 'sometimes', your statement would have
been true instead of false. You made a logical error. It's no biggie.
I left off the absolute magnitude signs. It's no biggie.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

46. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:04:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f537dac$1_4@corp.newsgroups.com>
Source record: 109162

Tarmo Tammaru wrote:
> Anybody for going down to the local power company and conjugate matching all
> thouse pesky AC generators?

That's why Edison thought AC would never catch on. I'm looking
for a ham amp with the internal impedance of a 100 MW AC
generator. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

47. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:15:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53803e_4@corp.newsgroups.com>
Source record: 109163
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

tater schuld wrote:
> can someone expand on this? or did i just flag myself as a newbie by not
> knowing what "a verison ptt" is?

PTT stands for push-to-talk, usually applied to microphones.
It's acceptable to push an electronic keyer paddle to talk,
but not acceptable to push a microphone key to talk. Pushing
a microphone key is too much like CB. :-) Of course, my
ICom-756PRO is PTT.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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48. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:23:20 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f538260$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 109164
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

No, no, no. It's not that you're unwelcome if you're an ex
CBer, it's that you're unwelcome if you're still a CBer.

If you have no technical interest in the innards of your rig,
and if your prime motivation is not technical, then you're still
a CBer.

Tim <tim.mcc@tesco.net> wrote in message
news:3f532787_2@mk-nntp-2.news.uk.tiscali.com...
>I am very much looking forward to copying some of the people on this
> group EVEN the ones who insist that as a soon to ex CBer I am not welcome
> just to prove to them that we are not all a bunch of monkeys who drag our
> knuckles on the ground.

49. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:25:27 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f538261$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 109165
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Au contraire! We who are wrongly described as, "curmudgeons"
ARE representative of ALL hams.....it's CBers we're not representative
of. If you think that we're not representative of you, then perhaps
you're a CBer-masquerading-as-a-Radio-Ham?

Carl R. Stevenson <wk3cqth@wk3c.com> wrote in message
news:SSI4b.169$vj4.28751@nnrp1.ptd.net...
> Don't let the curmudgeons here dissuade you. They are NOT representative
> of ALL hams ... there are many of us who welcome newcomers and want
> to help them become active, productive hams.
>
> Carl - wk3c

50. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:26:24 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f538262_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 109166
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

But it's only CBers who want such a thing, so that they
can feel safer in numbers.

Carl R. Stevenson <wk3cqth@wk3c.com> wrote in message
news:JUI4b.170$vj4.28848@nnrp1.ptd.net...
> Perfect example of a curmudgeon ... follow my previous advice.
> Those of us who WANT more hams simply ask that you behave
> in an acceptable manner (polite, courteous, follow the rules, etc.)

51. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:35:40 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bj001c$v5m$0@208.206.142.74>
Source record: 109167
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Tim wrote:

> I am very much looking forward to copying some of the people on this
> group EVEN the ones who insist that as a soon to ex CBer I am not welcome
> just to prove to them that we are not all a bunch of monkeys who drag our
> knuckles on the ground. Thanks for the support those who have offered it.

No one detests you just because you are or were a CBer. CBers per se were never the problem, rather the outlaws and deliberately crude troublemakers therein. If you come to ham radio with an attitude that you want to learn the ropes and become a quality ham. you'll be welcomed by all who matter. You can easily disregard the rest.

You will need to act responsibly and work to change from the CB culture to that of ham radio, which is an important enough factor to merit your effort if you wish to avoid problems in "fitting in". Listen a lot, and learn from it. It's for your own good as much as anything else. If one acts like an outlaw CBer while operating on ham radio he shouldn't be surprised to find that attitude unacceptable. And I assure you, the fact that you come from CB will only make you a member of the majority of new hams.
In short, it's all up to you.
But don't start out feeling inferior just because of your CB origins.

Dick

52. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:38:18 UTC
From: Doug Smith W9WI <w9wi@invalid.invalid>
Message-ID: <3F53840A.7050206@invalid.invalid>
Source record: 109168
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

tater schuld wrote:
> can someone expand on this? or did i just flag myself as a newbie by not
> knowing what "a verison ptt" is?

I think he meant "Verizon". They're a mobile-phone company that offers
a two-way radio feature, where you can talk with other Verizon
mobile-phones as if they were VHF hand-held radios. (which I suppose
they are!)

Of course you don't need a ham license to talk on a mobile phone -
though your Verizon phone may not work when the electricity is out, as
many subscribers learned in New York a couple of weeks ago!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://www.w9wi.com

53. Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 17:48:17 UTC
From: Wedgew <wedgew@rochester.rr.com>
Message-ID: <BDL4b.32996$lk1.8856@twister.nyroc.rr.com>
Source record: 109019

Could one of ye reccomend a reference on basic antenna theory

54. Re: EZ Way tower sheared hinge pin conclusion(?)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:03:20 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F5389E8.77BEB293@cwis.net>
Source record: 109020

Dan,
I guess it just depends on who you have available and
how much you want to spend. On one end of the 'spectrum'
you have a ham(?) who knows a little about towers. On the
other end you have a profesional consulting engineer. Both
have their 'pro$' and 'con$'. Maybe a company that erects
towers (if you can find one) would be your best bet. I'd
expect them to be fairly conservative (otherwise called
'C.Y.A.') which is a good way to be, when you think about it.
Probably your best bet is to replace the hinge/base of the
tower. I'm sure you're looking forward to that!
'Doc

55. How to find a subject.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:09:10 UTC
From: Ronald Bilodeau <va3sgr@vianet.ca>
Message-ID: <vl72q3nhksptc1@corp.supernews.com>
Source record: 109021

HI! Can sombody tell me how to find a subject on a newsgroup? Like finding articles on j-poles antenna etc...
Thank You Very Mutch, Ron
VA3SGR

56. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:12:08 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <TQ-dnZascrxgFs6iXTWJgA@comcast.com>
Source record: 109022

I notice I did not run spell check on my previous! It is a rainy day here; so, let me add something else that may not be obvious to some:

In general, the addition of negative feedback to change the output impedance does not change the dynamic range.

Consider the following. An ideal DC op amp operating from a 10V supply with 0 output impedance, and infinite gain.

1. Put a 1K resistor in series with the output.

2. You now have an op amp with 1K output impedance.

3. Connect the inverting input of the op amp to the other end of the 1K resistor. Call that the output terminal. and connect a load resistor Rl from there to ground. (The gain from the non inverting input to Rl =1 in the linear range)

4. Because of the infinite feedback, the output impedance is now 0 again, but all of the load current still flows through the 1K series resistor. It will not, for instance, deliver 5V into a 910 Ohm resistor because the amplifier will have saturated before that point. For a given RL, the maximum voltage you can get out is (10 x Rl)/(1000 + Rl) with or without feedback.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f537dac$1_4@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > Anybody for going down to the local power company and conjugate matching
all
> > thouse pesky AC generators?
>
> That's why Edison thought AC would never catch on. I'm looking
> for a ham amp with the internal impedance of a 100 MW AC
> generator. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

57. Re: How to find a subject.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:22:56 UTC
From: ricknj101@hotmail.com
Message-ID: <3f538d91.127044640@news.optonline.net>
Source record: 109023

Go to www.google.com
Right above the place where you put in your search item (j-pole)
select :groups". It means "newsgroups"
Then select rec.radio.amateur to restrict your search (you find it on
the second page)

I did this search and came up with only 5,300 articles. Sorry that
there isn't much info available!!!!

GL, OM

Rick K2XT

58. Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:23:08 UTC
From: kiddi@marel.is
Message-ID: <b7cca008.0309011023.336bc920@posting.google.com>
Source record: 109024

Does anyone have a suggestion for constructing a simple, compact, receive-only antenna, that covers reasonably well the HF range (1,8 to 30 MHz)? My plan is keep such an antenna as a constant reference when I am experimenting with the "real" antennas at my station. Comparing signal strenghts on the antennas over some time would at least give me a reference on whether directivity in certain directions was improving or not, when replacing one antenna with another.

The antenna would have the following characteristics:

- Simple (home-made, inexpensive, preferably not using any pre-amps).
- Small (not taking up space among my other antennas, non-intrusive).
- Receive-only (little need for elaborate matching, power handling).
- Connected through a coax, which should not pick up the RX signals.
- Broadband (preferably 1,8-30 MHz).
- Omnidirectional (or reasonably so, don't want any sharp nulls).
- Receive, to some extent, vertical and horizonal polarization.
- (Any other characteristics that should be included?)

I have thought of using a short whip or a loop for this (say, 1m/3ft max. dimensions), but these both are rather selective in terms of polarization and directivity.

Any suggestions or comments?

73 de Kristinn, TF3KX

59. Two Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:32:00 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj03b0$43i$1@titan.btinternet.com>
Source record: 109025

The first question - is the internal resistance of a transmitter 50 ohms or is it not 50 ohms - has been lingering along for many years. It has been without answer because nobody has ever found a satisfactory method of measuring it at full power output into the transmitter's load. Very recently the Establishment has been shocked into silence by the outrageous suggestion the internal resistance can be calculated. Shocked because the principal subject of argument in this newsgroup with its hangers-on of conjugative matches and re-re-reflections may fade into history (as has which part of a dipole does most of the radiating?) The answer was no - it is not 50-ohms.

So the first of these questions has been answered by saying "if you can't measure it then why not CALCULATE it."

The other outstanding question is "Can the magnitude of the reflection coefficient exceed unity with a passive load".

This question can be answered in the reverse manner - "if you have difficulty calculating it then why not MEASURE it."

Before embarking on this hazardous course of action I would like to ask Dr Slick if he would be prepared to change his mind on the subject if an accurate simple instrument is described which will MEASURE, not just indicate, both MAGNITUDE and phase of the reflection coefficient. The meter scale can be calibrated linearly between | rho | = 0 and say 2.5

Dr Slick, your challenge is accepted. Gentlemen place your bets.

Reg, G4FGQ

60. Re: Comet VA30 (base loaded tri-band dipole 40/15/10)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 18:33:00 UTC
From: PA3HHO <billyrocksagain@hotmail.com>
Message-ID: <bj03nb$e2i$1@reader1.tiscali.nl>
Source record: 109026

Hi Tom,

> The maker might respond to an e-mail. They have a website at
> http://www.comet-ant.co.jp

Thanks for your reply. First thing I did (before posting a message here) was exactly what you suggested HI.

Did not receive any reply yet unfortunately...

Thanks!

Rgrds, Pleun (PA3HHO)

61. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:12:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f539b98_7@corp.newsgroups.com>
Source record: 109027

Cecil Moore wrote:
>> Some people here seem to incorrectly think you can
>> have a return gain with a passive network...
>
> Does anyone remember what is the absolute value of a
> complex number?

Found the answer in, "Higher Mathematics for Engineers and Physicists".
I suspect the square of the absolute value of the voltage reflection
coefficient is the volt-amp reflection coefficient, not the power
reflection coefficient.

With a complex characteristic impedance, what is being reflected is
volt-amps. I suspect the reflected volt-amps can be higher than the
incident volt-amps. I seriously doubt that the reflected watts
can be higher than the incident watts. The correct *power* reflection
coefficient therefore may be something like |Re(rho)|^2 where 'Re'
means "the real part of". The simpler |rho|^2 may be the volt-amp
reflection coefficient when Z0 is complex.

Using deductive reasoning, since the real part of the voltage
reflection coefficient cannot be greater than 1.0, it seems to
me that |1.0|^2 may be the maximum power reflection coefficient.
The complex voltage reflection coefficient squared may be the
volt-amp reflection coefficient which can be greater than 1.0.

In a transmission line with a complex characteristic impedance, the
reflected voltage and reflected current would not be in phase.
Therefore, their product would be volt-amps, not watts. Reflected
watts could be obtained from Vref*Iref*cos(theta) which would always
be less than (or equal to) Vref*Iref.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

62. Re: Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:21:47 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <f%M4b.22931$S_.14780@fed1read01>
Source record: 109028

Lots to choose from at URL:
http://ac6v.com/antprojects.htm#theory

--
73 From Ye Signal In The Noise
Caveat Lector Ye All

"Wedgew" <wedgew@rochester.rr.com> wrote in message
news:BDL4b.32996$lk1.8856@twister.nyroc.rr.com...
> Could one of ye reccomend a reference on basic antenna theory
>

63. Re: Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:29:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f539fa0_8@corp.newsgroups.com>
Source record: 109029

Wedgew wrote:
> Could one of ye reccomend a reference on basic antenna theory

For very basic antenna theory, "The ARRL Antenna Book" is pretty good.
For serious antenna theory, "Antennas for All Applications" by Kraus
and Marhefka is hard to beat.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

64. Laugh of the day

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:31:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53a026$1_8@corp.newsgroups.com>
Source record: 109031

```
Foxnews just reported a criminal who stole an active
GPS tracking device. :-) :-) :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----
```

65. Re: How to find a subject (like J-poles)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:35:42 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <icN4b.22934$S_.18070@fed1read01>
Source record: 109030

Ron
Use Google.com -- type in for search J-Pole
Then click on the GROUPS tab

Also u can find several dozen J-Pole projects at URL:
http://ac6v.com/antprojects.htm

Use CTRL F then type in J-Pole
this will search regardless of band
OR
Search by Band in the beginning of the page

Good Radiating
73 From The Signal In The Noise
Caveat Lector Ya All

"Ronald Bilodeau" <va3sgr@vianet.ca> wrote in message
news:vl72q3nhksptc1@corp.supernews.com...
> HI! Can sombody tell me how to find a subject on a newsgroup? Like
finding
> articles on j-poles antenna etc...
> Thank You Very Mutch, Ron
> VA3SGR
>
>

66. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:45:39 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <DIN4b.209$vj4.34184@nnrp1.ptd.net>
Source record: 109032
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Like I said ... a curmudgeon ...

Carl - wk3c

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:r1n6lvg7uen1r9fk94o3gm64l065tf27ed@4ax.com...
> On Mon, 01 Sep 2003 14:42:14 GMT, "Carl R. Stevenson"
> <wk3cqth@wk3c.com> wrote:
>
> >Those of us who WANT more hams simply ask that you behave
> >in an acceptable manner (polite, courteous, follow the rules, etc.)
>
> That rules out all CBers at the outset, then.
> :-)
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

67. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:48:29 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <hoN4b.210$vj4.34058@nnrp1.ptd.net>
Source record: 109033
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Airy R. Bean" <me@privacy.net> wrote in message
news:3f538260$1_1@mk-nntp-1.news.uk.worldonline.com...
> No, no, no. It's not that you're unwelcome if you're an ex
> CBer, it's that you're unwelcome if you're still a CBer.
>
> If you have no technical interest in the innards of your rig,
> and if your prime motivation is not technical, then you're still
> a CBer.

Bean,

Do you realize that you've just labeled a majority of contesters
as "CBers" ???

Carl - wk3c

68. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:49:07 UTC
From: Steve Terry <g4wwk@despammed.com>
Message-ID: <8pN4b.3697$bC1.2385@newsfep4-winn.server.ntli.net>
Source record: 109035
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"tater schuld" <taters1@maps.charter.net> wrote in message
news:vl6u6f6kjng6b6@corp.supernews.com...
> "helmsman" <helmsman@mindspring.com> wrote in message
> news:qkm6lvoa5pv3c4cv92hpd9i6smkeikikg5@4ax.com...
> >
> > For anyone not wanting to learn CW, just get a verison ptt. And on top
> > of that there is NO TEST at all!!!
>
> can someone expand on this? or did i just flag myself as a newbie by not
> knowing what "a verison ptt" is?
>
I believe its similar to what we call in Europe, GSM Pro.
A mobile (cellular) phone with low cost Push To Talk closed group calling.
Technically could, but isn't offered by UK phone networks.

Steve Terry

69. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:50:42 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <mqN4b.212$vj4.34148@nnrp1.ptd.net>
Source record: 109034
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

BS .. you ARE a curmudgeon, as evidenced by your attitude.

You are CERTAINLY not representative of ME ... and from
my experience you are only representative of the WORST
side (the "dark side of the force," if you will) of ham radio.

You truly deserve the Wouff Hong.

Carl - wk3c

>
> Carl R. Stevenson <wk3cqth@wk3c.com> wrote in message
> news:SSI4b.169$vj4.28751@nnrp1.ptd.net...
> > Don't let the curmudgeons here dissuade you. They are NOT
representative
> > of ALL hams ... there are many of us who welcome newcomers and want
> > to help them become active, productive hams.
> >
> > Carl - wk3c
>
>
>

70. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:50:55 UTC
From: Steve Terry <g4wwk@despammed.com>
Message-ID: <QqN4b.3704$bC1.1236@newsfep4-winn.server.ntli.net>
Source record: 109036
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:hoN4b.210$vj4.34058@nnrp1.ptd.net...
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:3f538260$1_1@mk-nntp-1.news.uk.worldonline.com...
> > No, no, no. It's not that you're unwelcome if you're an ex
> > CBer, it's that you're unwelcome if you're still a CBer.
> >
> > If you have no technical interest in the innards of your rig,
> > and if your prime motivation is not technical, then you're still
> > a CBer.
>
> Bean,
> Do you realize that you've just labeled a majority of contesters
> as "CBers" ???
> Carl - wk3c
>
They are, as are most US Hams.

Steve Terry

71. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:53:26 UTC
From: Steve Terry <g4wwk@despammed.com>
Message-ID: <btN4b.3710$bC1.1115@newsfep4-winn.server.ntli.net>
Source record: 109037
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:GYI4b.175$vj4.28890@nnrp1.ptd.net...
> Perfect example of a curmudgeon ... follow my previous advice.
> Those of us who WANT more hams simply ask that you behave
> in an acceptable manner (polite, courteous, follow the rules, etc.)
>
> Carl - wk3c
>
<snip top post>
>
Your cut and paste repeated inane top posted replies remind me of our Ged
Are you related ?

Steve Terry

72. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 19:59:12 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f53a670$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 109039
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

I agree. Those who are contesters but have no
technical acumen are CBers.

Their behaviour as DXers is indistinguishable
from the 27MHz DXers.

Steve Terry <g4wwk@despammed.com> wrote in message
news:QqN4b.3704$bC1.1236@newsfep4-winn.server.ntli.net...
> "Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
> news:hoN4b.210$vj4.34058@nnrp1.ptd.net...
> > "Airy R. Bean" <me@privacy.net> wrote in message
> > news:3f538260$1_1@mk-nntp-1.news.uk.worldonline.com...
> > > No, no, no. It's not that you're unwelcome if you're an ex
> > > CBer, it's that you're unwelcome if you're still a CBer.
> > > If you have no technical interest in the innards of your rig,
> > > and if your prime motivation is not technical, then you're still
> > > a CBer.
> > Do you realize that you've just labeled a majority of contesters
> > as "CBers" ???
> They are, as are most US Hams.

73. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:03:51 UTC
From: Tim <tim.mcc@tesco.net>
Message-ID: <3f53a5e4$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 109038
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Young Nick" <hothere@pit.com> wrote in message
news:4fI4b.2718$4L1.478370@wards.force9.net...
> <huff snipped>
>
> >This has certainly made me think three or four times weather to bother
taking the
> > exams and taking up a HAM callsign.
>
> I hope it rains on you, you illiterate CB pratt.
>
>
> Young Nick
>
>
>
>
sorry not illiterate just dyslexic which I am sure most people will tell is
something I can do nothing about! so sorry if that offends you.

74. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:06:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl79mu7imr0814@corp.supernews.com>
Source record: 109040

In the numerical example I posted, I calculated the average real power incident at the load (that is, the power calculated from the forward voltage and current waves), and the average real reflected power at the load (that is, the power calculated from the reverse voltage and current waves). The "reflected power" is greater than the "incident power". However, the net power exiting the line and entering the load is a positive value. That's because the net power isn't equal to the "forward power" minus the "reverse power" at that point. I gave the equation for total power in that analysis, and if you plug in the numbers, you'll see that the total power is correct.

If you are interested in calculating the "reactive power" for some reason, you can easily do so from the complex voltages and currents which have been calculated for you.

And for those who are wondering about your question, the absolute value of a complex number is the magnitude of that number. In the example I gave, all the complex values were given in polar form, with the first part being the magnitude.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Cecil Moore wrote:
>
>>> Some people here seem to incorrectly think you can
>>> have a return gain with a passive network...
>>
>>
>> Does anyone remember what is the absolute value of a
>> complex number?
>
>
> Found the answer in, "Higher Mathematics for Engineers and Physicists".
> I suspect the square of the absolute value of the voltage reflection
> coefficient is the volt-amp reflection coefficient, not the power
> reflection coefficient.
>
> With a complex characteristic impedance, what is being reflected is
> volt-amps. I suspect the reflected volt-amps can be higher than the
> incident volt-amps. I seriously doubt that the reflected watts
> can be higher than the incident watts. The correct *power* reflection
> coefficient therefore may be something like |Re(rho)|^2 where 'Re'
> means "the real part of". The simpler |rho|^2 may be the volt-amp
> reflection coefficient when Z0 is complex.

>
> Using deductive reasoning, since the real part of the voltage
> reflection coefficient cannot be greater than 1.0, it seems to
> me that |1.0|^2 may be the maximum power reflection coefficient.
> The complex voltage reflection coefficient squared may be the
> volt-amp reflection coefficient which can be greater than 1.0.
>
> In a transmission line with a complex characteristic impedance, the
> reflected voltage and reflected current would not be in phase.
> Therefore, their product would be volt-amps, not watts. Reflected
> watts could be obtained from Vref*Iref*cos(theta) which would always
> be less than (or equal to) Vref*Iref.

75. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:11:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl7a0fa38usl9d@corp.supernews.com>
Source record: 109041

This sounds like a good application for a T2FD type antenna. A web search should bring more information about it.

I tried a similar scheme many years ago, using an inefficient comparison antenna, and found it very difficult to make decent comparisons between two antennas which had very different gain, in the presence of the QSB which was often present. I'll be interested in hearing how well it works for you.

Roy Lewallen, W7EL

Kristinn Andersen wrote:
> Does anyone have a suggestion for constructing a simple, compact,
> receive-only antenna, that covers reasonably well the HF range (1,8 to
> 30 MHz)? My plan is keep such an antenna as a constant reference when
> I am experimenting with the "real" antennas at my station. Comparing
> signal strenghts on the antennas over some time would at least give me
> a reference on whether directivity in certain directions was improving
> or not, when replacing one antenna with another.
>
> The antenna would have the following characteristics:
>
> - Simple (home-made, inexpensive, preferably not using any pre-amps).
> - Small (not taking up space among my other antennas, non-intrusive).
> - Receive-only (little need for elaborate matching, power handling).
> - Connected through a coax, which should not pick up the RX signals.
> - Broadband (preferably 1,8-30 MHz).
> - Omnidirectional (or reasonably so, don't want any sharp nulls).
> - Receive, to some extent, vertical and horizonal polarization.
> - (Any other characteristics that should be included?)
>
> I have thought of using a short whip or a loop for this (say, 1m/3ft
> max. dimensions), but these both are rather selective in terms of
> polarization and directivity.
>
> Any suggestions or comments?
>
> 73 de Kristinn, TF3KX

76. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:21:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2867lvsdia61ddccatl3fe2am9d9ade1d7@4ax.com>
Source record: 109042

On Mon, 1 Sep 2003 10:19:39 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>Richard Clark wrote:
>>On Sun, 31 Aug 2003 19:42:42 +0100, "Ian White, G3SEK"

>>Motorola publishes the equivalent series (or parallel) resistance for
>>the MRF-xxx (pick your own that corresponds to the actual device used
>>for the finals in your own transmitter).
>
>Sorry, that horse won't run. RF power transistor data sheets specify the
>load impedance that needs to be presented *to* the transistor from the
>outside world, in order for the device to function as specified.

Clearly you did not look at such a sheet, and certainly not from
Motorola.

The MRF421 is used in two of my HF rigs and you have yet to offer what
you have. You didn't look did you? Have you ever looked? Have you
ever repaired a Finals' deck? Ever design one that is comparable?

From that specification sheet(s):
Figure 7 - Series Equivalent Impedance, Zin
shown with both Smith Chart and tabular results over the range of 2
MHz to 30 MHz:
Freq. Zin
30 0.7 - j.5
15 1.39 - j1.1
7.5 2.8 - j1.9
2.0 5.35 - j2.2

Figure 9 - Output Resistance versus Frequency, Zout
slightly less than 2 Ohms at 1.5 MHz to 1.0 Ohms at 30 MHz shown in a
clear and unambiguous chart over the entire range of frequency and
resistance described as Rout, Parallel Equivalent Output Resistance,
(Ohms).

Both specifications are observed for the Transistor powered at 12.5V
with a collector quiescent current of 150mA, and supporting an output
power of 100W PEP.

>Sometimes they state the conjugate of the required load impedance, and
>sometimes they don't say which.

Sometimes? You don't seem to sure, and you offer nothing specific.

>
>That is not the output impedance *of* the transistor itself (except in
>certain special cases). However, the data sheets sometimes do
>ambiguously call it the "output impedance". It's a confusing mess.

The data sheets are quite ordinary to the designers however. I've
never sat through a design seminar where any RF design engineer has
made such a statement as yours (much less the outright howler of
circularity below). In fact their queries related to exactly these
specifications. How is it that your experience is different?

>
>However, I'd hoped by now that we were all agreed about this particular
>dead horse. It's buried somewhere in the Google archives of this
>newsgroup.
>
>The rest of the argument about transforming the impedance from the
>device collector/drain anode to the output socket is correct, but it's
>being applied to the wrong impedance. The answer you'll find at the
>output socket will always be 50 ohms, because all you've done is lead
>your horse around in a very tight circle.

Odd that in a chain of signal flow, that you see it being circular.
I've yet to observe a commercial rig with its antenna strapped back
into its driver input. Reading schematics is a fine art, and I have
taught more than 200 students how to do it with far more complex
Transceivers, like Collins equipment KWT-6 (AN/URC-32 HF) or Ship's
Radar AN/SPS-10, VHF/UHF AN/SRC20-21 and so on.

The quality of documentation for those pieces of equipment include
mini-treatises covering the engineering details of design, and
specific to these issues of matching. You would be well advised to
garner such gear, as you could, with attending documentation to
augment your education. One still popular item that I taught also
comes from Collins in the form of the R-390A.
>
>I'd better stop now, before some seriously tasteless horse metaphors
>come to mind.

Hi Ian,

Regrettably, you would be outclassed in metaphor usage by an old salt
who could express the word **** as a verb, noun, adjective, adverb,
conjunction....

For those lurkers who get short-shrifted of quality in these
half-debates I offer another Motorola reference: "RF Device Data
Volume II." Observe in AN2821, "Systemizing RF Power Amplifier
Design," in the sub-section "Amplifier Design":
"After selection of a transistor with the required
performance capabilities, the next step in the design
of a power amplifier is to determine the large-signal
input and output impedance of the transistor."

...
"Having determined the large-signal impedances, the
designer selects a suitable network configuration
and proceeds with his network synthesis."

ALL may note this is exactly what has been described by me. ALL may note nothing of equal scope and depth is offered in rebuttal - if one were to elevate those responses to such a lofty description.

73's
Richard Clark, KB7QHC

77. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:24:02 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309011224.10cea03d@posting.google.com>
Source record: 109043

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<RxmdnSAnyKO6zc6iXTWJhQ@comcast.com>...
>
> Read this again. The *normal* equation works. It is the ARRL/Besser equation
> that does not.
>
> Tam

I can admit that i'm wrong, but only if you give me good
reasons, which is something you have failed to do.

Read THIS again.

But please note that the rho is 1 in both cases.

And i believe that the conjugate equation is correct, that the
reflected voltage will have a phase shift of twice the phase of the
Zo, which in this case would be 45 degrees.

And you bring up an excellent point Tam, that the only Zo that
will give you a RC=-1 (or 1 /_ 180), with an ideal short as a Zload,
would be a purely REAL Zo, with no reactance.

So again, the "normal" equation fails in this respect. I'll state
once again that the normal equation assumes a purely real Zo.

Besser and Kurokawa and the ARRL are all correct.

Slick

78. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:26:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53acf8_4@corp.newsgroups.com>
Source record: 109046

Roy Lewallen wrote:
> The "reflected power" is greater than the "incident power".

So if the load is put into a black box, there is more power coming
out of the box than is going in?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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79. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:30:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hta7lvku6jlv5pkubqcl7b5vn0c1j0n7h0@4ax.com>
Source record: 109044

On Mon, 1 Sep 2003 14:12:08 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>In general, the addition of negative feedback to change the output impedance
>does not change the dynamic range.
>

Hi Tam,

H.W. Bode, of Bell Labs, developed a body of work that proves you
completely wrong. Negative feedback enhances every facet of amplifier
design and to claim otherwise is wholly misinforming.

73's
Richard Clark, KB7QHC

80. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:30:51 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309011230.532468a3@posting.google.com>
Source record: 109045

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f537cdb_4@corp.newsgroups.com>...
> kd1@sympatico.ca wrote:
> > I assume, then, that from now on you will constrain the use
> > rho=Sqrt(Pref/Pfwd) to situations where Pref is zero?
>
> No, the equation from Ramo & Whinnery from which the above
> is developed is
>
> Pz-/Pz+ = |rho|^2 and take the square root of each side.
>

And this shows us that if [rho] is greater than one, the reflected
power will be greater than the incident power.

This is only possible with an ACTIVE network, with a Return Gain
instead of a Return Loss.

> Like I said at first, I made a boo-boo and should have put absolute
> value signs around 'rho'. You are completely ignoring that response
> of mine.
>
> I left off the absolute magnitude signs. It's no biggie.

True. No big deal because most of the literature has rho=[gamma].

Where gamma is the complex reflection coefficient, and rho is only the
magnitude.

Slick

81. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 20:40:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53b051_4@corp.newsgroups.com>
Source record: 109047

Dr. Slick wrote:

> Cecil Moore <Cecil.A.Moore@ieee.org> wrote:
>>Pz-/Pz+ = |rho|^2 and take the square root of each side.
>>
> And this shows us that if [rho] is greater than one, the reflected
> power will be greater than the incident power.

Maybe, or maybe the equation assumes Z0 is not complex. I don't know
the assumptions. Which leads to another question. Can the index of
refraction for a material be complex? To the best of my knowledge,
there's no mention of complex indices of refraction in _Optics_.

> ... most of the literature has rho=[gamma].
> Where gamma is the complex reflection coefficient, and rho is only the
> magnitude.

That is the convention I use. Unfortunately, it is not universal and may
even be old-fashioned, like me. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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82. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 21:11:40 UTC
From: Harry Bloomfield <harry.m1bytNOSPAM@tiscali.co.uk>
Message-ID: <MPG.19bdc66a51cc9575989917@news.individual.net>
Source record: 109048
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

In article <uka7lvstnniucn2jm2op4vce7ntit9ngma@4ax.com>,
g3nyy@despammed.com says...
| When I was at school, "dyslexia" was called "stupidity".
|

When in fact very many dyslexia sufferers are of above average
intelligence.... I know of a few such and I used to suffer a mild form
dyslexia myself.

--
Regards,
Harry (M1BYT)...

Remove the 'NOSPAM' in my email address to reply.

Free Amateur Radio Courses:-
http://www.ukradioamateur.org

83. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 21:14:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj0cs5flm1@hercules.btinternet.com>
Source record: 109049
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

> When I was at school, "dyslexia" was called
"stupidity".
>
> 73 de G3NYY
>
==========

"Stupidity Rules, KO ?"

Was it you, the usual ring-leader, who cross-posted
this stupid rubbish all over the net ?

Just make your usual witty reply and then please clear
off.

84. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 21:52:43 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <WiOdnQev75stIs6iXTWJkQ@comcast.com>
Source record: 109050

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:hta7lvku6jlv5pkubqcl7b5vn0c1j0n7h0@4ax.com...
> On Mon, 1 Sep 2003 14:12:08 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >
> >In general, the addition of negative feedback to change the output
impedance
> >does not change the dynamic range.
> >
>
> Hi Tam,
>
> H.W. Bode, of Bell Labs, developed a body of work that proves you
> completely wrong. Negative feedback enhances every facet of amplifier
> design and to claim otherwise is wholly misinforming.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

Everything, except the output dynamic range. Please go through my numbers. The equation I gave is for the point at which the amplifier goes non linear, and there actually is no feedback. There is a large error voltage at the input, but the amp can't do anything about it because it is already in saturation. For a 5V input/output and a 1K load the output terminal of the op amp is already at VCC. A more practical example might have been a 13.8 volt power supply regulator running off 16 volts, with a current sensing resistor in series with the output. Anyway, it was a rainy afternoon kind of thing.

Tam/WB2TT

85. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:00:37 UTC
From: Tim <tim.mcc@tesco.net>
Message-ID: <3f53c142$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 109051
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bj0cs5flm1@hercules.btinternet.com...
> > When I was at school, "dyslexia" was called
> "stupidity".
> >
> > 73 de G3NYY
> >
> ==========
>
> "Stupidity Rules, KO ?"
>
> Was it you, the usual ring-leader, who cross-posted
> this stupid rubbish all over the net ?
>
> Just make your usual witty reply and then please clear
> off.
>
>

I would just like to add that despite my difficulty with words and maths I have managed to gain several qualifications that I am very proud of although I never made it to a university I did gain 4 B's, 3 C's, a D, an E, and an F at GCSE, a BTEC National Diploma in General Engineering (which of course includes analogue and digital electronics along with things like three phase principles),and a City & Guilds Level 1 in Visual Basic. On top of these I hold a BGA endorsement to glide (which I gained at the age of 18). I have a good self taught understanding of PC hardware (I have been building my own P.C.'s since I was 12) and operating systems including DOS and CPM(I know CPM is an Amstrad based system but it is the fore runner of DOS) as well as several high and low level programming languages. I therefore take being called stupid or illiterate as quite an offence. I do have a great interest in learning about the way radios work hence I want to join the armature community although I will probably still use my CB as I have many friends there who except me for who I am and not the problems I have. I would also like to suggest that if CBers are to the dislike of certain members of this news group then perhaps they would like to stay off the newsgroups for that medium and let them get on with it. As such this will be my last posing here until I pass my exams. which I will no matter how long it takes me to solve my problems with the words and numbers involved I will pass.Having had my rant and hopefully shown I am not stupid or thick or whatever other label has been placed on me I would like to say a big thank you to those who have posted in my defence and say I would welcome their input on the CB groups as perhaps they could help dispel some of the fears and misconceptions that

CBers have about armatures. This on its own could make for a better environment for all.

86. Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:09:58 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309011409.750b5a84@posting.google.com>
Source record: 109052

Hello,

No one has really derived the Reflection Coefficient,
either the "normal" or "conjugate" equation. This would
be key to our understanding of when you can use which equation.

What is not understood is how A/C/F got from:

Voltage R. C.= (Vr/Vi)e**(2*y*z)

where y=sqrt((R+j*omega*L)(G+j*omega*C))
and z= distance from load

To:

Voltage RC=(Z1-Z0)/(Z1+Z0) for purely real Zo
or Voltage RC=(Z1-Z0*)/(Z1+Z0)

Even Kurokawa doesn't show us how he gets the conjugate
equation. Email me to get the paper, his notation is confusing.

I have NO problems with the normalized formula,
AS LONG AS Zo IS PURELY REAL.

Nevertheless, even if you do believe the "normal"
equation is correct even with complex Zo, i'd still like
to see your derivation.

And please give us a derivation with VARIABLES ONLY.
The strong temptation to use specific numbers will only
lead us to incorrect conclusions like:

A**B=A+B, because it's true when A and B are equal to 2.

Slick

87. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:12:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl7h31mr17s3c8@corp.supernews.com>
Source record: 109053

Nope.

I'm glad you're finding the time to look over the example. I see you've stumbled into the first problem with assigning a power to each individual wave. I'm afraid you'll encounter additional dilemmas as you dig deeper into it.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> The "reflected power" is greater than the "incident power".
>
>
> So if the load is put into a black box, there is more power coming
> out of the box than is going in?

88. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:31:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53ca53_5@corp.newsgroups.com>
Source record: 109055

Roy Lewallen wrote:
> I see you've stumbled into the first problem with assigning
> a power to each individual wave.

I've stumbled upon the first problem in your solution. :-)
What are Z0 and ZLoad again? Is Z0 physically possible? Is
ZLoad physically possible?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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89. Re: Matching 70 cm Yagi to coax feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:32:46 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <66i7lvgje8d3v6h25h1u89nkpg67qoih01@4ax.com>
Source record: 109054

How would a ferrite core go at 70cm?

Losses might be unacceptably high.

Any ideas?

MikeN

On Fri, 11 Jul 2003 05:35:22 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>>Thanks Sjoerd.
>>
>>Two questions arise.
>>
>>I'd thought earlier of using a 1/4 wave transformer, using paralleled
>>50 ohm coax to give me 25 ohms, which transforms the 12.7ohm antenna
>>to to 49, say 50 ohms, but isn't the DK7ZB match still an unbalanced
>>feed to a balanced radiator?
>>
>>Won't this perturb the directivity?
>
>The same thought came to my mind when I read the DK7ZB pages this
>afternoon (it's a neat design idea and is going into my keep-this
>notebook!) Seems to me there might be a pretty easy way to deal with
>this.
>
>A 1/4-wavelength coax transformer for 2-meter operation, using typical
>V=.66C foam-dielectric coax cable is going to be just about a foot
>long. I'd think that one could wind the pair of coaxes through a
>modest-sized ferrite toroid core a few times and tie-wrap the ends
>firmly into place, rather than just running them out along the boom
>and back. This should create a reasonably effective choke balun...
>something like a Reisert 1:1 style, but acting as an impedance
>transformer thanks to the paralleled coaxes. You'd get both the
>12.7 : 50 ohm transformation, and the balancing, out of one package.
>
>You'd probably want to wind only part of the impedance transformer
>around the ferrite, leaving a few inches to make the connection to the
>feedpoint (thus keeping the balun itself from coupling into the
>radiating element too badly).
>
>Another possibility: in his book on baluns and ununs, Jerry Sevick
>discusses this basic sort of application, and suggests that a 1:1
>balun of this sort can be used as an isolation transformer by putting
>it 1/2 wavelength back down the coax from the balanced-antenna

>feedpoint (a technique which he credits to one of Roy W7EL's
>articles). It seems to me that this would work equally well for one
>of these 1/4-wave-impedance-transformers-wrapped-into-a-balun. Mount
>it back behind the reflector, run 1/2 electrical wavelength of any
>convenient coax (or maybe open-wire line?) up to the antenna
>feedpoint, and it'd still perform both the balanced-to-unbalanced
>conversion, and the proper impedance transformation in that location.
>
>So - does this make sense, or am I being stupid and missing something?

90. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:53:13 UTC
From: kd1@sympatico.ca
Message-ID: <3F53CDD9.CA287CA4@sympatico.ca>
Source record: 109057

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > My gosh, you work hard to find disagreement. In my sentence above,
> > please update "there are NET reflections" with "there may be NET
> > reflections".
>
> Shirley, you can understand that the first statement is an absolute-
> exclusive and the second statement is a conditional-inclusive and
> are logically opposite statements, one false and the other true.

That is the beauty of reading for disagreement; you can always
justify the disagreement.

> > If readers spent just a small fraction of their effort interpreting
> > for agreement instead, discussion would flow so much more smoothly.
>
> Interpreting an exclusive statement as an inclusive statement is
> logically invalid.

To read for agreement, the reader examines statements in context
and ignores the minor inconsistencies that the author has made in
the prose. Taking each statement out of context and examining it
individually will provide a myriad of opportunities for finding
disagreement, if that is the objective.

> >>Sometimes, there are net reflections existing where there is no
> >>impedance discontinuity.
> >
> > Excellent. Agreement.
>
> Nope, not agreement. Your absolute statement was false. My conditional
> statement is true.

There it is again; searching for disagreement.

> If you had said 'sometimes', your statement would have
> been true instead of false.

And is that not exactly what I did with my clarification to
the original sentence?

Are you sure that you do not read with the intent of maximizing
disagreement?

...Keith

91. Re: How to find a subject.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 22:54:01 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnbl7jg9.1dfg.bit-bucket@localhost.config.com>
Source record: 109056

```
On Mon, 1 Sep 2003 14:09:10 -0400, Ronald Bilodeau hath writ:
> HI! Can sombody tell me how to find a subject on a newsgroup? Like finding
> articles on j-poles antenna etc...
> Thank You Very Mutch, Ron
> VA3SGR

Bookmark this:

http://groups.google.com/advanced_group_search?lr=lang_en&num=50&hl=en

Then fiddle with the input fields as you see fit.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | config.com | DM68mn SK
```

92. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:17:40 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <2P2dnYDTkIELQc6iU-KYuA@comcast.com>
Source record: 109068

Richard,

Let me be the lurker on for the day. Actually, you have a good example. I see the parallel equivalent resistance for the device at 1.5 MHz is about 2 Ohms. At 12.5V with a Vcesat of an optimistic .5V, the power that can be delivered at conjugate match is 12^2/(2 * 2) = 36W. Not the rated 100.

The 421 is a fairly inefficient transistor. The 50W MRF450 has a *series* equivalent output impedance at 30 MHz of 174 - j.5. The parallel resistance will be about 175. Matched power will be 12^2/(2 * 175) = 0.4W. There is nothing wrong with that.

One of their ap notes states that on newer devices they specify the conjugate of the desired load, rather than the intrinsic output impedance. On some devices you simply can't tell which they mean. On the very popular MRF150, it is footnoted as being "conjugate of optimum load". It may be that the FET resistance is too high to be meaningful.

Tam/WB2TT
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2867lvsdia61ddccatl3fe2am9d9ade1d7@4ax.com...
> On Mon, 1 Sep 2003 10:19:39 +0100, "Ian White, G3SEK"
> The MRF421 is used in two of my HF rigs and you have yet to offer what
> you have. You didn't look did you? Have you ever looked? Have you
> ever repaired a Finals' deck? Ever design one that is comparable?
>
> From that specification sheet(s):
> Figure 7 - Series Equivalent Impedance, Zin
> shown with both Smith Chart and tabular results over the range of 2
> MHz to 30 MHz:
> Freq. Zin
> 30 0.7 - j.5
> 15 1.39 - j1.1
> 7.5 2.8 - j1.9
> 2.0 5.35 - j2.2

93. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:23:34 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bj0kdm$gt1$0@208.206.142.83>
Source record: 109058
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" wrote:

> "Airy R. Bean" <me@privacy.net> wrote in message
> news:3f538260$1_1@mk-nntp-1.news.uk.worldonline.com...
> > No, no, no. It's not that you're unwelcome if you're an ex
> > CBer, it's that you're unwelcome if you're still a CBer.
> >
> > If you have no technical interest in the innards of your rig,
> > and if your prime motivation is not technical, then you're still
> > a CBer.
>
> Bean,
>
> Do you realize that you've just labeled a majority of contesters
> as "CBers" ???

Carl, you display a serious flaw in your logic here, too. I've never been interested in hard-core contesting, but those I've known who were always were very much interested in what was going on inside their rigs. Otherwise their contesting endeavors wouldn't be nowhere near as successful. You seem to fail to recognize that contesters are competitors and competitors are very much involved in the technology involved in their competition.

If you believe otherwise, tell it to the NASCAR people. Their response might be interesting.

Of course you also don't believe that advances in radio technology have seriously improved the operation of CW, so the rest follows.

94. Re: Laugh of the day

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:24:55 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <vl7lb919kn4b0@corp.supernews.com>
Source record: 109059

A number of years ago my CAP Ground DF search team tracked a stolen aircraft ELT (distress beacon) to a shed in a backyard. When the County Sheriff's Detective arrived he knew the people who lived there. After talking with the property owner the shed was searched and a quantity of stolen aircraft parts were found including an actively transmitting ELT. The detective came out of the shed with a grin on his face that wouldn't quit. Said this was the easiest case he had ever worked. The ground team tracked the ELT for several hours following it as the crooks moved their loot several times.

Dave Nagel, CPT CAP

Cecil Moore wrote:

> Foxnews just reported a criminal who stole an active
> GPS tracking device. :-) :-) :-)

95. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:28:12 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <W$yPQPgMY9U$EAEC@ifwtech.co.uk>
Source record: 109061

Richard Clark wrote:
>On Mon, 1 Sep 2003 10:19:39 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.co.uk> wrote:
>
>>Richard Clark wrote:
>>>On Sun, 31 Aug 2003 19:42:42 +0100, "Ian White, G3SEK"
>
>>>Motorola publishes the equivalent series (or parallel) resistance for
>>>the MRF-xxx (pick your own that corresponds to the actual device used
>>>for the finals in your own transmitter).
>>
>>Sorry, that horse won't run. RF power transistor data sheets specify the
>>load impedance that needs to be presented *to* the transistor from the
>>outside world, in order for the device to function as specified.
>
>Clearly you did not look at such a sheet, and certainly not from
>Motorola.
>
>The MRF421 is used in two of my HF rigs and you have yet to offer what
>you have. You didn't look did you? Have you ever looked?

Of course I have, over several years: looked at data sheets (Motorola
more than any others), at numerous application notes, and at Dye and
Granberg's textbook.

>Have you
>ever repaired a Finals' deck?

If you mean, have I worked in the mobile radio industry, then the answer
is no.

>Ever design one that is comparable?

Oh yes: designed, built, used - and understood.

>
>From that specification sheet(s):
>Figure 7 - Series Equivalent Impedance, Zin
[snip]
Yes, Zin is the true input impedance of the device - but "Zout" is not.

>Figure 9 - Output Resistance versus Frequency, Zout
>slightly less than 2 Ohms at 1.5 MHz to 1.0 Ohms at 30 MHz shown in a
>clear and unambiguous chart over the entire range of frequency and
>resistance described as Rout, Parallel Equivalent Output Resistance,
>(Ohms).

>
"Described" is the operative word. What these terms really mean is a
different matter - see the quotes from Motorola below.

>
>>Sometimes they state the conjugate of the required load impedance, and
>>sometimes they don't say which.
>
>Sometimes? You don't seem to sure, and you offer nothing specific.
>
I am very sure. Some manufacturers state the conjugate, others don't.
Even Motorola have changed their terminology over the years: sometimes
it's "output impedance" or "Zout", sometimes it's "Z(subscript OL)",
sometimes it's "Z(superscript *)(subscript OL)".

Motorola's AN1526 was written in the 1990s to clear up this mess. This
is the key paragraph [my comments in square brackets]:

"Almost every RF power device in Motorola's RF Device Data Book has a
section identifying the device's large-signal series equivalent input
and output impedances. Most often, the device output impedance is
referred to as 'the complex conjugate of the optimum load impedance into
which the device operates at a given output power, voltage and
frequency.' That is certainly a statement requiring some careful
thought, especially since the term 'output impedance' is somewhat
misleading [so even Motorola admit that]. ... as described in [AN282]
it is the conjugate of the LOAD impedance at the fundamental operating
frequency which allowed the transistor to 'function properly' [when the
load impedance was varied in a test jig]."

AN1526 goes on to explain this in much more detail. All of it is
consistent with my earlier statement that the parameter sometimes
labelled "output resistance" is actually the LOAD that needs to be
presented *to* the device from the outside world, for optimum
performance.

>>
>>That is not the output impedance *of* the transistor itself (except in
>>certain special cases). However, the data sheets sometimes do
>>ambiguously call it the "output impedance". It's a confusing mess.
>
>The data sheets are quite ordinary to the designers however. I've
>never sat through a design seminar where any RF design engineer has
>made such a statement as yours (much less the outright howler of
>circularity below). In fact their queries related to exactly these
>specifications. How is it that your experience is different?
>
Maybe it's because I haven't swallowed someone else's half-digested
information, but have done my own thinking and not given up till it
really made sense.

>>
>>However, I'd hoped by now that we were all agreed about this particular
>>dead horse. It's buried somewhere in the Google archives of this
>>newsgroup.
>>
>>The rest of the argument about transforming the impedance from the
>>device collector/drain anode to the output socket is correct, but it's
>>being applied to the wrong impedance. The answer you'll find at the
>>output socket will always be 50 ohms, because all you've done is lead
>>your horse around in a very tight circle.
>
>Odd that in a chain of signal flow, that you see it being circular.

I never mentioned signal flow - I'm talking about your circular logic!

The output network is designed to transform a 50-ohm load at the output into the complex load impedance that needs to be presented to the collector. But you incorrectly claim that the data sheet gives the "output impedance" of the device itself. You then claim that by transforming that "device output impedance" through the output network, you can calculate the output impedance of the transmitter. Since you are simply back-tracking through the network design calculations, the answer you get will always be 50 ohms! It's circular logic in the tightest possible loop.

>
>For those lurkers who get short-shrifted of quality in these
>half-debates I offer another Motorola reference: "RF Device Data
>Volume II." Observe in AN2821, "Systemizing RF Power Amplifier
>Design," in the sub-section "Amplifier Design":

That's actually AN282A.

> "After selection of a transistor with the required
> performance capabilities, the next step in the design
> of a power amplifier is to determine the large-signal
> input and output impedance of the transistor."
> ...
What you cut out here was the key reference to "collector LOAD resistance", presumably because you missed the significance of "load".

> "Having determined the large-signal impedances, the
> designer selects a suitable network configuration
> and proceeds with his network synthesis."
>
>ALL may note this is exactly what has been described by me. ALL may
>note nothing of equal scope and depth is offered in rebuttal

AN282, from which you quote, was first published in 1968. The truth about load impedance is in there to be seen, but I'd be the first to agree that it's not stated clearly. Motorola then confused the issue by continuing to talk ambiguously about "output impedance" for at least another 20 years.

AN1526, from which I'm quoting above, supersedes AN282. It was written about 25 years later in an attempt to clear up that inherited mess of loose definitions... but apparently with limited success.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

96. Re: Determining antenna resonance with a grid dip meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:31:20 UTC
From: R P Haviland <bobh@iag.net>
Message-ID: <cFQ4b.15617$EW1.5147@newsread1.news.atl.earthlink.net>
Source record: 109060

Of course, the two basic methods of coupling a grid dipper to an antenna are capacative and inductive. For capacative, couple one side of the dipper coil to the end of the antenna by 2 to 5 pf. You may be changing the resonant frequency by stray coupling.
For inductive, make a coil shaped like a wire coathanger, size or more than one turn to get to the right frequency. couple the long side of this "coil" to the center of the element.
bob w4mb

97. Re: Two Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:35:02 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <l7-cnbSAk7X_Rc6iXTWJkA@ctc.net>
Source record: 109062

> The first question - is the internal resistance of a
> transmitter 50 ohms or is it not 50 ohms - has been
> lingering along for many years. It has been without
> answer because nobody has ever found a satisfactory
> method of measuring it at full power output into the
> transmitter's load. Very recently the Establishment has

Reg this has to be a troll question. I am sure you know the impedance of a transmitter can be almost anything. Usually an ohm or so for transistor transmitters and a couple of thousand for a tube . It is then matched to whatever load is hooked to it.

98. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:41:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53dad3$1_7@corp.newsgroups.com>
Source record: 109063

kd1@sympatico.ca wrote:
> And is that not exactly what I did with my clarification to
> the original sentence?

Thanks for correcting your error.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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99. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:49:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53dc87$1_7@corp.newsgroups.com>
Source record: 109066
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Walt Davidson wrote:
> Certainly, most of the early Amstrad 8-bit computers used CP/M and DOS
> was developed, based upon CP/M, around 1980.

Actually, IBM looked at CP/M-86 for their PC operating system and then
decided to go with Microsoft instead of Digital Research. If DR had
gotten the contract, Bill Gates' life would probably be a lot different.
--
73, Cecil http://www.qsl.net/w5dxp

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100. Re: Another DXCC question ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:54:13 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <F_Q4b.19571$Om1.4738@newsread2.news.atl.earthlink.net>
Source record: 109065

I may be wrong, but I understand that ARRL has 'field checking' of QSL cards. Check your ham clubs and hamfests.

Dan/W4NTI

"W4WNT" <w4wnt@carolina.rr.com> wrote in message news:TWb4b.40340$J16.2076238@twister.southeast.rr.com...
> Hi Carter,
>
> As long as the cards clearly list your call and a signal report as well as
> the details of the QSO, time date, band, mode, they should be acceptable for
> DXCC submission. Most folks submit 102 or so cards with the first
> submission, then if there is a problem with one card, they are still OK.
>
> As for the HA5-350 card, it sounds like an SWL report rather than an amateur
> call. (As above, does it have QSO details of your QSO with the call listed?)
> Since you'll probably be having a field checker look them over, he or she
> can tell you if it is legit card. Another question for the checker is
> whether the ten year old cards have to go into the ARRL DXCC desk (but ARRL
> Divisional Hamfests will have League reps who can check them).
>
> Good luck and good DX,
>
> Bill, W4WNT
> "carter" <cartw@netart.com> wrote in message
> news:3F5022DB.84E55202@netart.com...
> > I'm sending in for the regular DXCC and a few things are unclear
> > to me:
> >
> > 1) Would a CY9AA (St. Paul Island) from 1997 on 160 meters
> > count?
> > Thought I read somewhere that 160 meters doesn't count on
> > the regular DXCC.
> >
> > 2) I have a 3E1DX from Panama. But on the list it doesn't
> > have 3E1 for Panama listed. Only HO-HP#* is listed for
> > Panama. It was a CQWW contest in 1997. Am I out of luck?
> >
> > 3) Have a 4N7DW from Yugoslavia from 1993. Once again
> > this prefix isn't listed on the ARRL list for Yugo (YT prefix is)
> > Out of luck??

> >
> > 4) I have a Pitcairn Island VR6BB from 1993. VP6 is now
> > listed as being Pircairn Island. VR is now Hong Kong.
> > What gives with this one??
> >
> > 5) I have a HA5-350 from Hungary from 1996. Not allowed?
> >
> >
>
>

101. Re: Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:54:40 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vl7n12mkrjedfc@corp.supernews.com>
Source record: 109064

I completely agree with Cecil. Make sure that you buy the latest
edition of each. The ARRL Antenna Book was on sale directly from
ARRL.ORG and Kraus is now in its third edition. The latter may be found
in a paperback (overseas) edition.
Good reading! Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f539fa0_8@corp.newsgroups.com...
> Wedgew wrote:
> > Could one of ye reccomend a reference on basic antenna theory
>
> For very basic antenna theory, "The ARRL Antenna Book" is pretty good.
> For serious antenna theory, "Antennas for All Applications" by Kraus
> and Marhefka is hard to beat.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>

102. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:55:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53dde3$1_7@corp.newsgroups.com>
Source record: 108970

Roy Lewallen wrote:
> I'm glad you're finding the time to look over the example. I see you've
> stumbled into the first problem with assigning a power to each
> individual wave.

Are you telling us that the net average Poynting vector points away
from the load? If so, doesn't that tell you that something is wrong?
--
73, Cecil http://www.qsl.net/w5dxp

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103. Re: QST & Antenna Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:55:53 UTC
From: NN7K@reno.rmci.net
Message-ID: <dSQ4b.2148$Aa.1034@fe01.atl2.webusenet.com>
Source record: 109067

And, this isn't the ONLY PLACE for such shenanigans!! on TVRO DISH's (where the gain calculations are Calculated, and pretty much accepted as GOSPEL, some manufacturers added .3-.5 dB gain OVER that which is THEORITICALY POSIABILE !!

Caviet Emptor (let the buyer beware) !!! Jim NN7K

> W1RFI wrote:
> >
> > Very few antenna manufacturers have provided the required models of their
> > antennas.
> >
> > 73,
> > Ed Hare, W1RFI
>
> This may be an ironic inversion of the condition we had years ago, where
> antenna manufacturers claimed all kinds of gain numbers for their
> products because they knew they were essentially unverifiable. Now, with
> the new policy in place and a better means of verifying antenna gains
> through modeling software, it is almost as if no one-- or, rather, very
> few-- want to step forward and put their claimed antenna gains on the
> line. Interesting.
>
> It looks like ARRL has done its job well, at least to weed out the
> ridiculous numbers from the rest.
>
> Al W6LX

104. Re: Extending range of wireless motion sensor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-01 23:59:13 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <l3R4b.19607$Om1.7423@newsread2.news.atl.earthlink.net>
Source record: 108969

Seems to me you are picking up too many signals and/or noise.

If unplugging the 'extra' antenna allows it to only trip when there is motion.....is that not what you want?

Dan/W4NTI

"Ivan H" <ivan_hendricks@hotmail.com> wrote in message news:keg4lvgrf8qhc66c1j5l2c9ahueet33mi0@4ax.com...
> Well, I did get it working with a different dipole. Now my problem is
> when the antenna is connected to the motion sensor, it continuously
> trips the motion sensor. If I unplug it, it only trips when it senses
> motion. Could some sort of interference/noise received by the dipole
> be causing the unit to trip all the time? How could I solve this?
>
> I know my questions are not specifically related to amateur radios,
> but I figured this would be the best place to find an answer as I am
> dealing with signal transmission and antennas.
>
> Cheers,
> Ivan
>
> On Sat, 30 Aug 2003 23:28:54 -0700, Ivan H
> <ivan_hendricks@hotmail.com> wrote:
>
> >I just bought a 400 ft wireless motion sensor and cannot get the
> >distance I want (big suprise :)). Anyway, I have read a lot about
> >directional antenas as well as cantenna's on newsgroups and websites
> >when I was researching options for my home wireless network.
> >
> >What I would like is a directional (beam) type antenna to see if I can
> >go the full 400+ feet I really need to go. Could a cantenna or
> >something of simular design work? I'm not an expert at radio or
> >electronics, but I can follow directions. Any other suggestions would
> >also be appreciated.
> >
> >I have one of those 1000ft driveway sensors and could not get the
> >range. Hooking up the receiver to my old television antenna, which I
> >don't use anymore due to DISH, worked like a charm. I tried the same
> >idea and it seemed to work at first with a dipole antenna conntected
> >to the transmitter, but then stopped and never worked again. Not sure
> >why. It still works at shorter ranges.
> >
> >Thanks in advance.
> >

> >Ivan
>

105. Re: Two Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:03:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj0mns$90d$1@hercules.btinternet.com>
Source record: 108971

> Reg this has to be a troll question. I am sure you know the impedance of a
> transmitter can be almost anything. Usually an ohm or so for transistor
> transmitters and a couple of thousand for a tube . It is then matched to
> whatever load is hooked to it.
>
I have no wish to be unkind but I'm sorry to say it is your response which is likely to be considered a troll.

In any case, the question was "Is the internal resistance of a transmitter 50 ohms or is it not 50 ohms?". The correct answer is "It is not 50 ohms." Now let's get on with Q2. ;o)

Reg, G4FGQ

106. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:11:09 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj0n6t$j9q$1@titan.btinternet.com>
Source record: 108972

Evidently data sheets and books are written by
marketing and sales departments.

107. Re: Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:15:47 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309011615.15f75a4a@posting.google.com>
Source record: 108973

Wedgew <wedgew@rochester.rr.com> wrote in message
news:<BDL4b.32996$lk1.8856@twister.nyroc.rr.com>...
> Could one of ye reccomend a reference on basic antenna theory

http://www.aticourses.com/antennas_tutorial.htm

Art

108. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:15:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q0h7lvc4en0k6c60dfvo407isq8m6ah7ho@4ax.com>
Source record: 108974

On Mon, 1 Sep 2003 17:52:43 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>Hi Richard,
>
>Everything, except the output dynamic range. Please go through my numbers.
>The equation I gave is for the point at which the amplifier goes non linear,
>and there actually is no feedback. There is a large error voltage at the
>input, but the amp can't do anything about it because it is already in
>saturation. For a 5V input/output

What exactly does this mean? That you expect 5V in will track with 5V
out? Say so. Shortcuts in specification lead to disaster. If this
is not what you mean (and you did not specify an input in the
original) your ambiguity allows for any interpretation.

>and a 1K load the output terminal of the
>op amp is already at VCC. A more practical example might have been a 13.8
>volt power supply regulator running off 16 volts, with a current sensing
>resistor in series with the output. Anyway, it was a rainy afternoon kind
>of thing.
>
>Tam/WB2TT

Hi Tam,

Let's review as you asked:

>>Consider the following. An ideal DC op amp operating from a 10V supply with
>>0 output impedance, and infinite gain.
>>
>>1. Put a 1K resistor in series with the output.

Hence the "ideal" Op Amp is crippled from the start, any expectations
of superlative performance have already been abandoned. Further, the
"ideal" Op Amp is not rail limited, nor is it convention to discuss Op
Amp designs with single ended supplies. These are more short cuts
that could have been expressed with very little greater length to
conventional usage.

>>
>>2. You now have an op amp with 1K output impedance.

#2 in fact adds absolutely nothing but repetition.

>>
>>3. Connect the inverting input of the op amp to the other end of the 1K
>>resistor. Call that the output terminal. and connect a load resistor Rl from

>>there to ground. (The gain from the non inverting input to Rl =1 in the
>>linear range)

That being the new output of the amplifier, R1 as you call it, now
loads that amp to ground. (By the way, if you are going to have two
resistors, convention would label them R1 R2; not R and R1.)

The gain is NOT 1 by sheer, obvious placement of the resistors you
describe. You elsewhere supply a gain that does not agree with this
#3. What you imply are the mu and beta gains, but you do not really
go into that distinction, nor do you perform the math that bears on
their usage.

>>
>>4. Because of the infinite feedback,

Infinite feedback? Poor specification where I have to presume you are
in error and meant infinite gain (for the previously "ideal" amplifier
- which it is not now). If the output were strapped back to the
inverting input, that "might" qualify as infinite, but your load is
the gain determinant of the amplifier. If you meant that the Op Amp
output is impressed upon the inverting input, that goes without saying
for all linear applications doesn't it? If by this your statement of
a gain of 1 above was along the same lines, it suffers by similar
degree.

>> the output impedance is now 0 again,

No, it is not, you have ascribed (by description) a 1000 Ohm output
impedance (resistance). The amplifier is not the Op Amp component, it
is the assembly of components presented to the load and is modified by
the gain that you incorrectly ascribe above.

>>but all of the load current still flows through the 1K series resistor.

Which confirms my statement and directly follows from the addition you
originally offer.

>> It
>>will not, for instance, deliver 5V into a 910 Ohm resistor because the
>>amplifier will have saturated before that point. For a given RL, the maximum
>>voltage you can get out is (10 x Rl)/(1000 + Rl) with or without feedback.
>>

With OR without feedback? Which is it? Do you have feedback or don't
you? The additional baggage of your statement both adds nothing, and
is self conflicting. Do I now have the choice to express it has no
feed back?

Dynamic range is not the same thing as rail limited and rail limiting
is certainly not within the canon of "ideal" amplifiers. Dynamic
range is dimensionless and generally described in dB and is a function
of noise. Feed back has a direct correlation to the amount of noise
added by the amplifier and thus impacts Dynamic Range directly.

It would have taken a whole lot less to simply use the conventional
741 Op Amp as an example, warts and all, to express the same issue
which merely points out that a poor design works poorly. You even
anticipate this poor aspect through the modifications after the fact:
>A more practical example might have been a 13.8
>volt power supply regulator running off 16 volts, with a current sensing
>resistor in series with the output.
which illuminates how a design engineer builds from known limitations
toward known loads. In other words, if the engineer faces a 10V rail
limitation, he could have as easily added a DC-DC up converter to
solve it. Anyone can trap another through crafted specifications.
I've got several many squirrels up a tree right now.

73's
Richard Clark, KB7QHC

109. Re: Off Center Fed Dipole: Windom HSQ

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:25:27 UTC
From: Charles Wittnam <wittnam@bresnan.net>
Message-ID: <XrR4b.248201$Oz4.66626@rwcrnsc54>
Source record: 108975

Thanks, Roy. I believe the Belrose articles were in 1994. I know they are downloadable by ARRL members from the ARRL web site. I just rejoined and don't have access to them yet. I will have to judge how bad a problem that will represent with 100 watts. I will undoubtably have to take precautions with the feedline. I will keep all informed with my experience unless I die from RF setting my after shave on fire.

Charlie KD7HU

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl2ovgltp57k64@corp.supernews.com...
> Jack Belrose, VE2CV did considerable research and experimenting with OCF
> dipoles some years ago. Some of his work was published in QST. One of
> the conclusions he reached was that it's awfully hard to keep the common
> mode RF off the feedline to the shack.
>
> Roy Lewallen, W7EL
>
> Charles Wittnam wrote:
> > Danny,
> >
> > I will keep a look out for RF Gremlins. I don't plan to run more
than
> > 100 watts. My rig will be the first to let me know since it is a Ten
Tec
> > Jupiter, which I suspect would not like a lot of RF in the shack. You
know
> > if you start randomly switching on the touch lights in all the bedrooms
in
> > your neighborhood while transmitting with your OCF dipole in the
evenings
> > you would probably would give a while new meaning to "interfering with
> > vertical polarization." You would also become very popular. <g >
> >
> > 73,
> > Charlie
> > KD7HU
> >
> >
> >
> > "Dan Richardson" <ChangeThisToCallSign@mendolink.com> wrote in message
> > news:s2o1lv4er41a8opjpbqg4u6en05n327o71@4ax.com...
> >
> >>Charles,

> >>
> >>Looks like you've got a good handle on things. I have used an OFC, fed
> >>with ladder line. Nothing particularly outstanding in its performance.
> >>However, as to common mode current: running around 100 watts I
> >>experienced no problems, but when I bumped up the power to about
> >>600-watts all hell broke loose. My computer, the TV, stereo, touch
> >>lights and just about any thing else electronic went wild. And I use a
> >>pretty good single point RF ground system here. So be prepared that
> >>some "strange things" may happen. <g>
> >>
> >>Good luck, nice talking with you.
> >>73,
> >>Danny, K6MHE
> >>
> >>
> >>On Sat, 30 Aug 2003 16:20:10 GMT, "Charles Wittnam"
> >><wittnam@bresnan.net> wrote:
> >>
> >>
> >>> Danny:
> >>> I think the you have raised a valid concern about
> >
> > the
> >
> >>>balun. This is something I did not fully appreciate before I made my
> >>>decision to try this. Cebik makes the same point and suggests if you
> >
> > use
> >
> >>>this antenna you might be better off using a parallel feed line with a
> >>>tuner, and no balun. I will make the cuts and scale this antenna down
> >>>preserving the same ratio of offset. Before I hang this permanently I
> >
> > will
> >
> >>>need to get a better feel for its performance and limitations. I may
do
> >
> > a
> >
> >>>head to head test with another antenna set up and see. I was
intrigued
> >
> > by
> >
> >>>W5DXP's "completed inverted L", which is a full wave loop variant.
> >>>The major benefit of this whole experience for me has been the amount
of
> >>>research it has instigated. I also have a better understanding of

> >
> > antenna
> >
> >>>options. I have come to the following conclusions about commercial
> >>>"windoms".(which really are folded OCF dipole antennas).
> >>>
> >>>1. The claims about performance are probably overblown due to:
> >>> a. Faulty assumptions about the degree the "vertical
> >>>radiation" of the feedline plays in modifying performance.
> >>> b. These incorrect assumptions being placed into
antenna
> >>>simulation programs and printed as truth.
> >>> c. Placebo effect: I suspect some of the
testimonials
> >>>are due to expecting better performance. On some occassions the
> >>>improvement may actually be due to hanging these antennas at
"recommended
> >>>heights". Of course your dipole would do better up there too.
> >>>2. The unbalanced feedline makes RF in the shack a common problem
since
> >>>your "vertical radiator" can be coming into your shack, depending
upon
> >>>whether you have taken the necessary precautions to prevent this.
> >>>3. You are almost always better off making your own antenna.
> >>>4. I do NOT recommend dealing with any amateur supply company that
> >>>routinely will not return inquiry calls.
> >>>5. Read up on OCF dipoles as much as possible before building or
buying
> >>>one.
> >>>
> >>> I will keep you informed of my
> >>>progress. I have truly appreciated the input. I hope this discussion
> >
> > helps
> >
> >>>some other hams who are contemplating purchasing commercially made
> >>>"Windoms."
> >>>
> >>>Charlie KD7HU
> >>>
> >>>
> >>>"Dan Richardson" <ChangeThisToCallSign@mendolink.com> wrote in message
> >>>news:5f20lvs86vagudgv7f7r27p059gf71uoi9@4ax.com...
> >>>
> >>>>One thing that as always bothered me is that antenna is not balanced
> >>>>with that lop-sided feed. Further-the-more that assumed 300-Ohm
> >>>>impedance has a pretty hefty reactive component. As baluns like
> >>>>resistive loads I would question just how well the balun works under
> >>>>that condition?

> >>>>
> >>>>I too have modeled the antenna and agree that the claims made
> >>>>regarding feedline's radiation contributing to a strong vertical
> >>>>component is over stated to say the least.
> >>>>
> >>>>Good luck with your cut and try.
> >>>>
> >>>>73
> >>>>Danny, K6MHE
> >>>>
> >>>>
> >>>>
> >>>>On Sat, 30 Aug 2003 02:02:46 GMT, "Charles Wittnam"
> >>>><wittnam@bresnan.net> wrote:
> >>>>
> >>>>
> >>>>> That is probably what I am going to do. I became a
> >>>>little more anxious after I read L.B. Cebik's articles on OCF
dipole
> >>>>antennas, "From the Ground Up." Things are a little bit more
> >>>
> >>>complicated
> >>>
> >>>>than I thought. Most baluns used in OCFs are 4/1. I have have
> >>
> >> included a
> >>
> >>>graph from his article .First of all, the calculations used to design
> >>>
> >>>OCFs
> >>>
> >>>>are supposed to estimate the 300 ohm impedance point. These are
> >>
> >> always
> >>
> >>>a
> >>>
> >>>>rough estimate since as you get further from the center of the
> >>
> >> antenna
> >>
> >>>it
> >>>
> >>>>goes up exponentially. When you factor in nearby objects, your
> >>
> >> radiating
> >>
> >>>feedline, and antenna height the calculated 300 ohm point can be
> >>

> > in a
> >
> >>>>>different area altogther. A 50% error in impedance result with a
> >
> > 5%
> >
> >>>>>shift in the 300 ohm point, which on a 40 meter OCF would be about
> >
> > three
> >
> >>>>>feet. More recently some of the 40meter OCF builders (I think the
> >
> > 40
> >
> >>>>>meter "Carolina Windom" would be an example), have tried to hit the
> >>>>>flatter part of the curve by using a different offset calculation.
> >>>
> >>>Instead
> >>>
> >>>>>of D3/L=.167 for the 300 ohm point they used D1/L=.38 and D2/L=
> >
> > .62
> >
> >>>for
> >>>
> >>>>>a 100ohm point. They are using a 2:1 balun. In the inclosed info that
> >>>
> >>>came
> >>>
> >>>>>with the antenna it says it is using a 1:1 balun which I sincerely
> >
> > doubt.
> >
> >>>>>So I measured my antenna and the offset is closer to the second
> >
> > formula,
> >
> >>>>>than the first so I was confused.. If I cut it up and it did not work
> >>>
> >>>well
> >>>
> >>>>>and I knew what the balun was I would know which part of the curve
(
> >>>
> >>>and
> >>>
> >>>>>the antenna) to head for! . So you can understand my intial
> >
> > reluctance

> >
> >>>to
> >>>
> >>>>>act. Perhaps this is being overly cautious. You get that way when you
> >
> > are
> >
> >>>>>given a "1:1" balun placed in the position where you would put 2:1
> >
> > in
> >
> >>>an
> >>>
> >>>>>antenna that usually uses a 4:1 AND the company does not answer
> >>>
> >>>questions
> >>>
> >>>>>about their product.
> >>>>>
> >>>>> I would highly recommend Cebik's article series on OCF antennas,
> >
> > in
> >
> >>>>>which he debunks a lot of their claims, especially the "vertical
> >>>
> >>>radiator"
> >>>
> >>>>>aspect of the feedline and the "yagi" performance. He basically
> >
> > argues
> >
> >>>>>that these claims are being backed up by overly simplified
assumptions
> >>>
> >>>about
> >>>
> >>>>>the antenna being plugged into antenna modeling programs. He
believes
> >>>
> >>>they
> >>>
> >>>>>are no different than dipoles really. For my purposes I wanted an
> >>>
> >>>antenna
> >>>
> >>>>>system with an offset feed because I can hide the feedline coax
> >
> > easier
> >

> >>>>>given my available tree locations. (and keep the XYL happier...)
This
> >>>>>antenna has a black balun and black insulated flexible wire which
> >
> > really
> >
> >>>>>blends in well on my heavily wooded lot. Right now I am trying to
> >>>
> >>>salvage
> >>>
> >>>>>the situation. This is the first time I have run into an amateur
> >
> > supply
> >
> >>>>>company that has behaved so poorly. It was a rude awakening. I may
> >
> > just
> >
> >>>do
> >>>
> >>>>>what you suggested. I hope I have the 4 to balun since I have other
> >
> > uses
> >
> >>>>>for it. If the down sizing doesn't work then I will either just
swap
> >>>
> >>>out
> >>>
> >>>>>baluns or try a different approach, such as using a parallel
feedline
> >>>
> >>>and
> >>>
> >>>>>not using the balun. We will see.
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>>>>
> >>>>>"Dan Richardson" <ChangeThisToCallSign@mendolink.com> wrote in
message
> >>>>>news:8plvkv4tqdhja7t1faok0s33curesbe3b4@4ax.com...
> >>>>>
> >>>>>>On Fri, 29 Aug 2003 21:37:00 GMT, "Charles Wittnam"
> >>>>>><wittnam@bresnan.net> wrote:
> >>>>>>
> >>>>>>
> >>>>>>> I am trying to salvage the situation before

> >>>
> >>>going
> >>>
> >>>>>to
> >>>>>
> >>>>>>>war with Antennas and More with my credit card company. They
> >
> > shipped
> >
> >>>the
> >>>
> >>>>>>>wrong antenna to me and have NOT answered numerous calls or emails.
> >>>
> >>>I
> >>>
> >>>>>was
> >>>>>
> >>>>>>>looking for a 40 meter OCF dipole and they sent me a 80 meter OCF,
> >>>
> >>>which
> >>>
> >>>>>>>was not what I ordered because of space limitations.
> >>>>>>>If I could cut the thing down to use on 40 meters then I can save
> >
> > the
> >
> >>>>>>>inevitable hassle of dealing with this outfit and going to war with
> >>>
> >>>them
> >>>
> >>>>>via
> >>>>>
> >>>>>>>my credit card company.. However, my understanding is that a lot
> >
> > of
> >
> >>>the
> >>>
> >>>>>>>commercial builders of the OCF dipoles use a 2/1 balun for their 40
> >>>
> >>>meter
> >>>
> >>>>>>>antennas since they are trying to match a different impedance spot
> >
> > on
> >
> >>>the
> >>>
> >>>>>>>shorter antenna., hence it is not necessarily the case that you can

> >>>
> >>>just
> >>>
> >>>>>cut
> >>>>>
> >>>>>>>them down. Any thoughts?
> >>>>>>>
> >>>>>>>
> >>>>>>>KD7HU
> >>>>>>>
> >>>>>>>
> >>>>>>
> >>>>>>Why not just scale the antenna? That's is to say, in your case,
> >
> > reduce
> >
> >>>>>>the length of the wires by a factor of .
> >>>>>>
> >>>>>>Danny, K6MHE
> >>>>>>
> >>>>>>
> >>>>>
> >
> >
>

110. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:33:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e9p7lvoitcbc9078bscoa1i92l6ngq8pk0@4ax.com>
Source record: 108976

On Mon, 1 Sep 2003 19:17:40 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>Let me be the lurker on for the day. Actually, you have a good example. I
>see the parallel equivalent resistance for the device at 1.5 MHz is about 2
>Ohms. At 12.5V with a Vcesat of an optimistic .5V, the power that can be
>delivered at conjugate match is 12^2/(2 * 2) = 36W. Not the rated 100.
>

Hi Tam,

rated 100 WHAT?

Sheesh.

73's
Richard Clark, KB7QHC

111. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:36:14 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <n2GdnQkfJsWfe86iXTWJhw@comcast.com>
Source record: 108977

I looked back in one of the earlier chapters, where they originally do
reflection, and
using e**(+/-jyz)= cosyz +/- jsinyz they get

V(z)=(V+ + V-)cosyz -j(V+ - V-)sinyz
and
I(z)=Yo{(V+ - V-)cosyz -j(V+ + V-)sinyz}

a V(z)=V1cosyz + V2sinyz
}
}
b I(z)=-jY0V1sinyz + jY0V2cosyz

It says the equation is divided into two independent solutions for voltage
and current. I do not understand it. The brackets encompass both a and b.

Tam/WB2TT

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309011409.750b5a84@posting.google.com...
> Hello,
>
> No one has really derived the Reflection Coefficient,
> either the "normal" or "conjugate" equation. This would
> be key to our understanding of when you can use which equation.
>
>
> What is not understood is how A/C/F got from:
>
> Voltage R. C.= (Vr/Vi)e**(2*y*z)
>
> where y=sqrt((R+j*omega*L)(G+j*omega*C))
> and z= distance from load
>
> To:
>
> Voltage RC=(Z1-Z0)/(Z1+Z0) for purely real Zo
> or Voltage RC=(Z1-Z0*)/(Z1+Z0)
>
>
>
> Even Kurokawa doesn't show us how he gets the conjugate
> equation. Email me to get the paper, his notation is confusing.
>
>
> I have NO problems with the normalized formula,

> AS LONG AS Zo IS PURELY REAL.
>
>
> Nevertheless, even if you do believe the "normal"
> equation is correct even with complex Zo, i'd still like
> to see your derivation.
>
> And please give us a derivation with VARIABLES ONLY.
> The strong temptation to use specific numbers will only
> lead us to incorrect conclusions like:
>
> A**B=A+B, because it's true when A and B are equal to 2.
>
>
>
> Slick

112. Re: Matching 70 cm Yagi to coax feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:41:22 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F53E4F1.C6F260DE@gte.net>
Source record: 108978

MikeN wrote:

> How would a ferrite core go at 70cm?
>
> Losses might be unacceptably high.
>
> Any ideas?
>
> MikeN
>

T matches (raising the feed to 200 Ohms resistive) followed by a coaxial
4:1 1/2 wave balun appear to be the choice of weak signal/EME ops.

Dale W4OP

113. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:51:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl7qcidrdb4rd3@corp.supernews.com>
Source record: 108979

Z0 = 68 - j39 ohms.
Zl = 10 + j50 ohms.

Zl is certainly physically possible. I believe Z0 is also.

Exactly in which step did I err in my solution? Or is it just that it doesn't fit within your view of power flow?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I see you've stumbled into the first problem with assigning
>
> > a power to each individual wave.
>
> I've stumbled upon the first problem in your solution. :-)
> What are Z0 and ZLoad again? Is Z0 physically possible? Is
> ZLoad physically possible?

114. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:56:16 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <Rv6dnc9PppIads6iXTWJiA@ctc.net>
Source record: 108981
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

>
> Actually, IBM looked at CP/M-86 for their PC operating system and then
> decided to go with Microsoft instead of Digital Research. If DR had
> gotten the contract, Bill Gates' life would probably be a lot different.

IBM did not decide on the operating system. The users decided based on cost. Gates outsmarted DR. He talked IBM into putting out both systems and letting the users decide which one to put on the computer. His was about $ 50 and DR wanted about $ 150. Even though DR was reported to be a much better system the consumer picked the cheaper one and got what they paid for.

115. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 00:58:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl7qqgmk9pq964@corp.supernews.com>
Source record: 108980

No, the average Poynting vector points toward the load. Power leaves the line and enters the load, as it should. I gave the average power leaving the line and entering the load, and showed its calculation from V and I.

I imagine your problem with the solution is your notion that the total average power is the difference between the "forward power" and "reverse power". But it's not. I gave the equation showing what the total power is, and as you can see, there's a third term involved. When this is taken into consideration, you see that there's a net power flow out of the line into the load, as there should be.

The total average power is computed from V and I at the load, which in turn can be split into forward and reverse voltage and current components. Considering the amount of time you've spent dealing with average power, I assume you've done this derivation yourself. If so, surely you came up with the same result, including the third power term. If you haven't done the derivation, or if you'd like to compare your derivation of total average power with mine, I'll be glad to post it.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I'm glad you're finding the time to look over the example. I see
>> you've stumbled into the first problem with assigning a power to each
>> individual wave.
>
>
> Are you telling us that the net average Poynting vector points away
> from the load? If so, doesn't that tell you that something is wrong?

116. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 01:03:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3gp7lv4g45tfcvmqpjqmruqigo5vm39o51@4ax.com>
Source record: 108982

On Tue, 2 Sep 2003 00:28:12 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>
>AN1526, from which I'm quoting above, supersedes AN282. It was written
>about 25 years later in an attempt to clear up that inherited mess of
>loose definitions... but apparently with limited success.
>

Hi Ian,

25 years after the 60's, and yet AN282 is still published by Motorola
in 1991 by my copy. Further, it appears to survive through to 91
without any appearance of AN1526 which superseded it. This would
suggest that this application note, if published in the 90's
represents quite a bulk of material (nearly half again the total AN's
by number following 1991) published in 10 Years? 1968 + 25 = 1993
which suggests rather a revolution in thought over two years and
clearly not within the scope of credibility. These publishing date
games are too inspecific with your reference clearly in front of you.
Don't you know to surer accuracy?

I still see nothing of substance, merely suggestion:
> That is certainly a statement requiring some careful
>thought, especially since the term 'output impedance' is somewhat
>misleading [so even Motorola admit that]. ... as described in [AN282]
>it is the conjugate of the LOAD impedance at the fundamental operating
>frequency which allowed the transistor to 'function properly' [when the
>load impedance was varied in a test jig]."
Does not say what it is, but what it was by testing - hardly
revolutionary nor upsetting.

Certainly you could come up with a smoking gun couldn't you? Complete
with an actual, demonstrable specification for the item I offered
(seeing as you still lack any concrete example). What does your new
and updated resource say about the MRF 421. Does it abandon that
discussion entirely to this new-age era of all being unknowable?

This is still nay-saying and cut-and-paste philosophy without any
correlatives to actual equipment in the field. Why is it so simple to
correlate for me, and for you to dispute through t'ain't so with no
further elaboration?

For example you countered my query as to "did you build your own RF
deck" and the paucity of specifics could create a vacuum. What
impedes your own counter examples of actual implementation? What

prevents your discussion of design issues considered that are germane to this side-bar? Where is the scope and depth? What service do you offer those mythical "lurkers" or do we agree that they are simply an egoists device?

If you think for yourself, be prepared to stand and deliver.
Otherwise this commentary is more posture than content.

73's
Richard Clark, KB7QHC

117. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 01:05:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl7r7a7s2nk4cd@corp.supernews.com>
Source record: 108983

Why of course that's the explanation! But we're sure thankful we've got
you to tell us what the *real* device characteristics are, and how
things really work! Or at least to give us programs that give us the
for-sure right answers when the underlying principles are too hard for
us to understand. Thanks!

Roy Lewallen, W7EL

Reg Edwards wrote:
> Evidently data sheets and books are written by
> marketing and sales departments.
>
>

118. Re: Laugh of the day

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 01:05:45 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030901210545.08204.00000279@mb-m14.aol.com>
Source record: 108984

>
>Foxnews just reported a criminal who stole an active
>GPS tracking device. :-) :-) :-)
>--

Crooks that stole our 2003 Escalade must have been smarter, On-Star didn't help to track it. They probably disconnected antennas or promptly packed it in the steel cargo container.

Ba$tards! Don't take your nice car to Montreal!

Yuri

119. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 01:23:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f53f291_2@corp.newsgroups.com>
Source record: 108985

Roy Lewallen wrote:
> No, the average Poynting vector points toward the load.

That automatically says Pz- is not larger than Pz+. There are only
two component Poynting vectors, 'Pz+' forward and 'Pz-' reflected.

> If so,
> surely you came up with the same result, including the third power term.
> If you haven't done the derivation, or if you'd like to compare your
> derivation of total average power with mine, I'll be glad to post it.

Assuming coherent waves, all wave components flowing toward the load
superpose into the forward wave and all wave components flowing away
from the load superpose into the reflected wave. Since there are only
two directions, there cannot exist a third wave. If your average Poynting
vector points toward the load, Pz- cannot possibly be larger than Pz+.
But feel free to post the derivation.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

120. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 01:50:35 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <7s2dnTh9Ufryas6iXTWJkA@comcast.com>
Source record: 108986

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl7qcidrdb4rd3@corp.supernews.com...
> Z0 = 68 - j39 ohms.
> Zl = 10 + j50 ohms.
>
> Zl is certainly physically possible. I believe Z0 is also.

According to A/C/F the angle of Zo is constrained to +/- 45 degrees.

121. Re: Calculus not needed (was: Reflection Coefficient Smoke Clears a Bit)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 02:06:38 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <OWS4b.20473$Om1.10095@newsread2.news.atl.earthlink.net>
Source record: 108987

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl612tb0b138b6@corp.supernews.com...
> The property of "vibrations" or "oscillations" that
> have a direction different from the direction of the field is new to me.
[snip]

That's fine, there are lots of things new to me as well. :-)

These are called longitudinal or compressive-dilutive waves. Such
vibrations do not [usually] occur
with electromagnetic fields, and in the early days of em theory scientists
did wonder if such were
possible, as I have noted in prior postings. However there are numerous
physical systems described
by wave equations which do support both transverse and longitudinal
vibrations of the constituient fields.
I gave several examples in prior postings and you will find lots of such
examples in "Physics of Waves".

[snip]
> I notice that you're now qualifying your statement to free space and
> isotropic media. Does this perhaps leave open the possibility that waves
> in a lossy medium, or bounded within a hollow waveguide, could have
> "vibrations" that *aren't* transverse to the direction of propagation?
[snip]

The point is not that the waves have "vibrations" that are transverse to the
direction
of propagation. Of course, guided em waves have vibrations which are not
perfectly
perpendicular to the direction of propagation. The TEM mode would not exist
and
TEM waves would not propagate if there were not some potential driving the
waves
forward, meaning that both the E and H fields have some tiny component in
the direction
of propagation. All of this to establish that I do understand em wave
propagation, and to
say that... this has nothing whatsoever to do with longitudinal or
compressive-dilutive
vibrations. The fact that E and H fields "lean" slightly in the direction
of propagation
in a wave guide is not a compressive-dillutive effect on the fields. For

longitudinal
field vibrations to occur the wavelength of the propagating fields has to change as
it propagates. This does not occur in "normal" em propagation. I conjecture that
there may however be some exceptions to this, e.g. plasmas, etc... I just am not
aware of them. Perhaps some other newsgroup reader/poster is more familiar
with any possible longitudinal vibrations of em waves.

[snip]
> My original question was in response to your statement that EM waves
> were always transverse, regardless of the medium.
[snip]

Roy, I believe that you may be reading too much into the word "transverse", it
can be used in several contexts. Tansverse vibrations are not compressive
vibrations. With compressive vibrations, the wavelength of the waves actually
changess it propagates. While in transverse vibrations no such wavelength
changes occur. In this usage the word "transverse" does not refer to directionality
with respect to direction of propagation, but rather to the fact that the waves
maintain their wavelegth during propagation. As a "real" example, some seismic
waves [the so called "S-Waves" in the earth actually change their wavelength as
they propagate..

[snip]
> Do you perhaps have Krus' _Electromagnetics_, or electromagnetics texts
> by Holt, Johnk, Skilling, Magid, Magnusson, or Jordan & Balmain? If so,
> perhaps you could direct me to a section which addresses this.
[snip]

Roy, yes indeed I have two editions of "Kraus" and I took a course from Keith Balmain
using his first edition text when I was at U of T.

And...

I can tell you here and now that neither of those two august gentlemen address the issue
of longitudinal vibrations anywhere in their texbooks! Simply because, as I have stated in
other postings, Maxwell-Heaviside equations do not support longitudinal vibrations, and so
why would a text on em waves even discuss such vibrations? The fact that Kraus and Balmain
do not discuss such things does not surprise me, nor should it you, since

electromagnetic wave
propagation and the Maxwell-Heaviside equations are a particularly simple example of wave
motion.

Roy if you wish to deeply understand wave equations and wave motions and to understand
the wider ramifications of wave motion, you just gotta read more widely in the "Waves"
literature.

Kraus and Balmain are very narrow in scope, being confined strictly to em waves!

If they had attempted to include any "early" history of em research from around the middle
of the 1800's then they would have outlined some of the early speculations by contemporaries
of Maxwell, such as Kelvin, Heaviside and others as to the possibility that Maxwell might have
left longitudinal terms that might have proved significant, of course they were found never to be
needed. However even back in those times most Natural Philosophers [They were'nt called
Physicists in those days] and Electricians like Heaviside were more widely schooled than
today's Engineers and they knew and studied wave equations in their full glory... longitudinal
vibrations included. These days however our electrical engineering education is far too narrrow
and does not expose folks to the wider view of the world. Thus we often find em wave
mechanics who don't understand longitudinal waves. Until I became involved in underwater acoustics and seismic propagation problems and saw the wave equations in
their full glory, I too had a narrow view of wave mechanics.

I don't know if Kraus or Balmain ever encountered the "full" wave equations, but in any
case their texts are directed at em specialists and so their narrow view is not surprising.

As I posted before, if you are interested in such things, check out:

Elmore and Heald, "Physics of Waves" and say, Kennett's, "The Seismic Wavefield" among
others to help you to broaden your horizons on these issues of longitudinal waves.

--
Peter K1PO
Indialantic By-the-Sea, FL.

122. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 02:36:10 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <umT4b.20651$Om1.11711@newsread2.news.atl.earthlink.net>
Source record: 108988

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl6079m1i1lod7@corp.supernews.com...
> I'm sorry I'm having such a hard time communicating, and maybe the
> trouble is that I've been misunderstanding what has been said. Here's
> how it looks to me.
[snip]

Heh, heh... don't feel bad, that is common in any discourse using the medium
of USENET Newsgroup postings!

[snip]
> So what's bothering me is that I'm completely unable to start with what
> I believe to be true about the relationships between voltages, currents,
> and characteristic impedance of a transmission line (itemized as three
> assumptions in a recent posting), and arrive at anything but the
> classical equation which is universally used for transmission line
> analysis.
[snip]

I'm with you man! I like and, only use, the classical definitions of rho
and
the Scattering Matrix wich correspond to the "actual" waves supported by
the wave equation [The Telegraphist's Equations] on passive transmission
lines.

I simply don't like the version of rho/Scattering matrix which uses the
complex
conjugate of the "reference impedance" or what ever else you wish to call
the charateristic or surge impedance simply because the transition between
Z and conj(Z) represents an impedance discontinuity, a big one in fact, and
physical intuition tells me that there will alwasy be some effect on waves
which
have to transit such a discontinuity.

I am not a bigot about this use of the conj(Z) and I can quote several
excellent
authoritative references that do so. I don't however agree with Slick's use
of
conj(Z) in the numerator and just Z in the denominator, I believe that to be
the result of some typographical error or complete errors in
misunderstanding.

I do understand that for special kinds of problems it may be convenient to adopt
different definitions for rho and the Scattering Matrix, and that is fine just as long
as the definers remain consistent thereafter and indicate their departure from the
more common usual definitions. Confusion sets in when there are proponents of
the different definitions discussing/arguing about results without first agreeing on
the definitions.

[snip]
> I've posted both a detailed derivation of the formula for reflection
> coefficient and a numerical example of a terminated transmission line
> with complex Z0.
[snip]

You do good work Roy.

[snip]
> elements or "semi-infinite" transmission lines -- or no derivation at
> all. The alternate dervivations, it seems, can't for some reason
> withstand the condition that a simple, finite length transmission line
> be involved. Rather than presenting a simple analysis of a system with a
> transmission line (as I did), all I've seen in response is lumped
> element or "semi-infinite" transmission line analyses with indignant
> protestations if I question the possibility that the presented models
> don't accurately represent a finite transmission line.
[snip]

Because Roy, the use of semi-infinite transmission lines in a simple "theoretical"
derivation is easier to communicate in short NG postings and easier to understand
and manipulate than complex long "arithmetical" developments, no matter how practical.

I too can give the group numerous practical Engineering design calculations of real
problems that many have solved over the years in the communications industry, not
made up problems like yours, but real ones involving complex Zo transmission lines
with highly variable Zo's of lengths up to 18,000 feet operating with very little
"talker echo" [reflection coefficient] over frequency ranges of a handful of decades,
using very economical lumped approximations to Zo in the balancing networks. There
are several patents issued in this area. But I am sure that most would get glassy eyed
with those detailed Engineering calculations.

Which would you rather have, some detailed long drawn out Engineering
calculations
or a simple two line theoretical proof that using Zo and not conj(Zo)
results in no talker
echo only for an image matched line.

The theory of "image matching" was developed by Campbell and Zobel in the
time
frame of the early 1920's, why are we trying to prove it again now using
arithmetic?

[snip]
> I really think that by now, anyone who is able to benefit from the
> discussion has done so, and those who remain will continue to hold their
> views no matter what. So I won't further waste the time of either group
> by continuing to question the issue. I hope that the derivations I've
> posted are helpful to those people who are interested in seeing where
> the common formulas and equations come from.
[snip]

Thanks for all of your efforts Roy. As you know I agree completely with
your
results and conclusions.

But I must re-iterate I don't agree with your methods. The use of
arithmetic where
a little algebra and mathematical theory of trasmission lines will suffice.
is not my ideal of good communications.

Kraus, Balmain and all of your "other heros" make use of semi-infinite lines
in their
developments and descriptions of the meaning of Zo, I just don't see what
your
problem is with that approach. I can assure you that Maxwell did not use
"arithmetic"
in the development of his equations, nor did the first person to "define" a
reflection
coefficient!

I am perplexed by your approach to say the least, but perhaps I just don't
understand...

--
Peter K1PO
Indialantic By-the-Sea, FL.

123. Re: Someone else using my antenna ((M321I58DNU 09/06/2003)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 02:36:27 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3F54027B.3090403@adelphia.net>
Source record: 108989

W1RFI wrote:
>>My surveillance camera happened to snag a picture of someone using my
>>antenna (obviously without my permission). He is probably not licensed,
>>not transmitting, he is still using MY STUFF!
>
>
> He is obviously cross polarized with your antenna, so I would just let this one
> go.
>
> 73,
> Ed Hare, W1RFI

Ed! I haven't heard from you for a while. Great work on the BPL issue.
You convinced me. That must have taken a huge bite of your schedule lately.

- Mike KB3EIA -

124. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 02:51:30 UTC
From: Steve Terry <g4wwk@despammed.com>
Message-ID: <9BT4b.4011$bC1.3598@newsfep4-winn.server.ntli.net>
Source record: 108990
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"RVMJ" <me@privacy.net> wrote in message
news:19b7lv0s30i99u5o6n93bp1h0152gc23nq@4ax.com...
> Airy R. Bean wrote:
>
> >I agree. Those who are contesters but have no
> >technical acumen are CBers.
>
> To contest (that is, operate) you need an Amateur Licence.
>
Nonsense, i've known pirates who've entered contests.

Steve Terry

125. How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:04:46 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0309011904.2e8536c0@posting.google.com>
Source record: 108991

I was looking at the rainbow tuner which matches a
half wave end fed antenna to 50 ohms using a quarter
wave radial. I am guessing it
works like a transformer but not sure. Here is
the schematic;

```
Ant |----- quarter wave radial
| |
| GND
----------
| )
--- )
Variable )<----- 50 ohm
--- )
| )
| )
----------
|
GND
```

If it does work like a transformer how does it do it?
How is the matching done?

Thanks for any help!

Jeff

126. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:15:36 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F540917.FC3FF36C@gte.net>
Source record: 108992

Jeffdeham wrote:

> I was looking at the rainbow tuner which matches a
> half wave end fed antenna to 50 ohms using a quarter
> wave radial. I am guessing it
> works like a transformer but not sure. Here is
> the schematic;
>
> Ant |----- quarter wave radial
> | |
> | GND
> ----------
> |)
> ---)
> Variable)<----- 50 ohm
> ---)
> |)
> |)
> ----------
> |
> GND
>
>
> If it does work like a transformer how does it do it?
> How is the matching done?
>
> Thanks for any help!
>
> Jeff

The antenna represents a hi impedance- in the 2K-->4K range for HF and wire as a radiator. The parallel tank L-C is also a hi impedance. The coaxial cable then is tapped up from ground until the 50 Ohm point is reached.

Dale W4OP

127. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:24:42 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <_3U4b.20891$Om1.19337@newsread2.news.atl.earthlink.net>
Source record: 108993

Slick:

[snip]
> If you believe that there are theoretically no
> reflections in a conjugate match, then with
>
> Zl=50+j10 and Zo=50-j10,
>
> the conjugate equation correctly cancels the reactances
> giving no reflections, while the non-conjugate still
> incorrectly gives a magitude (non zero) for rho.
>
> Slick
[snip]

Oh yes here are voltage reflections at a conjugate match!

Simply put as waves pass across the transition from an impedance
of Zo to an impedance of conj(Zo) they are crossing a boundary
with an impedance discontinuity. Zo on one side and conj(Zo)
on the other side is definitely discontinuous! Unless of course,
Zo = conj(Zo) which occurs only when Zo is real.

There will always reflections at such an impedance
discontinuity where an impedance faces its' conjugate.

If an impedance Zo faces itself Zo there will be no "voltage
reflections", this phenomena was called an "image match" by
Campbell and Zobel way back around 1920 or so, it represents
the basis for the image match design of filters and transmission
systems. Do any reader's here recall image parameter filter
design? I designed more than a few that way myself.

If an impedance Zo faces its' conjugate conj(Zo) then there will be
no "power reflections", but there will in general be voltage reflections,
and this is called a "conjugate match" and represents the basis
for "insertion loss" design of filters and transmission systems.
Darlington and Cauer introduced the insertion loss design
of filters which eventually supplanted the older Campbell,
Zobel image parameter design.

The "classical definition of voltage reflection coefficient from
theoretical physics and the solutions to the wave equations is
the one that does not use the conjugate. This classical
definition corresponds to the calculations made by a reflectometer
configured to measure the reflected voltage at the boundary

between Z and Zo such that if Z=Zo the reflected voltage
(often called the "talker echo") will be zero. This will not
correspond to maximum power transfer in the general case.

i.e. "classical" rho = (Z - Zo)/(Z + Zo) is not zero at a conjugate match.

I also believe that this is "Mother Nature's" reflection coefficient
for it is exactly what she uses as she lets the waves propagate
down her lines of surge impedance Zo following her partial differential
equations at every point along the way. At every infinitesimal
length of line all along it's length the waves are passing from a
infinitesimal region of surge impedance Zo to the next infinitesimal
region of surge impedance Zo and there are no voltage reflections
anywhere along that [uniform] line, although if the line is not lossless
there will be energy lost as the wave progresses.

Slick... On another whole level it simply does not matter which defiinition
of the reflection coefficient one uses to make design calculations though,
as
long as the definition is used consistently throughout any calculations.

One can convert any results based on the non-conjugate version of rho to
results based on the conjugate version of rho and vice versa.

In other words, neither version is "RIGHT" or "WRONG" as long
as the results from using that particular definition are interperted
correctly in terms of the original definition.

In fact one can cook up an [almost] completely ficticious reference
impedance, one which has no relation whatsoever to the Zo of the line.

Just call the ficticious, perhaps complex reference impedance R
[I like to use R since in my mind it stands for "Reference", and it need
not be a pure resistance.] and use this R in a defintition of rho and/or a
Scattering Matrix and then any and all subsequent calculations afterwords
will be correct as long as this ficticious R is used consistently with the
definitions in terms of the electrical port vectors the voltage v, current i
and
wave vector comprising the "waves" a and b.

rho = (Z - R)/(Z + R) = b/a = (v - Ri)/(v + Ri)

This is true simply because the "waves" a and b are mathematically
just simple linear combinations of the voltage v and current i! Look
at how simple the relationship is...

[a, b] and [i, v] are simply related by a simple transformation
matrix as follows:

a = v + Ri
b = v - Ri

or

wave vector = matrix * electrical vector

And the matrix, in this case is:

| 1 R |
| 1 -R|

As long as you choose a reference impedance R such that the transformation
matrix is non-singular then you can go back and forth from a, and b to
v and i any time, any where, etc...

So... who gives a damm about the defintion of rho as long as you are
consistent.

Unless of course, like Roy and others, you insist that the "waves"
correspond to
some preconceived notion of what waves really are... ;-)

Thoughts, comments,
--
Peter K1PO
Indialantic By-the-Sea, FL

128. Re: DXCC Field QSL Chekers (Was Another DXCC question ??)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:25:49 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <15U4b.23344$S_.3777@fed1read01>
Source record: 108994

Correct Dan -- field checkers for DXCC QSL cards are at URL:
http://www.arrl.org/awards/dxcc/checkers.html

And they frequently attend ARRL conventions and DX Conventions like Visalia.

Had some checked at last years convention.

--
73 From The Signal In The Noise
Caveat Lector Ya All

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:F_Q4b.19571$Om1.4738@newsread2.news.atl.earthlink.net...
> I may be wrong, but I understand that ARRL has 'field checking' of QSL
> cards. Check your ham clubs and hamfests.
>
> Dan/W4NTI
>
> "W4WNT" <w4wnt@carolina.rr.com> wrote in message
> news:TWb4b.40340$J16.2076238@twister.southeast.rr.com...
> > Hi Carter,
> >
> > As long as the cards clearly list your call and a signal report as well
as
> > the details of the QSO, time date, band, mode, they should be acceptable
> for
> > DXCC submission. Most folks submit 102 or so cards with the first
> > submission, then if there is a problem with one card, they are still OK.
> >
> > As for the HA5-350 card, it sounds like an SWL report rather than an
> amateur
> > call. (As above, does it have QSO details of your QSO with the call
> listed?)
> > Since you'll probably be having a field checker look them over, he or
she
> > can tell you if it is legit card. Another question for the checker is
> > whether the ten year old cards have to go into the ARRL DXCC desk (but
> ARRL
> > Divisional Hamfests will have League reps who can check them).
> >
> > Good luck and good DX,
> >
> > Bill, W4WNT
> > "carter" <cartw@netart.com> wrote in message
> > news:3F5022DB.84E55202@netart.com...

> > > I'm sending in for the regular DXCC and a few things are unclear
> > > to me:
> > >
> > > 1) Would a CY9AA (St. Paul Island) from 1997 on 160 meters
> > > count?
> > > Thought I read somewhere that 160 meters doesn't count on
> > > the regular DXCC.
> > >
> > > 2) I have a 3E1DX from Panama. But on the list it doesn't
> > > have 3E1 for Panama listed. Only HO-HP#* is listed for
> > > Panama. It was a CQWW contest in 1997. Am I out of luck?
> > >
> > > 3) Have a 4N7DW from Yugoslavia from 1993. Once again
> > > this prefix isn't listed on the ARRL list for Yugo (YT prefix is)
> > > Out of luck??
> > >
> > > 4) I have a Pitcairn Island VR6BB from 1993. VP6 is now
> > > listed as being Pircairn Island. VR is now Hong Kong.
> > > What gives with this one??
> > >
> > > 5) I have a HA5-350 from Hungary from 1996. Not allowed?
> > >
> > >
> >
> >
>
>

129. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:28:32 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f540f6c_2@news1.prserv.net>
Source record: 108995

Kristinn:

If you are willing to run lots of power into the test antenna at your station, then a simple remotely located whip will do. But, if you are going to look at elevation angle of emission rather than ground wave only, then you will find that you need the equivalent of a full professional antenna range to get repeatable data. Most non-professional configurations show only +/- 3 dB of repeatability, so 1 or 2 dB improvements in antennas are invisible.

--
Crazy George
Remove NO and SPAM from return address
"Kristinn Andersen" <kiddi@marel.is> wrote in message
news:b7cca008.0309011023.336bc920@posting.google.com...
> Does anyone have a suggestion for constructing a simple, compact,
> receive-only antenna, that covers reasonably well the HF range (1,8 to
> 30 MHz)? My plan is keep such an antenna as a constant reference when
> I am experimenting with the "real" antennas at my station. Comparing
> signal strenghts on the antennas over some time would at least give me
> a reference on whether directivity in certain directions was improving
> or not, when replacing one antenna with another.
>
> The antenna would have the following characteristics:
>
> - Simple (home-made, inexpensive, preferably not using any pre-amps).
> - Small (not taking up space among my other antennas, non-intrusive).
> - Receive-only (little need for elaborate matching, power handling).
> - Connected through a coax, which should not pick up the RX signals.
> - Broadband (preferably 1,8-30 MHz).
> - Omnidirectional (or reasonably so, don't want any sharp nulls).
> - Receive, to some extent, vertical and horizonal polarization.
> - (Any other characteristics that should be included?)
>
> I have thought of using a short whip or a loop for this (say, 1m/3ft
> max. dimensions), but these both are rather selective in terms of
> polarization and directivity.
>
> Any suggestions or comments?
>
> 73 de Kristinn, TF3KX

130. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:31:23 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <faU4b.20904$Om1.3954@newsread2.news.atl.earthlink.net>
Source record: 108996

Roy:

[snip]
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vl7h31mr17s3c8@corp.supernews.com...
> Nope.
>
> I'm glad you're finding the time to look over the example. I see you've
> stumbled into the first problem with assigning a power to each
> individual wave. I'm afraid you'll encounter additional dilemmas as you
> dig deeper into it.
>
> Roy Lewallen, W7EL
[snip]
Slick:

[snip]
> If you believe that there are theoretically no
> reflections in a conjugate match, then with
>
> Zl=50+j10 and Zo=50-j10,
>
> the conjugate equation correctly cancels the reactances
> giving no reflections, while the non-conjugate still
> incorrectly gives a magitude (non zero) for rho.
>
> Slick
[snip]

If an impedance Zo faces itself Zo there will be no "voltage
reflections", this phenomena was called an "image match" by
Campbell and Zobel way back around 1920 or so, it represents
the basis for the image match design of filters and transmission
systems. Do any reader's here recall image parameter filter
design? I designed more than a few that way myself.

If an impedance Zo faces its' conjugate conj(Zo) then there will be
no "power reflections", but there will in general be voltage reflections,
and this is called a "conjugate match" and represents the basis
for "insertion loss" design of filters and transmission systems.
Darlington and Cauer introduced the insertion loss design
of filters which eventually supplanted the older Campbell,
Zobel image parameter design.

The "classical definition of voltage reflection coefficient from
theoretical physics and the solutions to the wave equations is

the one that does not use the conjugate. This classical
definition corresponds to the calculations made by a reflectometer
configured to measure the reflected voltage at the boundary
between Z and Zo such that if Z=Zo the reflected voltage
(often called the "talker echo") will be zero. This will not
correspond to maximum power transfer in the general case.

i.e. "classical" rho = (Z - Zo)/(Z + Zo) is not zero at a conjugate match.

I also believe that this is "Mother Nature's" reflection coefficient
for it is exactly what she uses as she lets the waves propagate
down her lines of surge impedance Zo following her partial differential
equations at every point along the way. At every infinitesimal
length of line all along it's length the waves are passing from a
infinitesimal region of surge impedance Zo to the next infinitesimal
region of surge impedance Zo and there are no voltage reflections
anywhere along that [uniform] line, although if the line is not lossless
there will be energy lost as the wave progresses.

On another whole level it simply DOES NOT MATER which defiinition
of the reflection coefficient one uses to make design calculations though,
as long as the definition is used consistently throughout any calculations.

One can convert any results based on the non-conjugate version of rho to
results based on the conjugate version of rho and vice versa.

In other words, neither version is "RIGHT" or "WRONG" as long
as the results from using that particular definition are interperted
correctly in terms of the original definition.

In fact one can cook up an [almost] completely ficticious reference
impedance, one which has no relation whatsoever to the Zo of the line.

Just call the ficticious, perhaps complex, reference impedance R
[I like to use R since in my mind it stands for "Reference", and it need
not be a pure resistance.] and use this R in a defintition of rho and/or a
Scattering Matrix and then any and all subsequent calculations afterwords
will be correct as long as this ficticious R is used consistently with the
definitions in terms of the electrical port vector the voltage "v", current
"i"
and port wave vector comprising the "waves" a and b.

rho = (Z - R)/(Z + R) = b/a = (v - Ri)/(v + Ri)

This is true simply because the "waves" a and b are mathematically nothing
more than simple linear combinations of the voltage v and current i!

Lookee herer doubters, at how simple the relationship is...

[a, b] and [i, v] are simply related by a simple transformation
matrix M as follows:

a = v + Ri
b = v - Ri

or

wave vector = matrix * electrical vector

And the matrix M, in this case is:

| 1 R |
| 1 -R|

As long as you choose a reference impedance R such that the transformation matrix is non-singular then you can go back and forth from a, and b to v and i any time, any where, etc...

So... who gives a damm about the defintion of rho as long as you are consistent in it's use. It simply doesn't matter! [Unless you choose M to be singular. ;-)]

Or... unless of course, like Roy and others, you insist that the "waves" correspond to some preconceived notion of what waves really are...

;-)

Thoughts, comments,
--
Peter K1PO
Indialantic By-the-Sea, FL

131. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:32:29 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <lOWcnSdj3r_NksmiXTWJjA@comcast.com>
Source record: 108997

Hi Richard,

Thanks for your comments. The next time I do anything like this I will make the thing more real world. Should have done the power supply thing. I have built enough of those. As I said, this was a rainy afternoon thought. I sprinked in some commenys below.

Tam
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:q0h7lvc4en0k6c60dfvo407isq8m6ah7ho@4ax.com...
> On Mon, 1 Sep 2003 17:52:43 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
> >Hi Richard,
> >
> >Everything, except the output dynamic range. Please go through my
numbers.
> >The equation I gave is for the point at which the amplifier goes non
linear,
> >and there actually is no feedback. There is a large error voltage at the
> >input, but the amp can't do anything about it because it is already in
> >saturation. For a 5V input/output
>
> What exactly does this mean? That you expect 5V in will track with 5V
> out? Say so. Shortcuts in specification lead to disaster. If this
> is not what you mean (and you did not specify an input in the
> original) your ambiguity allows for any interpretation.
>
> >and a 1K load the output terminal of the
> >op amp is already at VCC. A more practical example might have been a 13.8
> >volt power supply regulator running off 16 volts, with a current sensing
> >resistor in series with the output. Anyway, it was a rainy afternoon
kind
> >of thing.
> >
> >Tam/WB2TT
>
> Hi Tam,
>
> Let's review as you asked:
>
> >>Consider the following. An ideal DC op amp operating from a 10V supply
with
> >>0 output impedance, and infinite gain.
> >>
> >>1. Put a 1K resistor in series with the output.

>
> Hence the "ideal" Op Amp is crippled from the start, any expectations
> of superlative performance have already been abandoned. Further, the
> "ideal" Op Amp is not rail limited, nor is it convention to discuss Op
> Amp designs with single ended supplies. These are more short cuts
> that could have been expressed with very little greater length to
> conventional usage.
****
I am making a not quite perfect amplifier from a perfect one. I used that so
I would not have to get into details about 80 db gain, .5V dropout voltage,
10 meg input impedance, 20 Ohm output impedance, etc. Single rail
amplifiers, including these that have a common mode range that includes
ground are quite common.
****
> >>
> >>2. You now have an op amp with 1K output impedance.
>
> #2 in fact adds absolutely nothing but repetition.
****
right, but I want the reader to consider the 1K as part of the amplifier,
and I have placed it at a point where its effect is obvious
****
> >>
> >>3. Connect the inverting input of the op amp to the other end of the 1K
> >>resistor. Call that the output terminal. and connect a load resistor Rl
from
> >>there to ground. (The gain from the non inverting input to Rl =1 in the
> >>linear range)
>
> That being the new output of the amplifier, R1 as you call it, now
> loads that amp to ground. (By the way, if you are going to have two
> resistors, convention would label them R1 R2; not R and R1.)
>
> The gain is NOT 1 by sheer, obvious placement of the resistors you
> describe.
****
The gain is precisely 1 at the point that I call the amplifier output. The
gain from input to the output terminal of the original amplifier is
variable, and depends on the load.
****
> You elsewhere supply a gain that does not agree with this
> #3. What you imply are the mu and beta gains, but you do not really
> go into that distinction, nor do you perform the math that bears on
> their usage.
>
****
Precisely. People might read this who have no idea what mu and beta are, but
they know Ohm's law.
****
> >>

> >>4. Because of the infinite feedback,
>
> Infinite feedback? Poor specification where I have to presume you are
> in error and meant infinite gain (for the previously "ideal" amplifier
> - which it is not now). If the output were strapped back to the
> inverting input, that "might" qualify as infinite, but your load is
> the gain determinant of the amplifier. If you meant that the Op Amp
> output is impressed upon the inverting input, that goes without saying
> for all linear applications doesn't it? If by this your statement of
> a gain of 1 above was along the same lines, it suffers by similar
> degree.
****
I have reduced the open loop gain A of the amplifier by the ratio
Rload/(Rload + 1K), but it is still infinite. I may be using terms that are
not universally used. When feedback is used to reduce gain by say 20 db, it
is common to refer to this as 20 db of feedback (May be an audio term). I
have a unity gain amplifier, as I have defined it, and reduced the open loop
gain by infinity.
**************************8
>
> >> the output impedance is now 0 again,
>
> No, it is not, you have ascribed (by description) a 1000 Ohm output
> impedance (resistance). The amplifier is not the Op Amp component, it
> is the assembly of components presented to the load and is modified by
> the gain that you incorrectly ascribe above.
****
I am defining the 1K as part of the amplifier, but I placed it at a point
where you could see it. As defined, if you placed +6V on the noninverting
input, and a load of 10K on the output, the output voltage would be 6V. If
you changed the load to 2K, the output voltage would still be 6V. The
impedance is 0. A person might assume he could easily obtain 11 ma from such
a low impedance source. He can not. Not even at .01V.
****
> >>but all of the load current still flows through the 1K series resistor.
>
> Which confirms my statement and directly follows from the addition you
> originally offer.
>
> >> It
> >>will not, for instance, deliver 5V into a 910 Ohm resistor because the
> >>amplifier will have saturated before that point. For a given RL, the
maximum
> >>voltage you can get out is (10 x Rl)/(1000 + Rl) with or without
feedback.
> >>
>
> With OR without feedback? Which is it? Do you have feedback or don't
you?
****

I realize this sounds unclear. Consider the node that drives the 1K
resistor. It can not go higher that 10V; the short circuit current is 10 ma.
This is true both for
a) loop is closed. That is the voltage across the load ic connected to the
non inverting input.

b) loop is open with inverting input at ground and noninverting input at
+10V
****

> The additional baggage of your statement both adds nothing, and
> is self conflicting. Do I now have the choice to express it has no
> feed back?
>
> Dynamic range is not the same thing as rail limited and rail limiting
> is certainly not within the canon of "ideal" amplifiers. Dynamic
> range is dimensionless and generally described in dB and is a function
> of noise. Feed back has a direct correlation to the amount of noise
> added by the amplifier and thus impacts Dynamic Range directly.
>
> It would have taken a whole lot less to simply use the conventional
> 741 Op Amp as an example, warts and all, to express the same issue
> which merely points out that a poor design works poorly. You even
> anticipate this poor aspect through the modifications after the fact:
****
I didn't want to do that. Instead of a 741 I would use an LM358.
****
> >A more practical example might have been a 13.8
> >volt power supply regulator running off 16 volts, with a current sensing
> >resistor in series with the output.
> which illuminates how a design engineer builds from known limitations
> toward known loads. In other words, if the engineer faces a 10V rail
> limitation, he could have as easily added a DC-DC up converter to
> solve it.
****
I didn't want to build a good circuit, I wanted to build a bad circuit, and
show that all the feedback in the world was not going to make it a good
circuit.
****

> Anyone can trap another through crafted specifications.
> I've got several many squirrels up a tree right now.
>
> 73's
> Richard Clark, KB7QHC

132. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 03:36:27 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <pwidnZ3ytIqjjcmiXTWJjQ@comcast.com>
Source record: 108998

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:e9p7lvoitcbc9078bscoa1i92l6ngq8pk0@4ax.com...
> On Mon, 1 Sep 2003 19:17:40 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >Richard,
> >
> >Let me be the lurker on for the day. Actually, you have a good example. I
> >see the parallel equivalent resistance for the device at 1.5 MHz is about
2
> >Ohms. At 12.5V with a Vcesat of an optimistic .5V, the power that can be
> >delivered at conjugate match is 12^2/(2 * 2) = 36W. Not the rated 100.
> >
>
> Hi Tam,
>
> rated 100 WHAT?

Not the rated 100 Watts.
This is just like the 6V6 thing we did earlier.

Tam
>
> Sheesh.
>
> 73's
> Richard Clark, KB7QHC

133. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:15:16 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f541d6c$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 108999
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

That's why they style themselves so grandly as, "Dyslexic".

They can't spell, "Thick"!.

BTW, it didn't take that one long to come up with the
standard excuse of dyslexia to justify his CBness, did it?

Walt Davidson <g3nyy@despammed.com> wrote in message
news:uka7lvstnniucn2jm2op4vce7ntit9ngma@4ax.com...
> On Mon, 1 Sep 2003 21:03:51 +0100, "Tim" <tim.mcc@tesco.net> wrote:
> >sorry not illiterate just dyslexic which I am sure most people will tell
is
> >something I can do nothing about! so sorry if that offends you.
> When I was at school, "dyslexia" was called "stupidity".

134. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:16:19 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f541d6d$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 109000
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

And so you have a mild form of intelligence, DYM?

Perhaps that is now your excuse for CBness?

Harry Bloomfield <harry.m1bytNOSPAM@tiscali.co.uk> wrote in message
news:MPG.19bdc66a51cc9575989917@news.individual.net...
> In article <uka7lvstnniucn2jm2op4vce7ntit9ngma@4ax.com>,
> g3nyy@despammed.com says...
> | When I was at school, "dyslexia" was called "stupidity".
> When in fact very many dyslexia sufferers are of above average
> intelligence.... I know of a few such and I used to suffer a mild form
> dyslexia myself.

135. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:17:03 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f541d6e_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 109001
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Dyslexia ulres OK!"?

Reg Edwards <g4fgq.regp@btinternet.com> wrote in message
news:bj0cs5flm1@hercules.btinternet.com...
> > When I was at school, "dyslexia" was called
> "stupidity".
> "Stupidity Rules, KO ?"
> Was it you, the usual ring-leader, who cross-posted
> this stupid rubbish all over the net ?
> Just make your usual witty reply and then please clear
> off.

136. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:21:47 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f541d6f_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 109003
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

If you have the qualifications that you boast, then why
play the dyslexia card to justify your CBness? The RAE is
trivial if you do indeed have the exams below under your belt.

"Armature"? Your head's in a spin....tangled webs, etc.....try
speaking the truth about laziness rather than the dubious
claims about dyslexia.

As to appropriate newsgroups, all the ones above are for Ham
Radio and not for CBers such as yourself.

Tim <tim.mcc@tesco.net> wrote in message
news:3f53c142$1_2@mk-nntp-2.news.uk.tiscali.com...
> I would just like to add that despite my difficulty with words and maths I
> have managed to gain several qualifications that I am very proud of
although
> I never made it to a university I did gain 4 B's, 3 C's, a D, an E, and an
F
> at GCSE, a BTEC National Diploma in General Engineering (which of course
> includes analogue and digital electronics along with things like three
phase
> principles),and a City & Guilds Level 1 in Visual Basic. On top of these
I
> hold a BGA endorsement to glide (which I gained at the age of 18). I have
a
> good self taught understanding of PC hardware (I have been building my own
> P.C.'s since I was 12) and operating systems including DOS and CPM(I know
> CPM is an Amstrad based system but it is the fore runner of DOS) as well
as
> several high and low level programming languages. I therefore take being
> called stupid or illiterate as quite an offence. I do have a great
interest
> in learning about the way radios work hence I want to join the armature
> community although I will probably still use my CB as I have many friends
> there who except me for who I am and not the problems I have. I would also
> like to suggest that if CBers are to the dislike of certain members of
this
> news group then perhaps they would like to stay off the newsgroups for
that
> medium and let them get on with it. As such this will be my last posing
here
> until I pass my exams. which I will no matter how long it takes me to
solve
> my problems with the words and numbers involved I will pass.Having had my

> rant and hopefully shown I am not stupid or thick or whatever other label
> has been placed on me I would like to say a big thank you to those who
have
> posted in my defence and say I would welcome their input on the CB groups
as
> perhaps they could help dispel some of the fears and misconceptions that
> CBers have about armatures. This on its own could make for a better
> environment for all.
>
>

137. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:23:24 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f541d6f$2_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 109002
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

And all because Gary Kildall was out to lunch.

(Sounds like the dyslexics, sorry, CBers, whingeing in
this NG!)

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:3f53dc87$1_7@corp.newsgroups.com...
> Actually, IBM looked at CP/M-86 for their PC operating system and then
> decided to go with Microsoft instead of Digital Research. If DR had
> gotten the contract, Bill Gates' life would probably be a lot different.

138. Re: Reference for basic antenna theory

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:48:43 UTC
From: Jason Dugas <kb5urq@hotmail.com>
Message-ID: <vl889i4uschi3d@corp.supernews.com>
Source record: 109004

Don't forget Balanis. It actually has some very practical design embedded
in it. Lots of theory though-- if you're not an engineer I wouldn't start
with this one. Use it as a backup for those items you can't find in the
ARRL antenna book.
Jason

"Wedgew" <wedgew@rochester.rr.com> wrote in message
news:BDL4b.32996$lk1.8856@twister.nyroc.rr.com...
> Could one of ye reccomend a reference on basic antenna theory
>

139. Re: Laugh of the day

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:55:12 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vl891gqlnlapeb@corp.supernews.com>
Source record: 109006

I saw on Leno tonight where some thieves stole a boat, ran it aground and
set it on fire.
They were on an island.
73
H.
NQ5H

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20030901210545.08204.00000279@mb-m14.aol.com...
> >
> >Foxnews just reported a criminal who stole an active
> >GPS tracking device. :-) :-) :-)
> >--
>
> Crooks that stole our 2003 Escalade must have been smarter, On-Star didn't
help
> to track it. They probably disconnected antennas or promptly packed it in
the
> steel cargo container.
>
> Ba$tards! Don't take your nice car to Montreal!
>
> Yuri

140. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 04:56:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl88o381tks0cc@corp.supernews.com>
Source record: 109005
Body handling: HTML body converted to readable text

Correction:

The formula for total average power was in error. The correct formula is:

= - + (|fE|^2 / |Z0|) * rho * exp(-2ax) * 2 * sin(2bx - 2
* psi) * sin(delta)

fE is the forward voltage at the measurement point, a distance of x from the load. load power can be calculated from this formula by setting x = 0, and using fE2 for fE. Doing so, and substituting values from the analysis gives:

= 7.677 - 13.97 + (26.34^2 / 78.39) * 1.349 * 2 * sin(-115.1) * sin(-29.84) = 4.467. The 0.2% difference between this and the more directly calculated value of 4.477 watts can be attributed to an accumulation of rounding error in the numerous calculations.

The error in the formula doesn't affect the conclusions drawn from the original analysis. The total average power of 4.477 watts out of the line was calculated directly from the voltage and current at the load, and not from this formula, so its correctness isn't affected. As you can see, the corrected formula now gives the same answer (within expected accumulated error).

Roy Lewallen, W7EL

141. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 05:01:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl891hak9368ec@corp.supernews.com>
Source record: 109007

Here's the calculation of total average power <P1> at any point on a transmission line. The point on the line is called point 1, and the location of the load is called point 2. The distance between them is x.

Notation:

Lower case c will be used to denote complex conjugate, to avoid confusion with multiplication symbol *.

fE1 = forward voltage at point 1 on the transmission line
rE1 = reverse voltage at point 1
fE2 = forward voltage at point 2 (the load)
fE2 = reverse voltage at point 2
Likewise for currents, with I substituted for E. Note that the positive direction of rI1 and rI2 is toward the load.

gamma = complex propagation constant = alpha + j * beta
Z0 = line characteristic impedance = |Z0| * exp(j * delta)
Gv = voltage reflection coefficient at the load = rE2/fE2 = -rI2/fI2 = rho * exp(j * 2 * psi)
gx = shorthand for gamma * x
ax = shorthand for alpha * x
bx = shorthand for beta * x

Assumed to be true:

fI1 = fE1/Z0
rI1 = -rE1/Z0
fE2 = fE1 * exp(gx)
E1 = fE1 + rE1
I1 = fI1 + rI1
E2 = fE2 + rE2
I2 = fI2 + rI2

The phase angle of fE1 will be the reference, so by definition the angle of fE1 = 0. Therefore, fE1 = |fE1| = fE1c.

Useful identities -- in the following expressions, c denotes complex conjugate, and | | magnitude; A and B are complex:

|A^2| = |A|^2
A * Ac = |A|^2
(A * B)c = Ac * Bc
(A + B)c = Ac + Bc

<P1> = Re{E1 * I1c} = Re{(fE1 + rE1) * (fI1 + rI1)c}
= Re{(fE1 + rE1) * (1 / Z0)c * (fE1 - rE1)c}
= Re{(fE1 + rE1) * (exp(j * delta) / |Z0|) * (fE1 - rE1)c}
= (1 / |Z0|) * Re{exp(j * delta) * (fE1 + rE1) * (fE1 - rE1)c}
= (1 / |Z0|) * Re{exp(j * delta) * (fE1 + rE1) * (fE1c - rE1c)}
= (1 / |Z0|) * Re{exp(j * delta) * (|fE1|^2 - |rE1|^2 + rE1 * fE1c -
fE1 * rE1c)}

At this point, you might recognize the portion to the left of the rE1 *
fE1c quantity as being the difference between the "forward power"
(computed solely from fE1) and "reverse power" (computed solely from
rE1). However, it's clear from this point onward that the total power
includes terms other than this simple difference.

<P1> = (1 / |Z0|) * Re{exp(j * delta) * (|fE1|^2 - |rE1|^2 + fE1 *
(rE1 - rE1c))}

rE1 = |fE1| * Gv * exp(-2 * gx) = |fE1| * rho * exp(-ax) * exp(j * (2 *
psi - 2 *bx))
rE1 - rE1c = |fE1| * rho * exp(-ax) * [exp(j * (2 * psi - 2 * bx)) -
exp(j * -(2 * psi - 2 * bx))]
|rE1|^2 = |fE1^2 * rho^2 * exp(j * 4 * psi - 4 * gx)| = |fE1|^2 * rho^2
* exp(-4 * ax)

so

<P1> = (|fE1|^2 / |Z0|) * Re{exp(j * delta) * (1 - rho^2 * exp(-4 * ax)
+ rho * exp(-2 * ax) * (exp(j * (2 * psi - 2 * bx)) - exp(j * -(2 * psi
- 2 * bx)))}

= (|fE1|^2 / |Z0|) * ((1 - rho^2 * exp(-4 * ax)) * cos(delta) + rho *
exp(-2 * ax) * (cos(delta + 2 * psi - 2 * bx) - cos(delta - 2 * psi + 2
* bx)))

= (|fE1|^2 / |Z0|) * ((1 - rho^2 * exp(-4 * ax)) * cos(delta) + rho *
exp(-2 * ax) * (2 * sin(delta) * sin(2 * bx - 2 * psi)))

Subtituting values for "forward power" and "reverse power", we have:

<P1> = <fP> - <rP> + (|fE1|^2 / |Z0|) * rho * exp(-2 * ax) * 2 *
sin(delta) * sin(2 * bx - 2 * psi).

This is the equation which appears in the numerical example I posted,
except for the term (|fE1|^2 / |Z0|), which I mistakenly omitted from
that analysis. (I just posted a correction.)

To use the formula to find the total average power at the load, set x =
0, and use the forward load voltage for fE1. In the correction I just
posted, values were plugged in from the example, to give the correct
total average power at the load.

I'm sure that a person more mathematically skilled than I would be able
to do the derivation much more elegantly and simply. But then again,
none of those folks have posted any derivation at all, so this is at
least better than none despite its lack of elegance. I've tried not to

do too many substitutions in each step, but if anyone has trouble following from one step to another, please let me know and I'll be glad to break it down and explain how I got from one to the next.

There are a lot of opportunities for typos in a derivation like this, especially when restricted to plain ASCII characters. I'd appreciate very much if anyone finding an error, either in concept, fact, assumption, or just typo, to call it to my attention so it can be corrected.

Roy Lewallen, W7EL

142. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 05:02:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f542611$1_8@corp.newsgroups.com>
Source record: 109008

Cecil Moore wrote:
> Using deductive reasoning, since the real part of the voltage
> reflection coefficient cannot be greater than 1.0, ...

So much for my deductive reasoning - A kind soul has furnished proof
by email that the real part of the voltage reflection can be greater
than 1.0.

>> Z_0 = 50 - 25j (which is well within the - 45 to 45 degree angle bounds)
>> Z_L = 50 + 250j (chosen to make the arithmetic easy; there are lots more)
>>
>> Then Z_L - Z_0 = 275j and Z_L + Z_0 = 100 + 225j so that
>> gamma = 11j/(4 + 9j) = 11j(4 - 9j)/(16 + 81) = (99 + 44j)/97.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

143. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 05:24:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl8acak84c1h94@corp.supernews.com>
Source record: 109009

Well, Cecil, I think we're zeroing in on the flaw in your perception of how the powers add. I hope you won't just keep saying it's impossible, and will instead sharpen your pencil to show, as I have, the forward, reverse, and total voltages, currents, and powers at both ends of the line. And how everything can work together consistently to fit into your view of power addition and subtraction.

A number of people have been trying for a long time to convince you there's a flaw in your logic, but so far you haven't been able to see it. Hopefully, in the process of deriving the values for this circuit, you'll see where your logic has gone astray. Or, perhaps, you'll come up with a completely consistent set of voltages, currents, and powers that do fit within your view. And we'll all learn from it as we see where the difference arises between your analysis and mine. Until you come up with your analysis, though, I won't pay much attention to your complaints that it's wrong unless you're able to show where in the analysis the error lies.

I've posted the derivation of the total power formula on this thread. In going through it, I found an error in the formula posted with my numerical example. I've posted a correction for that on the same thread as the example. In the correction posting, I also show how the formula produces the same result as I got by directly calculating the total power from the load voltage and current.

A closing quotation, from Johnson's _Transmission Lines and Networks_:

"[For a low loss line] P = |E+|^2 / Z0 - |E-|^2 / Z0. We can regard the first term in this expression as the power associated with the forward-traveling wave, and the second term as the reflected power. This simple separation of power into two components, each associated with one of the traveling waves, can be done only when the characteristic impedance is a pure resistance. Otherwise, the interaction of the two waves gives rise to a third component of power. Thus, the concept applies to low-loss lines and to distortionless lines, but not to lossy lines in general."

Something for you to think about. Or maybe you subscribe to Reg's view that these texts are written by marketeers and salesmen. After all, as Chairman of Princeton's EE department, I suppose Johnson's job was primarily PR.

I'm quite sure that if you look carefully at any text where the author subtracts "reverse power" from "forward power" to get total power, that somewhere prior to that the assumption is made that loss is zero and/or the line's characteristic impedance is purely real.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> No, the average Poynting vector points toward the load.
>
>
> That automatically says Pz- is not larger than Pz+. There are only
> two component Poynting vectors, 'Pz+' forward and 'Pz-' reflected.
>
>> If so, surely you came up with the same result, including the third
>> power term. If you haven't done the derivation, or if you'd like to
>> compare your derivation of total average power with mine, I'll be glad
>> to post it.
>
>
> Assuming coherent waves, all wave components flowing toward the load
> superpose into the forward wave and all wave components flowing away
> from the load superpose into the reflected wave. Since there are only
> two directions, there cannot exist a third wave. If your average Poynting
> vector points toward the load, Pz- cannot possibly be larger than Pz+.
> But feel free to post the derivation.

144. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 05:25:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl8aec9snp5jc8@corp.supernews.com>
Source record: 109010

I believe that, and the value I used is within that range.

Roy Lewallen, W7EL

Tarmo Tammaru wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vl7qcidrdb4rd3@corp.supernews.com...
>
>>Z0 = 68 - j39 ohms.
>>Zl = 10 + j50 ohms.
>>
>>Zl is certainly physically possible. I believe Z0 is also.
>
>
>
> According to A/C/F the angle of Zo is constrained to +/- 45 degrees.
>
>

145. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 06:44:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f543dbf$1_8@corp.newsgroups.com>
Source record: 109011

Roy Lewallen wrote:

> Well, Cecil, I think we're zeroing in on the flaw in your perception of
> how the powers add.

I don't see how this thread is relevant to the treatment of powers in
lossless lines. Perhaps you have misunderstood what I said.

> A number of people have been trying for a long time to convince you
> there's a flaw in your logic, but so far you haven't been able to see
> it.

If there's a flaw for lossless lines with purely resistive characteristic
impedances, please present it. So far, nobody has. Here's what I said in
my magazine article on my web page"

"For the purpose of an energy analysis involving *LOSSLESS* transmission
lines, we do not need to know anything about the source or the load or
the length of the transmission lines."

> I'm quite sure that if you look carefully at any text where the author
> subtracts "reverse power" from "forward power" to get total power, that
> somewhere prior to that the assumption is made that loss is zero and/or
> the line's characteristic impedance is purely real.

Of course, that's why my previous assertions have been only about lossless
lines. Do you happen to have a lossless example that proves my concepts
about lossless lines are wrong? I have no concepts about lossy lines
except that they obey the conservation of energy principle.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

146. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 06:47:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f543e9e_8@corp.newsgroups.com>
Source record: 109012

Roy Lewallen wrote:
> <P1> = <fP> - <rP> + (|fE1|^2 / |Z0|) * rho * exp(-2 * ax) * 2 *
> sin(delta) * sin(2 * bx - 2 * psi).

Seems to me, all the terms with a '+' sign would be forward power, by definition, and all the terms with a '-' sign would be reflected power, by definition. I don't see any violation of the conservation of energy principle. The power equation balances.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

147. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 06:51:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f543f8b_8@corp.newsgroups.com>
Source record: 109013
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Walt Davidson wrote:
> The biggest mistake IBM made was to allow Microsoft to release DOS
> independently as "MS-DOS". They should have kept all proprietary
> rights to the operating system!

I suspect IBM, in the end, simply didn't want to commit the necessary
resources to support a proprietary operating system. At least it seemed
that way from my vantage point at Intel.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

148. Re: Homebrew tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 06:59:36 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <jbf8lv8jgcj2lvr9jd0i3ctb8fmngq6bk5@4ax.com>
Source record: 109014

I used to use a homebrew tapped transformer like the Palomar, wound on a Philips 4C6 toroid, around late 70's to match my homebrew helical mobile whips to my Atlas 210X installed in my Austin 1800 (like a Mini on steroids and affectionately known as the "land crab").

The separate whips, for 80 40 and 20 metres, could all be matched to 50 ohms, all I had to do when changing bands was to change the whip, turn the selector switch to the appropriate tapping and away we went. Best dx - when mobile one afternoon, I heard a VK4 (across the pond in Aus) calling CQ on 40m, but when I went back to him found he was a DK4.

MikeN ZL1BNB

bnb

On 29 Jul 2003 08:50:27 -0700, aunwin@insightbb.com (Art Unwin KB9MZ) wrote:

>Seems like a lot of hams with limited resources are still compelled
>to operate on many bands with just a long wire and a tuner.
>The wire is inexpensive but the tuners are not. Thus my present
>project.
>I was given a Palomar enginnering balun with 5 female connenection
>which by selection can match a antenna in steps from 5 ohms to over
>450 ohms
>in a series of steps. I am presently rigging it up so that all
>steps can be switched thru remotely by a single motor. The switching
>arrangement
>is the main challenge since inexpensive means simple.
>Now I have not measured losses of the balun before hand because the
>switching
>challenge is what is driving me.
>Anybody have any thoughts about what I should expect from this
>balun other than knowing that it is not a tuner as is generally known
>since
>it does not have the ability to obtain the priceless 1:1 condition
>that so many desire?
>Regards
>Art

149. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 07:54:45 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <RfBOo$GFzEV$EA$s@ifwtech.co.uk>
Source record: 108925

Richard Clark wrote:
>On Tue, 2 Sep 2003 00:28:12 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.co.uk> wrote:
>
>>
>>AN1526, from which I'm quoting above, supersedes AN282. It was written
>>about 25 years later in an attempt to clear up that inherited mess of
>>loose definitions... but apparently with limited success.
>>
>
>Hi Ian,
>
>25 years after the 60's, and yet AN282 is still published by Motorola
>in 1991 by my copy. Further, it appears to survive through to 91
>without any appearance of AN1526 which superseded it. This would
>suggest that this application note, if published in the 90's
>represents quite a bulk of material (nearly half again the total AN's
>by number following 1991) published in 10 Years? 1968 + 25 = 1993
>which suggests rather a revolution in thought over two years and
>clearly not within the scope of credibility. These publishing date
>games are too inspecific with your reference clearly in front of you.
>Don't you know to surer accuracy?
>
I only know what Motorola say in HB215/D, 'RF Application Reports'. As
you know, Motorola don't go back and re-write old application notes -
they only publish newer ones, leaving users to sort out which aspects
have been superseded and which are still valid.

AN282 is still included in HB215/D and older compilations because it
contains valuable information on other topics.

The application notes themselves are not dated. The list of references
in AN1526 states that AN282(A?) was published in 1968. The publication
date for AN1526 can be bracketed to the early 1990s (after the latest
dated reference that it quotes, and before 1995 when it was re-published
in HB215/D).

That is sufficient to establish my point: that the thinking in AN1526 is
based on about 25 years further experience after AN282.

>I still see nothing of substance, merely suggestion:
>> That is certainly a statement requiring some careful
>>thought, especially since the term 'output impedance' is somewhat
>>misleading [so even Motorola admit that]. ... as described in [AN282]
>>it is the conjugate of the LOAD impedance at the fundamental operating

>>frequency which allowed the transistor to 'function properly' [when the
>>load impedance was varied in a test jig]."
>Does not say what it is, but what it was by testing - hardly
>revolutionary nor upsetting.
>
>Certainly you could come up with a smoking gun couldn't you?

If you can't get it from the key paragraph I quoted, then read all 15 pages of AN1526. If you still can't see that your notion about "device output impedance" is shot clear through, then neither Motorola and I can help.

>Complete
>with an actual, demonstrable specification for the item I offered
>(seeing as you still lack any concrete example). What does your new
>and updated resource say about the MRF 421.

You know perfectly well that AN1526 won't say anything about your specific pet device, so what was the point of asking that question?

>Does it abandon that
>discussion entirely to this new-age era of all being unknowable?
>
And that is an even worse travesty of what Motorola and I are saying.

If you want to measure the *true* output impedance of an MRF 421 - as distinct from the load impedance given in the data sheet - then go ahead and do it. After all, you're the one who claims it is an important design parameter.

I'm the one who says it is (a) not what you think it is; and (b) not important anyway.

Now it's up to other people to judge the technical truth of the matter.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

150. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 08:24:45 UTC
From: Gary Cavie <m0jjh@despammed.com>
Message-ID: <MPG.19be642acb277dc79896b4@news.freeserve.com>
Source record: 109015
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

In article <3f541d6f_3@mk-nntp-1.news.uk.worldonline.com>, me@privacy.net says...
>
> As to appropriate newsgroups, all the ones above are for Ham
> Radio and not for CBers such as yourself.
>

Actually, 3 of them are about amateur radio, which, according to you, is totally different from ham radio

151. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 08:30:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl8l9t1j906p93@corp.supernews.com>
Source record: 109016

```
Well, shucks, that makes it easy.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> <P1> = <fP> - <rP> + (|fE1|^2 / |Z0|) * rho * exp(-2 * ax) * 2 *
>> sin(delta) * sin(2 * bx - 2 * psi).
>
>
> Seems to me, all the terms with a '+' sign would be forward power, by
> definition, and all the terms with a '-' sign would be reflected power,
> by definition. I don't see any violation of the conservation of energy
> principle. The power equation balances.
```

152. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 08:35:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl8likhsvfptc1@corp.supernews.com>
Source record: 109017

I apologize. I thought your view of power waves was alleged to hold true even with loss. If it's restricted to lossless lines (which have purely real Z0), then the total average power does equal "forward power" minus "reverse power".

So please don't bother yourself with trying to explain the component of power that's neither the "forward power" nor "reverse power".

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Well, Cecil, I think we're zeroing in on the flaw in your perception
>> of how the powers add.
>
>
> I don't see how this thread is relevant to the treatment of powers in
> lossless lines. Perhaps you have misunderstood what I said.
>
>> A number of people have been trying for a long time to convince you
>> there's a flaw in your logic, but so far you haven't been able to see it.
>
>
> If there's a flaw for lossless lines with purely resistive characteristic
> impedances, please present it. So far, nobody has. Here's what I said in
> my magazine article on my web page"
>
> "For the purpose of an energy analysis involving *LOSSLESS* transmission
> lines, we do not need to know anything about the source or the load or
> the length of the transmission lines."
>
>> I'm quite sure that if you look carefully at any text where the author
>> subtracts "reverse power" from "forward power" to get total power,
>> that somewhere prior to that the assumption is made that loss is zero
>> and/or the line's characteristic impedance is purely real.
>
>
> Of course, that's why my previous assertions have been only about lossless
> lines. Do you happen to have a lossless example that proves my concepts
> about lossless lines are wrong? I have no concepts about lossy lines
> except that they obey the conservation of energy principle.

153. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 09:10:19 UTC
From: kiddi@marel.is
Message-ID: <b7cca008.0309020110.7c737dd@posting.google.com>
Source record: 109018

No, this is not the idea. I want to use received signals only to
compare the antenna performances - due to reciprocity improvement in
RX signal on my side should correspond to similar improvement of my TX
signal on the other side.

73 de Kris, TF3KX

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3f540f6c_2@news1.prserv.net>...
> Kristinn:
>
> If you are willing to run lots of power into the test antenna at your
> station, then a simple remotely located whip will do. But, if you are going
> to look at elevation angle of emission rather than ground wave only, then
> you will find that you need the equivalent of a full professional antenna
> range to get repeatable data. Most non-professional configurations show
> only +/- 3 dB of repeatability, so 1 or 2 dB improvements in antennas are
> invisible.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> "Kristinn Andersen" <kiddi@marel.is> wrote in message
> news:b7cca008.0309011023.336bc920@posting.google.com...
> > Does anyone have a suggestion for constructing a simple, compact,
> > receive-only antenna, that covers reasonably well the HF range (1,8 to
> > 30 MHz)? My plan is keep such an antenna as a constant reference when
> > I am experimenting with the "real" antennas at my station. Comparing
> > signal strenghts on the antennas over some time would at least give me
> > a reference on whether directivity in certain directions was improving
> > or not, when replacing one antenna with another.
> >
> > The antenna would have the following characteristics:
> >
> > - Simple (home-made, inexpensive, preferably not using any pre-amps).
> > - Small (not taking up space among my other antennas, non-intrusive).
> > - Receive-only (little need for elaborate matching, power handling).
> > - Connected through a coax, which should not pick up the RX signals.
> > - Broadband (preferably 1,8-30 MHz).
> > - Omnidirectional (or reasonably so, don't want any sharp nulls).
> > - Receive, to some extent, vertical and horizonal polarization.
> > - (Any other characteristics that should be included?)
> >
> > I have thought of using a short whip or a loop for this (say, 1m/3ft
> > max. dimensions), but these both are rather selective in terms of

> > polarization and directivity.
> >
> > Any suggestions or comments?
> >
> > 73 de Kristinn, TF3KX

154. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 10:17:52 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309020217.81d487b@posting.google.com>
Source record: 108919

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<_3U4b.20891$Om1.19337@newsread2.news.atl.earthlink.net>...
> Slick:
>
> [snip]
> > If you believe that there are theoretically no
> > reflections in a conjugate match, then with
> >
> > Zl=50+j10 and Zo=50-j10,
> >
> > the conjugate equation correctly cancels the reactances
> > giving no reflections, while the non-conjugate still
> > incorrectly gives a magitude (non zero) for rho.
> >
> > Slick
> [snip]
>
> Oh yes here are voltage reflections at a conjugate match!
>
> Simply put as waves pass across the transition from an impedance
> of Zo to an impedance of conj(Zo) they are crossing a boundary
> with an impedance discontinuity. Zo on one side and conj(Zo)
> on the other side is definitely discontinuous! Unless of course,
> Zo = conj(Zo) which occurs only when Zo is real.
>
> There will always reflections at such an impedance
> discontinuity where an impedance faces its' conjugate.
>

I disagree completely. The theoretical impedance of a resonant
series L and C (which is lossless) is zero. So in a conjugate
match, where they cancel out, in an ideal loss-less world, it
would be equivalent to the series C and L not being there at all,
with the source and load 50 ohms free to pass max. power delivered to
the load.

>
> If an impedance Zo faces its' conjugate conj(Zo) then there will be
> no "power reflections", but there will in general be voltage reflections,
>

??? if the square of the magnitude of the voltage RC is the power RC,
then your statement is incorrect. And rho (magnitude of Voltage RC) is the
square root of the Power RC.

>
> i.e. "classical" rho = (Z - Zo)/(Z + Zo) is not zero at a conjugate match.
>

That's why it is incorrect for complex Zo.

> I also believe that this is "Mother Nature's" reflection coefficient
> for it is exactly what she uses as she lets the waves propagate
> down her lines of surge impedance Zo following her partial differential
> equations at every point along the way. At every infinitesimal
> length of line all along it's length the waves are passing from a
> infinitesimal region of surge impedance Zo to the next infinitesimal
> region of surge impedance Zo and there are no voltage reflections
> anywhere along that [uniform] line, although if the line is not lossless
> there will be energy lost as the wave progresses.
>

Maybe "Mother Nature" should take a Les Besser course... :)

> Slick... On another whole level it simply does not matter which defiinition
> of the reflection coefficient one uses to make design calculations though,
> as
> long as the definition is used consistently throughout any calculations.
>

I totally disagree again:

Did you read Williams' data?

> The data follows:
>
> Note: |rho1*| is conjugated rho1, SWR1 is for
> |rho1*|, |rho2| is not conjugated and SWR2 applies
> to |rho2|
>
> X0.......|rho1*|..SWR1.....|rho2|..SWR2
> -250..... 0.935...30.0.....1.865...-3.30
> -200..... 0.937...30.8.....1.705...-3.80
> -150..... 0.942...33.3.....1.517...-4.87
> -100..... 0.948...37.5.....1.320...-7.25
> -050..... 0.955...43.3.....1.131...-16.3
> -020..... 0.959...47.6.....1.030...-76.5
> -015..... 0.960...48.4.....1.010...-204
> -012..... 0.960...48.9.....0.997....+/- infinity
> -010..... 0.960...49.2.....0.990....+305
> -004..... 0.961...76.3.....0.974....+76.3
> 0000..... 0.961...50.9.....0.961....+50.9
>
> The numbers for not-conjugate rho are all over the
> place and lead to ridiculous numbers for SWR. It
> is also obvious that for a low-loss line it
> doesn't matter much. But values of rho greater
> than 1.0, on a Smith chart correspond to negative

> values of resistance (see the data).
>

Excellent work William. You are also showing how
a rho>1 leads to ridiculous numbers for the equation:

SWR = (1 + rho)/(1 - rho)

The non-conjugate equation simply cannot handle
complex Zo.

Some people think we should throw out the SWR formula
completely, but this is complete nonsense, of course.

SWR = (1 + rho)/(1 - rho) works for 0=>rho=>1,
for very good reason, as it applies to passive networks only.

And the conjugate will always give 0=>rho=>1,
even with a complex Zo.

Slick

155. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 11:30:55 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <ot2dnZ825aXl4smiU-KYvw@crocker.com>
Source record: 108921

From 'Fields and Waves in Communications Electronics' by Ramo Whinnery and
Van Duzer. section 1.16 and 1.23

start with positive moving wave plus negative moving wave = total to load
for both voltage and current, simple kirchoff's law summations at the
junction of the coax and load.
Vp+Vn=Vload (1)
Ip-In=Iload (2)
note that their convention is that current moving to the 'right' is positive
so the reflected 'negative' current wave is moving left which gives the
negative sign on the second term.

now use ohm's law to rewrite (2)

Vp/Zo - Vn/Zo = Vload/Zload (3)

then solving from (1) and (3) to get Vn/Vp

multiple (3) by Zload on both sides
Vp*Zload/Zo - Vn*Zload/Zo = Vload
substitute this for Vload in (1) to get:
Vp+Vn = Vp*Zload/Zo - Vn*Zload/Zo
group terms:
Vp-Vp*Zload/Zo = -Vn-Vn*Zload/Zo
factor:
Vp(1-Zload/Zo) = Vn(-1-Zload/Zo)
divide out terms
(1-Zload/Zo)/(-1-Zload/Zo) = Vn/Vp
multiply by Zo/Zo
(Zo-Zload)/(-Zo-Zload) = Vn/Vp
mulitply by -1/-1
(Zload-Zo)/(Zload+Zo) = Vn/Vp

therefore:
rho = Vn/Vp = Zload-Zo/Zload+Zo

what could be simpler... apply kirchoff's and ohm's laws and a bit of
algebra.

156. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 11:30:56 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <Qb%4b.21791$Om1.19754@newsread2.news.atl.earthlink.net>
Source record: 108920

Roy:

[snip]
> There are a lot of opportunities for typos in a derivation like this,
> especially when restricted to plain ASCII characters. I'd appreciate
> very much if anyone finding an error, either in concept, fact,
> assumption, or just typo, to call it to my attention so it can be
corrected.
>
> Roy Lewallen, W7EL
[snip]

Wow! You said it Roy.

BTW... thanks for all of your nice work.

But for my taste it's far too detailed and seems filled with gratuitously
long
symbols for ASCII text consumers.

My eyes glazed over and I nearly fell asleep and had to stop following after
a couple of screens of what seemed to turn into gibberish before my eyes.

Not your fault mind you, it's mine.

On the other hand, ASCII NewsGroup postings are hardly the media for
sharing such detailed algebraic/numeric developments!

I just don't get the point of all of your wonderful efforts!

Thoughts, comments,

--
Peter

157. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 11:33:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <Be%4b.21793$Om1.2288@newsread2.news.atl.earthlink.net>
Source record: 108922

Roy:

[snip]
> I'm quite sure that if you look carefully at any text where the author
> subtracts "reverse power" from "forward power" to get total power, that
> somewhere prior to that the assumption is made that loss is zero and/or
> the line's characteristic impedance is purely real.
>
> Roy Lewallen, W7EL
[snip]

Yep, that just don't work with complex Zo!

--
Peter K1PO
Indialantic By-the-Sea, FL.

158. Wanted Icom HM-14 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 11:46:34 UTC
From: Tom S <t_stenbraaten@hotmail.com>
Message-ID: <fo09lvs9of76jbethvp2nti2jsv12d675f@4ax.com>
Source record: 108923

I'm looking for an Icom HM-14 hand Mic,

If you have one please email.

Thanks,
Tom S
Ontario Canada

159. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 11:54:52 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <gy%4b.21837$Om1.9849@newsread2.news.atl.earthlink.net>
Source record: 108924

Slick:

[snip]
> I disagree completely. The theoretical impedance of a resonant
> series L and C (which is lossless) is zero. So in a conjugate
> match, where they cancel out, in an ideal loss-less world, it
> would be equivalent to the series C and L not being there at all,
> with the source and load 50 ohms free to pass max. power delivered to
> the load.
[snip]

Which is exactly what happens for all energy passing through at
the resonant frequency of the series LC!

And for instance if you are testing with a sinusoidal generator at
that frequency that is exactly what you will observe.

Of course if you are testing with a broad band signal rather
than a sinusoidal signal lots of much more interesting stuff
happens. That all can be calculated simply by using the
full functional descriptions of the network/transmission
system, i.e. assuming Z = Z(p) where p = s + jw, etc, etc...

[snip]
> ??? if the square of the magnitude of the voltage RC is the power RC,
> then your statement is incorrect.
[snip]

To which voltage reflection coefficient do you refer? :-)

No! The square of the magnitude of the voltage reflection coefficient is
not,
in general, equal to the power reflection coefficient.

[snip]
> That's why it is incorrect for complex Zo.
[snip]

Slick, no "correctly" defined reflection coefficient is "incorrect".

There can easily be an infinity of different "correct" reflection
coefficients so defined,
and none is "incorrect" so long as no incorrect conclusions are drawn from
their use.

The only "incorrect" ones are the reflection coefficients that are not
defined based upon simple non-singular linear combinations of the electrical
variables i and v.

Slick, your view of the reflection coefficient world is far too narrow!

Widen your horizons, there is more than one way to go to hell, and
chosing a particular definition of a reflection coefficient and forcing
all others to believe in it is nothing short of bigotry!

[snip]
> Maybe "Mother Nature" should take a Les Besser course... :)
[snip]

I am sure that Dr. Besser is an honorable and accomplished man despite
his obviously narrow views of "waves".

[snip]
> I totally disagree again:
>
> Did you read Williams' data?
[snip]

Yes I "scanned" it and lost interest quickly, because of the gratuitous
use of mind boggling numerical tables in ASCII text on a newsgroup
posting!

I am sure that William did a lot of work whilst typing in those long
strings of numbers without error. Good work William!

Hey I'll scan in and post a listing of a couple of thousand lines of the Zo
versus frequency of 18,000 feet of plastic insulated AWG 24 wire if that
will help. I've got hundreds and hundreds of pages of such data! :-)

[snip]
> Excellent work William. You are also showing how
> a rho>1 leads to ridiculous numbers for the equation:
>
> SWR = (1 + rho)/(1 - rho)
>
> The non-conjugate equation simply cannot handle
> complex Zo.
>
> Some people think we should throw out the SWR formula
> completely, but this is complete nonsense, of course.
>
> SWR = (1 + rho)/(1 - rho) works for 0=>rho=>1,
> for very good reason, as it applies to passive networks only.
>
> And the conjugate will always give 0=>rho=>1,
> even with a complex Zo.
[snip]

Hey, again your view of rho and VSWR is too narrow.

Ask yourself what is the meaning of SWR in that formula
when rho is complex and SWR is complex!

Actually if you let your mind expand a little beyond your
narrow view of things you will find that complex SWR can
have a physical and useful meaning as well.

--
Peter K1PO
Indialantic By-the-Sea, FL

160. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 12:07:27 UTC
From: kd1@sympatico.ca
Message-ID: <3F5487FF.DB65F36C@sympatico.ca>
Source record: 108927

"Peter O. Brackett" wrote:
> On another whole level it simply DOES NOT MATER which defiinition
> of the reflection coefficient one uses to make design calculations though,
> as long as the definition is used consistently throughout any calculations.
>
> One can convert any results based on the non-conjugate version of rho to
> results based on the conjugate version of rho and vice versa.
>
> In other words, neither version is "RIGHT" or "WRONG" as long
> as the results from using that particular definition are interperted
> correctly in terms of the original definition.

While true, this is not what is occuring in the 'revised rho' debate.

Their claim is simply that 'classical rho' has been mis-calculated all these years and we should start using the 'proper' calculation. There is no acknowledgement that 'revised rho' will have different properties than 'classical rho' and that, therefore, they are introdcing a new entity.

Their claim of incorrectness derives from the fact that 'classical rho' can have a magnitude greater than 1 and a belief that this means reflected power is greater than incident. This belief is inconsistent with generally accepted knowledge, so rather than modifying the belief, the derivation of 'classical rho' is rejected.

Their second difficulty derives from not being able to separate the behaviour at a particular interface from the system behaviour. They do not recognize that a reflection at a particular interface (which would reduce energy transfer at that interface), can improve overall system energy transfer by improving the energy transfer at another interface. This being what a transmission line transformer does, for example.

Once they overcome these two hurdles, they will have no problems with the classical definition of rho.

> So... who gives a damm about the defintion of rho as long as you are
> consistent in it's use. It simply doesn't matter! [Unless you choose
> M to be singular. ;-)]

There is no problem if this is what the 'revised rho' crowd really is attempting to do, but they should clearly state this and have the courtesy to pick a new name (despite Humpty-Dumpty's assertions) to facilitate clear communication.

Really though, you are thinking several levels above them when you hypothesize the existence of other, self-consistent, definitions of rho.

They are still at the 'classical rho computation is just plain wrong' level.

...Keith

161. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 12:11:04 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <AvudnUrryd19FcmiU-KYuA@crocker.com>
Source record: 108926

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:gy%4b.21837$Om1.9849@newsread2.news.atl.earthlink.net...
> Slick:

> Hey, again your view of rho and VSWR is too narrow.
>
> Ask yourself what is the meaning of SWR in that formula
> when rho is complex and SWR is complex!
>

how can swr be complex... in my book it is:

SWR=(1+|rho|)/(1-|rho|)

so swr can't be complex.

162. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 12:21:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj21vhnoh1@titan.btinternet.com>
Source record: 108928

Peter, K1PO wrote -
> As long as you choose a reference impedance R such
that the transformation
> matrix is non-singular then you can go back and forth
from a, and b to
> v and i any time, any where, etc...
>
==========

Peter, the stage is now set to introduce Eigenvectors,
Eigenvalues and Sylvesters theorem for square matrices.
;o)

Reg

163. Re: Another DXCC question ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 12:56:54 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bj242p$149c$1@f04n12.cac.psu.edu>
Source record: 108929

The only rule about 160M card is that they can't be checked by field checkers. They must be sent to the ARRL headquarters. I just dumped off 450 cards at the end of Augest to be checked and was told it will that about 5 to 6 weeks for them to processe them.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"W4WNT" <w4wnt@carolina.rr.com> wrote in message
news:TWb4b.40340$J16.2076238@twister.southeast.rr.com...
> Hi Carter,
>
> As long as the cards clearly list your call and a signal report as well as
> the details of the QSO, time date, band, mode, they should be acceptable
for
> DXCC submission. Most folks submit 102 or so cards with the first
> submission, then if there is a problem with one card, they are still OK.
>
> As for the HA5-350 card, it sounds like an SWL report rather than an
amateur
> call. (As above, does it have QSO details of your QSO with the call
listed?)
> Since you'll probably be having a field checker look them over, he or she
> can tell you if it is legit card. Another question for the checker is
> whether the ten year old cards have to go into the ARRL DXCC desk (but
ARRL
> Divisional Hamfests will have League reps who can check them).
>
> Good luck and good DX,
>
> Bill, W4WNT
> "carter" <cartw@netart.com> wrote in message
> news:3F5022DB.84E55202@netart.com...
> > I'm sending in for the regular DXCC and a few things are unclear
> > to me:
> >
> > 1) Would a CY9AA (St. Paul Island) from 1997 on 160 meters
> > count?
> > Thought I read somewhere that 160 meters doesn't count on
> > the regular DXCC.
> >
> > 2) I have a 3E1DX from Panama. But on the list it doesn't
> > have 3E1 for Panama listed. Only HO-HP#* is listed for

> > Panama. It was a CQWW contest in 1997. Am I out of luck?
> >
> > 3) Have a 4N7DW from Yugoslavia from 1993. Once again
> > this prefix isn't listed on the ARRL list for Yugo (YT prefix is)
> > Out of luck??
> >
> > 4) I have a Pitcairn Island VR6BB from 1993. VP6 is now
> > listed as being Pircairn Island. VR is now Hong Kong.
> > What gives with this one??
> >
> > 5) I have a HA5-350 from Hungary from 1996. Not allowed?
> >
> >
>
>

164. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 15:25:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj2cof$4lf$1@hercules.btinternet.com>
Source record: 108930

"Roy Lewallen" wrote

> - - - - - right answers when the underlying
principles
> are too hard for us to understand.
>
==========

Roy, there you go again - blaming the principles.

165. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 15:46:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f54bcff$1_4@corp.newsgroups.com>
Source record: 108933

Roy Lewallen wrote:
> Well, shucks, that makes it easy.

Just being logical. There are only two directions in a transmission line, forward and reverse. If all the waves are coherent, all forward waves superpose to one wave and all reverse waves superpose to one other wave. Your net forward power is greater than your net reflected power by the net amount of power accepted by the load. This happens locally at the load no matter what is happening elsewhere in the transmission line.

> Cecil Moore wrote:
>> Seems to me, all the terms with a '+' sign would be forward power, by
>> definition, and all the terms with a '-' sign would be reflected power,
>> by definition. I don't see any violation of the conservation of energy
>> principle. The power equation balances.
--
73, Cecil http://www.qsl.net/w5dxp
"One thing I have learned in a long life: that all our science, measured against reality, is primitive and childlike ..." Albert Einstein

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166. Re: Determining antenna resonance with a grid dip meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 15:47:48 UTC
From: Tom Coates <tecoates@comcast.net>
Message-ID: <51idnYMb0ts-JsmiXTWJjg@comcast.com>
Source record: 108931

Thanks very much!

The last time I can recall tuning a Yagi, it was for 20 and I did well by
just whacking the gamma
short with a broomstick and watching the SWR meter. Then I was working with
inches, now I'm working
with tenths, and my usual method of measuring with a micrometer and cutting
with a shovel is not
sufficiently precise. Hence the inquiry.

Tom, N3IJ
"Tom Coates" <tecoates@comcast.net> wrote in message
news:rQCdnfXCtI-Y9daiXTWJgA@comcast.com...
> I recall reading about this many years ago but can't find it in any of the
> books I have now.
>
> How do I couple the meter to the antenna?
>
> The project is a 3-element 2 meter yagi and I'm trying to set the length
of
> the driven element. I can't find a dip within the band using the rig and
an
> swr bridge.
>
> Tom, N3IJ
>
>
>
>
>

167. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 15:49:51 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3F54BC1C.E083907A@shaw.ca>
Source record: 108932

Jeffdeham wrote:
>
> I was looking at the rainbow tuner which matches a
> half wave end fed antenna to 50 ohms using a quarter
> wave radial. I am guessing it
> works like a transformer but not sure. Here is
> the schematic;
>
> Ant |----- quarter wave radial
> | |
> | GND
> ----------
> |)
> ---)
> Variable)<----- 50 ohm
> ---)
> |)
> |)
> ----------
> |
> GND
>
>
> If it does work like a transformer how does it do it?
> How is the matching done?
>
> Thanks for any help!
>
> Jeff

The fed end of a half wave antenna appears as a high impedance.
The parallel resonant circuit (at resonance) also appears as a high impedance.
To match the low impedance of the feedline, it is necessary to
tap down on the coil (so as to feed between the tap and ground) -- like
an autotransformer.

Think of a half wave dipole -- you need good insulators on the end
of the half wave because the voltage there is very high, and the
current is very low. Uzing (pardon the pun) Z=E/I=High/Low yields
a high impedance.

This is a pretty simplified explanation, but if you think about
it it will work.

Hope it helps you to understand things a bit.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

168. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 16:06:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f54c193$1_4@corp.newsgroups.com>
Source record: 108934

Roy Lewallen wrote:

> I apologize. I thought your view of power waves was alleged to hold true
> even with loss. If it's restricted to lossless lines (which have purely
> real Z0), then the total average power does equal "forward power" minus
> "reverse power".

I have been very careful to say that my methods are designed to work
with lossless lines and perfect circles on a Smith Chart. I use open-
wire transmission lines on HF so my methods work pretty well at home
in the real world.

However, you have taught me something here and I appreciate it. I thought
my impedance discontinuity analysis would work with lossy lines since the
analysis is completely local to the impedance discontinuity. I realize
that's not true now because I was assuming that the forward/reflected
voltages/currents are in phase which they are not in a lossy line.
Thanks for pointing that out in a round about way.

> So please don't bother yourself with trying to explain the component of
> power that's neither the "forward power" nor "reverse power".

Since I'm ignorant of lossy lines, I am learning something, which is good.
Whatever the nature of the extra calculated component of power, it must have
direction. If it's moving forward, it is part of the forward wave, by definition
As you have said, waves can be arbitrarily sub-divided and nothing changes.
It would be interesting to take a look at the nature of your extra wave which
must exist to satisfy the conservation of energy principle. It just might
explain Richard's data. What does a plot of that extra power look like up
and down the line?
--
73, Cecil http://www.qsl.net/w5dxp

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169. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 16:13:17 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f54c3e8$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 108935
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Joking apart, I know, and I suspect that you know also,
that dyslexia and intelligence are different and unrelated matters.

So different in fact, that it is perfectly possible to have dyslexics
who are thick.

I think that when we see someone playing the dyslexic
card in this NG to justify their CBness, then we are
seeing examples of dyslexics who are also thick.

Walt Davidson <g3nyy@despammed.com> wrote in message
news:cme8lvk4m88ldfm7fmu14kbvbuei1ddhm5@4ax.com...
> On Tue, 2 Sep 2003 05:15:16 +0100, "Airy R. Bean" <me@privacy.net>
> wrote:
> >That's why they style themselves so grandly as, "Dyslexic".
> >They can't spell, "Thick"!.
> >BTW, it didn't take that one long to come up with the
> >standard excuse of dyslexia to justify his CBness, did it?
> I have never found one yet who has any difficulty in spelling
> "dyslexia"! That is the one word they have taken the trouble to
> learn.

170. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 16:20:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f54c4ee_4@corp.newsgroups.com>
Source record: 108936

Dr. Slick wrote:

> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote:
>>There will always reflections at such an impedance
>>discontinuity where an impedance faces its' conjugate.
>>
> I disagree completely. The theoretical impedance of a resonant
> series L and C (which is lossless) is zero. So in a conjugate
> match, where they cancel out, in an ideal loss-less world, it
> would be equivalent to the series C and L not being there at all,
> with the source and load 50 ohms free to pass max. power delivered to
> the load.

Better be careful. Did you just assert that you can change
the SWR on a feedline by forming a conjugate match at the source?
All Peter is saying is that the VSWR on the feedline will not be 1:1
if Z-complex-load differs from the purely resistive Z0 of a lossless
line. For a lossless line, there is nothing you can do at the source
to change the SWR at the load.

However, if the line is lossless, you can achieve maximum power
transfer anyway even in the face of a high SWR.
--
73, Cecil http://www.qsl.net/w5dxp

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171. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 16:30:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f54c736$1_4@corp.newsgroups.com>
Source record: 108937

Peter O. Brackett wrote:
> My eyes glazed over and I nearly fell asleep and had to stop following after
> a couple of screens of what seemed to turn into gibberish before my eyes.
>
> Not your fault mind you, it's mine.

What helps for me is to print it out. I evolved looking at printed
pages, not computer screens. I can scribble the correct math
operators down so I don't have to remember what e** means.

> I just don't get the point of all of your wonderful efforts!

Roy may have explained Richard's data. In any case, it's good
to know that we cannot use the simplified wave reflection model
on very lossy lines. It appears that a lossy line doesn't yield
a smooth spiral on a Smith Chart.
--
73, Cecil http://www.qsl.net/w5dxp

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172. Re: Re-Normalizing the Smith Chart (Changing the SWR into the

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 16:50:28 UTC
From: richardharrison@webtv.net
Message-ID: <6175-3F54CA54-278@storefull-2318.public.lawson.webtv.net>
Source record: 108940

Keith wrote:
"---it is this cyclical variation in energy flow which prompted power dudes to invent three phase lines in which energy flow does not vary cycillaly, power is constant."

It`s true the wires are shared by multiple phases which peak 120-degrees apart in the 3-phase case. This distributes power flow more evenly with respect to time and reduces peak loads since the phases never coicide. Tesla figured this out 100 years ago.

Coincidences of incident and reflected waves are very different from the cyclical variations of a-c.

Incident and reflected waves have cyclical voltages and currents. As the reflected wave is just a delayed incident wave, the period is the same for both.

In those line spots where the total reflected voltage is 180-degrees different in phase from the incident wave, the net voltage is always zero during the cycle if the reflection is complete on a lossless line.

The power is not zero at points where the voltage is always zero because the voltages that add to zero are not zero. In the lossless line, these voltages are full strength, as are the currents at a current null, some 90-degrees away in space from the voltage null on the line.

Fact is, both the forward power and the reflected power would measure the same at any point along the line.

The wave action has been observed and documented for more than a century. The explanations withstand all arguments, so far. Something new will be needed to replace the ancient wave theory to win acceptance. Keith`s zero power at zero null spots won`t persuade.

The power appearing to null is not the whole story when there are forward and reflected powers, each having electric and magnetic fields with phase differences all around.

Best regards, Richard Harrison, KB5WZI

173. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 17:03:15 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0309020903.10ec2003@posting.google.com>
Source record: 108938

Dale Parfitt <parinc@gte.net> wrote in message > > If it does work like a transformer how does it do it?
> > How is the matching done?
> The antenna represents a hi impedance- in the 2K-->4K range for HF and
> wire as a radiator. The parallel tank L-C is also a hi impedance. The
> coaxial cable then is tapped up from ground until the 50 Ohm point is
> reached.

That makes perfect sense except if you have two high impedances in series how does tapping the coil at a certain point give you 50 ohms? What exactly is the process where by the impedance transformation occurs?

Just trying to learn here.

Thanks for any help once again!

Jeff

174. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 17:16:03 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F54D053.9D64C939@cwis.net>
Source record: 108939

Jeff,
Series? How about parallel.
'Doc

175. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 17:34:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f54d62a$1_6@corp.newsgroups.com>
Source record: 108941

Jeffdeham wrote:
> That makes perfect sense except if you have two high impedances in
> series how does tapping the coil at a certain point give you 50 ohms?
> What exactly is the process where by the impedance transformation
> occurs?

It is NOT two high impedances in series. It is an autotransformer
action related to the turns ratio. All impedances are referenced to
ground at the bottom of the tuned circuit. In a high-Q circuit, the
impedance at the top of the tuned circuit will be the impedance
presented by the antenna. So as you "tap down" on the coil, the
impedance goes from a few thousand ohms to zero. At some point in
the transformer tap down process, you will encounter a point where
the ratio of the voltage to current is 50 ohms. That's where to
attach the 50 ohm coax for a low SWR and good efficiency.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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176. Re: Re-Normalizing the Smith Chart (Changing the SWR into the

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 17:45:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F54D754.BAE66EB1@uci.edu>
Source record: 108942

W5DXP wrote:
>
> kd1@sympatico.ca wrote:
>
> > W5DXP wrote:
> >
> >>Jim Kelley wrote:
> >>>Nodes and zero crossings aren't necessarily the same thing.
> >>
> >>They are for standing waves on lossless unterminated lines,
> >>by definition.

Zero crossings are not unique to standing wave patterns, therefore nodes
and zero crossing aren't necessarily the same thing.

What are you claiming crosses zero at a node in a standing wave pattern?

73 de ac6xg

177. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 18:20:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl9nsbiqji1093@corp.supernews.com>
Source record: 108943

It obviously doesn't bother you that your new "forward power" isn't the product of forward voltage and current, or that the new "reverse power" isn't the product of reverse voltage and current. But then I guess we shouldn't be surprised.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Well, shucks, that makes it easy.
>
>
> Just being logical. There are only two directions in a transmission
> line, forward and reverse. If all the waves are coherent, all forward
> waves superpose to one wave and all reverse waves superpose to one
> other wave. Your net forward power is greater than your net reflected
> power by the net amount of power accepted by the load. This happens
> locally at the load no matter what is happening elsewhere in the
> transmission line.
>
>> Cecil Moore wrote:
>>
>>> Seems to me, all the terms with a '+' sign would be forward power, by
>>> definition, and all the terms with a '-' sign would be reflected power,
>>> by definition. I don't see any violation of the conservation of energy
>>> principle. The power equation balances.

178. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 18:23:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl9o1ajn4mbd53@corp.supernews.com>
Source record: 108944

I've given the equation. With that and a spreadsheet or plotting program (or graph paper) of your choice, you can have the plot in minutes. Note that x is the distance from the load.

Roy Lewallen, W7EL

Cecil Moore wrote:

>. . .
> What does a plot of that extra power look like up
> and down the line?

179. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 18:41:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl9p2fldo7jg76@corp.supernews.com>
Source record: 108945

Anyone interested in seeing the same derivation in perhaps slightly different order can review my posting of 8-23 in the thread "Re: A subtle detail of reflection coefficient. . .". It includes a numerical comparison of results using the derived formula with results using a couple of alternative formulas. Of course, you can find a similar derivation in nearly any electromagnetics or transmission line text. If you do look it up, please note that I made an error (later corrected) in stating that conjugately matching the line results in maximum power transfer to the load. The condition for maximum power transfer for a given source impedance is of course that the load impedance be the complex conjugate of the impedance seen looking from the load back toward the source.

Roy Lewallen, W7EL

David Robbins wrote:
> From 'Fields and Waves in Communications Electronics' by Ramo Whinnery and
> Van Duzer. section 1.16 and 1.23
>
> start with positive moving wave plus negative moving wave = total to load
> for both voltage and current, simple kirchoff's law summations at the
> junction of the coax and load.
> Vp+Vn=Vload (1)
> Ip-In=Iload (2)
> note that their convention is that current moving to the 'right' is positive
> so the reflected 'negative' current wave is moving left which gives the
> negative sign on the second term.
>
> now use ohm's law to rewrite (2)
>
> Vp/Zo - Vn/Zo = Vload/Zload (3)
>
> then solving from (1) and (3) to get Vn/Vp
>
> multiple (3) by Zload on both sides
> Vp*Zload/Zo - Vn*Zload/Zo = Vload
> substitute this for Vload in (1) to get:
> Vp+Vn = Vp*Zload/Zo - Vn*Zload/Zo
> group terms:
> Vp-Vp*Zload/Zo = -Vn-Vn*Zload/Zo
> factor:
> Vp(1-Zload/Zo) = Vn(-1-Zload/Zo)
> divide out terms
> (1-Zload/Zo)/(-1-Zload/Zo) = Vn/Vp
> multiply by Zo/Zo

> (Zo-Zload)/(-Zo-Zload) = Vn/Vp
> mulitply by -1/-1
> (Zload-Zo)/(Zload+Zo) = Vn/Vp
>
> therefore:
> rho = Vn/Vp = Zload-Zo/Zload+Zo
>
> what could be simpler... apply kirchoff's and ohm's laws and a bit of
> algebra.
>
>

180. Re: Hotmail Hacking Made Simple

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 18:52:18 UTC
From: Adrian Bailey <dadge@hotmail.com>
Message-ID: <GD55b.18439$io2.6464@news-binary.blueyonder.co.uk>
Source record: 108946
Cross-posted to: rec.photo.technique.people,rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc

<donjones@optonline.net> wrote in message
news:ue55b.122227$yg.34886355@news4.srv.hcvlny.cv.net...
> Check this out. I didnt know hotmail was so easy to break into
>
> http://www.iwars.net/dmxdvc.html

Clicking on that link gives you:

YOU HAVE JUST BEEN RECRUITED AS DMXDVC'S THUG!

By visiting this page, you have just recruited 1 thug for dmxdvc, increasing
their chance of winning the prizes! dmxdvc now has 5853 thugs and is getting
stronger every day, it is upto you to beat them.
Good Luck!

So don't click on it.
Adrian

181. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 19:07:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl9qjc2b6j3ff2@corp.supernews.com>
Source record: 108947

Note also that if the equation for total average power is used to find average power at any point along the line, fE1 becomes the forward voltage at the observation point, not necessarily the forward voltage at the input end of the line. So to calculate the total power as a function of position along the line, it's probably best to use a voltage at a fixed point, such as fE2, the forward voltage at the load, in its place. Make the substitution

|fE1|^2 = |fE2|^2 * exp(2 * ax)

for |fE1|^2 to make the power equation more usable for this purpose.

Roy Lewallen, W7EL

Roy Lewallen wrote:
> I've given the equation. With that and a spreadsheet or plotting program
> (or graph paper) of your choice, you can have the plot in minutes. Note
> that x is the distance from the load.
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
>
> >. . .
>
>> What does a plot of that extra power look like up
>> and down the line?
>
>

182. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 19:19:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vl9raa73s39p2a@corp.supernews.com>
Source record: 108948

As derived, the equation for total average power at any point along the line contains the term |fE1|^2, which is the square of the magnitude of the forward voltage at that point. It might be more useful to replace fE1 with a value which doesn't vary with position along the line, such as fE2, the forward voltage at the load. The substitution is:

|fE1|^2 = |fE2|^2 * exp(2 * ax)

which gives the alternate formula

<P1> = (|fE2|^2 / |Z0|) * (exp(2 * ax) * (1 - rho^2 * exp(-4 * ax)) * cos(delta) + rho * (2 * sin(delta) * sin(2 * bx - 2 * psi)))

And, subtituting values for "forward power" and "reverse power":

<P1> = <fP> - <rP> + (|fE2|^2 / |Z0|) * rho * 2 * sin(delta) * sin(2 * bx - 2 * psi).

Roy Lewallen, W7EL

Roy Lewallen wrote:
> Here's the calculation of total average power <P1> at any point on a
> transmission line. The point on the line is called point 1, and the
> location of the load is called point 2. The distance between them is x.

> . . .

> = (|fE1|^2 / |Z0|) * ((1 - rho^2 * exp(-4 * ax)) * cos(delta) + rho *
> exp(-2 * ax) * (2 * sin(delta) * sin(2 * bx - 2 * psi)))
>
> Subtituting values for "forward power" and "reverse power", we have:
>
> <P1> = <fP> - <rP> + (|fE1|^2 / |Z0|) * rho * exp(-2 * ax) * 2 *
> sin(delta) * sin(2 * bx - 2 * psi).
> . . .

183. Re: Homebrew tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 19:45:02 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309021145.4152f3f0@posting.google.com>
Source record: 108949

Mike.
Why I chose a switchable transformer is the antenna I use
is always made resonant because of remote variable lumped
constants. (The loop antenna is a similar type antenna)
Thus for me I only have to deal with RESISTIVE resonant
impedances that vary from frequency to frequency.
The Palomar provides a lot of different ratios between all
inputs and outputs thus SWR of less than 1.3 is really a snap.
As far as efficiency goes I should have defined efficiency but
then it comes down to compared to what.
I suppose a telephone call would be the best no matter how
efficiency is defined. As far as radio goes a remotely switchable
TRANSFORMER placed at the antenna input would be hard to beat
no matter how one defines efficiency.
Now a wag will enter bringing up the subject of inter
coil capacitances in a transformer.
Regards
Art

MikeN <mnewman@clear.net.nz> wrote in message
news:<jbf8lv8jgcj2lvr9jd0i3ctb8fmngq6bk5@4ax.com>...
> I used to use a homebrew tapped transformer like the Palomar, wound on
> a Philips 4C6 toroid, around late 70's to match my homebrew helical
> mobile whips to my Atlas 210X installed in my Austin 1800 (like a Mini
> on steroids and affectionately known as the "land crab").
>
> The separate whips, for 80 40 and 20 metres, could all be matched to
> 50 ohms, all I had to do when changing bands was to change the whip,
> turn the selector switch to the appropriate tapping and away we went.
> Best dx - when mobile one afternoon, I heard a VK4 (across the pond
> in Aus) calling CQ on 40m, but when I went back to him found he was a
> DK4.
>
> MikeN ZL1BNB
>
>
>
>
>
>
>
>
>
>
>

>
> bnb
>
>
> On 29 Jul 2003 08:50:27 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >Seems like a lot of hams with limited resources are still compelled
> >to operate on many bands with just a long wire and a tuner.
> >The wire is inexpensive but the tuners are not. Thus my present
> >project.
> >I was given a Palomar enginnering balun with 5 female connenection
> >which by selection can match a antenna in steps from 5 ohms to over
> >450 ohms
> >in a series of steps. I am presently rigging it up so that all
> >steps can be switched thru remotely by a single motor. The switching
> >arrangement
> >is the main challenge since inexpensive means simple.
> >Now I have not measured losses of the balun before hand because the
> >switching
> >challenge is what is driving me.
> >Anybody have any thoughts about what I should expect from this
> >balun other than knowing that it is not a tuner as is generally known
> >since
> >it does not have the ability to obtain the priceless 1:1 condition
> >that so many desire?
> >Regards
> >Art

184. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 20:07:20 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj2t9o$b5r$1@hercules.btinternet.com>
Source record: 108950

"Peter O. Brackett" wrote
> why are we trying to prove it again now using
> arithmetic?
>
=======================

Arithmetic is indeed an appropriate description of the
operations being used.

185. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 20:34:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj2ut1$mh9$1@titan.btinternet.com>
Source record: 108951

If the feedpoint resistance of the 1/2-wave vertical is
R ohms, then the input impedance of the coil tapping
point is R*(K squared) where K is the fraction of total
coil turns below the tap.

It requires only that L and C are resonant at the same
resonant frequency of the 1/2-wave antenna.

A roller inductor makes a nice job of it.
Disadvantage - the roller inductance L being fixed,
with C, limits the matching range to only 1 or 2 bands
before things become inefficient. For highest
efficiency L should be big and C should be quite small
like 10 to 50pF.

Solution - prune the antenna to an off-resonance
frequency. I have a program for it but never published
it because its too simple.

Reg G4FGQ.

186. Cushcraft A743 40 meter add-on

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 20:37:39 UTC
From: Steve Dakin <sdakin@sbcglobal.net>
Message-ID: <nc75b.616$PR2.467@newssvr22.news.prodigy.com>
Source record: 108952

Anyone here had experience doing an upgrade to the
Cushcraft A3 with the A743 40 meter add-on? Does
it work well enough to justify investing nearly 200
dollars to buy?

Thanks for your opinions.

Steve WQ5N

steve@dakin.ws
wq5n@amsat.org

187. Helix Antennas & Delta Match

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 20:41:21 UTC
From: Chris I Townsend <ci.townsend@btinternet.com>
Message-ID: <lOYNbwDxBQV$EwI6@holmfirth.demon.co.uk>
Source record: 108954

Hi,

Can anyone point me in the right direction for the theory to design a
Delta Match for a Centre fed Helix (using slinkys)?

Please email
--
Chris I Townsend

(chris@cbnr.net)

188. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 20:42:12 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F5500A4.4D4E4EFE@uci.edu>
Source record: 108953

Cecil Moore wrote:
> To the best of my knowledge,
> there's no mention of complex indices of refraction in _Optics_.

Born and Wolf has a chapter on the Optics of Metals. Chapter 13.1 is called Wave Propagation in a Conductor. In it, they use a complex wave number, complex dielectric constant, complex phase veloctity, and a complex refractive index.

73, Jim AC6XG

189. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:11:29 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <5I75b.16623$EW1.9018@newsread1.news.atl.earthlink.net>
Source record: 108955

Cecil:

[snip]
> In any case, it's good
> to know that we cannot use the simplified wave reflection model
> on very lossy lines. It appears that a lossy line doesn't yield
> a smooth spiral on a Smith Chart.
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

Amen brother and... heh, heh... especially for broad band signals.

Smith Charts are for mono-chomatic signals. Most tough transmission
problems
are broad band and the Smith Chart yeilds no useful insight in those
problems.

A widely applied practical example is the transmission of bi-directional
broad band digital subscriber loop (DSL) signals over telephone twisted
pair.

Telephone twisted pair is very lossy... at the "standard" 18,000 foot
length you can barely tell what is connected on the other end, short
or open. In fact it might just as well be "semi-infinite"! The longest
spans we have built chips for were up to 47,000 feet of #24 AWG
full duplex data transmission at the basic rate with digital echo
cancellation
on both ends using trellis coded pulse amplitude modulation.

I can assure you that 47,000 feetof #24 AWG definitely has a complex
and lossy Zo! I had quite a few big "spools" of such cable in my lab
for the beta tests!

The big problem with such designs is not maximum power transfer,
rather it is hearing the remote end in the presence of the local transmitter
blasting away on the same pair as the receiver [talker echo] and so one
needs to "image match" the transmitter to eliminate as much talker echo
as possible and just take whatever power reaches the receiver at
the other end. Of course you have some control over the spectrum
of the power that reaches the other end by "pre-coding" at the
transmitter, still the optimum strategy at the transmitter is to get
an "image match". i.e. make the generator internal impedance
as close to the complex Zo as you can make it!

And... in those problems you need to differentiate two forward waves
and two reflected waves. Heh, heh... hard to do that using just the

two symbols Vfwd and Vref or V_+ and V_-, you need symbols
for at least two each... Say Vfwd_1 and Vfwd_2 and Vref_1 and
Vref_2, etc... messy to say the least!

For this reason I much prefer the Scattering Formalism symbols
"a" for incident and "b" for reflected, a1 for indicdent on port 1
and a2 for incident on port 2, then b1, b2, etc...

Sometime, when I get some free time from my current
consulting gig, I'll prepare a short example for the group of the
problems inherent in full duplex signalling over complex Zo lines in
situations where the "best" Engineering solution is "image match"
not "conjugate match". ;-)

--
Peter K1PO
Indialantic By-the-Sea, FL.

190. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:18:47 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309021318.6b5db52b@posting.google.com>
Source record: 108956

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<ot2dnZ825aXl4smiU-KYvw@crocker.com>...
> From 'Fields and Waves in Communications Electronics' by Ramo Whinnery and
> Van Duzer. section 1.16 and 1.23
>
> start with positive moving wave plus negative moving wave = total to load
> for both voltage and current, simple kirchoff's law summations at the
> junction of the coax and load.
> Vp+Vn=Vload (1)
> Ip-In=Iload (2)
> note that their convention is that current moving to the 'right' is positive
> so the reflected 'negative' current wave is moving left which gives the
> negative sign on the second term.
>
> now use ohm's law to rewrite (2)
>
> Vp/Zo - Vn/Zo = Vload/Zload (3)
>

I believe this line (3) is only true if Zo is purely real.

If Zo is complex, i don't think you can apply
this.

> then solving from (1) and (3) to get Vn/Vp
>
> multiple (3) by Zload on both sides
> Vp*Zload/Zo - Vn*Zload/Zo = Vload
> substitute this for Vload in (1) to get:
> Vp+Vn = Vp*Zload/Zo - Vn*Zload/Zo
> group terms:
> Vp-Vp*Zload/Zo = -Vn-Vn*Zload/Zo
> factor:
> Vp(1-Zload/Zo) = Vn(-1-Zload/Zo)
> divide out terms
> (1-Zload/Zo)/(-1-Zload/Zo) = Vn/Vp
> multiply by Zo/Zo
> (Zo-Zload)/(-Zo-Zload) = Vn/Vp
> mulitply by -1/-1
> (Zload-Zo)/(Zload+Zo) = Vn/Vp
>
> therefore:
> rho = Vn/Vp = Zload-Zo/Zload+Zo
>
> what could be simpler... apply kirchoff's and ohm's laws and a bit of

> algebra.

Nice job David, nobody has done this yet. And done with variables,
as it needs to be done, and not with specific numbers.

I think this is correct for Zo is purely real.

I'd like to see the derivation for the conjugate equation,
which i have seen in Kurokawa, Besser, and the ARRL, among
other sources.

Slick

191. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:25:57 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <FV75b.16643$EW1.15696@newsread1.news.atl.earthlink.net>
Source record: 108957

Reg:

[snip]
> Peter, the stage is now set to introduce Eigenvectors,
> Eigenvalues and Sylvesters theorem for square matrices.
> ;o)
> ---
> Reg
[snip]

Ahhhh... Sylvester, I knew him well!

Roy even fusses at me and insists that the transformation matrix M between
v, i and a, b include a factor of 1/2 as:

a = v/2 + Ri/2 = 1/2 [v + Ri]
b = v/2 - Ri/2 = 1/2 [v - Ri]

i.e. M is:

|1/2 R/2|
|1/2 -R/2|

so that the M is chosen for the voltage and current values to match the
values of v and i found
in solutions of the Telegraphists Equation.

That's fine, but with that simple multiplier common to all elements of the
linear combination of electricals to make the waves, it just don't matter
since as you know, when you form rho = b/a the factor of 1/2 just drops out.

I suppose introducing the "outer product" of the two vectors B = [b1, b2]
and [A^-1]'[= [1/a1, 1/a2]'
as Bx[A^-1]' = S to form the two by two Scattering Matrix and showing that
the factor of 1/2 disappears there as well would be far far too much for
this group to assimilate!

I can hear Oliver rolling over in his grave!

Long live Sylvester!

;-)

--
Peter K1PO
Indialantic By-the-Sea, FL.

192. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:27:55 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <vX75b.16649$EW1.10537@newsread1.news.atl.earthlink.net>
Source record: 108958

Keith:

[snip]
> They are still at the 'classical rho computation is just plain wrong'
> level.
>
> ...Keith
[snip]

Another fan of Lewis Carol...

Welcome to the discussion.

Nice to meet you here Keith.

--
Peter K1PO
Indialantic By-the-Sea, FL.

193. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:36:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vla3bhi995kld0@corp.supernews.com>
Source record: 108959

And there's a very good discussion of unbounded EM waves in media with complex intrinsic impedance in Kraus' _Electromagnetics_. See the chapter titled "Plane Waves in Conducting Media".

Roy Lewallen, W7EL

Jim Kelley wrote:
>
> Cecil Moore wrote:
>
>>To the best of my knowledge,
>>there's no mention of complex indices of refraction in _Optics_.
>
>
> Born and Wolf has a chapter on the Optics of Metals. Chapter 13.1 is
> called Wave Propagation in a Conductor. In it, they use a complex wave
> number, complex dielectric constant, complex phase veloctity, and a
> complex refractive index.
>
> 73, Jim AC6XG

194. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:41:54 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309021341.36db4675@posting.google.com>
Source record: 108960

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<gy%4b.21837$Om1.9849@newsread2.news.atl.earthlink.net>...
> Slick:
>
> [snip]
> > I disagree completely. The theoretical impedance of a resonant
> > series L and C (which is lossless) is zero. So in a conjugate
> > match, where they cancel out, in an ideal loss-less world, it
> > would be equivalent to the series C and L not being there at all,
> > with the source and load 50 ohms free to pass max. power delivered to
> > the load.
> [snip]
>
> Which is exactly what happens for all energy passing through at
> the resonant frequency of the series LC!
>
> And for instance if you are testing with a sinusoidal generator at
> that frequency that is exactly what you will observe.
>
> Of course if you are testing with a broad band signal rather
> than a sinusoidal signal lots of much more interesting stuff
> happens. That all can be calculated simply by using the
> full functional descriptions of the network/transmission
> system, i.e. assuming Z = Z(p) where p = s + jw, etc, etc...
>

Well, of course i assume the conjugate match to occur at ONE frequency,
and with a small signal sine wave.

> [snip]
> > ??? if the square of the magnitude of the voltage RC is the power RC,
> > then your statement is incorrect.
> [snip]
>
> To which voltage reflection coefficient do you refer? :-)
>
> No! The square of the magnitude of the voltage reflection coefficient is
> not,
> in general, equal to the power reflection coefficient.
>

Nope! Page 16-2 of the 1993 ARRL: rho=sqrt(Preflected/Pforward)

Look it up yourself, don't take my word for it.

>
> The only "incorrect" ones are the reflection coefficients that are not
> defined based upon simple non-singular linear combinations of the electrical
> variables i and v.
>

I don't think you know what you are typing about here..

> Slick, your view of the reflection coefficient world is far too narrow!
>
> Widen your horizons, there is more than one way to go to hell, and
> chosing a particular definition of a reflection coefficient and forcing
> all others to believe in it is nothing short of bigotry!
>

Believe what you will... I ain't forcing anyone to accept anything!
I will tell you what respected authorities have written, though.

Jesus, dude. Do you want me to agree with you even when i think you
are incorrect?

Or would you prefer me to be honest?

> [snip]
> > Maybe "Mother Nature" should take a Les Besser course... :)
> [snip]
>
> I am sure that Dr. Besser is an honorable and accomplished man despite
> his obviously narrow views of "waves".
>

YOU are the one with the narrow views. Besser's courses are like
$1,200 a head. Do you think companies would pay him to steer them wrong?

Please!

>
> Yes I "scanned" it and lost interest quickly, because of the gratuitous
> use of mind boggling numerical tables in ASCII text on a newsgroup
> posting!
>
> I am sure that William did a lot of work whilst typing in those long
> strings of numbers without error. Good work William!
>

Lost interest, or don't want to look at information that you disagree
with?

> [snip]
> > Excellent work William. You are also showing how
> > a rho>1 leads to ridiculous numbers for the equation:
> >
> > SWR = (1 + rho)/(1 - rho)
> >
> > The non-conjugate equation simply cannot handle

> > complex Zo.
> >
> > Some people think we should throw out the SWR formula
> > completely, but this is complete nonsense, of course.
> >
> > SWR = (1 + rho)/(1 - rho) works for 0=>rho=>1,
> > for very good reason, as it applies to passive networks only.
> >
> > And the conjugate will always give 0=>rho=>1,
> > even with a complex Zo.
> [snip]
>
> Hey, again your view of rho and VSWR is too narrow.
>
> Ask yourself what is the meaning of SWR in that formula
> when rho is complex and SWR is complex!
>

Sigh... rho is the MAGNITUDE of the RC, so it isn't complex.

And SWR is never complex! And a negative SWR is pretty
meaningless!

If you want to rewrite the RF books, good luck.

Cheers,

Slick

195. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:42:07 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0309021342.225811a0@posting.google.com>
Source record: 108961

Irv Finkleman <finkirv@shaw.ca> wrote in message news:<3F54BC1C.E083907A@shaw.ca>...

> Think of a half wave dipole -- you need good insulators on the end
> of the half wave because the voltage there is very high, and the
> current is very low. Uzing (pardon the pun) Z=E/I=High/Low yields
> a high impedance.
>
> This is a pretty simplified explanation, but if you think about
> it it will work.
>
> Hope it helps you to understand things a bit.

I have a much better understanding of how it all works now. I had an idea that is how it would work but just couldn't visualize it. Been 27 years since electronics school and the old brain has gotten a little fuzzy since then! 8-)

Thanks everyone for all your help!

73!

Jeff

196. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:48:14 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309021348.261b2ce7@posting.google.com>
Source record: 108962

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f54c4ee_4@corp.newsgroups.com>...
> >>
> > I disagree completely. The theoretical impedance of a resonant
> > series L and C (which is lossless) is zero. So in a conjugate
> > match, where they cancel out, in an ideal loss-less world, it
> > would be equivalent to the series C and L not being there at all,
> > with the source and load 50 ohms free to pass max. power delivered to
> > the load.
>
> Better be careful. Did you just assert that you can change
> the SWR on a feedline by forming a conjugate match at the source?
> All Peter is saying is that the VSWR on the feedline will not be 1:1
> if Z-complex-load differs from the purely resistive Z0 of a lossless
> line. For a lossless line, there is nothing you can do at the source
> to change the SWR at the load.
>

As usual, your sentences don't make too much sense, which is probably
why you go one with your record-breaking threads.
Maybe you actually agree with people when you argue with them...
well, we could all be accused of that one.

> However, if the line is lossless, you can achieve maximum power
> transfer anyway even in the face of a high SWR.

If Zo=50-j5 and Zload=50+j5, you will have a conjugate match,
and max power delivered to the load.

Slick

197. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 21:51:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9g1alvshvkj4m6o8ud20k82j5msn5f8ba7@4ax.com>
Source record: 108963

On Tue, 2 Sep 2003 08:54:45 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>>Certainly you could come up with a smoking gun couldn't you?
>
>If you can't get it from the key paragraph I quoted, then read all 15
>pages of AN1526. If you still can't see that your notion about "device
>output impedance" is shot clear through, then neither Motorola and I can
>help.
>
>>Complete
>>with an actual, demonstrable specification for the item I offered
>>(seeing as you still lack any concrete example). What does your new
>>and updated resource say about the MRF 421.
>
>You know perfectly well that AN1526 won't say anything about your
>specific pet device, so what was the point of asking that question?

Quite obvious isn't it? (Speaking of rhetorical questions....) You
fail to offer ANY of your personal knowledge outside of the
cut-and-paste rebuttal that you loath as being inferior to thinking
for oneself. I supplied my experience and thought both with
correlations and supplemental insights that you condemn through
association; and you cannot dredge up any affect your understanding of
AN1526 bears on the literal design application of the MRF 421. In
short, an academic appeal to it being unknowable with the concomitant
ivory tower snub of application (including your own!).
>
>>Does it abandon that
>>discussion entirely to this new-age era of all being unknowable?
>>
>And that is an even worse travesty of what Motorola and I are saying.

You AND Motorola? Are you two in a joint partnership? Twice you draw
on this stale illusion where your own original experience offers a
vacuum of discussion.
>
>If you want to measure the *true* output impedance of an MRF 421 - as
>distinct from the load impedance given in the data sheet - then go ahead
>and do it. After all, you're the one who claims it is an important
>design parameter.

This merely underlines you having ignored my having posted both
commentary AND data to that effect, and you remain silent in regard to
your own efforts that could prove insightful to the meaning imparted

by AN1526 to you. To this point, and through my prodding you have yet to offer any substance of its importance aside from snippets that are drawn from an unknown context that you challenge me to review. And to what end if I were to; and offer your understanding lacked in its regard? More denial and little detail of substantiation? Who does your thinking for you? You toss that in my face and then abandon the field when I put it to you to explain how it bore to the application you built under your own hands. Was this piece-de-resistance a Heathkit? Why does its detail of implementation remain cloaked from your discussion?

>
>I'm the one who says it is (a) not what you think it is; and (b) not
>important anyway.

Is there any doubt? (a) remains deliberately vague and (b) is, frankly, contradicted by the hew and cry that attends your considerably extended fulmination.

>
>Now it's up to other people to judge the technical truth of the matter.

Ah Ian,

The TRUTH. As if there is only one answer and its altar is not to be approached. Appeals to educating the lurker is vanity. I enjoy that game as much as the rest of you, especially when you guys, like wallflowers, come up so stylistically drab and technically un-prepared. :-)

Too many mix Truth with explicit admission that this discussion is
>not important anyway.
The quality of your rebuttal already proves your sentiment.

Now, your offering any further discussion that relates to your experience; the role of this AN1526 to it; and some, even if plagued, specification for any source you designed to, if that follows; then we may actually get around to a dialog over the topic. Anything less will be repetition and would again belie your closing sentiment.

73's
Richard Clark, KB7QHC

198. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:04:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <881alvslj5lmijqtiebjhjda6smj2de099@4ax.com>
Source record: 108964

On Mon, 1 Sep 2003 23:36:27 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:e9p7lvoitcbc9078bscoa1i92l6ngq8pk0@4ax.com...
>> On Mon, 1 Sep 2003 19:17:40 -0400, "Tarmo Tammaru"
>> <t-tammaru@home.com> wrote:
>>
>> >Richard,
>> >
>> >Let me be the lurker on for the day. Actually, you have a good example. I
>> >see the parallel equivalent resistance for the device at 1.5 MHz is about
>2
>> >Ohms. At 12.5V with a Vcesat of an optimistic .5V, the power that can be
>> >delivered at conjugate match is 12^2/(2 * 2) = 36W. Not the rated 100.
>> >
>>
>> Hi Tam,
>>
>> rated 100 WHAT?
>
>Not the rated 100 Watts.
>This is just like the 6V6 thing we did earlier.
>
>Tam
>>
>> Sheesh.
>>
>> 73's
>> Richard Clark, KB7QHC
>

Hi Tam,

You missed the point. 100 Watts PEP is not 100 Watts continuous (such
as your computation leads to).

Further, there is the consideration that the specification of 100 W
PEP is in itself not complete, but referenced to a test jig. Others
here may pine on that this jig is an inferential measurement, and not
an actual measurement. -sigh-

Further yet, it is not the typical application (thank you for not
dredging that up) where we would find it in a push-pull implementation
such that when the device is not conducting (open resistor) there is

an image of it in its pair drawing current.

The point of the matter is that these "killer" observations such as you offer, are used to deny the specification in its entirety. If the spec offered 100W and only 95 could be reasonably computed, it seems many would jump at the aberration to thump their bible and condemn the 2 Ohm (actually less than 2) and refuse to accept, within production variances it was 1.7 Ohm. "1.7 is not 2!" would be the cry and continue with "as it is not 2, it is unknowable!"

Every one of my students appreciated that such logic would have had them serving aboard a destroyer on Yankee Station fixing Simpson 260's. Such prospects cleared the mind in sharp relief when the Navy demanded them to distinguish themselves between techs and shark bait.

73's
Richard Clark, KB7QHC

199. Re: Another DXCC question ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:20:33 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <RI85b.22811$Om1.1111@newsread2.news.atl.earthlink.net>
Source record: 108965

Why the difference concerning Top Band cards?

Dan/W4NTI

"John Passaneau" <jxp16@psu.edu> wrote in message
news:bj242p$149c$1@f04n12.cac.psu.edu...
> The only rule about 160M card is that they can't be checked by field
> checkers. They must be sent to the ARRL headquarters. I just dumped off
450
> cards at the end of Augest to be checked and was told it will that about 5
> to 6 weeks for them to processe them.
>
>
> --
> John Passaneau, W3JXP
> Penn State University
> w3jxp@arrl.net
>
>
>
>
> "W4WNT" <w4wnt@carolina.rr.com> wrote in message
> news:TWb4b.40340$J16.2076238@twister.southeast.rr.com...
> > Hi Carter,
> >
> > As long as the cards clearly list your call and a signal report as well
as
> > the details of the QSO, time date, band, mode, they should be acceptable
> for
> > DXCC submission. Most folks submit 102 or so cards with the first
> > submission, then if there is a problem with one card, they are still OK.
> >
> > As for the HA5-350 card, it sounds like an SWL report rather than an
> amateur
> > call. (As above, does it have QSO details of your QSO with the call
> listed?)
> > Since you'll probably be having a field checker look them over, he or
she
> > can tell you if it is legit card. Another question for the checker is
> > whether the ten year old cards have to go into the ARRL DXCC desk (but
> ARRL
> > Divisional Hamfests will have League reps who can check them).
> >
> > Good luck and good DX,
> >

> > Bill, W4WNT
> > "carter" <cartw@netart.com> wrote in message
> > news:3F5022DB.84E55202@netart.com...
> > > I'm sending in for the regular DXCC and a few things are unclear
> > > to me:
> > >
> > > 1) Would a CY9AA (St. Paul Island) from 1997 on 160 meters
> > > count?
> > > Thought I read somewhere that 160 meters doesn't count on
> > > the regular DXCC.
> > >
> > > 2) I have a 3E1DX from Panama. But on the list it doesn't
> > > have 3E1 for Panama listed. Only HO-HP#* is listed for
> > > Panama. It was a CQWW contest in 1997. Am I out of luck?
> > >
> > > 3) Have a 4N7DW from Yugoslavia from 1993. Once again
> > > this prefix isn't listed on the ARRL list for Yugo (YT prefix is)
> > > Out of luck??
> > >
> > > 4) I have a Pitcairn Island VR6BB from 1993. VP6 is now
> > > listed as being Pircairn Island. VR is now Hong Kong.
> > > What gives with this one??
> > >
> > > 5) I have a HA5-350 from Hungary from 1996. Not allowed?
> > >
> > >
> >
> >
>
>

200. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:31:08 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <K46dnT5DTKWoh8iiXTWJgA@crocker.com>
Source record: 108966

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309021318.6b5db52b@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<ot2dnZ825aXl4smiU-KYvw@crocker.com>...
> > From 'Fields and Waves in Communications Electronics' by Ramo Whinnery
and
> > Van Duzer. section 1.16 and 1.23
> >
> > start with positive moving wave plus negative moving wave = total to
load
> > for both voltage and current, simple kirchoff's law summations at the
> > junction of the coax and load.
> > Vp+Vn=Vload (1)
> > Ip-In=Iload (2)
> > note that their convention is that current moving to the 'right' is
positive
> > so the reflected 'negative' current wave is moving left which gives the
> > negative sign on the second term.
> >
> > now use ohm's law to rewrite (2)
> >
> > Vp/Zo - Vn/Zo = Vload/Zload (3)
> >
>
>
> I believe this line (3) is only true if Zo is purely real.
>
> If Zo is complex, i don't think you can apply
> this.
>

yes you can. in sinusoidal steady state analysis as discussed in 'Basic
Circuit Theory' by Desoer and Kuh. in chapter 7 and specifically section 5
of that chapter they show the kirchoff current and voltage laws and ohms law
generalized for phasor representations of voltage and current and complex
impedances and admittances. those representations are perfectly valid in
that type of analysis.

201. Re: Re-Normalizing the Smith Chart (Changing the SWR into the

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:45:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f551f38_5@corp.newsgroups.com>
Source record: 108967

Jim Kelley wrote:
> Zero crossings are not unique to standing wave patterns,
> therefore nodes and zero crossing aren't necessarily the same thing.

A zero crossing exists at a node in a lossless unterminated
transmission line. If they were the same thing there wouldn't
need to be two different names, would there?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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202. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:50:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f55205e_5@corp.newsgroups.com>
Source record: 108968

Roy Lewallen wrote:
> It obviously doesn't bother you that your new "forward power" isn't the
> product of forward voltage and current, or that the new "reverse power"
> isn't the product of reverse voltage and current. But then I guess we
> shouldn't be surprised.

I guess I will quote Aristotle on that one, Roy. A thing is what it is -
It's not something else. Two directions are all that exist, forward and
backwards. Do I need to publish a binary truth table?
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

203. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 22:57:27 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-0209031557270001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108869

In article <1d15af91.0309021318.6b5db52b@posting.google.com>,
radio913@aol.com (Dr. Slick) wrote:

> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<ot2dnZ825aXl4smiU-KYvw@crocker.com>...
> > From 'Fields and Waves in Communications Electronics' by Ramo Whinnery and
> > Van Duzer. section 1.16 and 1.23
> >
> > start with positive moving wave plus negative moving wave = total to load
> > for both voltage and current, simple kirchoff's law summations at the
> > junction of the coax and load.
> > Vp+Vn=Vload (1)
> > Ip-In=Iload (2)
> > note that their convention is that current moving to the 'right' is positive
> > so the reflected 'negative' current wave is moving left which gives the
> > negative sign on the second term.
> >
> > now use ohm's law to rewrite (2)
> >
> > Vp/Zo - Vn/Zo = Vload/Zload (3)
> >
>
>
> I believe this line (3) is only true if Zo is purely real.
>
> If Zo is complex, i don't think you can apply
> this.

I swore that I wouldn't get into this one, but enough's enough.

Equation (1) is an application of Kirchoff's voltage law.
Equation (2) is an application of Kirchoff's current law.
Equation (3) results from (2) if you apply Ohm's law three times, to the
three terms in Equation (2).

Which of these three principles (Kirchoff's voltage law, Kirchoff's
current law, or Ohm's law) is the one you don't believe? Or do you
disbelieve more than one of the three?

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

204. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-02 23:03:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj37kg$55o$1@hercules.btinternet.com>
Source record: 108870

> Now it's up to other people to judge the technical
truth of the matter.
>
==========

Justice from 'peers' on THIS newsgroup ??????

Try Brussels.

205. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 00:00:16 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <3PKdnUqOEeaEssiiXTWJjQ@crocker.com>
Source record: 108871

"David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
news:ryeburn-0209031557270001@bni030qny8kc.bc.hsia.telus.net...
> In article <1d15af91.0309021318.6b5db52b@posting.google.com>,
> radio913@aol.com (Dr. Slick) wrote:
>
> > "David Robbins" <k1ttt@arrl.net> wrote in message
> news:<ot2dnZ825aXl4smiU-KYvw@crocker.com>...
> > > From 'Fields and Waves in Communications Electronics' by Ramo Whinnery
and
> > > Van Duzer. section 1.16 and 1.23
> > >
> > > start with positive moving wave plus negative moving wave = total to
load
> > > for both voltage and current, simple kirchoff's law summations at the
> > > junction of the coax and load.
> > > Vp+Vn=Vload (1)
> > > Ip-In=Iload (2)
> > > note that their convention is that current moving to the 'right' is
positive
> > > so the reflected 'negative' current wave is moving left which gives
the
> > > negative sign on the second term.
> > >
> > > now use ohm's law to rewrite (2)
> > >
> > > Vp/Zo - Vn/Zo = Vload/Zload (3)
> > >
> >
> >
> > I believe this line (3) is only true if Zo is purely real.
> >
> > If Zo is complex, i don't think you can apply
> > this.
>
> I swore that I wouldn't get into this one, but enough's enough.
>
> Equation (1) is an application of Kirchoff's voltage law.
> Equation (2) is an application of Kirchoff's current law.
> Equation (3) results from (2) if you apply Ohm's law three times, to the
> three terms in Equation (2).
>
> Which of these three principles (Kirchoff's voltage law, Kirchoff's
> current law, or Ohm's law) is the one you don't believe? Or do you
> disbelieve more than one of the three?

>
now, now, take it easy on him... he didn't say he didn't believe kcl or kvl
or ohm's law... he just doesn't understand that they still do apply to
phasor notation used in sinusoidal steady state analysis. an easy
misunderstanding.

206. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 00:17:43 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030902201743.13344.00000322@mb-m15.aol.com>
Source record: 108872

The business of comparing performance makes sense if you are designing or building antennas and are looking for comparison or improvement between them (particular antennas). Having "standard" vertical or dipole makes sense only if you have them on the same height as other "better" antenna and looking for gain over single radiator.
Comparing say 3 el. beam, or long wire to vertical is mostly meaningless, different patterns, polarization.
Using modeling program gives one idea about relative performance of various antennas. Building them gives very close picture how they should perform. If you really want to compare or measure gain over vertical/dipole standard (at the same height) than do that. One can generally get pretty good idea how different antennas work from the models (software) and if you want to optimize or verify real antennas, the best way is do it on say scaled 2m model. Then there is comparison with neighboring stations for the ultimate test.

GL Yuri, K3BU

207. Re: Laugh of the day

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 00:19:28 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <ksa5b.174$y_6.72509@twister.tampabay.rr.com>
Source record: 108873

THAT will DEFINITELY be one selected by the John-Boy and Billy Show
"Dumb CROOK NEWS"

YODAR

"Cecil Moore" <Cecil.A.Moore@ieee.org>
> Foxnews just reported a criminal who stole an active
> GPS tracking device. :-) :-) :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp

208. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 00:28:39 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Aq6cnTFilqAkqMiiU-KYvw@comcast.com>
Source record: 108874

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:5I75b.16623$EW1.9018@newsread1.news.atl.earthlink.net...
> Sometime, when I get some free time from my current
> consulting gig, I'll prepare a short example for the group of the
> problems inherent in full duplex signalling over complex Zo lines in
> situations where the "best" Engineering solution is "image match"
> not "conjugate match". ;-)
>
> --
> Peter K1PO
> Indialantic By-the-Sea, FL.
>
>
> Peter,

You have just answered the question that people have been arguing about the
last few weeks. I hope you have time to describe this in more detail.
Tam/WB2TT

209. Re: Purchasing Ferrite Cores for Balums

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 00:29:46 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <_Ba5b.176$y_6.74810@twister.tampabay.rr.com>
Source record: 108875

skycraftsurplus.com is the website for the retail surplus electronics
outlet in Orlando that has 1.25 and 2.5" ferrite cores of unknown identity
in bins for a buck or two each...I'm 'sperimentin' with one for a 9:1
receive balun now.

Yodar

"yea right" <spam@spam.spam> wrote in message
news:pan.2003.08.30.18.17.06.172693@spam.spam...
> I'm trying to find a place (in the US) to purchase ferrite donuts so I can
> wind my own balum. Any recommendations?
>

210. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 01:18:03 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <YtednaUZLJnn3MiiU-KYgw@comcast.com>
Source record: 108876

"Richard Clark" <kb7qhc@comcast.net> wrote in message >
> Hi Tam,
>
> You missed the point. 100 Watts PEP is not 100 Watts continuous (such
> as your computation leads to).
> ....

Hi Richard,

The voltage swing at the collector can only go between roughly ground a 2*VCC. For a continuous wave it does that for every cycle of the RF signal. For SSB, it only reaches that on voice peaks, but it can get no larger. Although you will be on the ragged edge, you can tune up a pi network linear on a constant tone, and operate with speech.

BTW, did you notice the 174 Ohm Zo of the MRF450. Clearly, you can't conjugate match that. I am convinced that is a real number, and not a conjugate of load number. They do not give any min or max limits on this. I looked at some small signal transistors, and found that Ro can vary by more than an order of magnitude from unit to unit.

I think that virtually all current HF ham transmitters are push pull, and use feedback. That will affect the output impedance.

We have all been quoting Motorola literature. I am going to look at what Philips, and the Japanese have to say on this.

Tam/WB2TT

211. Re: Cushcraft A743 40 meter add-on

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 01:42:13 UTC
From: k9sqg@aol.com
Message-ID: <20030902214213.10780.00000334@mb-m29.aol.com>
Source record: 108877

Steve,

You might be disappointed. Basically what you end up with is a severely shortened dipole that is inductively loaded. It has limited bandwidth and offers no gain. As an advantage, however, it does allow one to rotate it to minimize a source of interference. But if you are limited to just one antenna, then it might be worthwhile. I've talked with maybe 6 hams that have owned them. While it does give them 40 meters, performance is not like on 10, 15, 20.

Best of luck with your decision.

73s,

Evan

212. Re: Hotmail Hacking Made Simple

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 01:57:06 UTC
From: Harris <ofoters33@yahoo.com>
Message-ID: <1062554335.22218@newshost03.voicenet.com>
Source record: 108878
Cross-posted to: rec.photo.technique.people,rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc

"Adrian Bailey" <dadge@hotmail.com> wrote in message
news:GD55b.18439$io2.6464@news-binary.blueyonder.co.uk...

> Clicking on that link gives you:
> -----
> YOU HAVE JUST BEEN RECRUITED AS DMXDVC'S THUG!
>
> By visiting this page, you have just recruited 1 thug for dmxdvc, increasing
> their chance of winning the prizes! dmxdvc now has 5853 thugs and is getting
> stronger every day, it is upto you to beat them.
> Good Luck!
> ------
>
> So don't click on it.
> Adrian

Good advice Adrian.
Clicking on the link also attempted to plant tracking
cookies onto the hard drive of Windows software.

Use Ad-Aware 6.0 from Lavasoft to detect and remove them.

Ad-Aware Europe: http://www.lavasoft.nu/

Ad-Aware USA: http://www.lavasoftusa.com/

213. Re: Cushcraft A743 40 meter add-on

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 02:30:16 UTC
From: Steve Dakin <sdakin@sbcglobal.net>
Message-ID: <Ymc5b.797$4h7.350@newssvr22.news.prodigy.com>
Source record: 108879

Thanks Evan. This was more or less what I expected.
I have room in the back yard for some sloping dipoles
and an inverted vee on the tower. I'll probably stick
with those for the time being

Steve WQ5N

"K9SQG" <k9sqg@aol.com> wrote in message
news:20030902214213.10780.00000334@mb-m29.aol.com...
> Steve,
>
> You might be disappointed. Basically what you end up with is a
severely
> shortened dipole that is inductively loaded. It has limited
bandwidth and
> offers no gain. As an advantage, however, it does allow one to
rotate it to
> minimize a source of interference. But if you are limited to just
one antenna,
> then it might be worthwhile. I've talked with maybe 6 hams that
have owned
> them. While it does give them 40 meters, performance is not like on
10, 15,
> 20.
>
> Best of luck with your decision.
>
> 73s,
>
> Evan

214. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:05:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dhhalvg8i1o2t9irmuv8ifp70qgcq5q7jp@4ax.com>
Source record: 108880

On Tue, 2 Sep 2003 21:18:03 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote in message >
>> Hi Tam,
>>
>> You missed the point. 100 Watts PEP is not 100 Watts continuous (such
>> as your computation leads to).
>> ....
>
>Hi Richard,
>
>The voltage swing at the collector can only go between roughly ground a
>2*VCC.

You've got the cart before the horse. Your computation converted to a
PEP valuation is on par and excursions of 2*VCC is not suggested by
anyone.

>For a continuous wave it does that for every cycle of the RF signal.
>For SSB, it only reaches that on voice peaks, but it can get no larger.

Why voice peaks? What confines PEP to voice? What defines PEP as
voice modulated signals characterizing Z? Two-tone tests are
sprinkled through the literature when it comes to modulation - I don't
think they mean duo-tonic renditions of whistling dixie.

>
>Although you will be on the ragged edge, you can tune up a pi network linear
>on a constant tone, and operate with speech.

Where in the specification with an equivalent circuit is there a pi
network? You are probably looking at power decoupling.
>
>BTW, did you notice the 174 Ohm Zo of the MRF450. Clearly, you can't
>conjugate match that. I am convinced that is a real number, and not a
>conjugate of load number. They do not give any min or max limits on this. I
>looked at some small signal transistors, and found that Ro can vary by more
>than an order of magnitude from unit to unit.

Small signal characterization? Other than being two orders of
magnitude off, you should stick with large signal characteristics.
Seems like this exact discussion has been gone through before.

>
>I think that virtually all current HF ham transmitters are push pull, and

>use feedback. That will affect the output impedance.

Making an appeal to "modern" equipment? Look at the schematic for
your own rig and describe the negative feedback path and its
magnitude. What you are looking at is neutralization. That may be
feedback, but it is far from the gain determination characteristic in
the classic sense defined by Bode. If you didn't have it, you would
be in trouble stability-wise.
>
>
>We have all been quoting Motorola literature. I am going to look at what
>Philips, and the Japanese have to say on this.
>
>Tam/WB2TT
>

Hi Tam,

Look at
http://www.semelab.com/
which offers to allow you to select FETs by specifying Z (how about
that? 10 years after Motorola gave up in confusion - by some accounts)

http://www.polyfet.com/Dsheet%5CSM724.pdf
or
http://www.polyfet.com/dsheet%5CSR341.pdf
chosen at random, another outlet that foolishly treads where Motorola
gave up in confusion - by some accounts

http://www.semiconductors.philips.com/acrobat/datasheets/BLF145_CNV_2.pdf
about the only HF Power transistor in their repertoire (I could be
wrong as they too offer input and output Z where Motorola gave up in
confusion - by some accounts)

Hi All,

You know fellas, this goes far afield from a simple bench test to
perform against 2 resistors and a hank of transmission line. As no
one handles these "advanced" topics of schematic reading and parts
specification, don't you think you might want to prove you can turn on
a transmitter and read a meter?

If you cannot accept a figure clearly displaying the Z characteristics
of your output finals, how do you think you are going to argue
something simpler such as line loss? It requires no advanced degree,
only proof of performing a task suitable to an amateur. Surely you
can manage that little.

Too much breezing on in place of work. The chorus of appeals of
"doing it for the lurker" must have them rolling in the aisles. :-)

73's
Richard Clark, KB7QHC

215. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:39:02 UTC
From: unkadean <dnorris@k7no.com>
Message-ID: <ggoalvg0gv37u77fdte372nteph34odlmj@4ax.com>
Source record: 108881
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

On Mon, 1 Sep 2003 23:00:37 +0100, "Tim" <tim.mcc@tesco.net> wrote:

All them smarts and he still don't know how to make a paragraph! <G>

>
>I would just like to add that despite my difficulty with words and maths I
>have managed to gain several qualifications that I am very proud of although
>I never made it to a university I did gain 4 B's, 3 C's, a D, an E, and an F
>at GCSE, a BTEC National Diploma in General Engineering (which of course
>includes analogue and digital electronics along with things like three phase
>principles),and a City & Guilds Level 1 in Visual Basic. On top of these I
>hold a BGA endorsement to glide (which I gained at the age of 18). I have a
>good self taught understanding of PC hardware (I have been building my own
>P.C.'s since I was 12) and operating systems including DOS and CPM(I know
>CPM is an Amstrad based system but it is the fore runner of DOS) as well as
>several high and low level programming languages. I therefore take being
>called stupid or illiterate as quite an offence. I do have a great interest
>in learning about the way radios work hence I want to join the armature
>community although I will probably still use my CB as I have many friends
>there who except me for who I am and not the problems I have. I would also
>like to suggest that if CBers are to the dislike of certain members of this
>news group then perhaps they would like to stay off the newsgroups for that
>medium and let them get on with it. As such this will be my last posing here
>until I pass my exams. which I will no matter how long it takes me to solve
>my problems with the words and numbers involved I will pass.Having had my
>rant and hopefully shown I am not stupid or thick or whatever other label
>has been placed on me I would like to say a big thank you to those who have
>posted in my defence and say I would welcome their input on the CB groups as
>perhaps they could help dispel some of the fears and misconceptions that
>CBers have about armatures. This on its own could make for a better
>environment for all.
>

216. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:40:41 UTC
From: unkadean <dnorris@k7no.com>
Message-ID: <sjoalv4t7dau0ug603mk4oqae4v369o87t@4ax.com>
Source record: 108882
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

On Mon, 01 Sep 2003 18:49:14 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Walt Davidson wrote:
>> Certainly, most of the early Amstrad 8-bit computers used CP/M and DOS
>> was developed, based upon CP/M, around 1980.
>
>Actually, IBM looked at CP/M-86 for their PC operating system and then
>decided to go with Microsoft instead of Digital Research. If DR had
>gotten the contract, Bill Gates' life would probably be a lot different.

And if Motorola would have agreed to quantity pricing on the 68000
series, Intel would be in the ashbin of history.

unk

217. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:41:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f55647d_4@corp.newsgroups.com>
Source record: 108884
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

unkadean wrote:
> And if Motorola would have agreed to quantity pricing on the 68000
> series, Intel would be in the ashbin of history.

They wanted too much for that 64 pin DIP. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

218. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:43:18 UTC
From: unkadean <dnorris@k7no.com>
Message-ID: <0qoalvsm3shvp4fr7tdcea2mi0ot88ijpn@4ax.com>
Source record: 108883
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

On Tue, 02 Sep 2003 07:41:45 +0100, Walt Davidson
<g3nyy@despammed.com> wrote:

>On Tue, 2 Sep 2003 05:15:16 +0100, "Airy R. Bean" <me@privacy.net>
>wrote:
>
>>That's why they style themselves so grandly as, "Dyslexic".
>>
>>They can't spell, "Thick"!.
>>
>>BTW, it didn't take that one long to come up with the
>>standard excuse of dyslexia to justify his CBness, did it?
>
>I have never found one yet who has any difficulty in spelling
>"dyslexia"! That is the one word they have taken the trouble to
>learn.
>
>:-)
>73 de G3NYY

I always thought it was Lysdexia?

unk

219. Re: How many rho? was: Re-Normalizing the Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 03:49:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f55666a$1_4@corp.newsgroups.com>
Source record: 108885

Jim Kelley wrote:

> Cecil Moore wrote:
>>To the best of my knowledge,
>>there's no mention of complex indices of refraction in _Optics_.
>
> Born and Wolf has a chapter on the Optics of Metals. Chapter 13.1 is
> called Wave Propagation in a Conductor. In it, they use a complex wave
> number, complex dielectric constant, complex phase veloctity, and a
> complex refractive index.

Yep, also found it in _Optics_ under "Waves in a Metal".
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

220. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 05:15:19 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309022115.44535b0c@posting.google.com>
Source record: 108886

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<3PKdnUqOEeaEssiiXTWJjQ@crocker.com>...
> > >
> > >
> > > I believe this line (3) is only true if Zo is purely real.
> > >
> > > If Zo is complex, i don't think you can apply
> > > this.
> >
> > I swore that I wouldn't get into this one, but enough's enough.
> >
> > Equation (1) is an application of Kirchoff's voltage law.
> > Equation (2) is an application of Kirchoff's current law.
> > Equation (3) results from (2) if you apply Ohm's law three times, to the
> > three terms in Equation (2).
> >
> > Which of these three principles (Kirchoff's voltage law, Kirchoff's
> > current law, or Ohm's law) is the one you don't believe? Or do you
> > disbelieve more than one of the three?
> >
> now, now, take it easy on him... he didn't say he didn't believe kcl or kvl
> or ohm's law... he just doesn't understand that they still do apply to
> phasor notation used in sinusoidal steady state analysis. an easy
> misunderstanding.

Gee, thanks David. I was wrong! This was a little review for me!
Hehe... owww..

But it still doesn't answer my question.

I don't think Kurokawa and Besser and the ARRL just pulled it
out of thin air.

And how do you explain the rho > 1 for a passive network?
Shouldn't be possible. And neither should a negative SWR.

I'm not sure what is wrong with your derivation, but there
must be something that they are missing to not have the conjugate
in the numerator. Or there is a particular step that you cannot do
with complex impedances.

Again, the normal equation is only for purely real Zo, or
when Zo*=Zo. If Zo is complex, you have to use the conjugate
equation.

Could you email a scan of some of the pages? Not that it would absolutely help me too much, but perhaps you are missing something.

Slick

221. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 08:14:36 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <RSLeLdJsLaV$EAfQ@ifwtech.co.uk>
Source record: 108887

Richard Clark wrote:
>>>Does it abandon that
>>>discussion entirely to this new-age era of all being unknowable?
>>>
>>And that is an even worse travesty of what Motorola and I are saying.
>
>You AND Motorola? Are you two in a joint partnership?

I and the Motorola technical reference that I quoted.

Recall what happened: I gave my technical point of view. You challenged it, asking if I'd ever read any Motorola literature. I quoted a reference from Motorola, supporting my point of view. Now you attempt to smear me and Motorola both.

> Twice you draw on this stale illusion where your own original
>experience offers a vacuum of discussion.

When you quote Motorola AN282A, it is a reference. When I quote AN1526, it is a "stale illusion."

Along with the "new-age... unknowable" stuff, these are cheap smears that discredit only you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

222. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 09:52:36 UTC
From: kiddi@marel.is
Message-ID: <b7cca008.0309030152.47f8237c@posting.google.com>
Source record: 108888

Just to clarify, let me rephrase what I am trying to do. I should add that I live in the middle of town, with little space for antenna experimentation and I keep all my antennas on the roof (approx. 15x15m or 45x45ft). This limits me in the number of full-size antennas I can have set up for use and comparison at the same time.

Of course, modeling and common wisdom (like "the half wave dipole has an 8-shaped directivity pattern") are a good start when planning a new antenna. The local situation may, however, distort the picture. In my case the roof right underneath the antenna is metallic, it has various slopes and I don't know how conductive or continuous it appears for RF. My street goes through a lava field (yes, this is Iceland, sitting on top of the central Atlantic plate division!) and I have no idea what the terrain or the neighboring houses and structures have on the directivity patterns of my antenna. This is certainly not the textbook "free space" or "flat earth" situation. This is why in the end I would like to use experimental data to gain better knowledge of whether my incremental "improvements" to the antenna system are really doing any good.

A typical scenario is that I have, say, an inverted-V mounted above the roof and I use it for a while. Then I would like to know if a vertical would perform better, so I have to take down the V and place a vertical there. Now I would like to know if the vertical is more sensitive (and thus more effective in TX) to certain areas of the world, as compared to the V. The comparison is difficult when the old antenna is gone.

So, I would start by routinely listen to signals on the inverted-V and note the S-meter difference as compared to the reference antenna. After a while I would have a database of these S-unit comparisons, along with the callsigns and thus also the directional bearing and distance. I would repeat this with the new antenna, the vertical. By comparing these difference figures for the two antennas I could answer the question: In what directions was the new antenna an improvement and in which directions was it not?

I realize that this would not be very accurate measurements, as QSB, noise, and the reading accuracy of the S-meter cause errors. However, by frequently switching between the tested antenna and the reference I can get a reasonable average estimate. It has occurred to me to write software to sample the S-meter readings from my rig (IC-746), synchronized with the antenna switching (the 746 has two antenna connectors that can also be selected with the computer) and thus accumulate more and improved readings.

The directional pattern of the reference antenna should not be an issue (although it is desirable that it is relatively omnidirectional). Because I am always comparing the antennas under test with the reference, its directivity cancels out in the calculations. The same should hold for polarization, as I am assuming that the skywave signals I am interested in have random polarization.

73 de Kristinn, TF3KX

kiddi@marel.is (Kristinn Andersen) wrote in message news:<b7cca008.0309011023.336bc920@posting.google.com>...
> Does anyone have a suggestion for constructing a simple, compact,
> receive-only antenna, that covers reasonably well the HF range (1,8 to
> 30 MHz)? My plan is keep such an antenna as a constant reference when
> I am experimenting with the "real" antennas at my station. Comparing
> signal strenghts on the antennas over some time would at least give me
> a reference on whether directivity in certain directions was improving
> or not, when replacing one antenna with another.
>
> The antenna would have the following characteristics:
>
> - Simple (home-made, inexpensive, preferably not using any pre-amps).
> - Small (not taking up space among my other antennas, non-intrusive).
> - Receive-only (little need for elaborate matching, power handling).
> - Connected through a coax, which should not pick up the RX signals.
> - Broadband (preferably 1,8-30 MHz).
> - Omnidirectional (or reasonably so, don't want any sharp nulls).
> - Receive, to some extent, vertical and horizonal polarization.
> - (Any other characteristics that should be included?)
>
> I have thought of using a short whip or a loop for this (say, 1m/3ft
> max. dimensions), but these both are rather selective in terms of
> polarization and directivity.
>
> Any suggestions or comments?
>
> 73 de Kristinn, TF3KX

223. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 11:35:16 UTC
From: "News.CIS.DFN.DE" <ken.TOPg1itv@ntlworld.com>
Message-ID: <bj4jld$f182h$1@ID-197247.news.uni-berlin.de>
Source record: 108889
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:8d5blvo7fbdahsd5mdcq5ur8b6rqsgv1c6@4ax.com...
> On Tue, 02 Sep 2003 20:40:41 -0700, unkadean <dnorris@k7no.com> wrote:
>
> >On Mon, 01 Sep 2003 18:49:14 -0500, Cecil Moore
> ><Cecil.A.Moore@ieee.org> wrote:
> >
> >>Walt Davidson wrote:
> >>> Certainly, most of the early Amstrad 8-bit computers used CP/M and DOS
> >>> was developed, based upon CP/M, around 1980.
> >>
> >>Actually, IBM looked at CP/M-86 for their PC operating system and then
> >>decided to go with Microsoft instead of Digital Research. If DR had
> >>gotten the contract, Bill Gates' life would probably be a lot different.
> >
> >
> >And if Motorola would have agreed to quantity pricing on the 68000
> >series, Intel would be in the ashbin of history.
>
> And if Texas Instruments has marketed their TMS9900 16-bit processor
> properly, things would look a lot different today.
> :-)
And if Clive Sinclair had marketed the C5 it wouldn't have become a
Co-Linear! or a Citroen.

G1ITV

224. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 12:08:21 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <cEd9ucP1mdV$EAPO@ifwtech.co.uk>
Source record: 108890

Reg Edwards wrote:

>> Now it's up to other people to judge the technical
>truth of the matter.
>>
>==========
>
>Justice from 'peers' on THIS newsgroup ??????
>

I wasn't feeling in need of justice - it's more about encouraging people
to think for themselves.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

225. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 12:30:58 UTC
From: peter@strg-alt-entf.org
Message-ID: <bj4mu2$fclg0$2@ID-31.news.uni-berlin.de>
Source record: 108891
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

In rec.radio.amateur.dx Walt Davidson <g3nyy@despammed.com> wrote:
> On Tue, 02 Sep 2003 20:43:18 -0700, unkadean <dnorris@k7no.com> wrote:
>
> >>I have never found one yet who has any difficulty in spelling
> >>"dyslexia"! That is the one word they have taken the trouble to
> >>learn.
> >>
> >>:-)
> >>73 de G3NYY
> >
> >
> >I always thought it was Lysdexia?
>
> Deluxia.

Dyslexics of the world: UNTIE!

Peter Lemken
Berlin

--
Wer behauptet, den "Playboy" nur der Artikel wegen zu lesen, der schaut sich
auch dreistï¿œndige Pornofilme an, um zu erfahren wie sie ausgehen.

226. Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 12:34:09 UTC
From: ralphmw@aol.com
Message-ID: <20030903083409.18292.00000361@mb-m13.aol.com>
Source record: 108892

Hi,

I just traded in my very old 1985 Jeep Cherokee for a 1996 model. The 1996 model has tinted windows. I've always used a Larsen thru-the-glass antenna for mobile operations. Does the tint affect the antenna function? Is there any way around it? Thanks.

Ralph KB3JQJ
41 16N 75 50W

227. Re: Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 13:32:41 UTC
From: "WB3FUP (Mike Hall)" <wb3fup@msn.com>
Message-ID: <bj4qhr$fe2lt$1@ID-204390.news.uni-berlin.de>
Source record: 108893

Yes, the tint does affect performance. Find a location where there is not any tint is the way around it. The glass in the windshield is the insulator that separates to conductors, forming a capacitor. The tint, to the best of my understanding, conducts, and screws up the matching, if nothing else.

--
73 es cul

wb3fup
a Salty Bear

"RalphMW" <ralphmw@aol.com> wrote in message
news:20030903083409.18292.00000361@mb-m13.aol.com...
> Hi,
>
> I just traded in my very old 1985 Jeep Cherokee for a 1996 model. The
1996
> model has tinted windows. I've always used a Larsen thru-the-glass
antenna for
> mobile operations. Does the tint affect the antenna function? Is there
any
> way around it? Thanks.
>
> Ralph KB3JQJ
> 41 16N 75 50W
>

228. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 14:15:36 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <3f55fba4$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 108895
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

A poor architecture with the "registers" in memory creating for
slow operations, and ISTR, a serial I/O bus.

Walt Davidson <g3nyy@despammed.com> wrote in message
news:8d5blvo7fbdahsd5mdcq5ur8b6rqsgv1c6@4ax.com...
> On Tue, 02 Sep 2003 20:40:41 -0700, unkadean <dnorris@k7no.com> wrote:
> And if Texas Instruments has marketed their TMS9900 16-bit processor
> properly, things would look a lot different today.

229. Re: Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 14:30:59 UTC
From: Dick <rhughes33@cableone.net>
Message-ID: <ekublvc98jp5sf8l63haeur58u5oq75fa7@4ax.com>
Source record: 108894

Assuming you are talking about one of the side-rear windows, is there
a darker band around the edges? That's the way it is on our '93 ZJ.
Mount the Larsen inside that band. Worked great for 10 years on our
ZJ.

Dick - W6CCD

On 03 Sep 2003 12:34:09 GMT, ralphmw@aol.com (RalphMW) wrote:

>Hi,
>
>I just traded in my very old 1985 Jeep Cherokee for a 1996 model. The 1996
>model has tinted windows. I've always used a Larsen thru-the-glass antenna for
>mobile operations. Does the tint affect the antenna function? Is there any
>way around it? Thanks.
>
>Ralph KB3JQJ
>41 16N 75 50W

230. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 14:31:21 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3F55FC2D.C62E45AD@uwe.ac.uk>
Source record: 108896
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

```
Peter Lemken wrote:
>
> In rec.radio.amateur.dx Walt Davidson <g3nyy@despammed.com> wrote:
> > On Tue, 02 Sep 2003 20:43:18 -0700, unkadean <dnorris@k7no.com> wrote:
> >
> > >>I have never found one yet who has any difficulty in spelling
> > >>"dyslexia"! That is the one word they have taken the trouble to
> > >>learn.
> > >>
> > >>:-)
> > >>73 de G3NYY
> > >
> > >
> > >I always thought it was Lysdexia?
> >
> > Deluxia.
>
> Dyslexics of the world: UNTIE!
>

Dyslexic devil worshipper sold his soul to Santa. Sorry, Nick.

vy 666

Andy, M1EBV
```

231. Re: Small Directional Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 14:40:35 UTC
From: rjw01@yahoo.com
Message-ID: <1db36613.0309030640.b848aea@posting.google.com>
Source record: 108897

Thanks!

The Moxen rectangle is still a little too large.

Any thoughts on just center loading the elements of a yagi? Anybody
ever tried or know how to calculate element lengths or required
inductance?

Thanks again.

WB6CAL

oldtime radio <nospam@spam.net> wrote in message
news:<dn6okvcahnrdtn0786jibf8j1t3v8l1ant@4ax.com>...
> How about a Moxen rectangle? Very easy to build.
> If you are familiar with the layout.....................
> 900 MHz =
> # 12 wire
> Driven element length of 4.68" plus 'legs' of 0.56"
> Reflectors element of 4.68" plus 'legs' of 0.91"
> Gap between the 'legs' of 0.28"
>
> If you're not familiar, do a Google search and you will probably find
> a dimensions calculator. If not, tell me your exact frequency and
> I'll calculate them for you.
>
> OTR
>
>
> On 26 Aug 2003 10:34:38 -0700, rjw01@yahoo.com (Ron) wrote:
>
> >Want to make a small directional antenna in UHF bands- either a yagi
> >or HB9CV or ??? Want the elements to be less than .5 WL. Anyone know
> >how to center or end load elements so that width of antenna could
> >collapse down to half to two-thirds the normal .5 WL? Perhaps some
> >other antenna design would do it but element loading comes first to
> >mind. Goal is VSWR of 1.5, a FB of 10db or better and beam width of
> >+/- 20 to 30 degress. In the 900 mhz band would like to limit width
> >to say 3 to 4 inches versus the nominal 6+. Any thoughts or directions
> >to look? Thanks!

232. Re: Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 14:44:38 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <q7n5b.25662$S_.5947@fed1read01>
Source record: 108898

Radio Shack thru the glass antennas used to gave a warning
"Some auto glass has passivated glass and the antenna will not function
properly" or something to that effect

Another is from Antenna FAQ's At URL:
http://www.altwireless.com/cellular-antennas/antennaFAQ.html

"passivated glass (glass impregnated with tiny metal particles that render
the glass incapable of coupling RF between the inside and outside couplers).
How can I tell if the glass on my vehicle is suitable for one of Larsen's
on-glass antennas?
First, look near a corner of a window for words that mean "sun", relate to
sun, or refer to ultraviolet or other forms of radiation. If you find terms
like "Soft-Ray", "EZE-Cool", "Solar-Coat", "Solar-Cool" or similar terms,
your glass is probably passivated and won't work with on-glass antennas. If
you want to be 100% certain, and you don't find helpful words on the glass,
ask a 2-way or cellular shop technician to test your glass with a
capacitance meter"

--
73 From The Signal In The Noise
Caveat Lector Ya All
"RalphMW" <ralphmw@aol.com> wrote in message
news:20030903083409.18292.00000361@mb-m13.aol.com...
> Hi,
>
> I just traded in my very old 1985 Jeep Cherokee for a 1996 model. The
1996
> model has tinted windows. I've always used a Larsen thru-the-glass
antenna for
> mobile operations. Does the tint affect the antenna function? Is there
any
> way around it? Thanks.
>
> Ralph KB3JQJ
> 41 16N 75 50W
>

233. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 15:33:03 UTC
From: richardharrison@webtv.net
Message-ID: <28251-3F5609AF-55@storefull-2315.public.lawson.webtv.net>
Source record: 108901

Ian, G3SEK wrote:
"..It`s more about encouraging people to think for themselves."

Why shoulld people worry with reflection coefficients or SWR?

Terman says:
SWR is important because it is easily measured, and SWR directly
indicates reflection in a system.

Reflection coefficient is defined in my dictionary as:
The vector ratio between the electric fields associated with the
reflected and incident waves, at the junction of a uniform transmission
line and a mismatched terminating impedancee.

Other planes and junctions producing an impedance discontinuity are also
cited as producing a reflection and thus a reflection coeficient.

The dictionary quantifies the reflection coefficient as:
(Z2 - Z1) / (Z2 + Z1)
where Z1 = source Z
and Z2 = load Z.

Absolute values are used above for the reflection coefficient when
relating it to SWR.
This is the voltage divider fraction.

Terman says on page 97 of his 1955 opus:
"Reflection coefficient (rho) = (VSWR-1) / (VSWR + 1).
"S" ---sometimes called (VSWR) to distinguish it from the standing-wave
ratio expressed as a power ratio, which is (Emax / Emin) squared.

best regards, Richard Harrison, KB5WZI

234. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 15:33:57 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309030733.57206091@posting.google.com>
Source record: 108899

I may be missing something here, but why not produce a
gain or field pattern for each antenna on the same
signal, random or otherwise and overlay each pattern
and put in memory? (cheap laptop and use a loop antenna
for reference)

In one of the early antenna compendiums (ARRLL)
a Peter Dobbs of the U.K. supplies all the info
and program to get you onboard quickly and inexpensively.
Art

235. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 15:34:02 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309030734.465a3bbe@posting.google.com>
Source record: 108900

I may be missing something here, but why not produce a
gain or field pattern for each antenna on the same
signal, random or otherwise and overlay each pattern
and put in memory? (cheap laptop and use a loop antenna
for reference)

In one of the early antenna compendiums (ARRLL)
a Peter Dobbs of the U.K. supplies all the info
and program to get you onboard quickly and inexpensively.
Art

236. Electronics questions???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 15:46:52 UTC
From: carter <cartw@netart.com>
Message-ID: <3F560CEC.59B0B0CE@netart.com>
Source record: 108904

I can't figure out how they got the answers they did on these questions.

Can anyone out there help?

For 81 I get (c) for an anwer not (d) Maybe something to do with
it being a parallel circuit instead of a series. Didn't know they had
different
formulas.

I get (c) for 86. Same story.

I get 300 - j318 for (88)

Can't figure out the other two also.

81] What is the impedance of a network composed of a
100-picofarad capacitor in parallel with a 4000-ohm resistor, at
500 kHz? (Specify your answer in polar coordinates.)

a} 2490 ohms, /51.5 degrees.

b} 4000 ohms, /38.5 degrees.

c} 5112 ohms, / -38.5 degrees.

d} 2490 ohms, /-51.5 degrees.@@

86] What is the impedance of a network composed of a
400-ohm-reactance inductor in parallel with a 300-ohm resistor?
(Specify your answer in polar coordinates.)

a} 240 ohms, / 36.9 degrees.@@

b} 240 ohms, / -36.9 degrees.

c} 500 ohms, / 53.1 degrees.

d} 500 ohms, / -53.1 degrees.

88] What is the impedance of a network composed of a
0.01-microfarad capacitor in parallel with a 300-ohm resistor, at
50 kHz? (Specify your answer in rectangular coordinates.)

a} 150 - j159.

b} 150 + j159.

c} 159 + j150.

d} 159 - j150.@@

111] A 6 volt battery with 1.2 ohms internal resistance is connected across two 3 watt bulbs. What is the current flow?

a} .57 amps.

b} .83 amps.@@

c} 1.0 amps.

d} 6.0 amps.

129] How many capacitors of 400 volts and 2.0 microfarads each would be necessary to obtain a combination rated at 1600 volts and 1.5 microfarads?

a} 10.

b} 12.@@

c} 14.

d} 16.

237. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 15:55:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b23clv4762poj4c1gudgmq0itcsjgb3skp@4ax.com>
Source record: 108902

On Wed, 3 Sep 2003 09:14:36 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>these are cheap smears that discredit only you.

Hi Ian,

I see you have nothing representing your own thinking to offer. No insights to your experience with regard to the topic, no correlations to actual applications, no counter examples to the stated Z's offered as quotes from Motorola (and four random examples from three other manufacturers that eclipse your statements of "confusion"). The hew and cry now plummets to emotional charges of smear and calumny.

To cap it off, I've seen nothing from you in regard to a simple measurement of transmission line loss under the simplest of constraints. Imagine the quality of technical discussion that lacks response to the example of two resistors and a hank of line. I've offered one solution that is right out of the book, and you, and others, fail to allow even that satisfies the inquiry.

Given this stark contrast, I embrace all discredit due me!

Will there be an awards ceremony? ;-)

73's
Richard Clark, KB7QHC

238. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:07:58 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vlc4dnindtj3d8@corp.supernews.com>
Source record: 108903

Dr. Slick wrote:

>
> I don't think Kurokawa and Besser and the ARRL just pulled it
> out of thin air.

After following this thread and also thinking
about it considerably (and changing my mind as
appropriate)
I have concluded:

1) Kurokawa was thinking of "power waves". His
formula is exactly correct for power waves that do
not involve *transmision lines*. The derivation of
his formula is very sensible. The literature on
power waves that I have seen confirms this.

2) I am not familiar with what Besser teaches.

3) The ARRL Antenna Book has picked up the
Kurokawa formula and adopted it. It is incorrectly
used in the transmission line context in chapter
24 of the 19th edition.

4) The determination that rho magnitude in a
transmission line can be greater than 1.0 is
correct. In a passively loaded line fed by an
oscillator, where there is no positive feedback
from load to oscillator, there is no problem about
a rho magnitude greater than 1.0.

Bill W0IYH

239. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:18:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5615d4_8@corp.newsgroups.com>
Source record: 108905

Dr. Slick wrote:
> And how do you explain the rho > 1 for a passive network?
> Shouldn't be possible. And neither should a negative SWR.

This seems to me to be somewhat akin to the fact that s11 and rho can have different values at an impedance discontinuity where a 'third power' is commonplace. Roy's 'third power' at the load appears to be analogous to a re-reflection of some sort as the inductive load tries and fails to dump energy back into the Z0=68-j39 transmission line. A re-reflection is another component of forward power.

The ratio of reflected Poynting vector to forward Poynting vector is |rho|^2. In Roy's example, the total average Poynting vector points toward the load indicating that (Pz+ - Pz-) > 0. That means |rho|^2 cannot be greater than 1.0.
--
73, Cecil http://www.qsl.net/w5dxp

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240. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:24:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f561745_8@corp.newsgroups.com>
Source record: 108908

Richard Harrison wrote:
> The dictionary quantifies the reflection coefficient as:
> (Z2 - Z1) / (Z2 + Z1)

> Terman says on page 97 of his 1955 opus:
> "Reflection coefficient (rho) = (VSWR-1) / (VSWR + 1).

Please note that if Z1 and Z2 are characteristic impedances of
transmission lines at an impedance discontinuity point, these
two equations yield different results.
--
73, Cecil http://www.qsl.net/w5dxp

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241. Re: Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:24:43 UTC
From: ralphmw@aol.com
Message-ID: <20030903122443.18028.00000397@mb-m25.aol.com>
Source record: 108906

Thanks for all of the responses. Will check things out further. May just go with a my mag mount if it presents with too much trouble.

73's de
Ralph KB3JQJ

242. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:29:18 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <3F5616E2.2080102@earthlink.net>
Source record: 108907

Peter O. Brackett wrote:
> A widely applied practical example is the transmission of bi-directional
> broad band digital subscriber loop (DSL) signals over telephone twisted
> pair.
> Peter K1PO
> Indialantic By-the-Sea, FL.

As Peter notes,
telephone transmission line impedance is always complex.
The parameters R, L, G & C per unit length
(series resistance, series inductance, shunt conductance,
shunt capacitance) are NOT CONSTANT with frequency,
or temperature. So the cable impedance is not
constant either.
Signal spectra extend from nearly DC (a few kHz)
up to 12MHz or more - many octaves.
Even over voiceband, 400Hz to 2800 Hz,
the cable impedance changes a _lot_.

Lengths vary from several feet to 10s of kft.
There are often/usually open-ended shunt cable sections,
a.k.a. bridged taps, along the cable.
Other things, like series lumped loading coils (inductors),
may appear if not removed from longer cables.
Signals at the DSL receiver ends are umpteen dB below
the transmitter signal levels on the same pair of wires,
and can be in the same band if separate to-the-customer
and to-the-network bands are not used.

Smith Charts, as much as I like them for ham purposes,
are of no help.

This subject is addressed in T1.417-2001, Issue 1
"Spectrum Management For Loop Transmission Systems"
January, 2001
Developed by Sub-Committee T1E1.4
which develops the xDSL standards (DSL, HDSL,
ADSL, VDSL,...) for North America.

Annex B of T11.417 deals with the modeling
of cables for such cases: formulas, RLCG vs. freq.
and other data for common AWG and metric cables...

Software packages are available offline and online.

http://net3.argreenhouse.com:8080/dsl-test/index.htm
(A free registration is needed.)

(The other 200+ pages are left for the reader.)

The latest working draft of Issue 2 is available free*
as document T1E1.4/2003-002R3 from

http://www.t1.org/filemgr/filesearch.taf

Do a "Simple Search" for filename 3e140023

When the "Results of Simple Search" page appears,
click on the blue full name T1E1.4/2003-002R3
under the Contributions column.

When the next page appears,
click on the blue 3e140023 after "File Prefix"
to finally download the document. (2.1MB)

I just tried this procedure to be sure it works.

* The official Issue 1 is over US$300.

In 1995 I was the first editor and wrote the first draft
of what became T1.417. Much of what I wrote is intact
word-for-word as the first half of Annex B
(to my amazment) - the general descriptive part
before the nitty-gritty models and numbers.

Have fun.

There will be an exam. :)

Cheers, 73,

Ron McConnell
Retired Secretary T1E1.4
w2iol@arrl.net

N 40ï¿½ 46' 57.9" W 74ï¿½ 41' 21.9"
FN20ps77GU46 [FN20ps77GV75]

http://home.earthlink.net/~rcmcc

243. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:31:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f561907$1_8@corp.newsgroups.com>
Source record: 108909

William E. Sabin wrote:
> 4) The determination that rho magnitude in a transmission line can be
> greater than 1.0 is correct. In a passively loaded line fed by an
> oscillator, where there is no positive feedback from load to oscillator,
> there is no problem about a rho magnitude greater than 1.0.

But can |rho|=Sqrt(Pref/Pfwd) ever be greater than 1.0 for a
passive load?
--
73, Cecil http://www.qsl.net/w5dxp

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244. Re: Small Directional Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:33:42 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <9PJFs9SmfhV$EArg@ifwtech.co.uk>
Source record: 108913

Ron wrote:
>
>The Moxen rectangle is still a little too large.
>
If it's really only a little too large, you might consider the earlier VK2ABQ which is square rather than rectangular, and thus has a slightly smaller turning circle. The performance isn't as good as the Moxon shape, but it will fit into some spaces where the Moxon won't.

>Any thoughts on just center loading the elements of a yagi? Anybody
>ever tried or know how to calculate element lengths or required
>inductance?
>
It has often been done. The method of choice now would be to decide how long the elements and the boom can be, and then experiment with various loading configurations using a modeling program. As the elements get shorter, remember that (a) the losses increase, as in all loaded antennas; and (b) the shortened elements no longer interact in quite the same way as full-length elements do.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

245. Re: Small Directional Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 16:42:12 UTC
From: richardharrison@webtv.net
Message-ID: <3861-3F5619E4-37@storefull-2311.public.lawson.webtv.net>
Source record: 108910

Ron wrote:
"Want to make a small directional antenna in UHF bands---."

John Devoldere, ON4UN considers short elements on page 8-10 of "Low-Band DXing". This is an ARRL publication and contains much valuable information. Antennas scale to any wavelength. Reciprocity rules, so it makes no difference if you want to transmit or receive except that efficiency is more important for transmitting antennas, usually.

John Kraus, W8JK considers short dipoles on page 166 of "Antennas For All Applications". This is a McGraw-Hill publication and worth every penny it costs.

Best regards, Richard Harrison, KB5WZI

246. Re: Small Directional Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 18:01:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f562e10_3@corp.newsgroups.com>
Source record: 108911

Richard Harrison wrote:
> John Kraus, W8JK considers short dipoles on page 166 of "Antennas For
> All Applications". This is a McGraw-Hill publication and worth every
> penny it costs.

Also available on the gray market in a "Low Price Edition".
--
73, Cecil http://www.qsl.net/w5dxp

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247. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 18:12:31 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bj5aul$b2k$1@nic.grnet.gr>
Source record: 108912

-
"The Third Term"
-
Roy Lewallen wrote:
-
| No, the average Poynting vector points toward the load.
| Power leaves the line and enters the load, as it should.
| ...
| I imagine your problem
| with the solution is your notion that
| the total average power
| is the difference between the
| "forward power" and "reverse power".
|
| But it's not.
|
| I gave the equation showing what the total power
| is, and as you can see,
| there's a third term involved.
| When this is
| taken into consideration, you see that there's a net power flow out of
| the line into the load, as there should be.
| ...
-
As usually,
Mr. Roy Lewallen,
points the right direction.
And this time,
it is of:
-
"The Third Term".
-
In the whole of the book by R.A.Chipman,
a phrase, less than a printed line,
is proved enough to cause a major upset:
-
"The third term
on the right
represents interaction
between the two waves."
-
But when there is such a steadfast loyalty
to the existence of some kind of
"interference"

between two,
rather clearly distinct waves,
the incident and the reflected one,
it is difficult for anybody
to compromise himself and accept
that the same two waves,
so clearly distinct until now,
when are coming along a line with complex Z0,
have to bear in addition
some kind of
"interaction".
-
Very difficult, indeed.
-
Sincerely,
-
pez
SV7BAX
-

248. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 18:19:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj5bc8$234$1@hercules.btinternet.com>
Source record: 108914

Cecil and others, even authors of books, have said -

> - - - - |rho|^2 cannot be greater than 1.0 - - - -

==========

Would you change your minds if I describe a
reflection-coefficient bridge, which anybody can
construct, which accurately measures values of | rho |
up to its greatest possible value in transmission lines
of 2.414 There's no catch!

For some reason Dr Slick has remained silent to my
acceptance of his challenge to find such an instrument.
Perhaps he's gone away to think about it.

Reg, G4FGQ

249. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 18:25:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlccguj3balf77@corp.supernews.com>
Source record: 108915

Yet in my example, |rho|^2 *is* greater than one.

Also, in the past, you and others have defined the "forward power" to be the power calculated from the forward voltage and current waves, namely Re(fE * fIconj) or |fE| * |fI| * cos(phiE - phiI). This is what you've consistently been calling the "power of the forward wave" or some such. Likewise for "reverse power". This is the definition I used for the substitution for <fP> and <rP> in the equation for total average power. And the result is that the total power *isn't* equal to <fP> - <rP>. What you're doing now is lumping the extra power into <fP> or <rP>, now making those terms mean something else. The additional power term has two components, one arising from the product of forward current and reverse voltage, and the other from the product of forward voltage and reverse current. (I combined the two cosine functions with a trig identitity into a product of two sine functions, but you should go back a step or two in the analysis to get a clear idea of their derivation.) I believe you've chosen to assign each of these, or the sine product, to either "forward power" or "reverse power", depending on its sign, even though they're a function of both forward and reverse voltage and current waves. I can't imagine the justification for doing this, but then there's quite a lot that people have been doing which I don't understand. As part of the process, you might consider the consequence of the sine or cosine function returning a negative value, which either of course can.

Again, I welcome an alternate solution that accounts for all the voltages, currents, and powers, including one that does it with rho < 1.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> This seems to me to be somewhat akin to the fact that s11 and
> rho can have different values at an impedance discontinuity
> where a 'third power' is commonplace. Roy's 'third power' at
> the load appears to be analogous to a re-reflection of some
> sort as the inductive load tries and fails to dump energy
> back into the Z0=68-j39 transmission line. A re-reflection
> is another component of forward power.
>
> The ratio of reflected Poynting vector to forward Poynting
> vector is |rho|^2. In Roy's example, the total average
> Poynting vector points toward the load indicating that
> (Pz+ - Pz-) > 0. That means |rho|^2 cannot be greater
> than 1.0.

250. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 18:39:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcdbte0hdi29c@corp.supernews.com>
Source record: 108916

Well, Cecil, you've redefined Pref and Pfwd. Pref used to be solely a function of the forward voltage and current waves, and Pref a function of the reverse voltage and current waves. But now you've chosen to add an extra term to one or the other of those, or both -- a term which contains components of both forward and reverse waves. You might recall from the analysis that I originally had two cosine terms, one arising from the product of forward voltage and reverse current, and the other arising from the reverse voltage and forward current. Which of these do you assign to the "forward power" and which to "reverse power"? If the choice is based solely on the sign, does the choice automatically change when the cosine function returns a negative value? (To be truthful, I haven't checked to see if that is, in fact, possible for possible values of the argument.) When combined into a product of two sine functions as I did in the analysis, do you assign this combined function to Pref or Pfwd? The combined sine functions can, I know, return either positive or negative values, so what do you do when it returns a negative value? If I use another trig identitity to convert it to some trig functions having a different sign, does it then switch from being part of Pref to part of Pfwd, or vice-versa?

So now when you say Pref and Pfwd, what do you mean?

If you were to stick with the definition you've always used in the past, i.e., powers calculated from solely forward or reverse voltage and current waves, the answer is yes. For evidence I offer my derivations.
Roy Lewallen, W7EL

Cecil Moore wrote:
> William E. Sabin wrote:
>
>> 4) The determination that rho magnitude in a transmission line can be
>> greater than 1.0 is correct. In a passively loaded line fed by an
>> oscillator, where there is no positive feedback from load to
>> oscillator, there is no problem about a rho magnitude greater than 1.0.
>
>
> But can |rho|=Sqrt(Pref/Pfwd) ever be greater than 1.0 for a
> passive load?

251. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 20:03:57 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <YtSdnV_SOJGl1MuiXTWJgA@crocker.com>
Source record: 108917

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309022115.44535b0c@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<3PKdnUqOEeaEssiiXTWJjQ@crocker.com>...
> > > >
> > > >
> > > > I believe this line (3) is only true if Zo is purely real.
> > > >
> > > > If Zo is complex, i don't think you can apply
> > > > this.
> > >
> > > I swore that I wouldn't get into this one, but enough's enough.
> > >
> > > Equation (1) is an application of Kirchoff's voltage law.
> > > Equation (2) is an application of Kirchoff's current law.
> > > Equation (3) results from (2) if you apply Ohm's law three times, to
the
> > > three terms in Equation (2).
> > >
> > > Which of these three principles (Kirchoff's voltage law, Kirchoff's
> > > current law, or Ohm's law) is the one you don't believe? Or do you
> > > disbelieve more than one of the three?
> > >
> > now, now, take it easy on him... he didn't say he didn't believe kcl or
kvl
> > or ohm's law... he just doesn't understand that they still do apply to
> > phasor notation used in sinusoidal steady state analysis. an easy
> > misunderstanding.
>
>
> Gee, thanks David. I was wrong! This was a little review for me!
> Hehe... owww..
>
> But it still doesn't answer my question.
>
> I don't think Kurokawa and Besser and the ARRL just pulled it
> out of thin air.
>
> And how do you explain the rho > 1 for a passive network?
> Shouldn't be possible. And neither should a negative SWR.
>
> I'm not sure what is wrong with your derivation, but there
> must be something that they are missing to not have the conjugate
> in the numerator. Or there is a particular step that you cannot do

> with complex impedances.
>
> Again, the normal equation is only for purely real Zo, or
> when Zo*=Zo. If Zo is complex, you have to use the conjugate
> equation.
>
> Could you email a scan of some of the pages? Not that it
> would absolutely help me too much, but perhaps you are missing
> something.
>
>
> Slick
sorry, no scanner here.

how do you get rho>1? please give me the Zo and Zl to try out, i have been playing for a while with the basic equations and haven't found a case where either formulat gives rho>1.

and of course if |rho|<=1 then swr can never be negative.

252. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 20:33:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5651c8_7@corp.newsgroups.com>
Source record: 108918

Reg Edwards wrote:
> Cecil and others, even authors of books, have said -
>>- - - - |rho|^2 cannot be greater than 1.0 - - - -
>
> Would you change your minds if I describe a
> reflection-coefficient bridge, which anybody can
> construct, which accurately measures values of | rho |
> up to its greatest possible value in transmission lines
> of 2.414 There's no catch!

Note that I didn't say |rho| couldn't be greater than one.
I said |rho|^2, the power reflection coefficient, cannot
be greater than 1.0 for a passive load, i.e. you cannot
get more power out of a passive load than you put into it.
It follows that the conservation of energy principle will
not allow the square of rho to be the power reflection
coefficient if rho is greater than 1.0.

> For some reason Dr Slick has remained silent to my
> acceptance of his challenge to find such an instrument.
> Perhaps he's gone away to think about it.

There is an answer here. I suspect you can answer it by
answering the following question about s-parameters.
Consider the following example:

Source--50 ohm feedline--+--1/2WL 150 ohm feedline--50 ohm load

s11 is 0.5 but rho, on the 50 ohm feedline, is zero.

|s11|^2 is defined in the HP AN 95-1 Ap note as the ratio of
the "Power reflected from the network input" to the "Power
incident on the network input" Assuming we have 100 watts of
power incident on the network input, the power reflected from
the network input would have to be 25 watts. But the actual
reflected power on the 50 ohm feedline measures to be zero
watts. Hint: |s12|^2 must also be taken into account.
--
73, Cecil http://www.qsl.net/w5dxp

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253. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 20:42:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3ljclvke2hm5m9lh7e0i04duv7piij1j2h@4ax.com>
Source record: 108819

On Wed, 3 Sep 2003 18:19:52 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Cecil and others, even authors of books, have said -
>
>> - - - - |rho|^2 cannot be greater than 1.0 - - - -
>
>==================================
>
>Would you change your minds if I describe a
>reflection-coefficient bridge, which anybody can
>construct, which accurately measures values of | rho |
>up to its greatest possible value in transmission lines
>of 2.414 There's no catch!
>
>For some reason Dr Slick has remained silent to my
>acceptance of his challenge to find such an instrument.
>Perhaps he's gone away to think about it.
>---
>Reg, G4FGQ
>

Ah Reg,

(Too many, like this season's crop of presidential hopefuls, have
usurped the role of clown, sorry to demote you - but you know the
irony in that gesture, you at least gained it honestly. ;-)

No catch? You stand little chance of interest as that would imply an
end to it - what fun when the stream of debate circles endlessly
around simple issues of arithmetic gone bad?

So, in their stead and knowing that anything practical is anathema,
and that anything observed as being cut-and-paste without context is
shunned as a cheap smear, give us the works. [Here's hoping that it
adds to the bottom line of my bountiful discredit.]

73's
Richard Clark, KB7QHC

254. Re: Cushcraft A743 40 meter add-on

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 21:00:44 UTC
From: Piotr S&#65533;aby <piotr.slaby@expert.wroc.pl>
Message-ID: <bj5kvp$7e2$1@nemesis.news.tpi.pl>
Source record: 108820

Hi,
Maybe one more comment.
I use this 40 meter add-on but it is only on the 15 meters mast.
From the same mast I have for 40 meters band inverted V.
I use Inverted V for listening but when I turn beam I get better results
while transmitting.
Best 73,
Piotr SP6RGQ

255. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 21:06:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f565959_7@corp.newsgroups.com>
Source record: 108821

Roy Lewallen wrote:

> Yet in my example, |rho|^2 *is* greater than one.

If so, |rho|^2 is NOT the power reflection coefficient. The conservation of energy principle will not allow the power reflection coefficient to be greater than 1.0.

If you calculate a forward Poynting vector and a reflected Poynting vector at a passive load, you will find that the forward Poynting vector always has a larger magnitude than the reflected Poynting vector. Thus, if Pz-/Pz+ = |rho|^2, as asserted in Ramo & Whinnery, |rho| cannot be greater than 1.0. I suspect you have stumbled upon a single-port case where rho and s11 are not equal.

You have apparently calculated an s11 reflection coefficient and called it "rho" under conditions where s11 doesn't have to equal rho.

> Also, in the past, you and others have defined the "forward power" to be
> the power calculated from the forward voltage and current waves, namely
> Re(fE * fIconj) or |fE| * |fI| * cos(phiE - phiI). This is what you've
> consistently been calling the "power of the forward wave" or some such.

ONLY for lossless lines. I never said or implied that it would work for lossy lines. I have carefully avoided making any assertions about lossy lines. The only assertion that I will make about lossy lines is that they obey the conservation of energy principle.

> Likewise for "reverse power". This is the definition I used for the
> substitution for <fP> and <rP> in the equation for total average power.

Well, that's apparently a boo-boo for lossy lines. Apparently, Vfwd*Ifwd* cos(theta) equals forward power only for lossless lines.

> And the result is that the total power *isn't* equal to <fP> - <rP>.
> What you're doing now is lumping the extra power into <fP> or <rP>, now
> making those terms mean something else.

Yes, for lossy lines, they apparently do mean something else. It reminds me of the s-parameter equations for power. Like your calculations, there are four powers, not just two. They are |s11|^2, |s22|^2, |s21|^2, |s12|^2. It looks as if you have set <fP> = |s22|^2 and <rP> = |s11|^2 and your other two power components are |s12|^2 and |s21|^2. But in real life, these last two powers are forced to join either the forward wave or the reflected wave.

> The additional power term has
> two components, one arising from the product of forward current and
> reverse voltage, and the other from the product of forward voltage and

> reverse current. (I combined the two cosine functions with a trig
> identitity into a product of two sine functions, but you should go back
> a step or two in the analysis to get a clear idea of their derivation.)
> I believe you've chosen to assign each of these, or the sine product, to
> either "forward power" or "reverse power", depending on its sign, even
> though they're a function of both forward and reverse voltage and
> current waves. I can't imagine the justification for doing this, ...

The justification is two, and only two directions, in a transmission line.
All coherent components are forced to superpose into Total Forward Power
or Total Reflected Power depending on the direction (sign).
--
73, Cecil http://www.qsl.net/w5dxp

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256. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 21:28:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f565e90_7@corp.newsgroups.com>
Source record: 108822

Roy Lewallen wrote:

> Well, Cecil, you've redefined Pref and Pfwd.

Nope, I haven't, Roy. You have somehow arrived at the equations for a four-port network while dealing with what appears to be a two-port network. Inadvertently, you seem to have calculated |s11|^2, |s12|^2, |s21|^2, and |s22|^2 for what appears to be a two-port network. Is a two-port lossy line network with inductive load really a four-port network in disguise? Does the delay in the inductor returning energy to the system constitute an 'a2' term in the s-parameter analysis?

> Pref used to be solely a
> function of the forward voltage and current waves, and Pref a function
> of the reverse voltage and current waves. But now you've chosen to add
> an extra term to one or the other of those, or both -- a term which
> contains components of both forward and reverse waves.

Roy, that is built right into the s-paramater analysis. For instance, for a Z0 (image) matched system:

Forward Power = |s11|^2 + |s12|^2 + |s21|^2 + |s22|^2

For a matched system, Forward Power contains four power terms.
In fact, Forward Power can contain from one to four terms depending on system configuration.

> You might recall
> from the analysis that I originally had two cosine terms, one arising
> from the product of forward voltage and reverse current, and the other
> arising from the reverse voltage and forward current. Which of these do
> you assign to the "forward power" and which to "reverse power"?

You are talking about |s12|^2 and |s21|^2. The sign and phase of their power flow vectors will indicate whether they are forward power or reverse power.

> When combined into a product of two sine functions as
> I did in the analysis, do you assign this combined function to Pref or
> Pfwd?

If the sign is positive, it is flowing toward the load, i.e. it will superpose with the forward wave. If the sign is negative, it is flowing toward the source, i.e. it will superpose with the reverse wave. The conservation of energy principle will not allow the power in the reverse wave to exceed the power in the forward wave for passive loads, no matter what the value of rho.

> So now when you say Pref and Pfwd, what do you mean?

What I have always meant. Pfwd is the total of all the coherent forward components. Pref is the total of all the coherent reverse components.

> If you were to stick with the definition you've always used in the past,
> i.e., powers calculated from solely forward or reverse voltage and
> current waves, the answer is yes. For evidence I offer my derivations.

All you have derived is the s-parameter analysis which is known to include four power parameters. It is known that s11 doesn't always equal rho for a four-ternimal network. You seem to have proven that to be true for what appears to be a two-port network.
--
73, Cecil http://www.qsl.net/w5dxp

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257. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:03:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5666cc_4@corp.newsgroups.com>
Source record: 108824

Roy Lewallen wrote:
> Again, I welcome an alternate solution that accounts for all the
> voltages, currents, and powers, including one that does it with rho < 1.

It dawned on me, just now in the shower, what is happening here. When you introduced the 'x' parameter, the distance from the load, you introduced a 2-port network analysis, be it an s-, h-, y-, z-, or whatever-parameter analysis. And of course there are four power terms in a 2-port analysis. There are:

1. The power reflected from the network input back toward the source. |s11|^2

2. The power transmitted through the network port toward the load. |s21|^2

3. The power re-reflected from the network output back toward the load. |s22|^2

4. The power transmitted through the network port toward the source. |s12|^2

These are the four powers you calculated and you consider only |s12|^2 to be forward power. That is an error. |s22|^2 is also forward power. These two forward power flow vectors have to be added to obtain the total forward Poynting vector. I do believe that clears up the confusion.
--
73, Cecil http://www.qsl.net/w5dxp

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258. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:04:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcpc384bmfn14@corp.supernews.com>
Source record: 108823

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Yet in my example, |rho|^2 *is* greater than one.
>
>
> If so, |rho|^2 is NOT the power reflection coefficient. The conservation
> of energy principle will not allow the power reflection coefficient to
> be greater than 1.0.

I didn't, and don't, claim to have derived a "power reflection coefficient". What I calculated was the ratio of reflected voltage to forward voltage at the load, and called its magnitude rho. If there's any step in the analysis that's unclear, I'll be happy to explain it in more detail.

> If you calculate a forward Poynting vector and a reflected Poynting vector
> at a passive load, you will find that the forward Poynting vector always
> has
> a larger magnitude than the reflected Poynting vector. Thus,
> if Pz-/Pz+ = |rho|^2, as asserted in Ramo & Whinnery,
> |rho| cannot be greater than 1.0. I suspect you have stumbled upon a
> single-port case where rho and s11 are not equal.
>
> You have apparently calculated an s11 reflection coefficient and called
> it "rho" under conditions where s11 doesn't have to equal rho.

What I have calculated is the ratio of reflected voltage to forward voltage at the load, no more and no less. Its magnitude is what I called rho. You won't see s11 mentioned anywhere in the analysis.

>> Also, in the past, you and others have defined the "forward power" to
>> be the power calculated from the forward voltage and current waves,
>> namely Re(fE * fIconj) or |fE| * |fI| * cos(phiE - phiI). This is what
>> you've consistently been calling the "power of the forward wave" or
>> some such.
>
>
> ONLY for lossless lines. I never said or implied that it would work for
> lossy lines. I have carefully avoided making any assertions about lossy
> lines. The only assertion that I will make about lossy lines is that
> they obey the conservation of energy principle.

Yet lossy lines are just what we're talking about now, isn't it?

>> Likewise for "reverse power". This is the definition I used for the
>> substitution for <fP> and <rP> in the equation for total average power.
>
>
> Well, that's apparently a boo-boo for lossy lines. Apparently, Vfwd*Ifwd*
> cos(theta) equals forward power only for lossless lines

So what are the "forward power" and "reverse power" for lossy lines? Any
explanation for why they vary (other than with the expected attenuation)
with position along the line?

>> And the result is that the total power *isn't* equal to <fP> - <rP>.
>> What you're doing now is lumping the extra power into <fP> or <rP>,
>> now making those terms mean something else.
>
>
> Yes, for lossy lines, they apparently do mean something else. It reminds
> me of the s-parameter equations for power. Like your calculations, there
> are four powers, not just two. They are |s11|^2, |s22|^2, |s21|^2, |s12|^2.
> It looks as if you have set <fP> = |s22|^2 and <rP> = |s11|^2 and your
> other
> two power components are |s12|^2 and |s21|^2. But in real life, these last
> two powers are forced to join either the forward wave or the reflected
> wave.

I'm sure that with enough s parameter and optics references, the facts
of the matter can be satisfactorily obscured. But I hope this isn't the
beginning of an effort to do so. S parameter analysis is fine and dandy,
but at the end of the day, the explanation has to work with a plain old
transmission line of finite length, with characteristic impedance,
voltages, and currents.

>> The additional power term has two components, one arising from the
>> product of forward current and reverse voltage, and the other from the
>> product of forward voltage and reverse current. (I combined the two
>> cosine functions with a trig identitity into a product of two sine
>> functions, but you should go back a step or two in the analysis to get
>> a clear idea of their derivation.) I believe you've chosen to assign
>> each of these, or the sine product, to either "forward power" or
>> "reverse power", depending on its sign, even though they're a function
>> of both forward and reverse voltage and current waves. I can't imagine
>> the justification for doing this, ...
>
>
> The justification is two, and only two directions, in a transmission line.
> All coherent components are forced to superpose into Total Forward Power
> or Total Reflected Power depending on the direction (sign)

Your view of how average powers add and travel do force that
restriction. I'm looking forward to your alternative analysis, which
shows the voltages, currents, and powers at both ends of the line while
simultaneously satisfying your notion of how average powers interact.

Roy Lewallen, W7EL

.

259. Re: 40M HF antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:13:55 UTC
From: Bob Cook <captcook@compuserve.com>
Message-ID: <bj5p39$q69$1@ngspool-d02.news.aol.com>
Source record: 108825

Two suggestions:

1. Try EZNEC antenna modeling software (or buy it, NEC 3.0) and model all kinds of antennas.

2. How about a dual "H" config dipole? It concentrates radiation in two directions and is low TOA.

Bob K9KKY

260. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:15:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5669a7_4@corp.newsgroups.com>
Source record: 108827

Roy Lewallen wrote:
> I didn't, and don't, claim to have derived a "power reflection
> coefficient". What I calculated was the ratio of reflected voltage to
> forward voltage at the load, and called its magnitude rho. If there's
> any step in the analysis that's unclear, I'll be happy to explain it in
> more detail.

What you apparently calculated is s11 which is not always equal to rho.

> What I have calculated is the ratio of reflected voltage to forward
> voltage at the load, no more and no less.

No, you have calculated the ratio of one of the reflected voltages to
one of the forward voltages. I believe you have calculated the ratio
of s21*a1 to s12*a2 when you should be calculating the ratio of
(s11*a1+s12*a2) to (s21*a1+s22*a2). You simply omitted half the terms.

> Yet lossy lines are just what we're talking about now, isn't it?

Yes, and I am in the process of trying to understand them.

> So what are the "forward power" and "reverse power" for lossy lines? Any
> explanation for why they vary (other than with the expected attenuation)
> with position along the line?

I don't know, yet.

> I'm sure that with enough s parameter and optics references, the facts
> of the matter can be satisfactorily obscured.

It is you who is using an s-, h-, y-, z-, or other-parameter analysis
and are inadvertently obscuring the facts. You left out half the voltage
terms that should be included in the forward voltage and reflected
voltage. Add all the reflected voltages together. Add all the forward
voltages together. Divide the total reflected voltage by the total
forward voltage.

> Your view of how average powers add and travel do force that
> restriction. I'm looking forward to your alternative analysis, which
> shows the voltages, currents, and powers at both ends of the line while
> simultaneously satisfying your notion of how average powers interact.

I think all that is built into your analysis. When you include all the
necessary terms, I will be surprised if everything doesn't fall out
consistently.
--
73, Cecil http://www.qsl.net/w5dxp

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261. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:18:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcq6q59e8fj31@corp.supernews.com>
Source record: 108826

My, it sure didn't take long to get the discussion diverted from the voltages, currents, and powers in the analysis. I'm sorry to say I expected that.

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Well, Cecil, you've redefined Pref and Pfwd.
>
>
> Nope, I haven't, Roy. You have somehow arrived at the equations for
> a four-port network while dealing with what appears to be a two-port
> network. Inadvertently, you seem to have calculated |s11|^2, |s12|^2,
> |s21|^2, and |s22|^2 for what appears to be a two-port network. Is a
> two-port lossy line network with inductive load really a four-port
> network in disguise? Does the delay in the inductor returning energy
> to the system constitute an 'a2' term in the s-parameter analysis?
>

I'll leave the philosophical question to you of when a transmission line is an n-port network and when it isn't, and which s parameter I inadvertently calculated. Was I unclear about what I did calculate? What part of it don't you understand?

>> Pref used to be solely a function of the forward voltage and current
>> waves, and Pref a function of the reverse voltage and current waves.
>> But now you've chosen to add an extra term to one or the other of
>> those, or both -- a term which contains components of both forward and
>> reverse waves.
>
>
> Roy, that is built right into the s-paramater analysis. For instance,
> for a Z0 (image) matched system:
>
> Forward Power = |s11|^2 + |s12|^2 + |s21|^2 + |s22|^2
>
> For a matched system, Forward Power contains four power terms.
> In fact, Forward Power can contain from one to four terms depending
> on system configuration.
>

I don't know, and don't really care, where you're trying to go with your S parameter analysis. But when you're all done, please translate all that wonderful stuff to voltages, currents, and powers, using a finite length transmission line, and present your analysis.

Are you having difficulty understanding what I've done simply with
voltages, currents, and powers?

>> You might recall from the analysis that I originally had two cosine
>> terms, one arising from the product of forward voltage and reverse
>> current, and the other arising from the reverse voltage and forward
>> current. Which of these do you assign to the "forward power" and which
>> to "reverse power"?
>
>
> You are talking about |s12|^2 and |s21|^2. The sign and phase of their
> power flow vectors will indicate whether they are forward power or
> reverse power.
>
>> When combined into a product of two sine functions as I did in the
>> analysis, do you assign this combined function to Pref or Pfwd?
>
>
> If the sign is positive, it is flowing toward the load, i.e. it will
> superpose with the forward wave. If the sign is negative, it is flowing
> toward the source, i.e. it will superpose with the reverse wave. The
> conservation of energy principle will not allow the power in the reverse
> wave to exceed the power in the forward wave for passive loads, no matter
> what the value of rho.
>
>> So now when you say Pref and Pfwd, what do you mean?
>
>
> What I have always meant. Pfwd is the total of all the coherent forward
> components. Pref is the total of all the coherent reverse components.
>
So, you mean that the term containing the product of two sine functions
is part of Pfwd when the angles are such that the sine functions return
a positive value, and part of Pref when they return a negative value?

>> If you were to stick with the definition you've always used in the
>> past, i.e., powers calculated from solely forward or reverse voltage
>> and current waves, the answer is yes. For evidence I offer my
>> derivations.
>
>
> All you have derived is the s-parameter analysis which is known to include
> four power parameters. It is known that s11 doesn't always equal rho for
> a four-ternimal network. You seem to have proven that to be true for what
> appears to be a two-port network.

No, I did not derive an s parameter analysis. I derived voltages,
currents, and powers. Interpretation of this in terms of s parameters is
strictly your own doing, and it provides wonderful opportunities to
obscure and misinterpret what's really happening. If you're unable to
understand voltages, currents, and powers and want to argue instead
about s parameters (which indeed do represent voltages and powers, but

not necessarily in a one-to-one correspondence to those in the circuit I analyzed), how many ports the circuit has, and the meaning of the power reflection coefficient, have at it. But I won't participate. I'll simply wait until you're done with your philosophising, calculations, translation back and forth, and post your analysis with V, I, and P as the variables.

Roy Lewallen, W7EL

262. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:29:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcqra6l3r1ga6@corp.supernews.com>
Source record: 108828

Johnson uses the same term of "interaction" to describe the origin of the extra power term. However, you can hopefully see from the analysis I posted that only ordinary superposition of the forward and reverse voltage and current waves is necessary for the term to appear. So I don't feel that "interaction" is entirely appropriate. The extra term actually is a result of the calculation of average power. I've said many times that it's risky to abandon the time information in the power waveform and deal only with averages. If the voltage and current in each wave aren't in phase with each other, there are components of the total VI product that add together but don't show up in the averages of the individual forward and reverse average powers. There's no mystery or true "interaction" involved. The "problem" lies simply in calculating average "forward power" and "reverse power" separately, throwing away all time related information, then expecting them to add or subtract to get the total.

Roy Lewallen, W7EL

pez wrote:
> -
> "The Third Term"
> -
> Roy Lewallen wrote:
> -
> | No, the average Poynting vector points toward the load.
> | Power leaves the line and enters the load, as it should.
> | ...
> | I imagine your problem
> | with the solution is your notion that
> | the total average power
> | is the difference between the
> | "forward power" and "reverse power".
> |
> | But it's not.
> |
> | I gave the equation showing what the total power
> | is, and as you can see,
> | there's a third term involved.
> | When this is
> | taken into consideration, you see that there's a net power flow out of
> | the line into the load, as there should be.
> | ...
> -
> As usually,
> Mr. Roy Lewallen,

> points the right direction.
> And this time,
> it is of:
> -
> "The Third Term".
> -
> In the whole of the book by R.A.Chipman,
> a phrase, less than a printed line,
> is proved enough to cause a major upset:
> -
> "The third term
> on the right
> represents interaction
> between the two waves."
> -
> But when there is such a steadfast loyalty
> to the existence of some kind of
> "interference"
> between two,
> rather clearly distinct waves,
> the incident and the reflected one,
> it is difficult for anybody
> to compromise himself and accept
> that the same two waves,
> so clearly distinct until now,
> when are coming along a line with complex Z0,
> have to bear in addition
> some kind of
> "interaction".
> -
> Very difficult, indeed.
> -
> Sincerely,
> -
> pez
> SV7BAX
> -
>

263. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:32:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcr0cgdrcv9f2@corp.supernews.com>
Source record: 108829

Clears up what confusion?

Nowhere in my analysis is s11, s12, or s22 mentioned. I don't consider
s12 or s22 to be anything at all, and don't make any claim whatsoevera
about what they are or aren't. Which step or steps of my analysis is/are
incorrect? And in terms of voltages, currents, and powers, why?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Again, I welcome an alternate solution that accounts for all the
>> voltages, currents, and powers, including one that does it with rho < 1.
>
>
> It dawned on me, just now in the shower, what is happening here. When
> you introduced the 'x' parameter, the distance from the load, you
> introduced a 2-port network analysis, be it an s-, h-, y-, z-, or
> whatever-parameter analysis. And of course there are four power
> terms in a 2-port analysis. There are:
>
> 1. The power reflected from the network input back toward the source.
> |s11|^2
>
> 2. The power transmitted through the network port toward the load. |s21|^2
>
> 3. The power re-reflected from the network output back toward the load.
> |s22|^2
>
> 4. The power transmitted through the network port toward the source.
> |s12|^2
>
> These are the four powers you calculated and you consider only |s12|^2 to
> be forward power. That is an error. |s22|^2 is also forward power. These
> two forward power flow vectors have to be added to obtain the total
> forward Poynting vector. I do believe that clears up the confusion.

264. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:34:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f566e14_4@corp.newsgroups.com>
Source record: 108830

Roy Lewallen wrote:

> My, it sure didn't take long to get the discussion diverted from the
> voltages, currents, and powers in the analysis. I'm sorry to say I
> expected that.

Please calm down, Roy. Disagreeing with you is not a diversion. You made a simple error. When you introduced the 'x' term, the distance away from the load, you introduced a 2-port analysis. It is a well known fact that there are four power terms involved in a 2-port analysis as explained in another posting.

> Was I unclear about what I did calculate?

Yes, you were, but it was inadvertent.

> I don't know, and don't really care, where you're trying to go with your
> S parameter analysis. But when you're all done, please translate all
> that wonderful stuff to voltages, currents, and powers, using a finite
> length transmission line, and present your analysis.

I'm just showing you what small error you made when you assumed that only one of the four power terms was the forward power. There are four power terms. They divide up and add to obtain the forward power and reflected power. You neglected to do that.

> Are you having difficulty understanding what I've done simply with
> voltages, currents, and powers?

Nope, I recognize the tiny error you made and am trying to explain it to you. You didn't include all the forward voltages in your forward voltage. There are four voltage terms, two forward and two reflected. You left out half the terms and got the wrong forward or reflected voltage or both. The mistake is in assuming that rho = s11. It doesn't in this case.

> So, you mean that the term containing the product of two sine functions
> is part of Pfwd when the angles are such that the sine functions return
> a positive value, and part of Pref when they return a negative value?

No, after further thought, I think you should NOT have combined those two terms. Four terms is what exists in the analysis so just leave it at four terms. All the terms with a plus sign combine and all the terms with a minus sign combine. Please publish the four term power equation before you used a trig identity to combine the terms. Two of those terms are forward power and two of those terms are reflected power.

> No, I did not derive an s parameter analysis. I derived voltages,
> currents, and powers.

You obviously did a something-parameter analysis (maybe a z-parameter analysis?). Whatever you did results in four power terms, not two plus a third. When you introduced 'x' you introduced an analysis that produces a reflected wave on each side of 'x' and a forward wave on each side of 'x'. That's four waves. You went too far when you combined two of those waves into one especially since one is a forward wave and one is a reflected wave.
--
73, Cecil http://www.qsl.net/w5dxp

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------== Over 100,000 Newsgroups - 19 Different Servers! =-----

265. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:38:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f566ee1_4@corp.newsgroups.com>
Source record: 108831

Roy Lewallen wrote:
> The "problem" lies simply in calculating
> average "forward power" and "reverse power" separately, throwing away
> all time related information, then expecting them to add or subtract to
> get the total.

The s-parameter analysis doesn't have a problem doing that, Roy.
Your analysis won't either when you include all the appropriate
terms.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

266. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:43:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcrlek0kmtb9a@corp.supernews.com>
Source record: 108832

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I didn't, and don't, claim to have derived a "power reflection
>> coefficient". What I calculated was the ratio of reflected voltage to
>> forward voltage at the load, and called its magnitude rho. If there's
>> any step in the analysis that's unclear, I'll be happy to explain it
>> in more detail.
>
>
> What you apparently calculated is s11 which is not always equal to rho.

I calculated the ratio of the reflected to forward voltage at the load,
and called its magnitude rho. If you have some other "rho" you want to
argue about, please call it something else.

>
>> What I have calculated is the ratio of reflected voltage to forward
>> voltage at the load, no more and no less.
>
>
> No, you have calculated the ratio of one of the reflected voltages to
> one of the forward voltages. I believe you have calculated the ratio
> of s21*a1 to s12*a2 when you should be calculating the ratio of
> (s11*a1+s12*a2) to (s21*a1+s22*a2). You simply omitted half the terms.
>

Please repeat my analysis, including the voltages or currents which were
omitted, and explain why they should be included. I used standard steady
state analysis, which infers one forward traveling voltage and current
wave, and one reverse traveling voltage and current wave. Although the
physical meaning of multiple traveling forward and reverse waves in
steady state gets a little hazy to me, I don't think there's anything in
principal that prevents you from assuming any number of forward and
reverse voltage an current waves you'd like, calculating reflection
coefficients for each pair, and adding them all up to get the total.
It'll be interesting to see how you choose to do it.

Of course, by choosing the pairs carefully, you can probably assure that
the magnitude of the reflection coefficient for any pair doesn't exceed
one. I'm not sure what that means or proves, but by all means have at it.

>. . .
>
>> I'm sure that with enough s parameter and optics references, the facts
>> of the matter can be satisfactorily obscured.

>
>
> It is you who is using an s-, h-, y-, z-, or other-parameter analysis
> and are inadvertently obscuring the facts. You left out half the voltage
> terms that should be included in the forward voltage and reflected
> voltage. Add all the reflected voltages together. Add all the forward
> voltages together. Divide the total reflected voltage by the total
> forward voltage.

What the heck are you talking about? Just where in the analysis do you
see any s, h, y, or z parameter? I did calculate an impedance here and
there from voltages and currents -- is that some kind of a no-no in your
eyes?

Again, please show your analysis with the "missing" terms (that is,
voltages and currents) included.
>
>> Your view of how average powers add and travel do force that
>> restriction. I'm looking forward to your alternative analysis, which
>> shows the voltages, currents, and powers at both ends of the line
>> while simultaneously satisfying your notion of how average powers
>> interact.
>
>
> I think all that is built into your analysis. When you include all the
> necessary terms, I will be surprised if everything doesn't fall out
> consistently.

Well, good. So show us.

Roy Lewallen, W7EL

267. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:44:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567078$1_4@corp.newsgroups.com>
Source record: 108836

Roy Lewallen wrote:

> Clears up what confusion?
>
> Nowhere in my analysis is s11, s12, or s22 mentioned. I don't consider
> s12 or s22 to be anything at all, and don't make any claim whatsoevera
> about what they are or aren't.

Those are the reflection and transmission coefficients that represent
the effect the forward waves have on the reflected waves and vice versa.
You said your analysis included that effect so you are performing an
s-parameter-like analysis whether you realize it or not.

> Which step or steps of my analysis is/are
> incorrect? And in terms of voltages, currents, and powers, why?

Please publish your four term power equation and I will show you exactly
what is wrong. Please don't say <rP> and <fP> in that equation but show
the voltage, current, and impedance terms that make up what you think is
<rP> and <fP>. Hint: <rP> is not the total reflected power that you think
it to be. Neither is <fP>.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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268. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:47:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcrsa5bku2s3a@corp.supernews.com>
Source record: 108833

No, no, Cecil. *You* need to include all the separate voltages and currents, to show us. I'm glad that you find the s-parameter analysis to be more trouble free. So do it, and when you're done, substitute back in for transmission line characteristic impedance, length, and loss; and load impedance, then show us the resulting voltages, currents, and powers. Should be easy, no?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> The "problem" lies simply in calculating average "forward power" and
>> "reverse power" separately, throwing away all time related
>> information, then expecting them to add or subtract to get the total.
>
>
> The s-parameter analysis doesn't have a problem doing that, Roy.
> Your analysis won't either when you include all the appropriate
> terms.

269. Re: Electronics questions???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:48:14 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <Pcu5b.25816$S_.9740@fed1read01>
Source record: 108834

Two different formulas and methods for series and parallel AC Circuits;

See URL:
http://www.tpub.com/neets/book2/4l.htm

For 81 in brief calculate Xc
Xc = 3,183 ohms
R=4000 ohms

Assume 4,000 volts
E/R = 1 amp
E/Xc = 1.257 amps

Iz = square root of Ir squared + Ix squared = 1.606 amps

Z=e/Iz = 4000/1.606 = 2490 ohms

For phase angle --- You can use Power Factor = true power divided by
apparent power = 4000/6424 = 0.6225 = PF
and PF is the cos of the phase angle
So cos 0.6225 is = 51.5 degrees
Did some rouning off here and there

Gurus -- check my math.
--
73 From The Signal In The Noise
Caveat Lector Ya All

==========
"carter" <cartw@netart.com> wrote in message
news:3F560CEC.59B0B0CE@netart.com...
> I can't figure out how they got the answers they did on these questions.
>
> Can anyone out there help?
>
> For 81 I get (c) for an anwer not (d) Maybe something to do with
> it being a parallel circuit instead of a series. Didn't know they had
> different
> formulas.
>
> I get (c) for 86. Same story.
>
> I get 300 - j318 for (88)
>
> Can't figure out the other two also.
>
>

>
>
> 81] What is the impedance of a network composed of a
> 100-picofarad capacitor in parallel with a 4000-ohm resistor, at
> 500 kHz? (Specify your answer in polar coordinates.)
>
> a} 2490 ohms, /51.5 degrees.
>
> b} 4000 ohms, /38.5 degrees.
>
> c} 5112 ohms, / -38.5 degrees.
>
> d} 2490 ohms, /-51.5 degrees.@@
>
>
>
>
> 86] What is the impedance of a network composed of a
> 400-ohm-reactance inductor in parallel with a 300-ohm resistor?
> (Specify your answer in polar coordinates.)
>
> a} 240 ohms, / 36.9 degrees.@@
>
> b} 240 ohms, / -36.9 degrees.
>
> c} 500 ohms, / 53.1 degrees.
>
> d} 500 ohms, / -53.1 degrees.
>
>
>
> 88] What is the impedance of a network composed of a
> 0.01-microfarad capacitor in parallel with a 300-ohm resistor, at
> 50 kHz? (Specify your answer in rectangular coordinates.)
>
> a} 150 - j159.
>
> b} 150 + j159.
>
> c} 159 + j150.
>
> d} 159 - j150.@@
>
>
>
>
>
>
>
> 111] A 6 volt battery with 1.2 ohms internal resistance is

> connected across two 3 watt bulbs. What is the current flow?
>
> a} .57 amps.
>
> b} .83 amps.@@
>
> c} 1.0 amps.
>
> d} 6.0 amps.
>
>
>
> 129] How many capacitors of 400 volts and 2.0 microfarads each
> would be necessary to obtain a combination rated at 1600 volts
> and 1.5 microfarads?
>
> a} 10.
>
> b} 12.@@
>
> c} 14.
>
> d} 16.
>
>

270. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:49:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcrvvekevt78e@corp.supernews.com>
Source record: 108835

So do it right and show us how it really should be done.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> You obviously did a something-parameter analysis (maybe a z-parameter
> analysis?). Whatever you did results in four power terms, not two plus
> a third. When you introduced 'x' you introduced an analysis that produces
> a reflected wave on each side of 'x' and a forward wave on each side of
> 'x'. That's four waves. You went too far when you combined two of those
> waves into one especially since one is a forward wave and one is a
> reflected wave.

271. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:53:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcs897u9a4l4e@corp.supernews.com>
Source record: 108837

Yuck.

That should, of course, be "principle", not "principal". Sorry, I really
do know better!

Roy Lewallen, W7EL

Roy Lewallen wrote:
>. . .
> steady state gets a little hazy to me, I don't think there's anything in
> principal that prevents you from assuming any number of forward and
> reverse voltage an current waves you'd like, . .

272. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 22:59:05 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj5rnp$f0f$1@titan.btinternet.com>
Source record: 108838

Dear Cec,

Your arithmetic is abominable. ;o) Dr Slick's vanishing-act was a better tactic.

Your only avenue of escape is to prove the | rho | meter gives incorrect meter readings.

That's likely to be difficult.

The meter is based on precisely the same simple principle as your common-or-garden SWR+Fwd Power+Refl Power meter. In fact, its scale, instead of | rho |, can be simultaneousy calibrated in terms of SWR from 1 to infinity. And 1 million professional housewives supported by trusted ARRL handbooks can't be wrong.

By the way, does that Texas vinyard you mentioned have a website? ;o)

Yours, Reg, G4FGQ

273. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:04:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlcsra10cipj19@corp.supernews.com>
Source record: 108839

Modify what I believe to be a correct analysis in order to satisfy your view of reality? You must be kidding again -- sometimes it's hard to tell.

Somehow I expected that an alternative analysis or any specific correction wouldn't be forthcoming. I'm glad you've got it all sorted out in your own mind, Cecil.

I'll now bow out, unless a coherent alternative analysis, or specific corrections to the one I posted, are presented.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Clears up what confusion?
>>
>> Nowhere in my analysis is s11, s12, or s22 mentioned. I don't consider
>> s12 or s22 to be anything at all, and don't make any claim whatsoevera
>> about what they are or aren't.
>
>
> Those are the reflection and transmission coefficients that represent
> the effect the forward waves have on the reflected waves and vice versa.
> You said your analysis included that effect so you are performing an
> s-parameter-like analysis whether you realize it or not.
>
>> Which step or steps of my analysis is/are incorrect? And in terms of
>> voltages, currents, and powers, why?
>
>
> Please publish your four term power equation and I will show you exactly
> what is wrong. Please don't say <rP> and <fP> in that equation but show
> the voltage, current, and impedance terms that make up what you think is
> <rP> and <fP>. Hint: <rP> is not the total reflected power that you think
> it to be. Neither is <fP>.

274. Re: Small Directional Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:04:34 UTC
From: jgboyles@aol.com
Message-ID: <20030903190434.13238.00000573@mb-m15.aol.com>
Source record: 108840

>Also available on the gray market in a "Low Price Edition".

What does a low price edition on the gray market mean? Sounds like I could get one cheap, just don't know how.

73 Gary N4AST

275. Re: Electronics questions???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:20:54 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <qHu5b.25911$S_.18330@fed1read01>
Source record: 108841

Forgot to mention -- now you can apply it to the other problems

--
73 From The Signal In The Noise
Caveat Lector Ya All
"Caveat Lector" <CL@latin.com> wrote in message
news:Pcu5b.25816$S_.9740@fed1read01...
> Two different formulas and methods for series and parallel AC Circuits;
>
> See URL:
> http://www.tpub.com/neets/book2/4l.htm
>
> For 81 in brief calculate Xc
> Xc = 3,183 ohms
> R=4000 ohms
>
> Assume 4,000 volts
> E/R = 1 amp
> E/Xc = 1.257 amps
>
> Iz = square root of Ir squared + Ix squared = 1.606 amps
>
> Z=e/Iz = 4000/1.606 = 2490 ohms
>
> For phase angle --- You can use Power Factor = true power divided by
> apparent power = 4000/6424 = 0.6225 = PF
> and PF is the cos of the phase angle
> So cos 0.6225 is = 51.5 degrees
> Did some rouning off here and there
>
> Gurus -- check my math.
> --
> 73 From The Signal In The Noise
> Caveat Lector Ya All
>
> ==========
> "carter" <cartw@netart.com> wrote in message
> news:3F560CEC.59B0B0CE@netart.com...
> > I can't figure out how they got the answers they did on these questions.
> >
> > Can anyone out there help?
> >
> > For 81 I get (c) for an anwer not (d) Maybe something to do with
> > it being a parallel circuit instead of a series. Didn't know they had

> > different
> > formulas.
> >
> > I get (c) for 86. Same story.
> >
> > I get 300 - j318 for (88)
> >
> > Can't figure out the other two also.
> >
> >
> >
> >
> > 81] What is the impedance of a network composed of a
> > 100-picofarad capacitor in parallel with a 4000-ohm resistor, at
> > 500 kHz? (Specify your answer in polar coordinates.)
> >
> > a} 2490 ohms, /51.5 degrees.
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> > b} 4000 ohms, /38.5 degrees.
> >
> > c} 5112 ohms, / -38.5 degrees.
> >
> > d} 2490 ohms, /-51.5 degrees.@@
> >
> >
> >
> >
> > 86] What is the impedance of a network composed of a
> > 400-ohm-reactance inductor in parallel with a 300-ohm resistor?
> > (Specify your answer in polar coordinates.)
> >
> > a} 240 ohms, / 36.9 degrees.@@
> >
> > b} 240 ohms, / -36.9 degrees.
> >
> > c} 500 ohms, / 53.1 degrees.
> >
> > d} 500 ohms, / -53.1 degrees.
> >
> >
> >
> > 88] What is the impedance of a network composed of a
> > 0.01-microfarad capacitor in parallel with a 300-ohm resistor, at
> > 50 kHz? (Specify your answer in rectangular coordinates.)
> >
> > a} 150 - j159.
> >
> > b} 150 + j159.
> >
> > c} 159 + j150.

> >
> > d} 159 - j150.@@
> >
> >
> >
> >
> >
> >
> >
> > 111] A 6 volt battery with 1.2 ohms internal resistance is
> > connected across two 3 watt bulbs. What is the current flow?
> >
> > a} .57 amps.
> >
> > b} .83 amps.@@
> >
> > c} 1.0 amps.
> >
> > d} 6.0 amps.
> >
> >
> >
> > 129] How many capacitors of 400 volts and 2.0 microfarads each
> > would be necessary to obtain a combination rated at 1600 volts
> > and 1.5 microfarads?
> >
> > a} 10.
> >
> > b} 12.@@
> >
> > c} 14.
> >
> > d} 16.
> >
> >
>
>

276. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:24:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5679b7_6@corp.newsgroups.com>
Source record: 108842

Roy Lewallen wrote:
> I calculated the ratio of the reflected to forward voltage at the load,
> and called its magnitude rho.

No you didn't. The voltage that you think is the reflected voltage
is only one term of two. The voltage that you think is the forward
voltage is only one term of two.

> Please repeat my analysis, including the voltages or currents which were
> omitted, and explain why they should be included.

I have already done that, Roy. There are four waves. You must combine
the four waves to get the forward wave and the reflected wave. You
didn't do that. You declared one of the four waves to be the forward
wave and one to be the reflected wave and added the other two to get
a "third wave". That is an error.

> What the heck are you talking about? Just where in the analysis do you
> see any s, h, y, or z parameter? I did calculate an impedance here and
> there from voltages and currents -- is that some kind of a no-no in your
> eyes?

OK, let me do it in a way that you can understand. When you introduced
'x', you introduced a 2-port analysis whether you realize it or not.
In a 2-port analysis, there are four waves, two forward and two reflected.
The four power waves are proof that you are inadvertently using a 2-port
analysis. There are forward and reflected waves on the left side of 'x'
and there are forward and reflected waves on the right side of 'x'.
Let's look at only the voltages for now where rho is a reflection
coefficient and tau is a transmission coefficient.

V1 = Vfwd1*tau1 similar to s21*a1

V2 = Vref2*rho2 similar to s22*a2

V3 = Vfwd1*rho1 similar to s11*a1

V4 = Vref2*tau2 similar to s12*a2

You are saying that one of these voltages is the forward voltage.
That's just not true.

V1+V2 = forward voltage similar to b2=s21*a1+s22*a2

V3+V4 = reflected voltage similar to b1 = s11*a1+s12*a2

> Again, please show your analysis with the "missing" terms (that is,
> voltages and currents) included.

Please publish your raw four term power equation, omitting the <rP>
and <fP> terms which you are wrong about. If you have already published
that equation, please tell me the date so I can go look it up.
--
73, Cecil http://www.qsl.net/w5dxp

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277. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:27:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567a7f_6@corp.newsgroups.com>
Source record: 108844

Roy Lewallen wrote:

> No, no, Cecil. *You* need to include all the separate voltages and
> currents, to show us.

Do you think I am capable of inventing something so complex just to pull your leg, Roy? What I am saying is grounded in physics. You simply made a simple mistake in assuming one term was forward voltage when actually, there are two terms when added together, yield the forward voltage. You didn't realize that you were doing a 2-port analysis.
--
73, Cecil http://www.qsl.net/w5dxp

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278. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:28:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567acc_6@corp.newsgroups.com>
Source record: 108845

Roy Lewallen wrote:
> So do it right and show us how it really should be done.

Sorry, that diversion won't work. Correct your error first
and effort on my part will be avoided.
--
73, Cecil http://www.qsl.net/w5dxp

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279. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:31:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567b74$1_6@corp.newsgroups.com>
Source record: 108846

Reg Edwards wrote:
> Your only avenue of escape is to prove the | rho |
> meter gives incorrect meter readings.

Nope, your only avenue of escape is to prove that a passive
load can reflect more than the incident power. :-)

> By the way, does that Texas vinyard you mentioned have
> a website? ;o)

I don't know but I will check. Heck, I might even try a
bottle to see if it's worth sending to you.
--
73, Cecil http://www.qsl.net/w5dxp

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280. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:32:00 UTC
From: kd1@sympatico.ca
Message-ID: <3F5679F0.784EAE2B@sympatico.ca>
Source record: 108848

Cecil Moore wrote:
>
> William E. Sabin wrote:
> > 4) The determination that rho magnitude in a transmission line can be
> > greater than 1.0 is correct. In a passively loaded line fed by an
> > oscillator, where there is no positive feedback from load to oscillator,
> > there is no problem about a rho magnitude greater than 1.0.
>
> But can |rho|=Sqrt(Pref/Pfwd) ever be greater than 1.0 for a
> passive load?

Seshardi, after two pages on rho>1, has the following:

In summary, we emphasize that the magnitude of the voltage reflection coefficient being greater than unity is not inconsistent with the passivity of the load and that in situations where it is physically meaningful to separate the total power as the sum of the incident and reflected powers it follows that the magnitude of the reflected power is less than the incident power, as it should be for a passive load.

It follows that when rho is greater than unity, it is not 'physically meaningful to separate the total power as the sum of the incident and reflected power' so the equation
|rho| = Sqrt(Pref/Pfwd)
has no meaning.

And yes, |rho| can be greater than unity for a passive load.

...Keith

281. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:32:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <thrclvcegtathj38lebpub123em0dmu41g@4ax.com>
Source record: 108843

On Wed, 03 Sep 2003 15:33:56 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

a vast assemblage of text snipped.

Hi Cecil,

So, do you want the bridge description
Or
Not?

This question was even simpler than that of two resistors and the hank
of wire. I can look forward to the amusement of how long a side
thread this may develop into.

73's
Richard Clark, KB7QHC

282. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:33:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567bde$1_6@corp.newsgroups.com>
Source record: 108847

Roy Lewallen wrote:
> I'll now bow out, unless a coherent alternative analysis, or specific
> corrections to the one I posted, are presented.

Heh, heh, just discovered how wrong you are, eh? :-) It was an
easy mistake to make, Roy.
--
73, Cecil http://www.qsl.net/w5dxp

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283. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:39:27 UTC
From: kd1@sympatico.ca
Message-ID: <3F567BAF.B01266AA@sympatico.ca>
Source record: 108849

Cecil Moore wrote:
>
> 1. The power reflected from the network input back toward the source. |s11|^2
>
> 2. The power transmitted through the network port toward the load. |s21|^2
>
> 3. The power re-reflected from the network output back toward the load. |s22|^2
>
> 4. The power transmitted through the network port toward the source. |s12|^2
>
> These are the four powers you calculated and you consider only |s12|^2 to
> be forward power. That is an error. |s22|^2 is also forward power. These
> two forward power flow vectors have to be added to obtain the total
> forward Poynting vector. I do believe that clears up the confusion.

Was not the discussion about powers on the source side?
Is not |s22|^2 on the load side?

...Keith

284. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:47:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567f31$1_1@corp.newsgroups.com>
Source record: 108850

kd1@sympatico.ca wrote:
> And yes, |rho| can be greater than unity for a passive load.

But the power reflection coefficient cannot be greater than 1.0
which is what the argument is all about.
--
73, Cecil http://www.qsl.net/w5dxp

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285. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:50:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f567fc4$1_1@corp.newsgroups.com>
Source record: 108851

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>
> a vast assemblage of text snipped.
>
> Hi Cecil,
>
> So, do you want the bridge description
> Or
> Not?

Since you snipped my posting, I have no idea what it was all about.
--
73, Cecil http://www.qsl.net/w5dxp

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286. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:56:11 UTC
From: kd1@sympatico.ca
Message-ID: <3F567F9B.4CB8C795@sympatico.ca>
Source record: 108856

Reg Edwards wrote:
>
> Cecil and others, even authors of books, have said -
>
> > - - - - |rho|^2 cannot be greater than 1.0 - - - -
>
> ==========
>
> Would you change your minds if I describe a
> reflection-coefficient bridge, which anybody can
> construct, which accurately measures values of | rho |
> up to its greatest possible value in transmission lines
> of 2.414 There's no catch!

I don't think I need to change my mind, but I would like
to see a description of a reflection-coefficient bridge,
if you could be so kind as to post it.

Thanks,

Keith

287. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-03 23:57:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f56816b_1@corp.newsgroups.com>
Source record: 108853

kd1@sympatico.ca wrote:

> Cecil Moore wrote:
>
>>1. The power reflected from the network input back toward the source. |s11|^2
>>
>>2. The power transmitted through the network port toward the load. |s21|^2
>>
>>3. The power re-reflected from the network output back toward the load. |s22|^2
>>
>>4. The power transmitted through the network port toward the source. |s12|^2
>>
>>These are the four powers you calculated and you consider only |s12|^2 to
>>be forward power. That is an error. |s22|^2 is also forward power. These
>>two forward power flow vectors have to be added to obtain the total
>>forward Poynting vector. I do believe that clears up the confusion.
>
> Was not the discussion about powers on the source side?
> Is not |s22|^2 on the load side?

Roy apparently doesn't realize it, but when he introduced 'x' into his
equations, he introduced 2-port analysis terms so, in his math, there are
indeed two powers existing on the load side. That's what got him confused
and he forgot to include those terms in his forward power and reflected
power, i.e. his <rP> is not all of the reflected power and his <fP>
is not all of the forward power. It's an easy mistake to make. But to
compound his mistake, he then combined those two terms on the load side,
one reflected and one forward, into one term so it is difficult to determine
which way its power flow vector points.
--
73, Cecil http://www.qsl.net/w5dxp

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288. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:00:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj5vac$lv7$1@titan.btinternet.com>
Source record: 108852

What all you experts have forgotten is that SWR on a lossless line is the ratio of two voltages, max and min, SPACED APART BY 1/4-WAVELENGTH. That is if the line is long enough to contain both a max and a min.

When the line is not lossless, ie., it has appreciable attenuation in dB per 1/4-wavelength, then the ratio is 'distorted' and has a phase angle. So negative values of indicated SWR can be expected at some values of | Vmax | / | Vmin |

SWR is calculated from the square of | rho |. As I've said before, immediately | rho | is squared, half the information it contains is junked. Any discussion/argument about power waves following rho-squared on a lossy (a real) line is meaningless piffle.

Anybody who writes books about power waves, selling them to make a living, is obtaining money under false pretences.

On the other hand we should be kind to otherwise unemployed Ph.D's. They too have wive's and kid's to clothe, feed and provide a roof over their heads. That's life!

Reg.

289. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:04:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f568332_1@corp.newsgroups.com>
Source record: 108855

Reg Edwards wrote:

> Roy wrote -
>>If you have some other "rho" you want to
>>argue about, please call it something else.
>
> - - - and while you are about it change the name of
> the SWR meter.

Trouble is, (Z2-Z1)/(Z2+Z1) is not always equal to Sqrt(Pref/Pfwd)
What then?
--
73, Cecil http://www.qsl.net/w5dxp

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290. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:05:23 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj5vk3gqf1@hercules.btinternet.com>
Source record: 108854

Roy wrote -
> If you have some other "rho" you want to
> argue about, please call it something else.

==========

- - - and while you are about it change the name of
the SWR meter.

291. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:25:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s51dlv4ugasf69kem4ncn7791o5h5971ti@4ax.com>
Source record: 108857

On Wed, 03 Sep 2003 18:50:08 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Since you snipped my posting, I have no idea what it was all about.

Hi Cecil,

I didn't this time, and I doubt you are any further ahead. Perhaps
you suffer from the Motorola syndrome of confusion. ;-)

So, is your response to the offer of the bridge description
Yes?
or
No?

(Consult google to fill the short attention span problems.)

73's
Richard Clark, KB7QHC

292. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:38:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj61iupen1@titan.btinternet.com>
Source record: 108858

> So, do you want the bridge description or not?

> Richard Clark, KB7QHC

==========

Rich, pleased to receive a message from you succinct
enough to read. ;o)

But it looks like there's at least two contestants who
have now vanished from the thread.

Keep stirring it up.

293. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 00:55:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <463dlvos5h27us9pfq4j19nqks3k1jinoi@4ax.com>
Source record: 108859

On Thu, 4 Sep 2003 00:38:54 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>> So, do you want the bridge description or not?
>
>> Richard Clark, KB7QHC
>
>============================
>
>Rich, pleased to receive a message from you succinct
>enough to read. ;o)
>
>But it looks like there's at least two contestants who
>have now vanished from the thread.
>
>Keep stirring it up.
>

How do you mix an ingredient of one?

That query alone will bring in at least a dozen recipes. ;-)

294. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 01:27:54 UTC
From: kd1@sympatico.ca
Message-ID: <3F56951A.761A6B65@sympatico.ca>
Source record: 108860

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > And yes, |rho| can be greater than unity for a passive load.
>
> But the power reflection coefficient cannot be greater than 1.0
> which is what the argument is all about.

Which is entirely consistent with my previous statement:
It follows that when rho is greater than unity, it is not 'physically meaningful to separate the total power as the sum of the incident and reflected power' so the equation
|rho| = Sqrt(Pref/Pfwd)
has no meaning.

I suppose one might phrase it as 'there is no such thing as a power reflection coefficient' when it is not 'physically meaningful to separate the total power as the sum of the incident and reflected power'.

...Keith

295. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 01:36:53 UTC
From: kd1@sympatico.ca
Message-ID: <3F569735.B651F2A9@sympatico.ca>
Source record: 108861

Cecil Moore wrote:
>
> Reg Edwards wrote:
>
> > Roy wrote -
> >>If you have some other "rho" you want to
> >>argue about, please call it something else.
> >
> > - - - and while you are about it change the name of
> > the SWR meter.
>
> Trouble is, (Z2-Z1)/(Z2+Z1) is not always equal to Sqrt(Pref/Pfwd)
> What then?

The equality was always iffy when you don't take the absolute value.
But once you do, the equality may hold depending on the equations
you use to derive Pref and Pfwd.

Whether Pref or Pfwd represent something physically meaningful is
another question, also dependent on how you derive them.

...Keith

296. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 02:32:36 UTC
From: unkadean <dnorris@k7no.com>
Message-ID: <cq8dlv0dfi6p7gb45p2eg9u9b4u5jc12nd@4ax.com>
Source record: 108862
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

On Wed, 03 Sep 2003 08:31:18 +0100, Walt Davidson
<g3nyy@despammed.com> wrote:

>On Tue, 02 Sep 2003 20:40:41 -0700, unkadean <dnorris@k7no.com> wrote:
>
>>On Mon, 01 Sep 2003 18:49:14 -0500, Cecil Moore
>><Cecil.A.Moore@ieee.org> wrote:
>>
>>>Walt Davidson wrote:
>>>> Certainly, most of the early Amstrad 8-bit computers used CP/M and DOS
>>>> was developed, based upon CP/M, around 1980.
>>>
>>>Actually, IBM looked at CP/M-86 for their PC operating system and then
>>>decided to go with Microsoft instead of Digital Research. If DR had
>>>gotten the contract, Bill Gates' life would probably be a lot different.
>>
>>
>>And if Motorola would have agreed to quantity pricing on the 68000
>>series, Intel would be in the ashbin of history.
>
>And if Texas Instruments has marketed their TMS9900 16-bit processor
>properly, things would look a lot different today.
>:-)
>
>73 de G3NYY

I used to work with a chap who had earlier (late 70's or early 80's)
worked with an ambitious young guy in Albuquerque. When said
youngster wanted to move his small business up to Washington state, he
offered my friend a large chunk of stock to go with him.

He turned it down. I wonder what 20% of MS would be worth today?

He would every morning look at his shitty office and miserable company
we worked for and cry until the first break. By then he was kinda
back in control.

unk

297. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 04:42:16 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <loz5b.21209$EW1.9075@newsread1.news.atl.earthlink.net>
Source record: 108863

Cecil:

[snip]
> forward voltage. You didn't realize that you were doing a 2-port
> analysis.
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

I was just castigated by Roy and Dave Robbins on another thread for making postings about
"ports", apparently we are not allowed to discuss "ports" when we are discussing transmission
lines since ports have only to do with networks and transmission lines have no ports!!!

;-)

--
Peter K1PO [A guy who believes that transmission lines have two ports.]
Indialantic By-the-Sea, Fl

298. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 05:10:49 UTC
From: richardharrison@webtv.net
Message-ID: <11425-3F56C959-43@storefull-2312.public.lawson.webtv.net>
Source record: 108864

Keith wrote:
"I suppose one might phrase it as "There is no such thing as a power reflection coefficient" when it is not physically meaningful to separate the total power as the sum of the incident and reflected power so the equatiomn:
[rho] = sq. rt. (Pref / Pfwd) has no meaning."

We don`t have a choice of options on a menu to select or reject from. Reality is whatever it is and we accept it and describe it as best we can.

Terman says on page 97 of his 1955 edition:
"{rho} = (SWR-1) / SWR + 1."

Power varies as the equare of the voltage, because when you increase the volts you also automatically increase the amps (Ohm`s law). Thus, Terman has a subscript at the bottom of page 97 which is relevant:
"The definition of standing-wave ratio is sometimes called voltage standing-wave ratio (VSWR) to distinguish it from the standing-wave ratio expressed as a power ratio which is (Emax / Emin) squared."

In my long rxperience, I`ve found it`s never profitable to argue with Terman. He is as close to infallible as any wrirter I`ve ever read.

Best regards, Richard Harrison, KB5WZI

299. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 05:50:41 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032150.2f7ebd46@posting.google.com>
Source record: 108865

kd1@sympatico.ca wrote in message news:<3F56951A.761A6B65@sympatico.ca>...
> Cecil Moore wrote:
> >
> > kd1@sympatico.ca wrote:
> > > And yes, |rho| can be greater than unity for a passive load.
> >
> > But the power reflection coefficient cannot be greater than 1.0
> > which is what the argument is all about.
>
> Which is entirely consistent with my previous statement:
> It follows that when rho is greater than unity, it is not 'physically
> meaningful to separate the total power as the sum of the incident and
> reflected power' so the equation
> |rho| = Sqrt(Pref/Pfwd)
> has no meaning.
>

It certainly does, because the ratio Pref/Pfwd is directly related
to the
ratio [rho]. Consider that after the absolute value brackets, the
phase information is gone. But since we are going to a ratio of
average (RMS)
values OR peak values of power, it doesn't matter.

Are you gonna re-write some books?

Slick

300. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 05:57:25 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032157.1339d299@posting.google.com>
Source record: 108866

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f5615d4_8@corp.newsgroups.com>...
> Dr. Slick wrote:
> > And how do you explain the rho > 1 for a passive network?
> > Shouldn't be possible. And neither should a negative SWR.
>
> This seems to me to be somewhat akin to the fact that s11 and
> rho can have different values at an impedance discontinuity
> where a 'third power' is commonplace. Roy's 'third power' at
> the load appears to be analogous to a re-reflection of some
> sort as the inductive load tries and fails to dump energy
> back into the Z0=68-j39 transmission line. A re-reflection
> is another component of forward power.
>
> The ratio of reflected Poynting vector to forward Poynting
> vector is |rho|^2. In Roy's example, the total average
> Poynting vector points toward the load indicating that
> (Pz+ - Pz-) > 0. That means |rho|^2 cannot be greater
> than 1.0.

Cecil,

The ratio Pref/Pfwd is directly related to the ratio [rho].
Consider that after the absolute value brackets, the phase information
is gone. But since we are going to a ratio of average (RMS)
values OR peak values of power, it doesn't matter.

In other words, if you use V**2/R, the "V" can be either peak or
RMS, it doesn't matter, because it is a ratio. And of course, the "R"
doesn't matter either. And of course, the phase information is gone
with
the absolute value brackets.

If you agree that the Pref/Pfwd ratio cannot be greater than 1
for a passive network, then neither can the [Vref/Vfwd]= rho be
greater
than 1 either.

Some people wanna rewrite some books here.

Slick

301. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:00:41 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032200.70023028@posting.google.com>
Source record: 108867

kd1@sympatico.ca wrote in message news:<3F569735.B651F2A9@sympatico.ca>...
> >
> > Trouble is, (Z2-Z1)/(Z2+Z1) is not always equal to Sqrt(Pref/Pfwd)
> > What then?
>
> The equality was always iffy when you don't take the absolute value.
> But once you do, the equality may hold depending on the equations
> you use to derive Pref and Pfwd.
>
> Whether Pref or Pfwd represent something physically meaningful is
> another question, also dependent on how you derive them.
>
> ...Keith

Cecil,

The ratio Pref/Pfwd is directly related to the ratio [rho].

Pref/Pfwd = [rho]**2 Absolute value brackets are a must!

Consider that after the absolute value brackets, the phase information
is gone. But since we are going to a ratio of average (RMS)
values OR peak values of power, it doesn't matter.

In other words, if you use V**2/R, the "V" can be either peak or
RMS, it doesn't matter, because it is a ratio. And of course, the "R"
doesn't matter either. And of course, the phase information is gone
with
the absolute value brackets.

If you agree that the Pref/Pfwd ratio cannot be greater than 1
for a passive network, then neither can the [Vref/Vfwd]= rho be
greater
than 1 either.

Some people wanna rewrite some books here.

Slick

302. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:07:10 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032207.50a2e671@posting.google.com>
Source record: 108868

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<bj5vac$lv7$1@titan.btinternet.com>...
>
> When the line is not lossless, ie., it has appreciable
> attenuation in dB per 1/4-wavelength, then the ratio is
> 'distorted' and has a phase angle. So negative values
> of indicated SWR can be expected at some values of |
> Vmax | / | Vmin |
>

What are you talking about? If it have losses, and they
are dissipative losses, the amplitude of the voltage will
decrease due to voltage drops. That would be moving AWAY
from having a greater reflected voltage than an incident one.

But, that's impossible anyways with a passive network.

The concept of Negative SWRs is rubbish.

> SWR is calculated from the square of | rho |. As I've
> said before, immediately | rho | is squared, half the
> information it contains is junked. Any
> discussion/argument about power waves following
> rho-squared on a lossy (a real) line is meaningless
> piffle.
>
> Anybody who writes books about power waves, selling
> them to make a living, is obtaining money under false
> pretences.
>
> On the other hand we should be kind to otherwise
> unemployed Ph.D's. They too have wive's and kid's to
> clothe, feed and provide a roof over their heads.
> That's life!
> ---
> Reg.

Remind me not to be YOUR book when it comes out!

The ratio Pref/Pfwd is directly related to the ratio [rho].

Pref/Pfwd = [rho]**2 Absolute value brackets are a must!

Consider that after the absolute value brackets, the phase information
is gone. But since we are going to a ratio of average (RMS)
values OR peak values of power, it doesn't matter.

In other words, if you use V**2/R, the "V" can be either peak or
RMS, it doesn't matter, because it is a ratio. And of course, the "R"
doesn't matter either. And of course, the phase information is gone
with
the absolute value brackets.

If you agree that the Pref/Pfwd ratio cannot be greater than 1
for a passive network, then neither can the [Vref/Vfwd]= rho be
greater
than 1 either.

Some people wanna rewrite some books here.

Slick

303. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:09:26 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bj6kuo$c1e$1@nic.grnet.gr>
Source record: 108769

```
-
| Dr. Slick wrote
| ...
| Also, i have never see a negative SWR
| in my life
| ...
-
Correctly.
-
Because the SWR constitutes
a "par excellence" conditional definition,
when a blind calculation of this
has a result lower than one,
some of its assumptions maybe are not valid.
-
Sincerely,
-
pez
SV7BAX
-
```

304. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:11:14 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032211.4d8c60b7@posting.google.com>
Source record: 108770

kd1@sympatico.ca wrote in message news:<3F5679F0.784EAE2B@sympatico.ca>...
>
> And yes, |rho| can be greater than unity for a passive load.
>
> ...Keith

Absolute Rubbish.. Could you produce a passive circuit that
will reflect a greater voltage than what you feed it? I'd
LOVE to see that...

The ratio Pref/Pfwd is directly related to the ratio [rho].

Pref/Pfwd = [rho]**2 Absolute value brackets are a must!

Consider that after the absolute value brackets, the phase information
is gone. But since we are going to a ratio of average (RMS)
values OR peak values of power, it doesn't matter.

In other words, if you use V**2/R, the "V" can be either peak or
RMS, it doesn't matter, because it is a ratio. And of course, the "R"
doesn't matter either. And of course, the phase information is gone
with
the absolute value brackets.

If you agree that the Pref/Pfwd ratio cannot be greater than 1
for a passive network, then neither can the [Vref/Vfwd]= rho be
greater
than 1 either.

Some people wanna rewrite some books here.

Slick

305. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:16:39 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309032216.e1affd5@posting.google.com>
Source record: 108771

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<YtSdnV_SOJGl1MuiXTWJgA@crocker.com>...
> sorry, no scanner here.
>
> how do you get rho>1? please give me the Zo and Zl to try out, i have been
> playing for a while with the basic equations and haven't found a case where
> either formulat gives rho>1.
>
> and of course if |rho|<=1 then swr can never be negative.

I think Reg put it best:

"Dear Dr Slick, it's very easy.

Take a real, long telephone line with Zo = 300 - j250 ohms at 1000 Hz.

Load it with a real resistor of 10 ohms in series with a real
inductance of
40 millihenrys.

The inductance has a reactance of 250 ohms at 1000 Hz.

If you agree with the following formula,

Magnitude of Reflection Coefficient of the load, ZL, relative to line
impedance

= (ZL - Zo) / (ZL + Zo) = 1.865 which exceeds unity,

and has an angle of -59.9 degrees.

The resulting standing waves may also be calculated.

Are you happy now ?"

Reg, G4FGQ

If it were not for Reg pointing out this example, i wouldn't have
researched and corrected my original, "purely real" Zo post with the
more general conjugate Zo formula.

And i researched it because i knew that you cannot have a R.C.
greater than one for a passive network (you can only have a R.C.
greater than one for an active network, which would be a "return gain"
instead of a "return loss"), so i knew that when Zo is complex, my
original post must have been wrong.

Intelligent people can be close-minded, that is for certainly, in
which case, their intelligence is blunted.

Slick

306. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 06:37:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5andlvgbeai9mk9ubg5pu30u7kcshi0up3@4ax.com>
Source record: 108772

On 3 Sep 2003 23:16:39 -0700, radio913@aol.com (Dr. Slick) wrote:

>
>I think Reg put it best:

Hi OM,

If you are going to quote him as an authority supporting you, you
should at least accept his offer of a bridge to settle this hash
shouldn't you? You can't run far on one legged stilts.

73's
Richard Clark, KB7QHC

307. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 07:42:48 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bj6qdpgdh1@nic.grnet.gr>
Source record: 108773

```
-
| Roy Lewallen wrote:
| ...
| I've said many
| times that it's risky to abandon the time information in the power
| waveform and deal only with averages.
| ...
-
Dear Mr. Roy Lewallen,
-
I do agree entirely.
-
From a long time ago
I have a cloudy suspicion,
not to say "obsession",
that an unjudicial use
of the indirect complex analysis,
in the manipulation
of time harmonic matters,
has some side-effects,
at least in a number of cases,
which maybe include
the one under discussion.
-
Therefore,
at least in these cases,
a complex analysis obscures the facts,
becomes redundant,
and for the sake of clearness,
must be abandoned and replaced
by the equivalent manipulation
of the direct real time dependence.
-
The real analysis,
being only an ostensibly tedious one
in this era of so much computing power,
it is expected to be proved as
the most enlightening one.
-
Sincerely yours,
-
pez
SV7BAX
-
```

308. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 11:17:56 UTC
From: kd1@sympatico.ca
Message-ID: <3F571F64.211219FE@sympatico.ca>
Source record: 108774

Richard Harrison wrote:
>
> Keith wrote:
> "I suppose one might phrase it as "There is no such thing as a power
> reflection coefficient" when it is not physically meaningful to separate
> the total power as the sum of the incident and reflected power so the
> equatiomn:
> [rho] = sq. rt. (Pref / Pfwd) has no meaning."
>
> We don`t have a choice of options on a menu to select or reject from.
> Reality is whatever it is and we accept it and describe it as best we
> can.
>
> Terman says on page 97 of his 1955 edition:
> "{rho} = (SWR-1) / SWR + 1."
>
> Power varies as the equare of the voltage, because when you increase the
> volts you also automatically increase the amps (Ohm`s law). Thus, Terman
> has a subscript at the bottom of page 97 which is relevant:
> "The definition of standing-wave ratio is sometimes called voltage
> standing-wave ratio (VSWR) to distinguish it from the standing-wave
> ratio expressed as a power ratio which is (Emax / Emin) squared."
>
> In my long rxperience, I`ve found it`s never profitable to argue with
> Terman. He is as close to infallible as any wrirter I`ve ever read.

Terman may be infallible, but I often find it unwise to trust his
interpreters.

The mention of SWR strongly implies lossless lines since VSWR varies
along a lossy line. Perhaps in prose previous to the equation above
he has limited his discussion to the lossless case. Quotes out of
context must be interpreted with great care.

...Keith

309. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 12:31:22 UTC
From: kd1@sympatico.ca
Message-ID: <3F57309A.74718E0@sympatico.ca>
Source record: 108775

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F56951A.761A6B65@sympatico.ca>...
> > Cecil Moore wrote:
> > >
> > > kd1@sympatico.ca wrote:
> > > > And yes, |rho| can be greater than unity for a passive load.
> > >
> > > But the power reflection coefficient cannot be greater than 1.0
> > > which is what the argument is all about.
> >
> > Which is entirely consistent with my previous statement:
> > It follows that when rho is greater than unity, it is not 'physically
> > meaningful to separate the total power as the sum of the incident and
> > reflected power' so the equation
> > |rho| = Sqrt(Pref/Pfwd)
> > has no meaning.
> >
>
> It certainly does, because the ratio Pref/Pfwd is directly related
> to the
> ratio [rho]. Consider that after the absolute value brackets, the
> phase information is gone. But since we are going to a ratio of
> average (RMS)
> values OR peak values of power, it doesn't matter.
>
> Are you gonna re-write some books?

Don't think I need to. But many need to read their books with more care.

The root question is:
Do Prev and Pfwd have physical meaning?
or
Are Prev and Pfwd just poorly named quantities which are useful
in certain (common) circumstances?

Once you settle on the latter definition, your difficulties will
disappear and you will be free to experience rho through its full
range of values.

The proof that Prev and Pfwd are not, in general, physical things
has been offerred on many recent threads.

Although useful, it is unfortunate that Pnet does equal Pfwd-Prev
for many common situations since people are tempted to generalize.
The belief then becomes so ingrained, that when examples are

presented which demonstrate the lack of generality, the
example is rejected, or the equations modified, rather than
examining the incorrect beliefs which lead to the difficulties.

...Keith

310. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 12:38:44 UTC
From: kd1@sympatico.ca
Message-ID: <3F573254.D96A3CD2@sympatico.ca>
Source record: 108776

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5679F0.784EAE2B@sympatico.ca>...
> >
> > And yes, |rho| can be greater than unity for a passive load.
> >
> > ...Keith
>
> Absolute Rubbish.. Could you produce a passive circuit that
> will reflect a greater voltage than what you feed it? I'd
> LOVE to see that...

Several examples have been presented, but rather than accepting
them, you changed the definition of rho. Perhaps you could build
one of these circuits to determine if modifying the definition
of rho was appropriate.

> The ratio Pref/Pfwd is directly related to the ratio [rho].
>
> Pref/Pfwd = [rho]**2 Absolute value brackets are a must!
>
> Consider that after the absolute value brackets, the phase information
> is gone. But since we are going to a ratio of average (RMS)
> values OR peak values of power, it doesn't matter.
>
> In other words, if you use V**2/R, the "V" can be either peak or
> RMS, it doesn't matter, because it is a ratio. And of course, the "R"
> doesn't matter either. And of course, the phase information is gone
> with
> the absolute value brackets.
>
> If you agree that the Pref/Pfwd ratio cannot be greater than 1

Which I haven't since Pref and Pfwd are just computed numbers and
the result for some circuits is that Pref/Pfwd is greater than 1.
Of course, Pnet is not equal to Pfwd-Pref in these circumstances
so there is no violation of basic physics. It is just that the
computation of Pfwd and Pref does not really produce real powers
(though, again unfortunately, the dimension of the quantity produced
is power).

> for a passive network, then neither can the [Vref/Vfwd]= rho be
> greater
> than 1 either.

...Keith

311. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 13:34:53 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vlefqmb44tnr8f@corp.supernews.com>
Source record: 108777

Richard Harrison wrote:
>
>
> In my long rxperience, I`ve found it`s never profitable to argue with
> Terman. He is as close to infallible as any wrirter I`ve ever read.
>

All of the handy-dandy transmission line formulas
that we have been using for many years apply
specifically to lossless lines.

A line with loss has a complex value of Z0. If the
imaginary part of Z0 is more than a few percent of
the real part we should use different methods.

One famous example:

Pload = Pforward - Preflected

is one that has to be treated with suspicion if
the line has appreciable loss (complex Z0).

Another is :

SWR = [1+|rho|]/[1-|rho|]

At high values of rho close to 1.0, SWR becomes a
totally useless concept. This is true regardless
of which formula for rho that we use.

We use the Smith chart outer circle to plot
lengths of transmission line, for example stubs
and matching transformers. We assume these lines
taken by themselves are lossless and have infinite
SWR (the outer circle of the Smith chart is the
"locus" of infinite SWR).

If we know the matched loss of a particular coax
(dB per 100 ft) it is far better to use a math
program and calculate everything, if the matched
loss is not negligible. The computer is much more
revealing than the Smith chart when line loss is
significant.

Bill W0IYH

312. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 13:56:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57460e_5@corp.newsgroups.com>
Source record: 108778

Peter O. Brackett wrote:
> I was just castigated by Roy and Dave Robbins on another thread for making
> postings about
> "ports", apparently we are not allowed to discuss "ports" when we are
> discussing transmission
> lines since ports have only to do with networks and transmission lines have
> no ports!!!

Darn Peter, I was hoping you could help me explain to Roy what is wrong with
his analysis - that he is using a 2-port analysis and getting four power terms
as a result, two of which have to be added to get forward power and the other
two of which have to be added to get reflected power.
--
73, Cecil http://www.qsl.net/w5dxp

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313. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:04:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f574805$1_5@corp.newsgroups.com>
Source record: 108780

Dr. Slick wrote:
> If you agree that the Pref/Pfwd ratio cannot be greater than 1
> for a passive network, then neither can the [Vref/Vfwd]= rho be
> greater than 1 either.

But apparently rho=(Z2-Z1)/(Z2+Z1) can be greater than unity. So
those are not the same reflection coefficients. A physical rho
and an image rho are quite often different values. s11 is a physical
rho. Vref/Vfwd is an image rho.
--
73, Cecil http://www.qsl.net/w5dxp

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314. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:07:15 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <nGH5b.354477$uu5.69628@sccrnsc04>
Source record: 108779

Peter O. Brackett wrote:

> --
> Peter K1PO [A guy who believes that transmission lines have two ports.]
>
>

Is that one on the East Coast and one on the West Coast??

Or, how about: one with an in'port' and the second with an out'port'?

:-)

Deacon Dave, W1MCE

315. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:08:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57490d$1_5@corp.newsgroups.com>
Source record: 108782

Dr. Slick wrote:
> If you agree that the Pref/Pfwd ratio cannot be greater than 1
> for a passive network, then neither can the [Vref/Vfwd]= rho be
> greater
> than 1 either.

Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
greater than one. Both are defined as 'rho' but they are not
always equal. (Z2-Z1)/(Z2+Z1) is a physical reflection coefficient.
Sqrt(Pref/Pfwd) is an image reflection coefficient.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

316. Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:11:25 UTC
From: arrow146@aol.com
Message-ID: <20030904101125.28624.00000339@mb-m03.aol.com>
Source record: 108781

Hello,

I could use some help if you have time.
Redone some of my web page, now it don't seem to be
working very well. Problem may be my AOL browser, seems
to work better using Internet Explorer, still on aol.

I have been playing with new software (Adobe Go Live)
Using a lot of "Tables" on the main page, that may be
what is screwing it up.
Could it be the web page is taking to long to load that
some of the graphics don'tload ?

Also adding a "Parts Catalog", it is also using Tables
but it seems to be working fine.

So could you please check it out <A
HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
and see if it works on your system.
Thanks!
73 Al Lowe N0IMW

317. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:19:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f574b8c_5@corp.newsgroups.com>
Source record: 108783

kd1@sympatico.ca wrote:
> It is just that the
> computation of Pfwd and Pref does not really produce real powers
> (though, again unfortunately, the dimension of the quantity produced
> is power).

Funny how they can heat resistors both at the load end and at the source end when the source is equipped with a circulator+load.

Incidentally, I've come up with a proof that there are no reflections at a voltage null in a homogeneous transmission line. Consider a 50 ohm lossless feedline. At a voltage null -

rho = (50-50)/(50+50) = 0 i.e. no reflections in either direction
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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318. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:35:38 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <%4I5b.26137$S_.12649@fed1read01>
Source record: 108784

Folks -- the URL should be
http://arrowantennas.com/

Not as posted

"Arrow146" <arrow146@aol.com> wrote in message
news:20030904101125.28624.00000339@mb-m03.aol.com...
> Hello,
>
> I could use some help if you have time.
> Redone some of my web page, now it don't seem to be
> working very well. Problem may be my AOL browser, seems
> to work better using Internet Explorer, still on aol.
>
> I have been playing with new software (Adobe Go Live)
> Using a lot of "Tables" on the main page, that may be
> what is screwing it up.
> Could it be the web page is taking to long to load that
> some of the graphics don'tload ?
>
> Also adding a "Parts Catalog", it is also using Tables
> but it seems to be working fine.
>
> So could you please check it out <A
> HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
> and see if it works on your system.
> Thanks!
> 73 Al Lowe N0IMW

319. Re: Electronics questions???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 14:38:35 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <M7I5b.26138$S_.10193@fed1read01>
Source record: 108785

Method here is the "Technician" method
Of course you can do the j omega etc engineering method as well.

"Caveat Lector" <CL@latin.com> wrote in message
news:Pcu5b.25816$S_.9740@fed1read01...
> Two different formulas and methods for series and parallel AC Circuits;
>
> See URL:
> http://www.tpub.com/neets/book2/4l.htm
>
> For 81 in brief calculate Xc
> Xc = 3,183 ohms
> R=4000 ohms
>
> Assume 4,000 volts
> E/R = 1 amp
> E/Xc = 1.257 amps
>
> Iz = square root of Ir squared + Ix squared = 1.606 amps
>
> Z=e/Iz = 4000/1.606 = 2490 ohms
>
> For phase angle --- You can use Power Factor = true power divided by
> apparent power = 4000/6424 = 0.6225 = PF
> and PF is the cos of the phase angle
> So cos 0.6225 is = 51.5 degrees
> Did some rouning off here and there
>
> Gurus -- check my math.
> --
> 73 From The Signal In The Noise
> Caveat Lector Ya All
>
> ==========
> "carter" <cartw@netart.com> wrote in message
> news:3F560CEC.59B0B0CE@netart.com...
> > I can't figure out how they got the answers they did on these questions.
> >
> > Can anyone out there help?
> >
> > For 81 I get (c) for an anwer not (d) Maybe something to do with
> > it being a parallel circuit instead of a series. Didn't know they had
> > different
> > formulas.

> >
> > I get (c) for 86. Same story.
> >
> > I get 300 - j318 for (88)
> >
> > Can't figure out the other two also.
> >
> >
> >
> >
> > 81] What is the impedance of a network composed of a
> > 100-picofarad capacitor in parallel with a 4000-ohm resistor, at
> > 500 kHz? (Specify your answer in polar coordinates.)
> >
> > a} 2490 ohms, /51.5 degrees.
> >
> > b} 4000 ohms, /38.5 degrees.
> >
> > c} 5112 ohms, / -38.5 degrees.
> >
> > d} 2490 ohms, /-51.5 degrees.@@
> >
> >
> >
> >
> > 86] What is the impedance of a network composed of a
> > 400-ohm-reactance inductor in parallel with a 300-ohm resistor?
> > (Specify your answer in polar coordinates.)
> >
> > a} 240 ohms, / 36.9 degrees.@@
> >
> > b} 240 ohms, / -36.9 degrees.
> >
> > c} 500 ohms, / 53.1 degrees.
> >
> > d} 500 ohms, / -53.1 degrees.
> >
> >
> >
> > 88] What is the impedance of a network composed of a
> > 0.01-microfarad capacitor in parallel with a 300-ohm resistor, at
> > 50 kHz? (Specify your answer in rectangular coordinates.)
> >
> > a} 150 - j159.
> >
> > b} 150 + j159.
> >
> > c} 159 + j150.
> >
> > d} 159 - j150.@@

> >
> >
> >
> >
> >
> >
> >
> > 111] A 6 volt battery with 1.2 ohms internal resistance is
> > connected across two 3 watt bulbs. What is the current flow?
> >
> > a} .57 amps.
> >
> > b} .83 amps.@@
> >
> > c} 1.0 amps.
> >
> > d} 6.0 amps.
> >
> >
> >
> > 129] How many capacitors of 400 volts and 2.0 microfarads each
> > would be necessary to obtain a combination rated at 1600 volts
> > and 1.5 microfarads?
> >
> > a} 10.
> >
> > b} 12.@@
> >
> > c} 14.
> >
> > d} 16.
> >
> >
>
>

320. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 15:05:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f575662_5@corp.newsgroups.com>
Source record: 108786

Dave Shrader wrote:
> Or, how about: one with an in'port' and the second with an out'port'?

When one ties 50 ohm coax to 300 ohm twin lead aka G5RV, one has created an input port and an output port at the coax/twinlead junction. In fact, such is a good example to illustrate the minor mistake Roy made in his analysis.

```
|rho|=0.7143
Source---50 ohm coax---+---300 ohm twinlead---load
Vfwd1--> Vfwd2-->
<--Vref1 <--Vref2
```

There are two sources, Vfwd1 and Vref2, that can be handled separately and then superposed. tau is the transmission coefficient.

|tau1| = 2*(300)/(300+50) = 1.714

|tau2| = 2*(50)/(300+50) = 0.286

Vfwd1 breaks down into two components.

Vfwd1 = Vfwd1(rho1) + Vfwd1(tau1)

The first term is reflected back toward the source. The second term passes through toward the load. Vref2 breaks down into two components.

Vref2 = Vref2(rho2) + Vref2(tau2)

The first term is re-reflected back toward the load. The second term passes through toward the source. Therefore:

Vfwd2 = Vfwd1(tau1) + Vref2(rho2)

Vref1 = Vfwd1(rho1) + Vref2(tau2)

Here are the four voltage terms that appear in Roy's equation but he says Vfwd2 = Vfwd1(tau1) and forgets the other component Vref2(tau2). He says Vref1 = Vfwd1(rho1) and forgets the other component Vref2(tau2). That gives him terms left over.

When he combines all the forward terms to get total forward and combines all the reflected terms to get total reflected, his equations will make sense. However, for power waves, there may exist interference that has to be taken into account. From Dr. Best's QEX article, the power term may look like: Ptot = P1 + P2 + Sqrt(P1*P2)cos(delta) where Sqrt(P1*P2)cos(delta) is the interference term which is positive if 0 < delta < 90 deg and negative if 90 deg < delta < 180 deg.
--

73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

321. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 15:09:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57573b_5@corp.newsgroups.com>
Source record: 108787

Caveat Lector wrote:
> Folks -- the URL should be http://arrowantennas.com/

UNIX strikes again! :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

322. Anybody using Cushcraft D3 or D4?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 15:21:14 UTC
From: Robert Scott <robscott@hargray.com>
Message-ID: <bj7ldd$fu7f$1@news3.infoave.net>
Source record: 108788

I was thinking of buying a Cushcraft D3W or D4 rotatable dipole. I live in a deeded community so I would have to have it on some kind of push up mast to put it up at night. Any feedback would be appreciated, as to performance or mast ideas (or if I should just put up a dipole or inverted vee at 40-50 feet instead!
Thanks
Rob

323. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 15:58:40 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <QiJ5b.351184$YN5.239404@sccrnsc01>
Source record: 108789

Worked just fine for me. Took about two seconds to come up and was all
there.
"Caveat Lector" <CL@latin.com> wrote in message
news:%4I5b.26137$S_.12649@fed1read01...
> Folks -- the URL should be
> http://arrowantennas.com/
>
> Not as posted
> ----------
> "Arrow146" <arrow146@aol.com> wrote in message
> news:20030904101125.28624.00000339@mb-m03.aol.com...
> > Hello,
> >
> > I could use some help if you have time.
> > Redone some of my web page, now it don't seem to be
> > working very well. Problem may be my AOL browser, seems
> > to work better using Internet Explorer, still on aol.
> >
> > I have been playing with new software (Adobe Go Live)
> > Using a lot of "Tables" on the main page, that may be
> > what is screwing it up.
> > Could it be the web page is taking to long to load that
> > some of the graphics don'tload ?
> >
> > Also adding a "Parts Catalog", it is also using Tables
> > but it seems to be working fine.
> >
> > So could you please check it out <A
> > HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
> > and see if it works on your system.
> > Thanks!
> > 73 Al Lowe N0IMW
>
>

324. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 16:32:38 UTC
From: kiddi@marel.is
Message-ID: <b7cca008.0309040832.69a4d8b@posting.google.com>
Source record: 108791

I would appreciate that you explain better what you are proposing.
Exactly how do you suggest I produce the gain or field pattern? My
plan is to switch in "real-time" between the antenna under test and
the reference antenna, thus eliminating as much as possible the
effects of QSB, conditions, etc.

73 - Kris, TF3KX

aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0309030734.465a3bbe@posting.google.com>...
> I may be missing something here, but why not produce a
> gain or field pattern for each antenna on the same
> signal, random or otherwise and overlay each pattern
> and put in memory? (cheap laptop and use a loop antenna
> for reference)
>
> In one of the early antenna compendiums (ARRLL)
> a Peter Dobbs of the U.K. supplies all the info
> and program to get you onboard quickly and inexpensively.
> Art

325. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 16:36:01 UTC
From: PM <mooney@cytanet.com.cy>
Message-ID: <pan.2003.09.04.16.35.56.664827@cytanet.com.cy>
Source record: 108792
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

On Tue, 02 Sep 2003 07:41:45 +0100, Walt Davidson wrote:

> On Mon, 01 Sep 2003 18:49:14 -0500, Cecil Moore
> <Cecil.A.Moore@ieee.org> wrote:
>
>>Actually, IBM looked at CP/M-86 for their PC operating system and then
>>decided to go with Microsoft instead of Digital Research. If DR had
>>gotten the contract, Bill Gates' life would probably be a lot different.
>
> The biggest mistake IBM made was to allow Microsoft to release DOS
> independently as "MS-DOS". They should have kept all proprietary
> rights to the operating system!
>
> 73 de G3NYY

At the time of the agreement there was no MS-DOS, it was a re-write of
QDOS (a rewrite of CP/M)

MS-DOS had so many bugs that IBM had to re-write it, and so the product
jointly licensed as both MS-DOS and PC-DOS initially.

DR-DOS was far superior to MS-DOS, but Ms effectively got rid of it's
challenge when it made Windows 3.1 unable to run on DR-DOS.

All good, clean business.

Paul M

326. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 18:21:33 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <5y-dnXA-muoLH8qiXTWJhg@comcast.com>
Source record: 108793
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

> DR-DOS was far superior to MS-DOS, but Ms effectively got rid of it's
> challenge when it made Windows 3.1 unable to run on DR-DOS.
>
> All good, clean business.
>
> Paul M

then there was zcpr very nice.

327. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 18:38:21 UTC
From: dplatt@radagast.org
Message-ID: <vlf1ktfihjop5a@corp.supernews.com>
Source record: 108794
Body handling: HTML body converted to readable text

In article <20030904101125.28624.00000339@mb-m03.aol.com>,
Arrow146 wrote:
>Hello,
>
>I could use some help if you have time.
>Redone some of my web page, now it don't seem to be
>working very well. Problem may be my AOL browser, seems
>to work better using Internet Explorer, still on aol.

If you go to www.w3.org (the World Wide Web Consortium home page) and click on the "Validators" link on the left side, you'll be taken to a page which lists quite a few freely-available Web-page validation services.

Their own service is at http://validator.w3.org/ - feed it your URL and it'll parse the content and tell you what, if anything, it finds wrong.

This particular validator objected to your home page immediately, as the document lacks a tag which would tell a browser what sort of document the page is (and thus the rules for interpreting it). This might be at least part of the cause of the problem you're seeing... different browsers are making different (and perhaps wrong) assumptions about how to parse and interpret the document's contents. IE is known to be more forgiving about certain types of HTML errors than some other browsers, and IE also has a bunch of nonstandard extensions.

I tried forcing the validator to handle the document as a couple of different versions of HTML DOCTYPE.

- The HTML 2.0 parser rejects a boatload of the tags and attributes, so I don't think this is what you want.

- The HTML 3.2 parser also rejects many tags, and is objecting specifically to the use of percentages in the tag WIDTH attributes.

- The HTML 4.0 parser is objecting to a lot of the
and
tags.

You can either use this validator on via their site, or download the source code (it's written in Perl) and run it on local files on your own system.

I'd suggest that you decide on _which_ version of HTML you want to be coding to, add a declaration to enforce this, and then clean up the HTML until the validator says that the document is fully compliant with the standard.

Avoid the use of nonstandard extensions (Microsoft or otherwise) if you want your page to look good to everybody.

--
Dave Platt AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

328. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 18:39:16 UTC
From: dplatt@radagast.org
Message-ID: <vlf1mkdldff5e0@corp.supernews.com>
Source record: 108795

In article <%4I5b.26137$S_.12649@fed1read01>,
Caveat Lector <CL@latin.com> wrote:

>Folks -- the URL should be
>http://arrowantennas.com/

The case-ness of the domain name should not matter at all. DNS
hostnames are case-insensitive.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

329. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 19:00:21 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f578c56_2@127.0.0.1>
Source record: 108796

Dave Shrader wrote:
> Or, how about: one with an in'port' and the second with an out'port'?

Speaking of which, I just thought of a way to alleviate the confusion
about the earlier example which was:

------lossy feedline---x----10+j60 ohm load

I hope my memory is correct about the load value. If we add one wavelength
of lossless feedline to the experiment, we don't change anything but
things become a lot clearer.

---lossy feedline--+--1WL lossless 50 ohm feedline--10+j60 ohm load
Pfwd1--> Pfwd2-->
<--Pref1 <--Pref2

It is readily apparent that Pref2 cannot be greater than Pfwd2.
If my math is correct, at the load, |rho|=0.85 and SWR=12.3:1
|rho|^2=0.7225 so Pref2 = 0.7225(Pfwd2)

The main thing to gather from the above example is that:

(Pfwd2 - Pref2) = (Pfwd1 - Pref1)

Therefore if Pfwd2 > Pref2 then Pfwd1 > Pref1

Conclusion: This is NOT an example of Pfwd > Pref.
--
73, Cecil, W5DXP

330. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 19:09:01 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f578e6e_2@127.0.0.1>
Source record: 108797

W5DXP wrote:
> Conclusion: This is NOT an example of Pfwd > Pref.

Obviously should have been Pfwd < Pref. Sorry

331. Thanks for the Web Page Help.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 20:04:46 UTC
From: arrow146@aol.com
Message-ID: <20030904160446.13421.00000542@mb-m15.aol.com>
Source record: 108798

Thank You all for taking the time to check out
the Web Page for me.
Most responses say it is working ok.
For now I will let it ride and do some more studing.
Thanks Again.

73 Al Lowe N0IMW

ArrowAntenna.com <A HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
604 West 17th Street
Cheyenne, WY 82001

307-638-2369
Fax 307-638-3521

332. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 20:21:57 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <suCcnRJaQv5sA8qiXTWJkg@crocker.com>
Source record: 108799

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bj5vac$lv7$1@titan.btinternet.com...
> What all you experts have forgotten is that SWR on a
> lossless line is the ratio of two voltages, max and
> min, SPACED APART BY 1/4-WAVELENGTH. That is if the
> line is long enough to contain both a max and a min.
>
> When the line is not lossless, ie., it has appreciable
> attenuation in dB per 1/4-wavelength, then the ratio is
> 'distorted' and has a phase angle. So negative values
> of indicated SWR can be expected at some values of |
> Vmax | / | Vmin |
>
> SWR is calculated from the square of | rho |. As

VSWR is defined as |Vmax|/|Vmin| and so can never be negative. in lossless lines this expression can be reduced to a function of rho, but that method is not valid in lossy lines. VSWR is not a constant in lossy lines and probably doesn't really mean much of anything as each voltage maximum and minimum is a different value, so which ones do you use???

333. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 20:57:17 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <II2dnYD3WeCkOsqiU-KYuA@crocker.com>
Source record: 108800

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309032216.e1affd5@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<YtSdnV_SOJGl1MuiXTWJgA@crocker.com>...
> > sorry, no scanner here.
> >
> > how do you get rho>1? please give me the Zo and Zl to try out, i have
been
> > playing for a while with the basic equations and haven't found a case
where
> > either formulat gives rho>1.
> >
> > and of course if |rho|<=1 then swr can never be negative.
>
> I think Reg put it best:
>
> "Dear Dr Slick, it's very easy.
>
> Take a real, long telephone line with Zo = 300 - j250 ohms at 1000 Hz.
>
> Load it with a real resistor of 10 ohms in series with a real
> inductance of
> 40 millihenrys.
>
> The inductance has a reactance of 250 ohms at 1000 Hz.
>
> If you agree with the following formula,
>
> Magnitude of Reflection Coefficient of the load, ZL, relative to line
> impedance
>
> = (ZL - Zo) / (ZL + Zo) = 1.865 which exceeds unity,
>
> and has an angle of -59.9 degrees.
>
> The resulting standing waves may also be calculated.
>
> Are you happy now ?"

yeah, verily...

note some interesting things about the case you present...

first, to get it out of the way. as i have stated elsewhere in this thread
today the VSWR calculation from rho is really only applicable to lossless

lines because of the simplifications needed to calculate it from |Vmax|/|Vmin| which is its real definition. and since Vmax and Vmin are not the same in any two points on a lossy line it really doesn't have much physical significance either.

the actual value of rho for this case is -.9372-1.60477i (which mathcad gives me as 1.8585/_120.283 but i started from R,G,L,C values and only got it down to Zo=301.5-250.3i which is close enough for this discussion i think)

now, how can this be real... the important case is to look at the voltages at the line/load junction. at this point Vf+Vr=Vl according to the derrivation of rho. so what do we get with a rho like this???

for Vf=1.0v
Vr=rho*Vf = -.9372+1.60477i
and then
Vl=.06279+1.60477i

so there is a small real voltage across the 10+250i load, and a large reactive voltage... the reactive voltage is equal to a reactive voltage on the transmission line side of the junction.... can i believe this? I am still working on that, in some ways it makes sense because you no longer have a purely resistive cable characteristic, though i haven't come to grips with the physical meaning of it yet. i do believe that it has a relationship to circulating currents and reactive power in power distribution circuits where you can get very odd looking voltages and currents when you have a reactive load. in looking at this you have a very capacitive looking line feeding a very inductive load, with a bit of resistance thrown in on each side... essentially it looks like a current pumping a resonant circuit which can result in very high voltages and currents.

on the other side, the rho calculated with the conjugate in the numerator gives: -.9358-.001688i or .9358/_-179.9

which gives voltages of:
Vf=1.0
Vr=-.9358-.001688i
Vl=.06419-.001688i
an interesting difference. note that the real parts are close, but the imaginary parts are a factor of 1000 different. something that should be easily measurable if such a line were constructed.

btw, for whom ever has it... i am still waiting to see the derivation of the conjugate rho formula. i published one on here for the 'classical' version, where is the other one???

334. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 21:10:54 UTC
From: kd1@sympatico.ca
Message-ID: <3F57AA5E.437EFD34@sympatico.ca>
Source record: 108802

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > It is just that the
> > computation of Pfwd and Pref does not really produce real powers
> > (though, again unfortunately, the dimension of the quantity produced
> > is power).
>
> Funny how they can heat resistors both at the load end and at the source
> end when the source is equipped with a circulator+load.

Not surprising. The energy comes from the source.

> Incidentally, I've come up with a proof that there are no reflections
> at a voltage null in a homogeneous transmission line. Consider a 50
> ohm lossless feedline. At a voltage null -
>
> rho = (50-50)/(50+50) = 0 i.e. no reflections in either direction

That's what you get when you use the surge impedance and compute
surge rho. Try steady state impedance for steady state rho.

rho = (0-50)/(0+50) = -1 as expected

...Keith

335. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 21:18:29 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f57acaa_2@127.0.0.1>
Source record: 108801

David Robbins wrote:
> btw, for whom ever has it... i am still waiting to see the derivation of the
> conjugate rho formula. i published one on here for the 'classical' version,
> where is the other one???

It exists in the Kurokawa paper, "Power Waves and the Scattering Matrix".
He defines a new kind of wave, different from traveling waves, and calls
them "Power Waves". That conjugate term is apparently the result of this
new definition of waves. He says, "... when the main interest is in the
relation between various circuits in which the sources are uncorrelated,
the traveling waves are not considered as the best independent variables
to use for the analysis." Seems he is not talking about a system where
all the waves are coherent and has defined a new concept of a "Power Wave"
which includes an alternate definition of a reflection coefficient which
includes a conjugate term.
--
73, Cecil, W5DXP

336. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 21:20:54 UTC
From: kd1@sympatico.ca
Message-ID: <3F57ACB6.41B5186A@sympatico.ca>
Source record: 108804

Cecil Moore wrote:
>
> Dr. Slick wrote:
> > If you agree that the Pref/Pfwd ratio cannot be greater than 1
> > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > greater
> > than 1 either.
>
> Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> greater than one. Both are defined as 'rho' but they are not
> always equal.

On the other hand...

if
Vrev = rho * Vfwd
then
rho^2 = (Vrev^2/Z0) / (Vfwd^2/Z0)

So
(Vrev^2/Z0) / (Vfwd^2/Z0)
can be greater than one.

If Sqrt(Pref/Pfwd) can not be greater than 1
then either
Pfwd is not equal to (Vfwd^2/Z0)
or
Prev is not equal to (Vrev^2/Z0)

Intriguing result, is it not?

...Keith

337. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 21:31:47 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <rcmdnZj_S_DSMsqiXTWJkg@crocker.com>
Source record: 108803

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f57460e_5@corp.newsgroups.com...
> Peter O. Brackett wrote:
> > I was just castigated by Roy and Dave Robbins on another thread for
making
> > postings about
> > "ports", apparently we are not allowed to discuss "ports" when we are
> > discussing transmission
> > lines since ports have only to do with networks and transmission lines
have
> > no ports!!!
>
> Darn Peter, I was hoping you could help me explain to Roy what is wrong
with
> his analysis - that he is using a 2-port analysis and getting four power
terms
> as a result, two of which have to be added to get forward power and the
other
> two of which have to be added to get reflected power.

i like ports, i use them all the time in network analysis, they are an important part of the tcp/ip protocol!. for transmission lines all you really need is voltage OR current waves, everything else falls out from those. computing power and trying to reflect power can only lead to confusion, because unless you use the complete formula for complex powers you are losing important information.... and don't even start on computing rms or other average powers, then you have totally lost the physical significance of the waves.

338. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 21:35:32 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <vPOdnYegxMGtLcqiXTWJjg@crocker.com>
Source record: 108805

"W5DXP" <Cecil.A.Moore@ieee.org> wrote in message
news:3f57acaa_2@127.0.0.1...
> David Robbins wrote:
> > btw, for whom ever has it... i am still waiting to see the derivation of
the
> > conjugate rho formula. i published one on here for the 'classical'
version,
> > where is the other one???
>
> It exists in the Kurokawa paper, "Power Waves and the Scattering Matrix".
> He defines a new kind of wave, different from traveling waves, and calls
> them "Power Waves". That conjugate term is apparently the result of this
> new definition of waves. He says, "... when the main interest is in the
> relation between various circuits in which the sources are uncorrelated,
> the traveling waves are not considered as the best independent variables
> to use for the analysis." Seems he is not talking about a system where
> all the waves are coherent and has defined a new concept of a "Power Wave"
> which includes an alternate definition of a reflection coefficient which
> includes a conjugate term.
> --
> 73, Cecil, W5DXP
>
is that paper on the web somewhere?? i figured it had to be something with
computing powers that was getting mixed in here some how, i think that is
the only place you can end up with conjugates in transmission lines. so i
assume its not a simple 1 page derivation from basic root principles, it
must take a whole new language to express it.

339. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:06:30 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj8d16$e82$1@titan.btinternet.com>
Source record: 108807

> VSWR is not a constant in lossy lines and
> probably doesn't really mean much of anything as each voltage maximum and
> minimum is a different value, so which ones do you use???

Dear David,

You have expressed my sentiments exactly. I have never used either or any of them. What does anybody do with value of SWR when they imagine they know it? I'm pleased to make your acquaintance!

For some years I have mildly advertised the idea of changing the name the name of the common-or-garden, so called SWR meter / combined forward-and-reflected power meter, to the TLI (Transmitter Loading Indicator) which is all it does. Although I must admit, at the present state of the art, it is a very useful instrument when changing antennas.

Is the transmitter loaded with a resistance of 50 ohms or is it not?

{ Actually, the meter on my top-band transmitter indicates relative to 75 ohms }

And there HAS to be SOMETHING more than the weather to talk about in QSO's and, of course, on this newsgroup.
;o)

Reg, G4FGQ

340. Re: Thanks for the Web Page Help.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:06:36 UTC
From: Dave Bushong <dbushong@adelphia.net>
Message-ID: <MHO5b.35786$Nc.8069634@news1.news.adelphia.net>
Source record: 108806

Arrow146 wrote:

> Thank You all for taking the time to check out
> the Web Page for me.
> Most responses say it is working ok.
> For now I will let it ride and do some more studing.

Great work if you can get it ----------------^^^^^^^

73,
Dave
KZ1O

341. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:08:54 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309041408.40a726ee@posting.google.com>
Source record: 108808

kd1@sympatico.ca wrote in message news:<3F573254.D96A3CD2@sympatico.ca>...
> > >
> > > And yes, |rho| can be greater than unity for a passive load.
> > >
> > > ...Keith
> >
> > Absolute Rubbish.. Could you produce a passive circuit that
> > will reflect a greater voltage than what you feed it? I'd
> > LOVE to see that...
>
> Several examples have been presented, but rather than accepting
> them, you changed the definition of rho. Perhaps you could build
> one of these circuits to determine if modifying the definition
> of rho was appropriate.
>

The definition of Rho has been set for "God-knows-how-long!"

Way before you or I were born, i would imagine!

Rho is the magnitude of Gamma, which is the complex voltage
reflection coefficient.

BUT, some people write Gamma is Rho, so just in case, it's wise
to say Power RC = [rho]**2 , with absolute value brackets.

Ok, show us a circuit, I'm waiting to see.

> > The ratio Pref/Pfwd is directly related to the ratio [rho].
> >
> > Pref/Pfwd = [rho]**2 Absolute value brackets are a must!
> >
> > Consider that after the absolute value brackets, the phase information
> > is gone. But since we are going to a ratio of average (RMS)
> > values OR peak values of power, it doesn't matter.
> >
> > In other words, if you use V**2/R, the "V" can be either peak or
> > RMS, it doesn't matter, because it is a ratio. And of course, the "R"
> > doesn't matter either. And of course, the phase information is gone
> > with
> > the absolute value brackets.
> >
> > If you agree that the Pref/Pfwd ratio cannot be greater than 1
>
> Which I haven't since Pref and Pfwd are just computed numbers and
> the result for some circuits is that Pref/Pfwd is greater than 1.

> Of course, Pnet is not equal to Pfwd-Pref in these circumstances
> so there is no violation of basic physics. It is just that the
> computation of Pfwd and Pref does not really produce real powers
> (though, again unfortunately, the dimension of the quantity produced
> is power).
>

ok, Keith, i look forward with great interest on your
imaginary passive circuit which can reflect more power than
what you feed it (incident power).

I can't wait to hook it up to see more reflected power than
incident on my DAIWA meter, that would be very interesting.

Slick

342. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:09:43 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309041409.124a4f22@posting.google.com>
Source record: 108809

ok, Keith, i look forward with great interest on your
imaginary passive circuit which can reflect more power than
what you feed it (incident power).

I can't wait to hook it up to see more reflected power than
incident on my DAIWA meter, that would be very interesting.

Slick

343. Re: Thru the glass antenna & tinted glass

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:10:39 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vlfe5qto724dea@corp.supernews.com>
Source record: 108810

I've been lurking here a bit, but I must report experience.
If there is an intervening conductive layer, the system is two caps in series, nothing works.
On my old BMW 2002tii with film on the inside, I just cut the film and ran a pair of Larsens for years.
When my son got his ticket (KD5RHI) I gave him the radio, a Kenwood 3 bander (144, 220, 440), and he ran it on a Chevy Tahoe, Larsen's glued to the side to clear a parking garage, with no problems; Tinted glass, no film.
Recently we tried the same Larsen's on my son's new Volvo, with the SAME radio, the tint forced us to use a trunk lid mount, as he wasn't too keen on cutting the film on his new Volvo.
I have not seen a glass tint cause a problem.
I HAVE seen applied films and defoggers cause problems.
So if the tint is due to an electrically conductive layer it will be an issue.
If it's an applied film, you can cut it successfully, I did, but I kept the car 24 years, too.
Good luck.
73
H.
NQ5H

"RalphMW" <ralphmw@aol.com> wrote in message news:20030903122443.18028.00000397@mb-m25.aol.com...
> Thanks for all of the responses. Will check things out further. May just go
> with a my mag mount if it presents with too much trouble.
>
> 73's de
> Ralph KB3JQJ
>

344. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:14:45 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309041414.62053c00@posting.google.com>
Source record: 108811

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<bj5rnp$f0f$1@titan.btinternet.com>...
> Dear Cec,
>
> Your arithmetic is abominable. ;o) Dr Slick's
> vanishing-act was a better tactic.
>
> Your only avenue of escape is to prove the | rho |
> meter gives incorrect meter readings.
>

ok, Reg, i look forward with great interest on your
imaginary passive circuit which can reflect more power than
what you feed it (incident power).

I can't wait to hook it up to see more reflected power than
incident on my DAIWA meter, that would be very interesting.

Slick

345. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:20:47 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <nJycnSP69JNeJ8qiU-KYvw@comcast.com>
Source record: 108812

If the loss per unit wavelength is large enough, and you produced a plot of voltage vs. distance x. The voltage maximum would be at the source, and the voltage minimum at the load. Try a thousand miles or so of RG58 at 60 Hz. I suspect that to see anything that looks like a standing wave you would have to look at dV/dx. Remember, I can always define a lossier line.

Tam/WB2TT

346. Would this work as a patio antenna for SWL 3-30Mhz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:24:51 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <TYO5b.8169$875.333274@twister.tampabay.rr.com>
Source record: 108813

http://www.fairradio.com/0mk-12.htm

12 foot Military Mast Kit . Comes with: three 47" long x 1 3/8" diameter
fiberglass mast sections, one 8" top mast section which holds two
horizontal aerial antennas and also has 16 feet of RG-58 coax with a
male BNC connection at the end, two 28" antenna elements that thread
to the top section, one guy ring with guy rope, three 9" stainless
steel stakes, one 27" long mast base which mounts directly into the
ground, and O.D. green carrying bag with handle. There is no indication
of a model number on the assembly. Excellent for field day or other
portable antenna use. 12 lbs sh. #MK-12, $
59.50 each;
2 for $99.50

347. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:24:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57bd4f$1_2@corp.newsgroups.com>
Source record: 108815

kd1@sympatico.ca wrote:
> That's what you get when you use the surge impedance and compute
> surge rho. Try steady state impedance for steady state rho.
>
> rho = (0-50)/(0+50) = -1 as expected

Heh, heh, the steady state impedances are V/I ratios which are results incapable of causing anything. Your logic is a closed loop. The V/I ratios cause the rho to be -1. Therefore, rho=-1 causes the appropriate V/I ratios. Can you name any other result in reality that causes itself? Hint: Only physical impedance discontinuities can cause reflections. Image impedances are incapable of causing anything since they are an end result.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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348. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:26:51 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309041426.c1e02ad@posting.google.com>
Source record: 108814

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f57490d$1_5@corp.newsgroups.com>...
> Dr. Slick wrote:
> > If you agree that the Pref/Pfwd ratio cannot be greater than 1
> > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > greater
> > than 1 either.
>
> Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> greater than one. Both are defined as 'rho' but they are not
> always equal. (Z2-Z1)/(Z2+Z1) is a physical reflection coefficient.
> Sqrt(Pref/Pfwd) is an image reflection coefficient.

I agree that Sqrt(Pref/Pfwd) cannot be greater than one for a
passive network.

(Z2-Z1)/(Z2+Z1) can be greater than one, for passive networks
and certain combinations of complex Z1 and Z2. I feel this is incorrect
usage of this formula, which should be limited to purely real Zo.
A [rho] that is greater than one gives meaningless negative SWR
data, and is limited to active devices.

Besser's, Kurokawa's, and the ARRL use Gamma = (Z2-Z1*)/(Z2+Z1),
and this can never be greater than one, for passive
networks, with ANY values of complex Z1 and Z2. So with
this conjugate equation, the Pref/Pfwd = [rho]**2 is also consequently
never greater than 1 either. AND, the SWR =(1+[rho])/(1-[rho])
suddenly makes sense again!

(i can almost hear your pencils taking up the challenge!)

Slick

349. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:29:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57be4e$1_2@corp.newsgroups.com>
Source record: 108816

kd1@sympatico.ca wrote:
> On the other hand...
>
> if
> Vrev = rho * Vfwd
> then
> rho^2 = (Vrev^2/Z0) / (Vfwd^2/Z0)
>
> So
> (Vrev^2/Z0) / (Vfwd^2/Z0)
> can be greater than one.
>
> If Sqrt(Pref/Pfwd) can not be greater than 1
> then either
> Pfwd is not equal to (Vfwd^2/Z0)
> or
> Prev is not equal to (Vrev^2/Z0)
>
> Intriguing result, is it not?

Only to the uninitiated. Contradictions don't exist in reality.
They only exist in human minds. That should be a clue. |rho1| is
not always equal to |rho2|.
--
73, Cecil http://www.qsl.net/w5dxp

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350. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:31:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57bef6$1_2@corp.newsgroups.com>
Source record: 108818

David Robbins wrote:
> is that paper on the web somewhere??

Perhaps someone will offer it to you as a .pdf file.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

351. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:35:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57bfca$1_2@corp.newsgroups.com>
Source record: 108669

Dr. Slick wrote:
> The definition of Rho has been set for "God-knows-how-long!"

Actually, 'rho' has contradictory definitions. (Z2-Z1)/(Z2+Z1)
is not always the same value as Sqrt(Pref/Pfwd) because of
interference energy.
--
73, Cecil http://www.qsl.net/w5dxp

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352. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:36:28 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309041436.261bef5c@posting.google.com>
Source record: 108817

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<5andlvgbeai9mk9ubg5pu30u7kcshi0up3@4ax.com>...
> On 3 Sep 2003 23:16:39 -0700, radio913@aol.com (Dr. Slick) wrote:
>
> >
> >I think Reg put it best:
>
> Hi OM,
>
> If you are going to quote him as an authority supporting you, you
> should at least accept his offer of a bridge to settle this hash
> shouldn't you? You can't run far on one legged stilts.
>
> 73's
> Richard Clark, KB7QHC

Who ever said he was an authority?

All he did was open up a can-o-worms by showing
how the "normal" Gamma equation is not always
less than 1 for passive networks, which is good
because i wouldn't have found out about the correct
conjugate equation (when Zo is complex).

But it is wise to pick and choose your fights, eh?

And i'd rather argue with someone who is making
sense at any particular point in time.

Show us a passive circuit that reflects more power than
you feed it (incident), on my Daiwa meter,
and i will be VERY impressed.

I'm be waiting a long time for that schematic....

Slick

353. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:36:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f57c005_2@corp.newsgroups.com>
Source record: 108670

Dr. Slick wrote:
> I can't wait to hook it up to see more reflected power than
> incident on my DAIWA meter, that would be very interesting.

If that's really what you want to observe, connect the meter backwards. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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354. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 22:52:03 UTC
From: kd1@sympatico.ca
Message-ID: <3F57C213.D02447E9@sympatico.ca>
Source record: 108671

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > That's what you get when you use the surge impedance and compute
> > surge rho. Try steady state impedance for steady state rho.
> >
> > rho = (0-50)/(0+50) = -1 as expected
>
> Heh, heh, the steady state impedances are V/I ratios which are results
> incapable of causing anything. Your logic is a closed loop. The V/I ratios
> cause the rho to be -1. Therefore, rho=-1 causes the appropriate V/I ratios.
> Can you name any other result in reality that causes itself? Hint: Only
> physical impedance discontinuities can cause reflections. Image impedances
> are incapable of causing anything since they are an end result.

Was it not only a few days ago that there was agreement that

If it is acceptable to claim that sometimes there is no reflection
at an impedance discontinuity, then it must also be acceptable to
claim that sometimes there is a reflection where there is no
discontinuity.

?

...Keith

355. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 23:16:55 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <woacnWSgiZVuWsqiXTWJkw@crocker.com>
Source record: 108672

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309041426.c1e02ad@posting.google.com...
> Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f57490d$1_5@corp.newsgroups.com>...
> > Dr. Slick wrote:
> > > If you agree that the Pref/Pfwd ratio cannot be greater than 1
> > > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > > greater
> > > than 1 either.
> >
> > Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> > greater than one. Both are defined as 'rho' but they are not
> > always equal. (Z2-Z1)/(Z2+Z1) is a physical reflection coefficient.
> > Sqrt(Pref/Pfwd) is an image reflection coefficient.
>
>
> I agree that Sqrt(Pref/Pfwd) cannot be greater than one for a
> passive network.
>
> (Z2-Z1)/(Z2+Z1) can be greater than one, for passive networks
> and certain combinations of complex Z1 and Z2. I feel this is incorrect
> usage of this formula, which should be limited to purely real Zo.
> A [rho] that is greater than one gives meaningless negative SWR
> data, and is limited to active devices.
>
it only gives negative swr values if you incorrectly use the lossless line
approximation to calculate vswr from rho. that is the incorrectly applied
formula in this case. that formula is not valid for a lossy line, you must
go back to the original definition of VSWR=|Vmax|/|Vmin|. which as we have
also noted is not meaningful on a lossy line as Vmax and Vmin are different
at each max and min point because of the losses in the line affecting both
the forward and reverse waves.

356. HELP need manual for dentron 160-10 1k tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 23:25:19 UTC
From: Ron H <ronh@yhti.net>
Message-ID: <vlfiet429su854@corp.supernews.com>
Source record: 108673

If anyone can make me a copt of the manual for
my dentron 160-10 1 kw tuner I will gladly pay copy cost and mailing
costs.
TNX
Ron Hisserich
N0PIR
4416 Hwy YY
Washington, Mo. 63090

357. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 23:26:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj8hne$pt1$1@titan.btinternet.com>
Source record: 108674

> is that paper on the web somewhere?? i figured it had to be something
with
> computing powers that was getting mixed in here some how, i think that is
> the only place you can end up with conjugates in transmission lines. so i
> assume its not a simple 1 page derivation from basic root principles, it
> must take a whole new language to express it.
>
==========

Yeah ! Trouble is nobody has yet dug up the ancient stone on which the language is carved and translated.

There are too many unjustified * 's to make any sense out of thse recently discovered hieroglyphics.

I am reminded of my old dear maths master, Mr Stevens. God had blessed him. He was a rare survivor of the machine gun bullets, shrapnel, flame-throwers, and chlorine-gas breathed in without a gas mask while hanging on the barbed wire in no-man's land between the trenches, Shell-fire-Corner, Ypres, Belgium, 1917. He spoke in a hoarse whisper and I always sat in the front row of desks in his classes so I could better hear him. He kept people awake at the back of the class by throwing missiles - sticks of chalk of which he was amply stocked.

He referred to Factorial(x) = x! = x Exclamation mark, as "x By Jove" and so endowed on me a lifelong love of the beauty of mathematics. He also taught History in similar vein.

Reg.

358. Re: Thanks for the Web Page Help.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 23:32:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj8i2r$l6b$1@hercules.btinternet.com>
Source record: 108675

```
> Great work if you can get it ----------------^^^^^^^
>
.............................. and you can get if you try !
```

359. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-04 23:49:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t1jflv0a9ut09u7mhkdootvksg7b1po09m@4ax.com>
Source record: 108676

On 4 Sep 2003 15:36:28 -0700, radio913@aol.com (Dr. Slick) wrote:

>Richard Clark <kb7qhc@comcast.net> wrote in message
news:<5andlvgbeai9mk9ubg5pu30u7kcshi0up3@4ax.com>...
>> On 3 Sep 2003 23:16:39 -0700, radio913@aol.com (Dr. Slick) wrote:
>>
>> >
>> >I think Reg put it best:
snip
> Who ever said he was an authority?
snip
> I'm be waiting a long time for that schematic....
>
>
>Slick

You're been thinkin' he done put it best and is no authority - uh huh.

Are all such sources of your support held in similar esteem?

I suppose the translation to the greater bulk of what you had to say
is no.

73's
Richard Clark, KB7QHC

360. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 00:24:13 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <6cSdnWpR_9okSsqiU-KYvA@crocker.com>
Source record: 108677

<kd1@sympatico.ca> wrote in message news:3F57ACB6.41B5186A@sympatico.ca...
> Cecil Moore wrote:
> >
> > Dr. Slick wrote:
> > > If you agree that the Pref/Pfwd ratio cannot be greater than 1
> > > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > > greater
> > > than 1 either.
> >
> > Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> > greater than one. Both are defined as 'rho' but they are not
> > always equal.
>
> On the other hand...
>
> if
> Vrev = rho * Vfwd
> then
> rho^2 = (Vrev^2/Z0) / (Vfwd^2/Z0)
>
> So
> (Vrev^2/Z0) / (Vfwd^2/Z0)
> can be greater than one.
>
> If Sqrt(Pref/Pfwd) can not be greater than 1
> then either
> Pfwd is not equal to (Vfwd^2/Z0)
> or
> Prev is not equal to (Vrev^2/Z0)
>
> Intriguing result, is it not?

indeed... and directly to the crux of the whole problem. there are a few too many powers being tossed around here without proper definition. i was just looking at section 7.1 in 'Basic Circuit Theory' by Desoer and Kuh that kind of sums up all the problems this discussion has been having in its title "Instantaneous, Average, and Complex Power". for some reason this section seems to have many more highlighted formulas than much of the rest of the book.

I think many of our problems come from mis-applying power formulas to the wrong cases. for example, the well known P=VI=V^2/R=I^2R takes a bit of modification to work for general complex impedances.

lets look at the simple one first:
Instantaneous power: p(t)=v(t)i(t)
aha! you say, there it is, nice and simple.... but not so fast. this is in the time domain. the Vfwd and Vrev we throw around so easily in phasor notation when talking about transmission lines aren't the same thing and can't be so easily converted... in fact, in going to the phasor notation you intentionally throw away time information.... so in this case when you write v(t) and i(t) in their full form they look like:
v(t)=|V| cos(wt+/_V)
i(t)=|I| cos(wt+/_I)
where w=omega, the angular rate, and /_ is used to denote the relative angle at t=0....
thus expanding out this power formula you get and ugly thing:
p(t)=.5 |V| |I| cos(/_V-/_I) + .5 |V| |I| cos(2wt+/_V+/_I)
which when averaged becomes:
Pav=.5 |V| |I| cos(/_V - /_I)
which hopefully looks familiar to people out there who deal with power factors and such.

Now, the odd one...
Complex Power:
P=.5 V I*
where V and I are the phasor representations used in sinusoidal steady state analysis, and I* is the conjugate of I.
now here is where it gets weird...substituted in the exponential forms of the phasors:
P=.5 |V| |I| e^(j(/_V-/_I))
oh for a good way to represent equations in plain text... but anyway, here is a similar notation to the instantaneous power above, but there is no time in it... only the magnitudes of the voltage and current multiplied by a complex exponential from the difference in their phase angles. this can be expanded into a sin/cos expression to separate the real and imaginary parts like this:
P=.5 |V| |I| cos(/_V-/_I) + j.5 |V| |I| sin(/_V-/_I)
and from this you can show that the real part of this is the average power, so:
Pav=.5 |V| |I| cos(/_V-/_I)
but since we are in phasor notation we can transform this one more time using
V=ZI and I=YV (Y=1/Z, the complex admittance)
to get:
Pav= .5 |I|^2 Re[Z] = .5 |V|^2 Re[Y]

there are also a couple of important notes to go with this. in a passive network Re[Z] and Re[Y] are both >=0 which also constrains cos(/_V-/_I) >=0... essentially, no negative resistances in passive networks... which of course then results in Pav always being positive(or zero).

now wait a minute you may say.. we have two different Pav equations... what happens if we equate them??? (well, actually we have 4 different equations, so lets play around a bit)

from time domain:
Pav=.5 |V| |I| cos(/_V - /_I)

from sinusoidal steady state:
Pav=.5 |V| |I| cos(/_V-/_I)
Pav= .5 |I|^2 Re[Z]
Pav= .5 |V|^2 Re[Y]

well, what do you know, the two methods give the same result (the first formula of the sss method is the same as the time domain formula). but what do the other two with the impedance and admitance do for us.... they show that power in phasor calculations is not quite as simple as the P=VI=V^2/R=I^2R we are used to... in fact, what are those equations good for? basically, just for resistive circuits where I and V are in phase... see section 7.3 of that reference for derivation of the I^2R power formula for resistive loads... and also for how the rms value gets rid of that pesky factor of .5 in all those equations to make I^2R work for sinusoidal voltages... so I^2R and V^2/R are REALLY only good for rms voltages and resistive loads. so you can't just use P=V^2/Z0 in the general case! but didn't we all know that? after all, why is there a power factor added to the calculation when working with reactive loads?? and why can you have LOTS more reactive power in a circuit than real power??? don't believe in reactive power? wait till the report about the blackout comes out, it was basically run away loss of control of reactive power that probably resulted in circulating currents that brought the grid to its knees.

so you are right:

> Pfwd is not equal to (Vfwd^2/Z0)
and
> Prev is not equal to (Vrev^2/Z0)

but by definition:

> Vrev = rho * Vfwd

now, who really read and understood that???

361. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 00:25:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <bg6dnaLUlcZ9SsqiXTWJgA@comcast.com>
Source record: 108678

Richard,

Do yourself a favor and try to get a copy of Motorola ap note AN762. It describes several amplifiers, including a version with the MRF421. It is clearly stated that the MRF has an output rating of 100W, PEP OR CW. Also, the amplifier has negative feedback.

Tam/WB2TT

362. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 00:57:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <CbR5b.32875$Om1.10816@newsread2.news.atl.earthlink.net>
Source record: 108679

Slick:

[snip]
> Some people wanna rewrite some books here.
>
>
> Slick
[snip]

As a published textbook author and reviewer I can assure you that many books do need to be re-written!

Slick... you've gotta disabuse yourself of the idea that everything in print is gospel. Check things out using your own brain... even the "authorities" make errors.

Moses brought the ten commandments down from God, but Engineering textbooks only come from the hands and brains of humans.

--
Peter K1PO
Indialantic By-the-Sea, FL.

363. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:05:22 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <mjR5b.32958$Om1.11521@newsread2.news.atl.earthlink.net>
Source record: 108680

Slick:

[snip]
> Are you gonna re-write some books?
>
>
> Slick
[snip]

Did it ever occur to you that most textbook authors actually plagiarize each other.

Since most textbooks have numerous competitors covering essentially the same material, it is apparent that most of their content is not original, rather lots of it is "copied" or re-written using a slightly different [improved] notation and set of symbols.

Have you never noticed the same error in several textbooks by different authors?

Why does that happen?

With how many textbook authors do you have a personal relationship?

Have you ever reviewed pre-publication drafts of textbooks for publishers...

Worked with authors on corrections to drafts before publication... believe me if you have why then you would be a lot more cautious in taking textbooks as gospel.

Textbooks that have become very popular and which have appeared in many editions/printings are usually pretty good... but even then still often have significant errata.

--
Peter K1PO
Indialantic By-the-Sea, FL.

364. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:08:04 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <UIR5b.32984$Om1.30081@newsread2.news.atl.earthlink.net>
Source record: 108681

Cecil:

[snip]
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f57c005_2@corp.newsgroups.com...
> Dr. Slick wrote:
> > I can't wait to hook it up to see more reflected power than
> > incident on my DAIWA meter, that would be very interesting.
>
> If that's really what you want to observe, connect the meter backwards.
:-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

Or hook a transmitter to the remote end!

Heh, heh... what is the read out of reflected power on a full duplex DSL
line, with transmitters running full bore on both ends simultaneously.

Slick's exposure to real world transmission problems is very limited!

;-)

--
Peter K1PO
Indialantic By-the-Sea, FL.

365. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:11:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <SoR5b.33015$Om1.19818@newsread2.news.atl.earthlink.net>
Source record: 108682

Cecil:

[snip]
> rho = (50-50)/(50+50) = 0 i.e. no reflections in either direction
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

Hey... that's my line.

That's Mother Nature's reflection coefficient!

At every infinitesimal length along a transmission line rho = (Zo - Zo)/(Zo + Zo) = 0.

It's not nice to fool Mother Nature!

--
Peter K1PO
Indialantic By-the-Sea, FL.

366. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:13:37 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <5rR5b.33038$Om1.9454@newsread2.news.atl.earthlink.net>
Source record: 108683

Slick:

[snip]
> I can't wait to hook it up to see more reflected power than
> incident on my DAIWA meter, that would be very interesting.
>
>
> Slick
[snip]

It sure will be an interesting event for your Daiwa when the transmitter hooked to the other end is keyed!

--
Peter K1PO
Indialantic By-the-Sea, FL.

367. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:26:35 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <fDR5b.33159$Om1.9692@newsread2.news.atl.earthlink.net>
Source record: 108684

Slick:

[snip]
> Show us a passive circuit that reflects more power than
> you feed it (incident), on my Daiwa meter,
> and i will be VERY impressed.
>
> I'm be waiting a long time for that schematic....
>
>
> Slick
[snip]

That's an easy one... simply connect a negative resistance to the end of the line.

And don't tell me that negative resistance is not passive!

--
Peter K1PO
Indialantic By-the-Sea, FL.

368. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:31:53 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <dIR5b.33209$Om1.24517@newsread2.news.atl.earthlink.net>
Source record: 108685

Dave:

[snip]
> Is that one on the East Coast and one on the West Coast??
>
> Or, how about: one with an in'port' and the second with an out'port'?
>
> :-)
>
> Deacon Dave, W1MCE
[snip]

I always have a port before dinner.

And often I have one sitting on the operating desk while I am transmitting.
I like the fortified ports best.

I always love the hotels in Portugal, cuz they always seem to leave a nice
decanter of port on the night stand every day. Helps to put you to sleep.

--
Peter K1PO
Indialantic By-the-Sea, FL

369. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:42:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlfqfvods7ql42@corp.supernews.com>
Source record: 108686
Body handling: HTML body converted to readable text

I have a few nits to pick with this analysis. Comments interspersed.

David Robbins wrote:
>
> indeed... and directly to the crux of the whole problem. there are a few
> too many powers being tossed around here without proper definition. i was
> just looking at section 7.1 in 'Basic Circuit Theory' by Desoer and Kuh that
> kind of sums up all the problems this discussion has been having in its
> title "Instantaneous, Average, and Complex Power". for some reason this
> section seems to have many more highlighted formulas than much of the rest
> of the book.
>
> I think many of our problems come from mis-applying power formulas to the
> wrong cases. for example, the well known P=VI=V^2/R=I^2R takes a bit of
> modification to work for general complex impedances.
>
> lets look at the simple one first:
> Instantaneous power: p(t)=v(t)i(t)
> aha! you say, there it is, nice and simple.... but not so fast. this is in
> the time domain. the Vfwd and Vrev we throw around so easily in phasor
> notation when talking about transmission lines aren't the same thing and
> can't be so easily converted... in fact, in going to the phasor notation you
> intentionally throw away time information....

Here's my first point of disagreement. Phasor notation doesn't throw away time information. It's still there, in implied form (as an implied term exp(jwt)). And that's an important distinction, which I'll note again shortly. One thing it means is that, given the phasor representation of a waveform, it's possible to determine exactly what the time waveform is -- you can convert back and forth at will. You do, of course, have to know the implied radian frequency. If the time information were thrown away, you wouldn't be able to do that.

so in this case when you write
> v(t) and i(t) in their full form they look like:
> v(t)=|V| cos(wt+/_V)
> i(t)=|I| cos(wt+/_I)
> where w=omega, the angular rate, and /_ is used to denote the relative angle
> at t=0....
> thus expanding out this power formula you get and ugly thing:
> p(t)=.5 |V| |I| cos(/_V-/_I) + .5 |V| |I| cos(2wt+/_V+/_I)
> which when averaged becomes:
> Pav=.5 |V| |I| cos(/_V - /_I)
> which hopefully looks familiar to people out there who deal with power

> factors and such.
>

Fine so far.

> Now, the odd one...
> Complex Power:
> P=.5 V I*
> where V and I are the phasor representations used in sinusoidal steady state
> analysis, and I* is the conjugate of I.

Problem here. As I mentioned above, a phasor contains an implied
frequency term. Phasors represent pure sine waves, and the frequency
must be the same for all phasors with which calculations are being
done. You can't use phasor analysis where the voltage, for example, is a
different frequency than the current, or to mix two voltages of
different frequencies. And that's the problem with the equation above.
It is *not* an equation for complex power. P is not, and cannot, be a
phasor, because its waveform has a different frequency than V and I. It
appears that you might be confusing this with an equation for *average*
power, which is:

= Re{V I*}

with a .5 factor if V and I are peak values, and no .5 factor if they're
RMS. The result of this calculation is a purely real number, and the
same as you get with |V||I|cos(phiV - phiI).

Power can't be represented in phasor form. At least not in the same
analysis as the V and I it's composed of -- some clever PhD candidate
might have devised some use for a phasor analysis involving only power,
which could be done if you can find a consistent way to deal with
power's DC (average) component. But I've never seen such a method,
unless that's what Cecil is doing. So "complex power" doesn't have any
real meaning, although "instantaneous power", or time-domain power,
certainly does.

> now here is where it gets weird...substituted in the exponential forms of
> the phasors:
> P=.5 |V| |I| e^(j(/_V-/_I))
> oh for a good way to represent equations in plain text... but anyway, here
> is a similar notation to the instantaneous power above, but there is no time
> in it... only the magnitudes of the voltage and current multiplied by a
> complex exponential from the difference in their phase angles. this can be
> expanded into a sin/cos expression to separate the real and imaginary parts
> like this:
> P=.5 |V| |I| cos(/_V-/_I) + j.5 |V| |I| sin(/_V-/_I)
> and from this you can show that the real part of this is the average power,
> so:
> Pav=.5 |V| |I| cos(/_V-/_I)
> but since we are in phasor notation we can transform this one more time
> using

> V=ZI and I=YV (Y=1/Z, the complex admittance)
> to get:
> Pav= .5 |I|^2 Re[Z] = .5 |V|^2 Re[Y]
>

Because of what I said above, I don't believe that this is valid. You
simply can't calculate a phasor power from phasor V and I.

> there are also a couple of important notes to go with this. in a passive
> network Re[Z] and Re[Y] are both >=0 which also constrains cos(/_V-/_I)
>
>>=0... essentially, no negative resistances in passive networks... which of
>
> course then results in Pav always being positive(or zero).
>
> now wait a minute you may say.. we have two different Pav equations... what
> happens if we equate them??? (well, actually we have 4 different equations,
> so lets play around a bit)
>
> from time domain:
> Pav=.5 |V| |I| cos(/_V - /_I)
>
> from sinusoidal steady state:
> Pav=.5 |V| |I| cos(/_V-/_I)
> Pav= .5 |I|^2 Re[Z]
> Pav= .5 |V|^2 Re[Y]
>
> well, what do you know, the two methods give the same result (the first
> formula of the sss method is the same as the time domain formula). but what
> do the other two with the impedance and admitance do for us.... they show
> that power in phasor calculations is not quite as simple as the
> P=VI=V^2/R=I^2R we are used to...

I hope we're not used to that. It's an attempt to calculate phasor
power, which is doomed from the start.

in fact, what are those equations good
> for? basically, just for resistive circuits where I and V are in phase...
> see section 7.3 of that reference for derivation of the I^2R power formula
> for resistive loads... and also for how the rms value gets rid of that pesky
> factor of .5 in all those equations to make I^2R work for sinusoidal
> voltages... so I^2R and V^2/R are REALLY only good for rms voltages and
> resistive loads.

That's true. And the reason is that when V and I are in phase, then V =
|V| and I = |I|, and Z = |Z|, so you're simply calculating the average
power.

so you can't just use P=V^2/Z0 in the general case!

Absolutely not. Again, for the reason that you can't calculate a phasor
value of P from phasor V and I.

but
> didn't we all know that? after all, why is there a power factor added to
> the calculation when working with reactive loads??

Don't confuse power factor or its existence with the fundamental problem.

and why can you have
> LOTS more reactive power in a circuit than real power???

Why not? It's very often the case.

don't believe in
> reactive power? wait till the report about the blackout comes out, it was
> basically run away loss of control of reactive power that probably resulted
> in circulating currents that brought the grid to its knees.

The idea of reactive power follows easily from observation of the power
time waveform you described. The power becomes negative for part of the
cycle if V and I aren't exactly in phase. This represents energy flowing
back out of the circuit it flows into during the positive portion of the
cycle. If the power waveform is centered around zero, which it will be
if V and I are in quadrature, then the same amount of energy flows out
as flows in, so no work is done -- the power is entirely imaginary. And
the average value -- the waveform DC offset -- is zero. On the other
hand, if the waveform is entirely positive, which it is if V and I are
in phase, then energy flowing in never flows out, so the power is
entirely real, and the average is half the peak-to-peak waveform value.
Real power represents the power that flows in without a corresponding
outward flow; reactive power is that which goes in and comes back out.

>
> so you are right:
>
>
>> Pfwd is not equal to (Vfwd^2/Z0)
>
> and
>
>> Prev is not equal to (Vrev^2/Z0)
>
>
> but by definition:
>
>
>> Vrev = rho * Vfwd
>
>
> now, who really read and understood that???

I hope I did. If not, please correct me.

Roy Lewallen, W7EL

370. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 01:52:38 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309041752.f58258f@posting.google.com>
Source record: 108687

I have created a new group on yahoo about skywires.

please visit and add your comments.

thanks

http://groups.yahoo.com/group/SkyWires/

371. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 02:00:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v2qflvod2shkaqapmaen8836q6d1b4bi55@4ax.com>
Source record: 108688

On Thu, 4 Sep 2003 20:25:01 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>Do yourself a favor and try to get a copy of Motorola ap note AN762. It
>describes several amplifiers, including a version with the MRF421. It is
>clearly stated that the MRF has an output rating of 100W, PEP OR CW. Also,
>the amplifier has negative feedback.
>
>Tam/WB2TT
>

Hi Atm,

"Continuous collector current could go as high as 21.3 A at
13.6 V operated into any load."

By Ohm's law, and variations, P = 289.68W and with a collector
efficiency 55% (however, only spec'd at 180W) results in 159W in RF
products (not all within band) over a full cycle. This spec is for
the tandem configuration common to most finals' decks found in amateur
equipment, not a single transistor and not at 12V. Further, the
current is shared by each transistor through alternation as the two
are in series feed to the primary of T3. At the drive levels offered,
the transistors each offer ballpark 1.2 Ohms T3 is specified at 1:5
(again, just as I described in past messages) and offers a 25:1
impedance transform would at a first pass evaluation offers exactly
what I said it would.

Motorola (in their confusion) offers:
"For example, in the 180 Watt version the input
transformer is of 16:1 impedance ratio, making
the secondary impedance 3.13 Ohm with a 50 Ohm
interface."
...
"It should be noted that in the lower power versions
[common to the experience and quality of gear found
in amateur application - rwc] the input and output
impedances are higher...."

At the end of AN762 they offer a design for low pass filtering (to
remove some of those out of band RF products) which specifically
includes the source specification of (-gasp!-) 50 Ohms, and a load of
50 Ohms. Of course, this all occurred prior to some accounts of the
great Motorola confusion of the early 90's that rendered all such

advice - um, well, who knows?

As for the negative feedback. Again, this is exactly what I said it was "The Input Frequency Correction Network." This hardly qualifies in the classic Bode sense of Z stabilization so commonly found in AF amplifiers.

Now I did you a favor by reading it to you.

73's
Richard Clark, KB7QHC

372. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 04:06:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f580d51_4@corp.newsgroups.com>
Source record: 108689

kd1@sympatico.ca wrote:
> If it is acceptable to claim that sometimes there is no reflection
> at an impedance discontinuity, then it must also be acceptable to
> claim that sometimes there is a reflection where there is no
> discontinuity.

Sometimes it rains and sometimes it doesn't. That fact doesn't keep
you dry when it is raining.

Reflections originate only at an impedance discontinuity, i.e.
reflections require a cause.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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373. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 04:14:28 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <583glvs93sebdnm0vuam8jdq8tvaaof9ra@4ax.com>
Source record: 108790

On 04 Sep 2003 14:11:25 GMT, arrow146@aol.com (Arrow146) wrote:

>Hello,
>
>I could use some help if you have time.
>Redone some of my web page, now it don't seem to be
>working very well. Problem may be my AOL browser, seems
>to work better using Internet Explorer, still on aol.
>
>I have been playing with new software (Adobe Go Live)
>Using a lot of "Tables" on the main page, that may be
>what is screwing it up.
>Could it be the web page is taking to long to load that
>some of the graphics don'tload ?
>
>Also adding a "Parts Catalog", it is also using Tables
>but it seems to be working fine.
>
>So could you please check it out <A
>HREF="http://ArrowAntennas.com/">ArrowAntennas.com</A>
>and see if it works on your system.
>Thanks!
>73 Al Lowe N0IMW

With my ancient IE v.4.93 for the PC, the home page loaded fine, but
then I went to a link, and couldn't get back to the home page; IE shut
down and my dial-up connection broke.

Bob
k5qwg

374. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 04:32:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f58136e$1_4@corp.newsgroups.com>
Source record: 108690

Roy Lewallen wrote:

> The calculation used for reflection coefficient is based on its
> definition, namely reflected voltage divided by forward voltage.

Unfortunately, you did not correctly identify the forward voltage
and reflected voltage. V1*tau is only one of the forward voltage
components. There is another one, V2*rho. Same for current.

Did you see my example where by adding one wavelength of lossless
feedline, it can be proven that reflected power can never be greater
than forward power?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

375. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 05:18:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlg74rcnfr4958@corp.supernews.com>
Source record: 108691

Frankly, I haven't paid any attention to your ducking, dodging, and hand-waving. You haven't been able to produce an analysis showing the voltages, currents, and powers in the same simple circuit I analyzed. As far as I'm concerned, nothing you've posted constitutes a proof of anything.

One thing I have gotten from your postings, though, is an appreciation for what you said about your alma mater being a military school. They obviously taught you to always present a moving target, and you learned the lesson well.

I return the readers now to tau, s11, n-port networks, optics, virtual photons, and whatever else can be produced to avoid directly facing the stark reality of Ohm's and Kirchoff's laws. Enjoy!

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> The calculation used for reflection coefficient is based on its
>> definition, namely reflected voltage divided by forward voltage.
>
>
> Unfortunately, you did not correctly identify the forward voltage
> and reflected voltage. V1*tau is only one of the forward voltage
> components. There is another one, V2*rho. Same for current.
>
> Did you see my example where by adding one wavelength of lossless
> feedline, it can be proven that reflected power can never be greater
> than forward power?

376. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 05:28:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5820a3_7@corp.newsgroups.com>
Source record: 108692

Roy Lewallen wrote:
> Frankly, I haven't paid any attention to your ducking, dodging, and
> hand-waving. You haven't been able to produce an analysis showing the
> voltages, currents, and powers in the same simple circuit I analyzed. As
> far as I'm concerned, nothing you've posted constitutes a proof of
> anything.

If one leads a horse to water and it refuses to drink, digging another
lake is just a waste of time. Analyze the following and see if you
get the same results. I'm betting you will catch your error.

Z0=68-j39
---lossy feedline---+---1WL 50 ohm lossless line---10+j50 load
Vfwd1--> Vfwd2-->
<--Vref1 <--Vref2

Vfwd1 = Vfwd1*rho1 + Vfwd1*tau1 one forward, one reflected component

Vref2 = Vref2*rho2 + Vref2*tau2 one forward, one reflected component

Vref1 = Vfwd1*rho1 + Vref2*tau2 both reflected components added together

Vfwd2 = Vfwd1*tau1 + Vref2*rho2 both forward components added together

Note that every voltage has two components. You chose only one component
for your Vfwd. You ignored the other component of Vfwd. Hint: you cannot
have voltages left over from calculating the total forward voltage and
the total reflected voltage.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

377. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 05:54:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlg98om61gvp4a@corp.supernews.com>
Source record: 108693
Body handling: HTML body converted to readable text

For Vfwd1 = 1 volt or the value of your choice at the input end of the line, fill in the following blanks:

At the input end of the lossy line:

Vref1 = volts
Vfwd2 = volts
Vref2 = volts
Ifwd1 = amps
Iref1 = amps
Ifwd2 = amps
Iref2 = amps
V = volts
I = amps

= watts

At the output end of the lossy line:

Vfwd1 = volts
Vref1 = volts
Vfwd2 = volts
Vref2 = volts
Ifwd1 = amps
Iref1 = amps
Ifwd2 = amps
Iref2 = amps
V = volts
I = amps

= watts

Feel free to toss in values for as many Pf's and Pr's as you think there are, at both ends of the line.

That's what you're going to have to do to get me to pay attention to you. Volts, amps, watts. If it's beneath your dignity, too complicated, too simple, too much work, too boring, or any other excuse, that's perfectly ok. I'll just continue ignoring your hand-waving. (Which is, come to think of it, probably a great relief anyway.)

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>

>> Frankly, I haven't paid any attention to your ducking, dodging, and
>> hand-waving. You haven't been able to produce an analysis showing the
>> voltages, currents, and powers in the same simple circuit I analyzed.
>> As far as I'm concerned, nothing you've posted constitutes a proof of
>> anything.
>
>
> If one leads a horse to water and it refuses to drink, digging another
> lake is just a waste of time. Analyze the following and see if you
> get the same results. I'm betting you will catch your error.
>
> Z0=68-j39
> ---lossy feedline---+---1WL 50 ohm lossless line---10+j50 load
> Vfwd1--> Vfwd2-->
> <--Vref1 <--Vref2
>
> Vfwd1 = Vfwd1*rho1 + Vfwd1*tau1 one forward, one reflected component
>
> Vref2 = Vref2*rho2 + Vref2*tau2 one forward, one reflected component
>
> Vref1 = Vfwd1*rho1 + Vref2*tau2 both reflected components added together
>
> Vfwd2 = Vfwd1*tau1 + Vref2*rho2 both forward components added together
>
> Note that every voltage has two components. You chose only one component
> for your Vfwd. You ignored the other component of Vfwd. Hint: you cannot
> have voltages left over from calculating the total forward voltage and
> the total reflected voltage.

378. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 07:14:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ebdglvs5e8uk4duqo98uvv838iu0lb4mi6@4ax.com>
Source record: 108694

On Fri, 05 Sep 2003 00:28:43 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>If one leads a horse to water and it refuses to drink, digging another
>lake is just a waste of time.

Hi you two,

The Navy had a way of dealing with these academic issues that put both
of you to shame.

I once offered that stale observation of "leading a horse to water..."
to a Chief Bos'un's Mate. He, understandably, was not amused by the
lack of imagination, insight, invention, intelligence, or what-ever
was suppose to be the hallmark of my specialty and simply replied with
a ho-hum:
"You hold its head under water and suck on its ass."

Seems no one is interested in actually getting anything accomplished
when trading complaints is obviously more fun. ;-)

73's
Richard Clark, KB7QHC

379. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 08:30:07 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050030.19679f56@posting.google.com>
Source record: 108695

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<woacnWSgiZVuWsqiXTWJkw@crocker.com>...
> "Dr. Slick" <radio913@aol.com> wrote in message
> news:1d15af91.0309041426.c1e02ad@posting.google.com...
> > Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
> news:<3f57490d$1_5@corp.newsgroups.com>...
> > > Dr. Slick wrote:
> > > > If you agree that the Pref/Pfwd ratio cannot be greater than 1
> > > > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > > > greater
> > > > than 1 either.
> > >
> > > Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> > > greater than one. Both are defined as 'rho' but they are not
> > > always equal. (Z2-Z1)/(Z2+Z1) is a physical reflection coefficient.
> > > Sqrt(Pref/Pfwd) is an image reflection coefficient.
> >
> >
> > I agree that Sqrt(Pref/Pfwd) cannot be greater than one for a
> > passive network.
> >
> > (Z2-Z1)/(Z2+Z1) can be greater than one, for passive networks
> > and certain combinations of complex Z1 and Z2. I feel this is incorrect
> > usage of this formula, which should be limited to purely real Zo.
> > A [rho] that is greater than one gives meaningless negative SWR
> > data, and is limited to active devices.
> >
> it only gives negative swr values if you incorrectly use the lossless line
> approximation to calculate vswr from rho. that is the incorrectly applied
> formula in this case. that formula is not valid for a lossy line, you must
> go back to the original definition of VSWR=|Vmax|/|Vmin|. which as we have
> also noted is not meaningful on a lossy line as Vmax and Vmin are different
> at each max and min point because of the losses in the line affecting both
> the forward and reverse waves.

What if Z1 represents the impedance at the end of the line? Then
it doesn't matter what the losses are. Then you are trying to find
the
RC right at the meeting of the line and the load, so you don;t care
what the
losses of the line are.

Slick

380. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 08:34:09 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050034.204c8994@posting.google.com>
Source record: 108696

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<fDR5b.33159$Om1.9692@newsread2.news.atl.earthlink.net>...
> Slick:
>
> [snip]
> > Show us a passive circuit that reflects more power than
> > you feed it (incident), on my Daiwa meter,
> > and i will be VERY impressed.
> >
> > I'm be waiting a long time for that schematic....
> >
>
>
> That's an easy one... simply connect a negative resistance to the end of the
> line.
>
> And don't tell me that negative resistance is not passive!

I most certainly WILL tell you that! A negative resistance can be found
in a tunnel diode, but you still need to apply a supply voltage to make
it an oscillator.

Negative resistance implies positive feedback, so i would certainly be
an active device.

Ok, show me your schematic, then.....waiting a long time......

Slick

381. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 09:09:38 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050109.166beb4@posting.google.com>
Source record: 108697

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<II2dnYD3WeCkOsqiU-KYuA@crocker.com>...
> >
>
> yeah, verily...
>
> note some interesting things about the case you present...
>
> first, to get it out of the way. as i have stated elsewhere in this thread
> today the VSWR calculation from rho is really only applicable to lossless
> lines because of the simplifications needed to calculate it from
> |Vmax|/|Vmin| which is its real definition. and since Vmax and Vmin are not
> the same in any two points on a lossy line it really doesn't have much
> physical significance either.
>

Zo and Zl can be the impedances at a connector, with NO
TRANSMISSION LINE.

Zo can be the impedance at the END of a transmission line.

VSWR = ([rho]+1)/([rho]-1) only works for 0=>[rho]=>1

or situations of return LOSS, not return GAIN (active networks)!

> the actual value of rho for this case is -.9372-1.60477i (which mathcad
> gives me as 1.8585/_120.283 but i started from R,G,L,C values and only got
> it down to Zo=301.5-250.3i which is close enough for this discussion i
> think)
>
> now, how can this be real... the important case is to look at the voltages
> at the line/load junction. at this point Vf+Vr=Vl according to the
> derrivation of rho. so what do we get with a rho like this???
>
> for Vf=1.0v
> Vr=rho*Vf = -.9372+1.60477i
> and then
> Vl=.06279+1.60477i
>
> so there is a small real voltage across the 10+250i load, and a large
> reactive voltage... the reactive voltage is equal to a reactive voltage on
> the transmission line side of the junction.... can i believe this? I am
> still working on that, in some ways it makes sense because you no longer
> have a purely resistive cable characteristic, though i haven't come to grips
> with the physical meaning of it yet. i do believe that it has a
> relationship to circulating currents and reactive power in power

> distribution circuits where you can get very odd looking voltages and
> currents when you have a reactive load. in looking at this you have a very
> capacitive looking line feeding a very inductive load, with a bit of
> resistance thrown in on each side... essentially it looks like a current
> pumping a resonant circuit which can result in very high voltages and
> currents.
>

But you will never get a Reflected voltage that is greater than
the
incident in a passive network. Sure, you may have an inductor
charging up a capacitor somewhere in a resonant circuit (like parallel
resonance, with
a "fly-wheel" effect). But this voltage will not be reflected.

> on the other side, the rho calculated with the conjugate in the numerator
> gives: -.9358-.001688i or .9358/_-179.9
>

Which makes WAY more sense than the "normal" equation result.

Consider: Zo=300-j250 and Zl=10+j250

Essentially, the two reactances should cancel, and it will be
identical to Zo=300 and Zl=10.

Now, this should be fairly close to a short (Zl=0), which it
really is, in the sense that almost all the voltage is reflected
and the phase shift is almost -180 (-179.9), as it should be for
a near-short.

The "Normal" equation's results of: RC = 1.8585/_120.283 is
absolutely
incorrect. You can't use the normal equation for complex Zo!

You folks can believe what you want, but you are convincing me
more that Besser and Kurokawa and the ARRL are all correct on this
one.

I won't hesistate to admit that i'm wrong, but nothing has been
presented to convince me of that.

>
> btw, for whom ever has it... i am still waiting to see the derivation of the

> conjugate rho formula. i published one on here for the 'classical' version,
> where is the other one???

I'll send you the paper...

I'd like to see the derivation too, as Kurokawa seems to skip it
or just copied it from another paper! haha...

Anyways, it's the correct formula for complex Zo, you've
convinced me of that with this post.

Thank you for your time and effort David.

Slick (Garvin)

382. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 09:15:40 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050115.79335c32@posting.google.com>
Source record: 108698

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<mjR5b.32958$Om1.11521@newsread2.news.atl.earthlink.net>...
> Slick:
>
> [snip]
> > Are you gonna re-write some books?
> >
> >
> > Slick
> [snip]
>
> Did it ever occur to you that most textbook authors actually plagiarize each
> other.
>
> Since most textbooks have numerous competitors covering essentially the same
> material, it is apparent that most of their content is not original, rather
> lots of it is "copied" or re-written using a slightly different [improved]
> notation and set of symbols.
>
> Have you never noticed the same error in several textbooks by different
> authors?
>
> Why does that happen?
>
> With how many textbook authors do you have a personal relationship?
>
> Have you ever reviewed pre-publication drafts of textbooks for publishers...
>
> Worked with authors on corrections to drafts before publication... believe
> me if you have why then you would be a lot more cautious in taking textbooks
> as gospel.
>
> Textbooks that have become very popular and which have appeared in many
> editions/printings are usually pretty good... but even then still often have
> significant errata.

I agree 100%. MOst of the stuff you see is regurgitated, and
plagerized over and over.

Which is why some books would use a complex Zo with the "normal"
equation which assumes purely real Zo.

Slick

383. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 09:19:22 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050119.52546481@posting.google.com>
Source record: 108699

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<UlR5b.32984$Om1.30081@newsread2.news.atl.earthlink.net>...
> Cecil:
>
> [snip]
> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> news:3f57c005_2@corp.newsgroups.com...
> > Dr. Slick wrote:
> > > I can't wait to hook it up to see more reflected power than
> > > incident on my DAIWA meter, that would be very interesting.
> >
> > If that's really what you want to observe, connect the meter backwards.
> :-)
> > --
> > 73, Cecil http://www.qsl.net/w5dxp

Ha! that would be the ONLY way, if you are going into a passive
network like coax and antenna.

>
> Or hook a transmitter to the remote end!
>
> Heh, heh... what is the read out of reflected power on a full duplex DSL
> line, with transmitters running full bore on both ends simultaneously.
>
> Slick's exposure to real world transmission problems is very limited!
>

Not as limited as yours, it would seems! ;^)

Show me an antenna-coax network that reflects more power than
incident! Impossible!

Slick

384. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 09:34:12 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309050134.470bc489@posting.google.com>
Source record: 108700

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<6cSdnWpR_9okSsqiU-KYvA@crocker.com>...
>
> I think many of our problems come from mis-applying power formulas to the
> wrong cases. for example, the well known P=VI=V^2/R=I^2R takes a bit of
> modification to work for general complex impedances.
>
> lets look at the simple one first:
> Instantaneous power: p(t)=v(t)i(t)
> aha! you say, there it is, nice and simple.... but not so fast. this is in
> the time domain. the Vfwd and Vrev we throw around so easily in phasor
> notation when talking about transmission lines aren't the same thing and
> can't be so easily converted... in fact, in going to the phasor notation you
> intentionally throw away time information.... so in this case when you write
> v(t) and i(t) in their full form they look like:
> v(t)=|V| cos(wt+/_V)
> i(t)=|I| cos(wt+/_I)
> where w=omega, the angular rate, and /_ is used to denote the relative angle
> at t=0....
> thus expanding out this power formula you get and ugly thing:
> p(t)=.5 |V| |I| cos(/_V-/_I) + .5 |V| |I| cos(2wt+/_V+/_I)
> which when averaged becomes:
> Pav=.5 |V| |I| cos(/_V - /_I)
> which hopefully looks familiar to people out there who deal with power
> factors and such.
>

Ok, this would be the DISSIPATED power.

>
> well, what do you know, the two methods give the same result (the first
> formula of the sss method is the same as the time domain formula). but what
> do the other two with the impedance and admitance do for us.... they show
> that power in phasor calculations is not quite as simple as the
> P=VI=V^2/R=I^2R we are used to... in fact, what are those equations good
> for? basically, just for resistive circuits where I and V are in phase...
> see section 7.3 of that reference for derivation of the I^2R power formula
> for resistive loads... and also for how the rms value gets rid of that pesky
> factor of .5 in all those equations to make I^2R work for sinusoidal
> voltages... so I^2R and V^2/R are REALLY only good for rms voltages and
> resistive loads. so you can't just use P=V^2/Z0 in the general case! but
> didn't we all know that? after all, why is there a power factor added to
> the calculation when working with reactive loads?? and why can you have
> LOTS more reactive power in a circuit than real power??? don't believe in
> reactive power? wait till the report about the blackout comes out, it was

> basically run away loss of control of reactive power that probably resulted
> in circulating currents that brought the grid to its knees.
>
> so you are right:
>
> > Pfwd is not equal to (Vfwd^2/Z0)
> and
> > Prev is not equal to (Vrev^2/Z0)
>

I just got slapped around for saying that the
Zo must be purely real, but it doesn't, and it can be complex.

But this may be part of the problem:

The concept of phase is meaningless for power.

So if ZO is complex in the above equations,
what up? Perhaps they must be the Re(ZO) parts only?

> but by definition:
>
> > Vrev = rho * Vfwd
>
> now, who really read and understood that???

Ok, but if you do ratios, it doesn't matter!

([Vpeak.incident/Vpeak.reflected])=
([Vrms.incident/Vrms.reflected])=sqrt(Pi/Pr)=[rho]

This is because the sqrt(2) is in the numerator and denominator.
And the 2 (after squaring) is also factored out in the Power RC!

And...the Zo is also factored out for Power RC!

Hah! the plot thickens a bit....

Slick

385. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 09:45:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bj9lvk$jd7$1@hercules.btinternet.com>
Source record: 108701

People who worship particular books have seldom tried to make any real practical use of the text.

They just make interesting, convincing reading.

386. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 10:46:03 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <5jednTjnNMXy9MWiXTWJig@crocker.com>
Source record: 108702
Body handling: HTML body converted to readable text

"Roy Lewallen" wrote in message
news:vlfqfvods7ql42@corp.supernews.com...
> I have a few nits to pick with this analysis. Comments interspersed.
>
> David Robbins wrote:
> >
> > indeed... and directly to the crux of the whole problem. there are a
few
> > too many powers being tossed around here without proper definition. i
was
> > just looking at section 7.1 in 'Basic Circuit Theory' by Desoer and Kuh
that
> > kind of sums up all the problems this discussion has been having in its
> > title "Instantaneous, Average, and Complex Power". for some reason this
> > section seems to have many more highlighted formulas than much of the
rest
> > of the book.
> >
> > I think many of our problems come from mis-applying power formulas to
the
> > wrong cases. for example, the well known P=VI=V^2/R=I^2R takes a bit of
> > modification to work for general complex impedances.
> >
> > lets look at the simple one first:
> > Instantaneous power: p(t)=v(t)i(t)
> > aha! you say, there it is, nice and simple.... but not so fast. this is
in
> > the time domain. the Vfwd and Vrev we throw around so easily in phasor
> > notation when talking about transmission lines aren't the same thing and
> > can't be so easily converted... in fact, in going to the phasor notation
you
> > intentionally throw away time information....
>
> Here's my first point of disagreement. Phasor notation doesn't throw
> away time information. It's still there, in implied form (as an implied
> term exp(jwt)). And that's an important distinction, which I'll note
> again shortly. One thing it means is that, given the phasor
> representation of a waveform, it's possible to determine exactly what
> the time waveform is -- you can convert back and forth at will. You do,
> of course, have to know the implied radian frequency. If the time
> information were thrown away, you wouldn't be able to do that.
>
> so in this case when you write

> > v(t) and i(t) in their full form they look like:
> > v(t)=|V| cos(wt+/_V)
> > i(t)=|I| cos(wt+/_I)
> > where w=omega, the angular rate, and /_ is used to denote the relative
angle
> > at t=0....
> > thus expanding out this power formula you get and ugly thing:
> > p(t)=.5 |V| |I| cos(/_V-/_I) + .5 |V| |I| cos(2wt+/_V+/_I)
> > which when averaged becomes:
> > Pav=.5 |V| |I| cos(/_V - /_I)
> > which hopefully looks familiar to people out there who deal with power
> > factors and such.
> >
>
> Fine so far.
>
> > Now, the odd one...
> > Complex Power:
> > P=.5 V I*
> > where V and I are the phasor representations used in sinusoidal steady
state
> > analysis, and I* is the conjugate of I.
>
>
> Problem here. As I mentioned above, a phasor contains an implied
> frequency term. Phasors represent pure sine waves, and the frequency
> *must be the same* for all phasors with which calculations are being
> done. You can't use phasor analysis where the voltage, for example, is a
> different frequency than the current, or to mix two voltages of
> different frequencies. And that's the problem with the equation above.
> It is *not* an equation for complex power. P is not, and cannot, be a
> phasor, because its waveform has a different frequency than V and I. It
> appears that you might be confusing this with an equation for *average*
> power, which is:

i didn't say Pcomplex was a phasor. in fact it's 'frequency' would be twice
the V and I frequency. as the derivation continues you can calculate the
average power from it though as shown below...

>
>
= Re{V I*}
>
> with a .5 factor if V and I are peak values, and no .5 factor if they're
> RMS. The result of this calculation is a purely real number, and the
> same as you get with |V||I|cos(phiV - phiI).

RMS is a whole different problem that simplifies the equation even further.

>
> Power can't be represented in phasor form. At least not in the same

> analysis as the V and I it's composed of -- some clever PhD candidate
> might have devised some use for a phasor analysis involving only power,
> which could be done if you can find a consistent way to deal with
> power's DC (average) component. But I've never seen such a method,
> unless that's what Cecil is doing. So "complex power" doesn't have any
> real meaning, although "instantaneous power", or time-domain power,
> certainly does.

ah, but it does and when used as defined.... it is an odd concept and rarely used but it is a way to represent power which keeps intact the phase relationship it came from.

>
> > now here is where it gets weird...substituted in the exponential forms of
> > the phasors:
> > P=.5 |V| |I| e^(j(/_V-/_I))
> > oh for a good way to represent equations in plain text... but anyway, here
> > is a similar notation to the instantaneous power above, but there is no time
> > in it... only the magnitudes of the voltage and current multiplied by a
> > complex exponential from the difference in their phase angles. this can be
> > expanded into a sin/cos expression to separate the real and imaginary parts
> > like this:
> > P=.5 |V| |I| cos(/_V-/_I) + j.5 |V| |I| sin(/_V-/_I)
> > and from this you can show that the real part of this is the average power,
> > so:
> > Pav=.5 |V| |I| cos(/_V-/_I)
> > but since we are in phasor notation we can transform this one more time
> > using
> > V=ZI and I=YV (Y=1/Z, the complex admittance)
> > to get:
> > Pav= .5 |I|^2 Re[Z] = .5 |V|^2 Re[Y]
> >
>
> Because of what I said above, I don't believe that this is valid. You
> simply can't calculate a phasor power from phasor V and I.
>

as i said, its not phasor power, it is complex power. there is no attempt made to show that it represents a phasor.

> > there are also a couple of important notes to go with this. in a passive
> > network Re[Z] and Re[Y] are both >=0 which also constrains cos(/_V-/_I)
> >
> >>=0... essentially, no negative resistances in passive networks... which

of
> >
> > course then results in Pav always being positive(or zero).
> >
> > now wait a minute you may say.. we have two different Pav equations...
what
> > happens if we equate them??? (well, actually we have 4 different
equations,
> > so lets play around a bit)
> >
> > from time domain:
> > Pav=.5 |V| |I| cos(/_V - /_I)
> >
> > from sinusoidal steady state:
> > Pav=.5 |V| |I| cos(/_V-/_I)
> > Pav= .5 |I|^2 Re[Z]
> > Pav= .5 |V|^2 Re[Y]
> >
> > well, what do you know, the two methods give the same result (the first
> > formula of the sss method is the same as the time domain formula). but
what
> > do the other two with the impedance and admitance do for us.... they
show
> > that power in phasor calculations is not quite as simple as the
> > P=VI=V^2/R=I^2R we are used to...
>
> I hope we're not used to that. It's an attempt to calculate phasor
> power, which is doomed from the start.

thats what i said, you can't use the simple VI formula with phasors to
directly get power.

>
> in fact, what are those equations good
> > for? basically, just for resistive circuits where I and V are in
phase...
> > see section 7.3 of that reference for derivation of the I^2R power
formula
> > for resistive loads... and also for how the rms value gets rid of that
pesky
> > factor of .5 in all those equations to make I^2R work for sinusoidal
> > voltages... so I^2R and V^2/R are REALLY only good for rms voltages and
> > resistive loads.
>
> That's true. And the reason is that when V and I are in phase, then V =
> |V| and I = |I|, and Z = |Z|, so you're simply calculating the average
> power.
>
> so you can't just use P=V^2/Z0 in the general case!
>
> Absolutely not. Again, for the reason that you can't calculate a phasor

> value of P from phasor V and I.
>
> but
> > didn't we all know that? after all, why is there a power factor added
to
> > the calculation when working with reactive loads??
>
> Don't confuse power factor or its existence with the fundamental problem.
>
> and why can you have
> > LOTS more reactive power in a circuit than real power???
>
> Why not? It's very often the case.

why not??? i didn't say your couldn't, i said you do often have lots of
reactive power.... i think you have lost track of what i was trying to show.

>
> don't believe in
> > reactive power? wait till the report about the blackout comes out, it
was
> > basically run away loss of control of reactive power that probably
resulted
> > in circulating currents that brought the grid to its knees.
>
> The idea of reactive power follows easily from observation of the power
> time waveform you described. The power becomes negative for part of the
> cycle if V and I aren't exactly in phase. This represents energy flowing
> back out of the circuit it flows into during the positive portion of the
> cycle. If the power waveform is centered around zero, which it will be
> if V and I are in quadrature, then the same amount of energy flows out
> as flows in, so no work is done -- the power is entirely imaginary. And
> the average value -- the waveform DC offset -- is zero. On the other
> hand, if the waveform is entirely positive, which it is if V and I are
> in phase, then energy flowing in never flows out, so the power is
> entirely real, and the average is half the peak-to-peak waveform value.
> Real power represents the power that flows in without a corresponding
> outward flow; reactive power is that which goes in and comes back out.
>
> >
> > so you are right:
> >
> >
> >> Pfwd is not equal to (Vfwd^2/Z0)
> >
> > and
> >
> >> Prev is not equal to (Vrev^2/Z0)
> >
> >
> > but by definition:

> >
> >
> >> Vrev = rho * Vfwd
> >
> >
> > now, who really read and understood that???
>
> I hope I did. If not, please correct me.
>
> Roy Lewallen, W7EL
>

387. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 10:47:41 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <2f-dneh-Qq9k9MWiU-KYgw@crocker.com>
Source record: 108703

```
"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309050030.19679f56@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<woacnWSgiZVuWsqiXTWJkw@crocker.com>...
> > "Dr. Slick" <radio913@aol.com> wrote in message
> > news:1d15af91.0309041426.c1e02ad@posting.google.com...
> > > Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
> > news:<3f57490d$1_5@corp.newsgroups.com>...
> > > > Dr. Slick wrote:
> > > > > If you agree that the Pref/Pfwd ratio cannot be greater than
1
> > > > > for a passive network, then neither can the [Vref/Vfwd]= rho be
> > > > > greater
> > > > > than 1 either.
> > > >
> > > > Sqrt(Pref/Pfwd) cannot be greater than one. (Z2-Z1)/(Z2+Z1) can be
> > > > greater than one. Both are defined as 'rho' but they are not
> > > > always equal. (Z2-Z1)/(Z2+Z1) is a physical reflection coefficient.
> > > > Sqrt(Pref/Pfwd) is an image reflection coefficient.
> > >
> > >
> > > I agree that Sqrt(Pref/Pfwd) cannot be greater than one for a
> > > passive network.
> > >
> > > (Z2-Z1)/(Z2+Z1) can be greater than one, for passive networks
> > > and certain combinations of complex Z1 and Z2. I feel this is
incorrect
> > > usage of this formula, which should be limited to purely real Zo.
> > > A [rho] that is greater than one gives meaningless negative SWR
> > > data, and is limited to active devices.
> > >
> > it only gives negative swr values if you incorrectly use the lossless
line
> > approximation to calculate vswr from rho. that is the incorrectly
applied
> > formula in this case. that formula is not valid for a lossy line, you
must
> > go back to the original definition of VSWR=|Vmax|/|Vmin|. which as we
have
> > also noted is not meaningful on a lossy line as Vmax and Vmin are
different
> > at each max and min point because of the losses in the line affecting
both
> > the forward and reverse waves.
```

>
>
> What if Z1 represents the impedance at the end of the line? Then
> it doesn't matter what the losses are. Then you are trying to find
> the
> RC right at the meeting of the line and the load, so you don;t care
> what the
> losses of the line are.
>
> Slick

but Vmax and Vmin don't occur at the same location on the line. when measuring Vmax and Vmin you have to look 1/4 wave apart on the line... so by definition it is a distributed measurement so losses do matter.

388. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 11:07:22 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <LPCdnX3Uds0L88WiU-KYgw@crocker.com>
Source record: 108704

"David Robbins" <k1ttt@arrl.net> wrote in message
news:6cSdnWpR_9okSsqiU-KYvA@crocker.com...
>
ok, thanks to radio913 who sent me the Kurokawa paper.... here is the basis
of the new 'power reflection coefficient'.

Step 1: DEFINE two waves:

a=V+ZI/sqrt(|Re Z|)
b=V-Z*I/sqrt(|Re Z|)

(note, each term is subscripted by i in the paper as each voltage, current
and impedance is for the i-th port of a network)

these waves are called 'power waves'. (note, i was chastised in one reply
to my long dissertation on powers last night about not being able to do
'phasor' powers.... that is sure what this looks like, much more than the
'complex' power i used from Desoer and Kuh's book.)
they actually look more like the square root of power calculated from the
sums of voltages and currents in and out of the port.

Step 2: DEFINE the 'power wave reflection coefficient' as b/a

b/a=(V-Z*I)sqrt(|Re Z|)/(V+ZI)sqrt(|Re Z|)
cancel terms, replace V=Zl I, factor out I and voila:
b/a=(Zl-Z*)/(Zl+Z)

so in order to use this equation for reflection you must be using the power
wave's defined which are obviously different than either voltage or current
waves. so therefore this 'power wave reflection coefficient' can not be
applied to simple voltage or current reflection in transmission lines. nor
would it appear to make sense to use it for calculating VSWR through the
formula with rho, since it is not a voltage reflection coefficient.

discussion over.

389. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:30:27 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f589e9a_2@127.0.0.1>
Source record: 108705

Roy Lewallen wrote:
> That's what you're going to have to do to get me to pay attention to
> you. Volts, amps, watts.

Roy, you are the one who made the mistake. I have told you exactly
what your mistake is. The rest is your problem, not mine.

Once again there are four component voltages and four component currents.
Forward voltage and current contain TWO terms, not one term as you assert.
Reflected voltage and current contain TWO terms, not one term as you assert.

I'm at work and don't remember all the values in the experiment but
here is something similar which I posted yesterday.

----lossy feedline---+---1WL 50 ohm lossless feedline---10+j60 load
Pfwd1--> Pfwd2-->
<--Pref1 <--Pref2

The ratio of Pref2 to Pfwd2 is 0.7225 on the 50 ohm line.

(Pfwd1 - Pref1) = (Pfwd2 - Pref2)

I don't remember the Z0 of the lossy line but the reflection coefficient
can be calculated to solve the problem. The main thing to realize from
the above is Pfwd2 > Pref2. Therefore, Pfwd1 > Pref1, i.e. total reflected
power is ALWAYS less than total forward power when dealing with passive
loads.

You have terms left over. There should be no terms left over. There
should be one forward voltage, one forward current, one reflected
voltage, and one reflected current. Until you collect all the terms,
your analysis will contain an error. Why are you so dead set against
collecting like terms?
--
73, Cecil, W5DXP

390. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:36:22 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f589ff6$1_2@127.0.0.1>
Source record: 108706

Dr. Slick wrote:
> I'd like to see the derivation too, as Kurokawa seems to skip it
> or just copied it from another paper! haha...

The point that you may have missed is that Kurokawa invents a different kind of wave called a "Power Wave". He dismisses traveling waves as not being very useful. So, of course, with the invention of a different kind of wave, he is free to introduce a different kind of reflection coefficient. The mistake being made here is trying to assume that his different kind of reflection coefficient applies to normal forward and reflected traveling waves. It doesn't.
--
73, Cecil, W5DXP

391. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:40:55 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f58a106$1_2@127.0.0.1>
Source record: 108707

Dr. Slick wrote:
> Show me an antenna-coax network that reflects more power than
> incident! Impossible!

I've pretty much proven that it can't happen. Simply insert one
wavelength of lossless feedline between the lossy feedline and
the reactive load. Everything becomes clear.
--
73, Cecil, W5DXP

392. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:47:28 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f58a290$1_2@127.0.0.1>
Source record: 108709

Dr. Slick wrote:
> The concept of phase is meaningless for power.

Actually, in a transmission line, it's not. Reference Dr. Best's
QEX article. He introduces a term familiar to the field of optics:

P1 + P2 + Sqrt(P1*P2)cos(delta)

where delta is the angle between V1 and V2.

Sqrt(P1*P2)cos(delta) is the interference term whose magnitude
depends on the phase between two voltages. If the phase between
V1 and V2 is less than 90 deg, the sign of that term is positive
and the interference is constructive. If the phase angle between
V1 and V2 is between 90 deg and 180 deg, the sign of that term
is negative and the interference is destructive.
--
73, Cecil, W5DXP

393. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:48:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kb8hlv81sgbq5mqs3shq77n9ncdi6v0cfk@4ax.com>
Source record: 108708

On Wed, 3 Sep 2003 18:19:52 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Cecil and others, even authors of books, have said -
>
>> - - - - |rho|^2 cannot be greater than 1.0 - - - -
>
>==========
>
>Would you change your minds if I describe a
>reflection-coefficient bridge, which anybody can
>construct, which accurately measures values of | rho |
>up to its greatest possible value in transmission lines
>of 2.414 There's no catch!
>
>For some reason Dr Slick has remained silent to my
>acceptance of his challenge to find such an instrument.
>Perhaps he's gone away to think about it.
>---
>Reg, G4FGQ
>

I've offered my request and have observed Dr. Slick, off in a remote
thread wheedle:
>On 5 Sep 2003 01:34:09 -0700, radio913@aol.com (Dr. Slick) wrote:
>>
>> Ok, show me your schematic, then.....waiting a long time......
>>Slick

You know how short attention spans are for youngsters. He's going to
start fidgeting soon and start another thread (not a new one, just
another one).

73's
Richard Clark, KB7QHC

394. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 14:58:31 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f58a527$1_2@127.0.0.1>
Source record: 108710

David Robbins wrote:
> but Vmax and Vmin don't occur at the same location on the line. when
> measuring Vmax and Vmin you have to look 1/4 wave apart on the line... so by
> definition it is a distributed measurement so losses do matter.

The measured 'rho' at any *point* can be determined by Sqrt(Pref/Pfwd).
That means, for lossy lines, measured SWR increases toward the load and
decreases toward the source. An open-ended 400 ft. piece of RG-58 will
show a near perfect SWR at the source end on 440 MHz.
--
73, Cecil, W5DXP

395. Icom IC 2000 manual wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 15:21:29 UTC
From: Bernard B&#65533;lisle <belisleb@webnet.qc.ca>
Message-ID: <YZ66b.2132$f7.162182@localhost>
Source record: 108732

Used manual or copy of it.
Thank's

396. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 15:24:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bja9rlksj1@sparta.btinternet.com>
Source record: 108711

> Reference Dr. Best's QEX article.

==========

Who is Dr. Best? Would it be Dr Who with his Daleks?

And what is QEX.

99.999 percents of the world's population has never heard of either.

397. BEWARE SPENDING TIME ANSWERING QUESTIONS HERE (WAS Electronic Questions)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 15:29:08 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <9Z16b.28575$S_.14368@fed1read01>
Source record: 108712

After spending some time answering AC circuit theory questions here
including problem solutions
Turns out the guy who asked the questions had an invalid e-mail address and
he never acknowledged the post

SO BEWARE YA ALL -- BEST SEND THEM TO A URL OR BOOK AND NOT SPEND MUCH TIME
AT IT

TEACH EM HOW TO FISH, BUT DON'T GIVE EM THE FISH --- SEEMS TO BE GOOD ADVICE

OH WELL --- I HAD FUN KNOWING I CUD STILL SOLVE AC PARALLEL CKT PROBLEMS

HP CALCULATOR HP-10C SURE HELPED

--
73 From The Signal In The Noise
Caveat Lector Ya All

398. Re: BEWARE SPENDING TIME ANSWERING QUESTIONS HERE (WAS Electronic Questions)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 15:47:59 UTC
From: Ed Cregger <ecregger@hotmail.com>
Message-ID: <bjab740dgd@enews4.newsguy.com>
Source record: 108713

The beauty of the internet is that millions of people are viewing anything that is posted. Certainly, others may have learned something from your effort, even though the original poster may not have followed up.

Ed, NM2K

"Caveat Lector" <CL@latin.com> wrote in message news:9Z16b.28575$S_.14368@fed1read01...
> After spending some time answering AC circuit theory questions here
> including problem solutions
> Turns out the guy who asked the questions had an invalid e-mail address and
> he never acknowledged the post
>
> SO BEWARE YA ALL -- BEST SEND THEM TO A URL OR BOOK AND NOT SPEND MUCH TIME
> AT IT
>
> TEACH EM HOW TO FISH, BUT DON'T GIVE EM THE FISH --- SEEMS TO BE GOOD ADVICE
>
> OH WELL --- I HAD FUN KNOWING I CUD STILL SOLVE AC PARALLEL CKT PROBLEMS
>
> HP CALCULATOR HP-10C SURE HELPED
>
> --
> 73 From The Signal In The Noise
> Caveat Lector Ya All
>
>

399. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 16:17:59 UTC
From: W5DXP <Cecil.A.Moore@ieee.org>
Message-ID: <3f58b7c5$1_2@127.0.0.1>
Source record: 108715

Reg Edwards wrote:

>> Reference Dr. Best's QEX article.
>
> Who is Dr. Best? Would it be Dr Who with his Daleks?

Dr. Best is the ham who started all this mess when he posted parts
of his QEX article to this newsgroup in May of 2001.

> And what is QEX.

QEX is a technical magazine publication of the ARRL.

> 99.999 percents of the world's population has never heard of either.

What percentage of the world's population are US hams? I'll bet at
least 20% of them have heard of QEX magazine.
--
73, Cecil, W5DXP

400. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 16:19:46 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <CI26b.367473$uu5.70870@sccrnsc04>
Source record: 108714

> Who is Dr. Best? Would it be Dr Who with his Daleks?
>
> And what is QEX.
>
> 99.999 percents of the world's population has never heard of either.
>
>
Yea, but those of us who matter, know both, and have been to Llangollen!

W4ZCB

401. Re: BEWARE SPENDING TIME ANSWERING QUESTIONS HERE (WAS Electronic Questions)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 16:34:00 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <YV26b.173195$2x.49357@rwcrnsc52.ops.asp.att.net>
Source record: 108716

Are you new to usenet? If not, why did this surprise you?
"Caveat Lector" <CL@latin.com> wrote in message
news:9Z16b.28575$S_.14368@fed1read01...
> After spending some time answering AC circuit theory questions here
> including problem solutions
> Turns out the guy who asked the questions had an invalid e-mail address
and
> he never acknowledged the post
>
> SO BEWARE YA ALL -- BEST SEND THEM TO A URL OR BOOK AND NOT SPEND MUCH
TIME
> AT IT
>
> TEACH EM HOW TO FISH, BUT DON'T GIVE EM THE FISH --- SEEMS TO BE GOOD
ADVICE
>
> OH WELL --- I HAD FUN KNOWING I CUD STILL SOLVE AC PARALLEL CKT PROBLEMS
>
> HP CALCULATOR HP-10C SURE HELPED
>
> --
> 73 From The Signal In The Noise
> Caveat Lector Ya All
>
>

402. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 17:02:02 UTC
From: richardharrison@webtv.net
Message-ID: <7094-3F58C18A-48@storefull-2311.public.lawson.webtv.net>
Source record: 108719

Richard Clark wrote:
"At the end of AN762 they offer a design for low pass filtering (to remove some of those out of band RF products) which specifically includes the source specification of (-gasp!-) 50 Ohms, and a load of 50 ohms."

"There is no way to find the best design except to try out as many designs as possible and discard failures," wrote Freeman Dyson.

Maximum power transfer occurs between matched impedances. This is well proved.

SWR depends on the match between load and transmission line and is usually unaffected by the source impedance which feeds the line.

It is possible to determine source impedance by experimentation with loads to find the load which extracts maximum power from the source.

Richard Clark wrote:
"Motorola (in their confusion) offers:
For example, in the 180 Watt version the input transformer is of 16:1 impedance ratio, making the secondatry impedance 3.13 Ohm with a 50 Ohm interface."

Does not seem confused to me.
16 x 3.13-ohm= 50 ohms by my calculation.

Best regards, Richard Harrison, KB5WZI

403. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 17:09:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlhgql4sr4rp07@corp.supernews.com>
Source record: 108717

No, I don't have a problem, nor did I make a mistake. I presented an example with voltages, currents, and powers that are all self-consistent, obey Ohm's and Kirchoff's laws, and don't violate any physical laws. It simply uses those laws, equations that can be found in nearly any transmission line text, and arithmetic. The analysis is correct as written.

You've demonstrated that you're unable to produce a similar analysis which can be fit into your conception of how things work. If your problem is dyslexia or unfamiliarity with complex arithmetic, all you have to do is say so. Neither is anything to be ashamed of.

I now return the readers to the standard flurry of hand-waving, objecting, dodging, and excuses. But don't expect an analysis, derivation, or proof. And I'll be back outta here.

Roy Lewallen, W7EL

W5DXP wrote:
>
> Roy, you are the one who made the mistake. I have told you exactly
> what your mistake is. The rest is your problem, not mine.
> . . .

404. Re: BEWARE SPENDING TIME ANSWERING QUESTIONS HERE (WAS Electronic Questions)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 17:20:50 UTC
From: James Mosier <jimm@gatecom.com>
Message-ID: <vlhhfedon77sb6@corp.supernews.com>
Source record: 108718

Ed,

You made a very good point. Plenty of lurkers follow the news groups like
me. I found the tpub site very helpful.

Jim KD8GS

"Ed Cregger" <ecregger@hotmail.com> wrote in message
news:bjab740dgd@enews4.newsguy.com...
> The beauty of the internet is that millions of people are viewing anything
> that is posted. Certainly, others may have learned something from your
> effort, even though the original poster may not have followed up.
>
> Ed, NM2K

405. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 17:57:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlhjjva08f1b58@corp.supernews.com>
Source record: 108720

I was attracted by the "usually" qualification. Under what circumstances
is the line SWR affected by the source impedance which feeds the line?

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> SWR depends on the match between load and transmission line and is
> usually unaffected by the source impedance which feeds the line.
> . . .

406. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 17:57:31 UTC
From: richardharrison@webtv.net
Message-ID: <25612-3F58CE8B-38@storefull-2317.public.lawson.webtv.net>
Source record: 108723

Dale, W4OP wrote:
"Could you give an explanation of why this is?"

Joe O. had written:
"A Horizontal Loop will pickup less vertically polarized atmospheric noise."

ON4UN wrote on page 10-7 of "Low-Band DXing":
"The loop will act as any horizontally polarized antenna over real ground; its wave angle will depend on the height of the antenna over the ground."

So, the short answer is "cross-polarization".

Most noise is local and reaches a receiver through ground-wave propagation. Horizontally polarized waves have zero ground-wave propagation. Their low-angle reflections are out-of-phase with the direct wave.

Horzontal antennas are in general quieter than vertical antennas. Cross-polarization loss has been often reported as about 20 db.

Loops, small in terms of wavelength, tend to have the same volts and amps induced into all their increments. This helps reduce sensitivity to overloads from high-power signals at frequencies far below the desired reception, as might be received on a voltage-probe antenna.

Best regards, Richard Harrison, KB5WZI

407. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 18:10:31 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <rk46b.661$BG6.487@newsread1.news.atl.earthlink.net>
Source record: 108721

Slick:

[snip]
> Not as limited as yours, it would seems! ;^)
>
> Show me an antenna-coax network that reflects more power than
> incident! Impossible!
>
>
> Slick
[snip]

Ever operate your antenna coax in the near field of a commerical broadcast antenna?

Guess what the reflected power reads?

RF applications, Ham antennas and transmission lines are ho-hum technology...

Such simple applications do not present any great analysis difficulty or operating
challenges, they are approximately lossless and distortionless and always operated narrow band with a purely resistive Zo =50 Ohms.

The question of complex Zo never arises in ham applications or most other RF applications for that matter...

The most difficult transmission line problems for design and analysis are those
operating in what is known as DSL [digital subscriber loop] technology and similar applications.

In the DSL application the Zo of the line, up to 18,000 feet of twisted pair with at leat 1500 Ohms of DC resistance, is extremely complex and varies all over the map over 5 - 6 decades of operating frequency range from DC to tens of MegaHz, supported by full duplex transmitters transmitting simulaneously
at full power on both ends with the receivers hooked directly to the same ends.

If you have succesfully designed transceivers to operate on those lines, maintained
by span powering from one end and shipped in the millions world wide as I have, why
then my friend you may claim to know something about complex Zo and reflection

coefficients.

--
Peter K1PO
Indialantic By-the-Sea, FL

408. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 18:14:40 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <ko46b.664$BG6.15@newsread1.news.atl.earthlink.net>
Source record: 108722

Slick:

What about a negative inductance for a load? A negative capacitance? And
don't tell me those are not passive!

--
Peter K1PO
Indialantic By-the-Sea, FL.

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309050034.204c8994@posting.google.com...
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:<fDR5b.33159$Om1.9692@newsread2.news.atl.earthlink.net>...
> > Slick:
> >
> > [snip]
> > > Show us a passive circuit that reflects more power than
> > > you feed it (incident), on my Daiwa meter,
> > > and i will be VERY impressed.
> > >
> > > I'm be waiting a long time for that schematic....
> > >
> >
> >
> > That's an easy one... simply connect a negative resistance to the end of
the
> > line.
> >
> > And don't tell me that negative resistance is not passive!
>
>
> I most certainly WILL tell you that! A negative resistance can be
found
> in a tunnel diode, but you still need to apply a supply voltage to make
> it an oscillator.
>
> Negative resistance implies positive feedback, so i would certainly be
> an active device.
>
> Ok, show me your schematic, then.........waiting a long time......
>
>
> Slick

409. NEC-2 and topography

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 18:46:01 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86ekyv2hw6.fsf@duchess.twilley.org>
Source record: 108724

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

NEC-2 assumes the ground is nice and flat. I would like to model an
antenna over a hillside with a 30 degree incline. Can NEC-2 handle
this?

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/WNnuGPFSfAB/ezgRArd2AKCtl29gpGZpHloQ/FVGqJ+YA7iltgCfRwZl
C6lAiZobnNm94CRzG+FPWuw=
=abQ5
-----END PGP SIGNATURE-----
```

410. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 18:53:22 UTC
From: richardharrison@webtv.net
Message-ID: <25612-3F58DBA2-42@storefull-2317.public.lawson.webtv.net>
Source record: 108727

Roy Lewallen wrote:
"Under what circumstances is the line SWR affected by the source
impedance which feeds the line?"

None that I kbow of, but I can imagine a control mechanism that adjusts the impedance presented to the antenna to reduce SWR.

To avoid responding to: "But, how about the "Matchmaker System", which I never herd of, I added the word "usually". As far as I know, there is usually nothing that can be done at the transmitter end of the line to affect SWR. Match between the load and line controls SWR.

Best regards, Richard Harrison, KB5WZI

411. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 19:05:21 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <lJGcneS7QszuQ8WiXTWJkw@crocker.com>
Source record: 108725

"Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
news:ko46b.664$BG6.15@newsread1.news.atl.earthlink.net...
> Slick:
>
> What about a negative inductance for a load? A negative capacitance? And
> don't tell me those are not passive!
>

a negative inductance is a capacitance, and a negative capacitance is an
inductance! and yes, they are both passive!

412. Re: NEC-2 and topography

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 19:10:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlhntod4q4iq4b@corp.supernews.com>
Source record: 108726

If the slope continues for a long distance, you can tilt your model 30 degrees, and tilt the resulting pattern 30 degrees the other way. Otherwise, no.

Roy Lewallen, W7EL

Jack Twilley wrote:
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> NEC-2 assumes the ground is nice and flat. I would like to model an
> antenna over a hillside with a 30 degree incline. Can NEC-2 handle
> this?
>
> Jack.
> - --
> Jack Twilley
> jmt at twilley dot org
> http colon slash slash www dot twilley dot org slash tilde jmt slash
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.2.3 (FreeBSD)
>
> iD8DBQE/WNnuGPFSfAB/ezgRArd2AKCtl29gpGZpHloQ/FVGqJ+YA7iltgCfRwZl
> C6lAiZobnNm94CRzG+FPWuw=
> =abQ5
> -----END PGP SIGNATURE-----

413. rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 19:30:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjao82jeq1@titan.btinternet.com>
Source record: 108728

Anybody who doesn't agree that

rho = (ZL - Zo) / (ZL + Zo)

means something can depart forthwith and forever hold their peace.

To assist brain cells a pencil and paper will be found useful..

There is a 4-arm bridge, a voltage generator and a high-impedance voltmeter.

Top-left arm of the bridge is a resistor, or capacitor, or inductor of any value.

Bottom-left arm of the bridge is exactly the same as the top-left arm.

The top-left and bottom-left arms therefore constitute the one-to-one bridge ratio arms.

The voltage generator, of negligeable internal resistance, is connected across the two ratio arms.

The top-right arm of the bridge is a complex impedance which we will call ZL.

The bottom-right arm of the bridge is another complex impedance which we will call Zo.

Zo, of course, can be the impedance of a long transmission line or just a pair of components Ro and jXo.

The voltmeter is connected in the obvious place between the centre-points of the left and right arms.

To calibrate the bridge set the generator to 2 (two volts). The bottom of the bridge can be considered to be ground, the voltage reference point.

We will now calculate what the voltmeter will read. Let the voltmeter reading = V volts.

In general the bridge will be unbalanced. The voltmeter will read the difference between the voltage at the centre of the ratio arms and the voltage at the junction of ZL and Zo.

The voltage at the centre of the ratio arms is 1 volt relative to ground.

The voltage at the junction of ZL and Zo is 2*Zo / (Zo + ZL) relative to ground.

Therefore the voltmeter reading will be -

V = 1 - 2*Zo / (Zo +ZL) volts.

V = (ZL - Zo) / (ZL + Zo) volts.

If V is diode-rectified and the meter is a DC voltmeter then -

BINGO !

THE METER GIVES A DIRECT MEASUREMENT OF THE MAGNITUDE OF THE REFLECTION COEFFICIENT.

THE METER CAN BE GIVEN A SECOND SCALE CALIBRATED FROM SWR = 1 TO INFINITY.

Where have we already seen an instrument with an SWR scale?

==========

In the common-or-garden SWR meter the bridge ratio arms are usually around 10 or 20-to-1 which requires a teeny transformer wound on teeny ferrite ring to accomplish. The high ratio is there just to prevent half or more of the Tx power being dissipated in the bridge itself.

{ To measure the angle of the reflection coefficient it is necessary to compare the relative phases of the generator volts and V. This requires a somewhat more complicated instrument. When V is used, for example, to control an automatic antenna tuner the angle information cannot be discarded. Remember, an antenna tuner has two knobs, L and C, and two pieces of information, amplitude and phase of V, are needed to set them accurately. Any discussion about forward and reflected powers is mere entertainment.}

==========

To demonstrate to heretical unbelievers that | rho | > 1 can occur, as it often does, let's put some easy-to-calculate values in -

Zo = Ro + jXo and ZL = RL + jXL.

Let Ro =1, Xo = -j1, RL = 0, XL = j1.

The Ph.D's amongst us ought to able to find it easy to calculate | rho | = Sqrt(2) = 1.4142

which is greater than unity but is by no means as great as it can be.

I've just spent 3 hours on this. Please address any questions to Dr Slick.

Reg, G4FGQ

414. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 19:58:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f58ec89_5@corp.newsgroups.com>
Source record: 108729

Roy Lewallen wrote:
> No, I don't have a problem, nor did I make a mistake. I presented an
> example with voltages, currents, and powers that are all
> self-consistent, obey Ohm's and Kirchoff's laws, and don't violate any
> physical laws. It simply uses those laws, equations that can be found in
> nearly any transmission line text, and arithmetic. The analysis is
> correct as written.

Nope, it isn't and after following all those laws, you violated one
you should have learned in the 4th grade, i.e. to collect like terms.

> You've demonstrated that you're unable to produce a similar analysis
> which can be fit into your conception of how things work.

No I haven't. I have produced a simple logical analysis that proved
yours to be wrong. Do you really believe yourself incapable of
making a conceptual error? In the following:

```
---lossy line---x---1WL 50 ohm lossless line---10+j50 load
Pfwd1--> Pfwd2--> = 30.53W rho=0.82 at 88.9 deg
<--Pref1 <--Pref2 = 20.53W
```

I measure ten volts across the ten ohm resistor. I measure 30.53W
forward on the 50 ohm line and 20.53W reflected on the 50 ohm line.
Since the 50 ohm line is lossless, the forward voltage is in phase
with the forward current and the reflected voltage is in phase
with the reflected current. The values of voltages and currents on
the 50 ohm line are easy to calculate. The load reflection coefficient
is easy to calculate. Analysis from 'x' to the load is a no-brainer.

The forward power on the 50 ohm line is 10W less than the reflected
power on the 50 ohm line, i.e. Pfwd2-Pref12 = 10W just as it should.

At point 'x', on the source side of 'x', Pfwd1-Pref1 MUST equal
that same 10W. It doesn't matter what happens between 'x' and the
source. At point 'x', Pfwd1 simply cannot be less than Pref1.

Conditions are the same whether the 1WL of lossless 50 ohm feedline
is in the circuit or out of the circuit. You have not taken all the
forward and reflected terms into account. You have violated something
you should have learned in the 4th grade, i.e. to collect like terms.
Instead, you threw away half of the forward terms and half of the
reflected terms. No wonder you got it wrong.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

415. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 20:02:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f58ed62$1_5@corp.newsgroups.com>
Source record: 108730

Reg Edwards wrote:

> Anybody who doesn't agree that
>
> rho = (ZL - Zo) / (ZL + Zo)
>
> means something can depart forthwith and forever hold their peace.

source----50 ohm feedline---+---150 ohm feedline---load

What is rho at point '+'? What is s11 at point 'x'?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

416. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 20:45:14 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <EvmdnStS-MxDaMWiU-KYvA@crocker.com>
Source record: 108731

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f58ed62$1_5@corp.newsgroups.com...
> Reg Edwards wrote:
>
> > Anybody who doesn't agree that
> >
> > rho = (ZL - Zo) / (ZL + Zo)
> >
> > means something can depart forthwith and forever hold their peace.
>
> source----50 ohm feedline---+---150 ohm feedline---load
>
> What is rho at point '+'? What is s11 at point 'x'?

rho can't be computed unless you know what the load impedance is, and what
the length of the 150 ohm line is in wavelengths.

and no one but you cares what s11 is.

417. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 21:53:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f590776$1_4@corp.newsgroups.com>
Source record: 108734

David Robbins wrote:
> rho can't be computed unless you know what the load impedance is, and what
> the length of the 150 ohm line is in wavelengths.
>
> and no one but you cares what s11 is.

:-) s11 is God's rho! :-) What good is an image rho anyway?
Help! Peter!
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

418. Re: FRACTAL ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 21:55:01 UTC
From: dx528@yahoo.com
Message-ID: <31b11dfa.0309051355.4c91fbda@posting.google.com>
Source record: 108733

Hi Howard,

Here is a more practical design.

http://www.gopherlink.com/DeltaXray/hfantenn.htm

73,

Rich

W9JUC (since 1954)

**********NN

k4wge@arrl.net (k4wge) wrote in message
news:<7b671b4e.0308280938.3587bac5@posting.google.com>...
> nedrog@aol.comNOSPAM (NEDROG) wrote in message
news:<20030828011411.12631.00000589@mb-m28.aol.com>...
> > LQQking for a copy of the FRACTAL Antenna for 10m, published I think back in
> > the late '90's, in 73 or Ham Radio mag??
> >
> > Thanks
> >
> > Howard W3CQH
>
> >"NEDROG" <nedrog@aol.comNOSPAM> wrote in message
> >news:20030716215016.27503.00001115@mb-m24.aol.com...
> >> Hey there - anybody still have a copy of the article - I think it was in 73 mag
> >> a couple of years back - reference a:
> >>
> >> 2 element FRACTUAL 10 M QUAD?
> >>
> >> 73's
> >>
> >> Howard W3CQH
> >
>
>
> Hi Howard,
>
> Take a look at:
> http://www.qsl.net/kb7qhc/antenna/fractal/index.htm
>
> 73's

419. Re: NEC-2 and topography

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 22:29:07 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f590f5c_4@news1.prserv.net>
Source record: 108735

Another example of a case where Beezley's TA helps. Someone needs to get
Brian to sell the rights to that program to them, then convert it to
Windows, and move on.

--
Crazy George
Remove NO and SPAM from return address
"Jack Twilley" <jmt+usenet@twilley.org> wrote in message
news:86ekyv2hw6.fsf@duchess.twilley.org...
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

NEC-2 assumes the ground is nice and flat. I would like to model an
antenna over a hillside with a 30 degree incline. Can NEC-2 handle
this?

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/WNnuGPFSfAB/ezgRArd2AKCtl29gpGZpHloQ/FVGqJ+YA7iltgCfRwZl
C6lAiZobnNm94CRzG+FPWuw=
=abQ5
-----END PGP SIGNATURE-----

420. Re: NEC-2 and topography

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 22:58:10 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <863cfa3ksd.fsf@duchess.twilley.org>
Source record: 108736

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Crazy" == Crazy George <munschNO@attglobal.net.SPAM> writes:

Crazy> Another example of a case where Beezley's TA helps. Someone
Crazy> needs to get Brian to sell the rights to that program to them,
Crazy> then convert it to Windows, and move on.

You sent a copy of your post to me as email, and I attempted to reply
to your email. This is what I received:

The following addresses had delivery problems:

<munsch@attglobal.net>
Permanent Failure: NO GOOK SPAM
Delivery last attempted at Fri, 5 Sep 2003 22:37:00 -0000
Reporting-MTA: dns; prserv.net
Arrival-Date: 5 Sep 2003 22:36:56 +0000

You may wish to address this issue.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/WRUKGPFSfAB/ezgRAuxyAKCBCZZTmSHQ7DMGBks9oOdXX4hTCACcCTYJ
yRfk3nZHzZGhfpIq1ZWMgL0=
=TeOI
-----END PGP SIGNATURE-----
```

421. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 23:02:46 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309051502.495e0017@posting.google.com>
Source record: 108737

W5DXP <Cecil.A.Moore@ieee.org> wrote in message news:<3f589ff6$1_2@127.0.0.1>...
> Dr. Slick wrote:
> > I'd like to see the derivation too, as Kurokawa seems to skip it
> > or just copied it from another paper! haha...
>
> The point that you may have missed is that Kurokawa invents a different
> kind of wave called a "Power Wave". He dismisses traveling waves as not
> being very useful. So, of course, with the invention of a different kind
> of wave, he is free to introduce a different kind of reflection coefficient.
> The mistake being made here is trying to assume that his different kind of
> reflection coefficient applies to normal forward and reflected traveling
> waves. It doesn't.

This is the bad nomenclature i was complaining about earlier!

It's not very clear is it! What he calls a "power wave RC" is
also the voltage RC if Zi is real and positive (see footnote on page
3).

At any rate, he does square the absolute value of the voltage RC
to get the
power RC, which is correct.

But his original formulas for ai and bi (incident and reflected
voltage waves) are quite confusing in terms of subscripts, and he
doesn't show us the
derivation for the conjugate RC formula, unfortunately.

Slick

422. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 23:14:31 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309051514.7104507a@posting.google.com>
Source record: 108738

W5DXP <Cecil.A.Moore@ieee.org> wrote in message news:<3f58a527$1_2@127.0.0.1>...
> David Robbins wrote:
> > but Vmax and Vmin don't occur at the same location on the line. when
> > measuring Vmax and Vmin you have to look 1/4 wave apart on the line... so by
> > definition it is a distributed measurement so losses do matter.
>
> The measured 'rho' at any *point* can be determined by Sqrt(Pref/Pfwd).
> That means, for lossy lines, measured SWR increases toward the load and
> decreases toward the source. An open-ended 400 ft. piece of RG-58 will
> show a near perfect SWR at the source end on 440 MHz.

I agree with both of you on this one.

This is why people will tell you that your SWR meter should really
be
at the antenna, instead of at the end of 100 ft. of RG-58, if you
wanna measure the SWR at the attenna!

Absolutely agrees with everything i know up to this point.

But, you SWR meter is at one point only! You don't have to
measure at two places 1/4 wave apart! This is because the SWR is
based on the forward and reflected powers.

But i agree, if you move 200 feet down RG-58 from the SWR meter at
the antenna, the SWR will most certainly improve!

My point is that the RC equation calculated the RC at one point,
and so the SWR equation will also apply at that ONE point.

But if you want to get the SWR 200 feet down the line, you will
have to
move the SWR meter and measure at the new location.

Slick

423. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 23:25:22 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309051525.282e12bb@posting.google.com>
Source record: 108739

W5DXP <Cecil.A.Moore@ieee.org> wrote in message news:<3f58a290$1_2@127.0.0.1>...
> Dr. Slick wrote:
> > The concept of phase is meaningless for power.
>
> Actually, in a transmission line, it's not. Reference Dr. Best's
> QEX article. He introduces a term familiar to the field of optics:
>
> P1 + P2 + Sqrt(P1*P2)cos(delta)
>
> where delta is the angle between V1 and V2.
>
> Sqrt(P1*P2)cos(delta) is the interference term whose magnitude
> depends on the phase between two voltages. If the phase between
> V1 and V2 is less than 90 deg, the sign of that term is positive
> and the interference is constructive. If the phase angle between
> V1 and V2 is between 90 deg and 180 deg, the sign of that term
> is negative and the interference is destructive.

Ok, well perhaps Dr. Best is talking about constructive and
destructive
interference, but i'm just talking about incident and reflected power.

Page 32 of "Electronic Applications of the Smith Chart":

"The power RC is defined simply as the ratio of the
reflected to the
incident power in a waveguide. Numerically it is equivalent to the
square
of the voltage reflection coefficient (atually, this should be
Magnitude-Slick).
However, unlike the voltage RC, the power RC has magnitude only, since
'phase' as applied to power is meaningless."

Slick

424. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 23:28:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f591db9$1_5@corp.newsgroups.com>
Source record: 108740

Dr. Slick wrote:
> But his original formulas for ai and bi (incident and reflected
> voltage waves) are quite confusing in terms of subscripts, and he
> doesn't show us the derivation for the conjugate RC formula, unfortunately.

He has simply invented a new model. There are a lot of them. From
now on, go through a binary decision tree to see if someone is
repeating the past or is offering something new.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

425. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-05 23:31:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f591e5f$1_5@corp.newsgroups.com>
Source record: 108741

Dr. Slick wrote:
> Ok, well perhaps Dr. Best is talking about constructive and destructive
> interference, ...

Yes, he was, but unfortunately he didn't realize it until a few weeks
after I told him. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

426. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 00:28:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hc9ilv85j3lll0k02if9f4jjg3ol3q2gg5@4ax.com>
Source record: 108742

On Fri, 5 Sep 2003 12:02:02 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark wrote:
>"Motorola (in their confusion) offers:
>For example, in the 180 Watt version the input transformer is of 16:1
>impedance ratio, making the secondatry impedance 3.13 Ohm with a 50 Ohm
>interface."
>
>Does not seem confused to me.
>16 x 3.13-ohm= 50 ohms by my calculation.

Hi Richard,

The expression of "confusion" is not original, nor embraced by myself.
It represents my wry comment, an irony in that this term (confusion)
applied to Motorola's specifications is rejected by data, experience,
Motorola (except through a particular reading of one application note
that seems to bear no relation to any known experience), and at least
three more vendors that I have supplied who all conform to this
practice.

Technical literature for RF Design Engineers is chock full of this
consideration that is taken for granted in academic texts (it would
only muddy the waters for students, I suppose). However, when
unmentioned, except in the footnotes, endnotes, or appendix (all
unread at hazard to speed readers) this academic shortfall gives the
impression that the topic is of no interest. Hence we read of
Motorola being confused about their specification of source Z that
everywhere in their literature is expressed with deliberation and
planning. To date, and through more than several inquiries to expand
upon this "confusion" I have been offered no data, other form of
specification, how it bears on application, or any correlation to
personal experience.

If you follow the thread back up several, you will find Tam struggling
to find negative confirmations, and through his lack of close reading
his "condemnatory" sources in fact supply me with all the engineering
details I had described as being part and parcel to a common RF
Finals' Deck.

73's
Richard Clark, KB7QHC

427. Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 00:31:52 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <NV96b.11724$QT5.3177@fed1read02>
Source record: 108743

I'm building a new ham shack location for my company's ham radio club, and I would like to hear some suggestions from our group about what antennas would be best for our location. Here's some details:

We want to provide for all HF bands first.
Maximum power will be about 500 watts, all-tube gear.
Location is San Diego, CA, USA.
The shack is at ground level, immediately against a two-story building with a concrete curtain wall about 50 feet high.
The top edge of the concrete wall is about 6 feet above the building roof.
The building roof is a flat metal pan, about 300 feet by 300 feet.
We have a BWD-90 160 M through 6 M folded dipole.
We have an IAC 40 M Double Bazooka antenna.
We have about 1000 feet of RG-213U coax.
We do not have a remote antenna match network.

We plan to place the folded dipole about 6 feet above the edge of the concrete wall, running N/S, to initially get us on the air.

The Double Bazooka might be strung NW/SE, to give us a maximum lobe toward the rest of the US & Australia.

So, what should we do next? A long-wire is one possibility, but we can't get much more than about 10 feet above the metal pan on that building roof.
Perhaps a horizontal loop, standing maybe 8 feet above that pan, for NVIS?
Perhaps a vertical multi-bander (what a ground plane!)

What would you do?

Thanks,

Ed
WB6WSN

428. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 00:48:25 UTC
From: kd1@sympatico.ca
Message-ID: <3F592ED9.3192F91E@sympatico.ca>
Source record: 108745

"Dr. Slick" wrote:
> ok, Keith, i look forward with great interest on your
> imaginary passive circuit which can reflect more power than
> what you feed it (incident power).
>
> I can't wait to hook it up to see more reflected power than
> incident on my DAIWA meter, that would be very interesting.

I would never claim there is a passive circuit which violated
the rules of conservation of energy but if you define
A = Vf**2/Z0
and
B = Vr**2/Z0
then there are circuits for which B is greater than A and if you
accept the often held view that Pfwd = A and Prev = B then YOU
are also claiming the Pref is greater than Pfwd. I claim that A
and B don't, in reality, have much to do with power at all.

On the other hand Vr > Vf has been demonstrated by several
examples of which Roy's August 20 post

http://groups.google.ca/groups?dq=&hl=en&lr=&ie=UTF-8
&threadm=vl88o381tks0cc%40corp.supernews.com
&prev=/groups%3Fdq%3D%26num%3D25%26hl%3Den%26lr%3D%26ie%3DUTF-8
%26group%3Drec.radio.amateur.antenna%26start%3D25

is just one example.

This example had a line with Z0 of 68-j39 ohms connected to a load
with impedance 10+j50 ohms.

While this example demonstrated lossy lines, for this analysis
we can simplify the line to its Thevenin equivalent:
- an ideal voltage source
- producing a 10 kHz sinusoid
- at 52.68 V
- with a source impedance of 68-j39 ohms
connected to a load of 10+j50 ohms.

The incident voltage is 26.34 V.

Using polar notation...
- source voltage: 52.68/_ 0.0 [52.68+j0.0] V
- source impedance: 78.4/_ -29.8 [68-j39] ohms
- load impedance: 51.0/_ 8.7 [10+j50] ohms

Total circuit impedance is source + load impedance:
78.4/_ -29.8 + 51.0/_ 8.7 = 78.8/_ 8.03 [78+j11]
Circuit current (voltage/impedance)
52.68/_ 0.0 / 78.8/_ 8.03 = 0.669/_ -8.03 [0.662-j0.0934]
Voltage at load (current * impedance)
0.669/_ -8.03 * 51.0/_ 8.7 = 34.1/_ 70.7 [11.3+j32.2]
which agrees with Roy's.
Reflected voltage (load voltage - incident)
34.1/_ 70.7 - 26.34/_ 0.0 = 35.5/_ 115.1 [-15.0+j32.2]
which also agrees.

So reflected voltage is greater than incident voltage
which leads to rho being greater than unity.

Now about that Daiwa....

Directional wattemeters compute the Vf and Vr using
Vf = (V + I*Z0) /2
Vr = (V - I*Z0) /2

Your Daiwa is probably calibrated for Z0 = 50 ohms, but let's
assume we can recalibrate for Z0 = 78.4/_ -29.8 [68-j39] ohms.

Then it will obtain
Vf = (34.1/_ 70.7 + 0.669/_ -8.03 * 78.4/_ -29.8) /2
= 26.34/_ 0.0 [26.34+j0.0]
Vr = (34.1/_ 70.7 - 0.669/_ -8.03 * 78.4/_ -29.8) /2
= 35.5/_ 115.1 [-15.0+j32.2]
as expected. Please note that your Daiwa DOES think that
Vr is greater than Vf.

Assuming your Daiwa works like most directional wattmeters
it will feed these voltages (appropriately scaled) to a
meter which will move linearly in response to the voltage.

So if your Daiwa had a linear scale it would have no
difficulty showing Vf and Vr (except that it would need
to be adjusted for the different Z0) and it would show
a greater Vr than Vf (i.e. rho > 1).

But displaying power (even though meaningless in this case)
is somewhat more difficult. Your Daiwa likely computes power
by having non-linear markings on the meter representing
V**2/Z0. This works fine for real Z0, but will not do for
complex Z0. For this, you need more sophosticated computation
than is possible with just a non-linear scale, so the
power indicated by your Daiwa will be quite incorrect.

But it does get Vf and Vr correct (assuming it is adjusted for
the different Z0).

...Keith

429. Re: Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 00:54:14 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Wv2dnXxFUuGnrcSiXTWJiQ@comcast.com>
Source record: 108744

Tell your Company, that in the interest of public relations, it important
for the ham club to reflect a positive image, and you want BIG BUCKS.

Tam/WB2TT
"Ed Price" <edprice@cox.net> wrote in message
news:NV96b.11724$QT5.3177@fed1read02...
> I'm building a new ham shack location for my company's ham radio club, and
I.............................

430. Complex Z0 - Power : A Proof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 00:57:25 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjbbdn$a26$1@nic.grnet.gr>
Source record: 108746

Complex Z0 - Power : A Proof
[Please use fixed-space font]

It seems that
a proof has been carried out
for the validation
of the so-called
Principle of Conservation of Energy
"P.C.E"
in any point of a Transmission Line
with a Complex characteristic impedance,
which is terminated at any passive load.

But,
I have to make an appeal
for some patience...

[1]

Let
the Characteristic Impedance

Zo = Ro + j Xo

and the Gamma

g = a + j b

[2]

At the Terminal Load

Zt = Rt + j Xt

a "Reflection Coefficient"
is defined by

pt = (Zt - Zo)/(Zt + Zo)
pt = |pt|.Exp(j tt)

On the load
the Average Power
"Wt"
is expressed as
[*]

Wt = k.T

where k > 0 is a constant
and

T = 1 - |pt|^2 + j (Xo/Ro)(pt - pt*)

[3]

With direct substitution of
Zt and Zo in the last one
and after
_enough_but_straightforward_
algebraic manipulation,
which it is impossible to be reproduced here,
we have for the
Average Power at the Terminal Load

[Wt >= 0] <=> [T >= 0] <=> [Rt >= 0]

This is an important partial result
which proves that
P.C.E. is valid
on any passive terminal load
of a Transmission Line with complex Zo.

[4]

Now,
at any other point on the Transmission Line
at a distance d from the Terminal Load,
a "Reflection Coefficient" is introduced from

pd = pt.Exp(-2.g.d)
[*]

and the following are defined

Zd = (1 + pd)/(1 - pd)
pd = (Zd - Zo)/(Zd + Zo)
pd = |pd|.Exp(j td)

and the relation

|pd| = |pt|.Exp(-2.a.d)

holds between the two
Reflection Coefficients

[5]

As in above [2],
the Average Power at any point at distance d is

Wd = k.D

where

D = 1 - |pd|^2 + j (Xo/Ro)(pd - pd*) =>
D = 1 - Exp(-4.a.d).|pt|^2 - 2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td)

Obviously,
P.C.E. holds,
if and only if

D >= 0

or equivalently

2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 1 - Exp(-4.a.d).|pt|^2

[6]

But, we have

0 < Exp(-4.a.d) =< 1

and

0 =< |pt|^2

therefore

Exp(-4.a.d)|pt|^2 =< |pt|^2 =>
-|pt|^2 =< -Exp(-4.a.d)|pt|^2

and finally

1 - |pt|^2 =< 1 - Exp(-4.a.d).|pt|^2

Hence,
for P.C.E validation,
it is sufficient to prove

2(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 1 - |pt|^2

But, in addition, we have
for the maximum value of the left part

0 < Exp(-2.a.d) =< 1
Sin(td) =< 1
(Xo/Ro) =< |Xo|/Ro

and therefore the left part
has the relation,
to its maximum value

2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 2.(|Xo|/Ro).|pt|

[7]

Consequently,
it is sufficient to prove

2.(|Xo|/Ro).|pt| =< 1 - |pt|^2

or

|pt|^2 + 2.(|X0|/R0).|pt| -1 =< 0

(Note:
(Probably,
(this is possible
(with a direct substitution,
(as in [3]

This is a 2nd degree polynomial in |pt|
with roots:

|pt|- = -|Xo|/Ro - Sqrt(|Xo|^2/Ro^2 + 1) < 0
|pt|+ = -|Xo|/Ro + Sqrt(|Xo|^2/Ro^2 + 1) > 0

After that,
the P.C.E. is valid at any point
if and only if
the "Reflection Coefficient"
at the terminal load is
lower than or equal to the positive root

0 =< |pt| =< |pt|+

But

|Xo|/Ro = Tan(|to|)

where tO is the argument of Zo, so

|pt|+ = -Tan(|to|) + Sqrt(Tan(|to|)^2 + 1)

After some trigonometric manipulation
the identity
can be proved

-Tan(|t0|) + Sqrt(Tan(|to|)^2 + 1) =
= Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]

Therefore,
the P.C.E. is valid,
at any point,
if and only if
the "Reflection Coefficient"
at the Terminal Load is

|pt| =< Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]

But this is a relation,
which has been already proved
in the Thread

"Complex Z0 [Corrected]"

QED
I hope,

but,
as any other time
d;^)
your comments are welcomed!

Sincerely,

pez
SV7BAX

[*]
---
e.g. Chipman, 1968, p.138

431. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 01:09:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <2ta6b.1178$BG6.930@newsread1.news.atl.earthlink.net>
Source record: 108747

Reg:

[snip]
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bjao82jeq1@titan.btinternet.com...
> Anybody who doesn't agree that
>
> rho = (ZL - Zo) / (ZL + Zo)
>
> means something can depart forthwith and forever hold their peace.
>
>
> To assist brain cells a pencil and paper will be found useful
[snip]

Here let me do a little pencil and paper work... er... algebra in ASCII to expose some of the "complexities" of complex Zo and complex rho.

rho is the ratio of the reflected voltage wave "b" to the incident voltage wave "a", rho = b/a and rho is in general a complex function of angular frequency w = 2*pi*f where f is "cyclic" frequency in Hz simply because both ZL and Zo can themselves be complex. rho may be considered to be a "transfer function" which gives the reflected voltage "b" or voltage echo, sometimes known as the "talker echo", resulting from the application of the incident voltage "a".

b/a = rho(jw) = [(ZL(jw) - Zo(jw)/(ZL(jw) + Zo(jw)] = |rho(w)|
exp[j*phie(w)]

Where phie(w) is known as the "echo phase" and |rho(w)| is the magitude of the reflection coefficient.

Now taking natural logarithm's of the inverse of rho one finds that:

ln[1/rho(jw)] = -ln|rho(w)| - j*phie(w) = Ae(w) - j*phie(w)

Where Ae(w):

Ae(w) = -ln|rho(jw)|

Measures the echo attenuation in Nepers and is the so-called "Echo Attenuation" or "Return Loss", in Nepers (Np) Ae(w) measures how much the talker echo or reflected voltage echo "b" is attenuated below the incident voltage wave "a".

Aside: Europeans seem to prefer the term Echo Attenuation and the symbol Ae(w) and Np units, which is also my preference, however North American's seem to prefer the term "Return Loss" and symbol RL and prefer to use dB's

units rather that Np units. For those who need to convert from Np to dB the conversion from Np to dB is simply dB = 20 log(e) = 8.686 Np.

phie(w) is the so-called "Echo Phase" or "Return Phase" measured in radians and measures the phase lag of the voltage echo as compared to the phase angle of the incident voltage.

Now for some stuff that should really interest Cecil. :-)

Differentiating the echo phase phie(w) with respect to w, one obtains the well-known "Echo Group Delay", this echo group delay or as it is sometimes called, the "Return Delay" is always a real function and is given by.

taugre(w) = d[phie(w)]/dw

and has units of seconds.

taugre(w) measures the group delay of the returned voltage echo as a function of frequency. In a differential bandwidth dw the value of taugre(w) measures the average delay of a "packet" of energy launched by the incident wave "a" in that differential frequency band dw and returned to the source in the voltage echo/

An even more interesting quantity is the echo group velocity or vge(w) which is simply the reciprocal of taugre(w)

vge(w) = 1/taugre(w)

and has units of inverse seconds. The vge(w) may never be faster than the speed of light in the Zo media.

vge(w) gives the actual group velocity of packets or groups of frequencies in the echo as it passes from the source back around to the source again. It is a function of frequency and illustrates that in waveguides with complex Zo not all frequencies in the echo travel with the same velocity and some frequencies arrive back at the source before the others. Of course no such thing occurs with real Zo lines! Real Zo lines are sooooo unintersting!

Another interesting quantity which I am sure Cecil will enjoy is the so-called echo phase delay or tauphe(w)

tauphe(w) = phie(w)/w

The echo phase delay is an interesting function and I will leave it to the reader to work out its' physical significance. This leads to the curious echo phase velocity or vpe(w)

vpe(w) = 1/tauphe(w)

It is interesting to note that vpe(w) can actually exceed the speed of light in the Zo media. In a transmission system with a real Zo of course vpe = vge. Dull and uninteresting when Zo is real, huh?

Finally the arcane "echo signal front delay" tausfe(w), when it exists equals the limit.

tausfe(w) = limit as w -> infinity of the ration phie(w)/w

And of course the reciprocal of the echo signal front delay gives the echo signal front velocity vsfe(w) when it exists, thus:

vsfe(w) = 1/tausfe(w) when it exists.

It is left as an exercise for the reader to find out under what physical circumstances this exotic velocity exists and just what it's physical meaning might be...

A quantity of great great interest to Cecil will be the value of the echo group delay evaluated at the origin (DC).

taugre(w) evaluated at w = 0 [DC] gives the first time moment of the echo!

taugre(0) = T*area under the voltage echo = Integral from 0 to infinity of t*b(t)*dt

taugre(0) when divided by the area under the echo voltage gives the average time T by which the echo is delayed.

T = taugre(0)/area under b(t).

It turns out that this is an extremely useful value to know if one is interested in designing or operating an effective and feasible analog or digital talker echo canceller to suppress echos on the line and allow the receiver to receive remotely generated signals in the face of extremely strong incident signals.

The design and operation of talker echo cancellers for transmission systems with complex Zo is quite a complicated and challenging task.

That's enough for tonight's scribbling...

I'd like some thoughts and comments on all of these functions and about comparisons between such functions for transmission systems with real Zo and those with complex Zo.

--
Peter K1PO
Indialantic By-the-Sea, FL.

432. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 01:27:18 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <WJa6b.1193$BG6.91@newsread1.news.atl.earthlink.net>
Source record: 108748

David:

[snip]
"David Robbins" <k1ttt@arrl.net> wrote in message
news:lJGcneS7QszuQ8WiXTWJkw@crocker.com...
>
> "Peter O. Brackett" <ab4bc@ix.netcom.com> wrote in message
> news:ko46b.664$BG6.15@newsread1.news.atl.earthlink.net...
> > Slick:
> >
> > What about a negative inductance for a load? A negative capacitance?
And
> > don't tell me those are not passive!
> >
>
> a negative inductance is a capacitance, and a negative capacitance is an
> inductance! and yes, they are both passive!
[snip]

You are only half correct David.

They are both passive, but a negative inductance certainly is NOT a
capacitor.

And a negative capacitor certainly is NOT an inductor.

Compare the expressions below to convince yourself of the truth of this
assertion.

The inductive reactance for a positive inductor is:

X = j*w*L

of a negative inductor

X = -j*w*L

of a positive capacitor

X = 1/j*w*C = -j/w*C

of a negative capacitor

X = 1/-j*w*C = j/w*C

The magnitude of the reactance of a negative inductor goes up with frequency
while the magnitude of a capacitor goes down with frequency, etc...

I have synthesized filters with both negative inductors and negative capacitors, they are theoretically passive and they do work.

--
Peter K1PO
Indialantic By-the-Sea, FL

433. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 01:32:36 UTC
From: kd1@sympatico.ca
Message-ID: <3F593934.6D13BBE5@sympatico.ca>
Source record: 108749

Cecil Moore wrote:
>
> Roy Lewallen wrote:
> > No, I don't have a problem, nor did I make a mistake. I presented an
> > example with voltages, currents, and powers that are all
> > self-consistent, obey Ohm's and Kirchoff's laws, and don't violate any
> > physical laws. It simply uses those laws, equations that can be found in
> > nearly any transmission line text, and arithmetic. The analysis is
> > correct as written.
>
> Nope, it isn't and after following all those laws, you violated one
> you should have learned in the 4th grade, i.e. to collect like terms.
>
> > You've demonstrated that you're unable to produce a similar analysis
> > which can be fit into your conception of how things work.
>
> No I haven't. I have produced a simple logical analysis that proved
> yours to be wrong. Do you really believe yourself incapable of
> making a conceptual error? In the following:
>
> ---lossy line---x---1WL 50 ohm lossless line---10+j50 load
> Pfwd1--> Pfwd2--> = 30.53W rho=0.82 at 88.9 deg
> <--Pref1 <--Pref2 = 20.53W
>
> I measure ten volts across the ten ohm resistor. I measure 30.53W
> forward on the 50 ohm line and 20.53W reflected on the 50 ohm line.
> Since the 50 ohm line is lossless, the forward voltage is in phase
> with the forward current and the reflected voltage is in phase
> with the reflected current. The values of voltages and currents on
> the 50 ohm line are easy to calculate. The load reflection coefficient
> is easy to calculate. Analysis from 'x' to the load is a no-brainer.
>
> The forward power on the 50 ohm line is 10W less than the reflected
> power on the 50 ohm line, i.e. Pfwd2-Pref12 = 10W just as it should.
>
> At point 'x', on the source side of 'x', Pfwd1-Pref1 MUST equal
> that same 10W. It doesn't matter what happens between 'x' and the
> source. At point 'x', Pfwd1 simply cannot be less than Pref1.

I observe that you make the assertion, but fail to do the arithmetic
to demonstrate the assertion, while Roy does the arithmetic which
seems to contradict your assertion. There is a strong suspicion that
the reason you don't do the arithmetic (since you do seem fond of
numerical examples) in this case is that you have been unable to make

arithmetic produce the desired result.

Note that a requirement for Vr to be greater than Vf is that the reactive component of the load has a different sign than the reactive component of the line. So the problem specification is incomplete.

Since the reactances on each side of 'x' have different signs, the circuit looks like it might be somewhat resonant and it should not be a surprise when resonant circuits produce higher voltages.

...Keith

434. Re: Would this work as a patio antenna for SWL 3-30Mhz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 01:52:25 UTC
From: funkbastler <funkbastler@yahoo.com>
Message-ID: <s9filvknifbq34i27dl1bbcogdr77p36q8@4ax.com>
Source record: 108750

On Thu, 04 Sep 2003 22:24:51 GMT, "Joe Strain" <jstrain1@cfl.rr.com>
wrote:

>
>http://www.fairradio.com/0mk-12.htm
>

This looks more like a VHF antenna.... If you want something
for HF SWL, just string a wire out to the nearest tree or telephone
pole or the neighbor's house. Much cheaper and probably will
work much better.

-fb-

435. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 02:18:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5945a4_4@corp.newsgroups.com>
Source record: 108751

kd1@sympatico.ca wrote:
> I observe that you make the assertion, but fail to do the arithmetic
> to demonstrate the assertion, while Roy does the arithmetic which
> seems to contradict your assertion. There is a strong suspicion that
> the reason you don't do the arithmetic (since you do seem fond of
> numerical examples) in this case is that you have been unable to make
> arithmetic produce the desired result.

I don't need to waste my time on arithmetic to prove that the
principle of conservation of energy is valid. Anyone who believes
that the reflected power in a passive circuit can ever be greater
than the forward power is simply NUTS and should resign from the
human race!

Roy's assertion that reflected power is greater than forward power
is simply the result of omniscientism, defined by a refusal to
collect like terms in the manner that his 4th grade teacher taught
him to do. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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436. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 03:14:37 UTC
From: kd1@sympatico.ca
Message-ID: <3F59511D.A648C66D@sympatico.ca>
Source record: 108752

Cecil Moore wrote:
> kd1@sympatico.ca wrote:
> > I observe that you make the assertion, but fail to do the arithmetic
> > to demonstrate the assertion, while Roy does the arithmetic which
> > seems to contradict your assertion. There is a strong suspicion that
> > the reason you don't do the arithmetic (since you do seem fond of
> > numerical examples) in this case is that you have been unable to make
> > arithmetic produce the desired result.
>
> I don't need to waste my time on arithmetic to prove that the
> principle of conservation of energy is valid. Anyone who believes
> that the reflected power in a passive circuit can ever be greater
> than the forward power is simply NUTS and should resign from the
> human race!

Perhaps completing the arithmetic would demonstrate whether the
definitions you think represent Pfwd and Prev actually do.

> Roy's assertion that reflected power is greater than forward power
> is simply the result of omniscientism, defined by a refusal to
> collect like terms in the manner that his 4th grade teacher taught
> him to do. :-)

Just to make sure I understand correctly, are you saying that
Vrev**2/Z0 can never be greater than Vfwd**2/Z0
(these being the common definitions of Prev and Pfwd) or did
you have another set of defintions in mind for Prev and Pfwd
when you state that Prev can never be greater than Pfwd?

If the former, then you are agreeing with Dr Slick that rho can
not be greater than unity.

If the latter, could you kindly reveal the definitions you
are using for Prev and Pfwd?

...Keith

437. Re: 40M HF antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 03:29:52 UTC
From: Mark Sheffield <sheffield@earthlink.net>
Message-ID: <a4lilv48ntm18mthoutvdb0bm5sfgk8obu@4ax.com>
Source record: 108753

Bob - never heard of a dual H. Is there a reference for it so I can
read up on it?

tnx - Mark/N0LF

On Wed, 3 Sep 2003 18:13:55 -0400, "Bob Cook"
<captcook@compuserve.com> wrote:

>Two suggestions:
>
>1. Try EZNEC antenna modeling software (or buy it, NEC 3.0) and model all
>kinds of antennas.
>
>2. How about a dual "H" config dipole? It concentrates radiation in two
>directions and is low TOA.
>
>Bob K9KKY
>
>

438. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 04:00:27 UTC
From: rckchp@comcast.net
Message-ID: <6dc33f40.0309052000.6e3420df@posting.google.com>
Source record: 108754

> Should I run a Sky-wire loop?

Walter,

Give the Skywire loop a try....I put one up almost a year ago and it definitely is better than my other wire antenna (a 40m dipole). Mine is approx 440' long and is shaped more like a rectangle than a perfect round (or square) loop. Each corner is at a different elevation, the higest 35' , the lowest 20'. I feed it with RG8X, no balun, and my K2's autotuner permits effective operation on all HF bands at less than 2-1 SWR, except on 160 where it only tunes down to 3.5 to 1. I haven't done it yet but I've worked out a way to enlarge it another 100', so the 160m swr should come down. I also plan to try switching to 450 ohm ladder line feed.....everyone says it will work even better. Did I mention it is the "quietest' recieving antenna I've used?.... But don't limit its use to only recieving....the horizontal loop is a great transmitting antenna too. My first contact with mine was on 20m to Tierra del Fuego at the southern tip of Argentina (5 watts ssb, got a 5x5 sig report!). Seems to be somewhat omni directional too as I've worked dx in all directions. I don't claim it will outperform a good beam on a tower but the price is right (cheap) and its realatively easy to make. Go for it!

Regards,

Rich K2CPE

439. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 04:20:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lunilv08uohtsv78d31248amvmp14soa3l@4ax.com>
Source record: 108755

On Fri, 05 Sep 2003 15:02:17 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Reg Edwards wrote:
>
>> Anybody who doesn't agree that
>>
>> rho = (ZL - Zo) / (ZL + Zo)
>>
>> means something can depart forthwith and forever hold their peace.
>
>source----50 ohm feedline---+---150 ohm feedline---load
>
>What is rho at point '+'? What is s11 at point 'x'?

Hi Cecil,

You've been offered an instrument, a method and you can do this at the
bench - but that would settle it wouldn't it?

73's
Richard Clark, KB7QHC

440. Re: A Subtle Detail of Reflection Coefficients (but important to know)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 04:42:42 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <6Bd6b.127864$0v4.9294146@bgtnsc04-news.ops.worldnet.att.net>
Source record: 108756

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309021348.261b2ce7@posting.google.com...

<snip>

> If Zo=50-j5 and Zload=50+j5, you will have a conjugate
match,
> and max power delivered to the load.

That would occur with RG-213 at a frequency of 51,300 Hz.

Interesting . . . but an odd frequency for ham radio.

Suppose that Zo was 50+j0 for all practical purposes - say RG-213 on 20 meters - and the load were 50+j5 ohms. We cut the line at the antenna connection and look back into it with our impedance bridge on top of the tower at the antenna. The tuner in the shack is then adjusted to present an impedance looking back into the line of 50-j5 ohms. We then connect the 50-j5 line output Z to the antenna input with the 50+j5 impedance.

Then we would have a conjugate match. And the transmitter coax to the tuner would see an SWR of 1:1 since the tuner input would present a load of 50+j0 ohms. And we would have a Zo-match as well.

Wonderful things these tuners . . .

73/72, George
Amateur Radio W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13QE
"Starting the 58th year and it just keeps getting better!"
w5yr@att.net

>
>
> Slick

441. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 04:58:06 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309052058.14548fa0@posting.google.com>
Source record: 108757

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<25612-3F58CE8B-38@storefull-2317.public.lawson.webtv.net>...
> Dale, W4OP wrote:
> "Could you give an explanation of why this is?"
>
> Joe O. had written:
> "A Horizontal Loop will pickup less vertically polarized atmospheric
> noise."

Than a vertically polarized antenna, yes.
>
> ON4UN wrote on page 10-7 of "Low-Band DXing":
> "The loop will act as any horizontally polarized antenna over real
> ground; its wave angle will depend on the height of the antenna over the
> ground."

I tend to agree with this statement.
>
> So, the short answer is "cross-polarization".

The dipole is horizontal also. Or I would assume anyway if hung from
two trees.
>
> Most noise is local and reaches a receiver through ground-wave
> propagation. Horizontally polarized waves have zero ground-wave
> propagation. Their low-angle reflections are out-of-phase with the
> direct wave.
>
> Horzontal antennas are in general quieter than vertical antennas.
> Cross-polarization loss has been often reported as about 20 db.
>
> Loops, small in terms of wavelength, tend to have the same volts and
> amps induced into all their increments. This helps reduce sensitivity to
> overloads from high-power signals at frequencies far below the desired
> reception, as might be received on a voltage-probe antenna.

A "sky wire" loop, as usually thought of, is not a small loop though.
Thats a name given to the practice of feeding a loop on all bands,
with the loop usually a full wave or larger for the lowest band to be
used. Kind of the loop equal to feeding a 1/2 wave low band dipole on
all bands with ladder line...
As far as noise, if the dipole and loop are both horizontal, there
should be little if any difference in noise received, unless the
pattern of the particular antenna favors the noise source. I haven't
done extensive tests, but it's my opinion that the common perception

of large loops being quieter than large dipoles is wishful thinking. I've never noticed any real difference. It's always been my experience that if a certain antenna receives less noise than another, not counting any local noise ingress problems, it's inferior in the direction of the noise received than the other. "All the same polarity and the noise in the far field"
Noise is rf same as any other. All good antennas pick up a lot of noise, if there is noise to be picked up. If I have an antenna thats "too" quiet, I start to worry..:/ As far as the original poster... I don't think changing antennas is worth the hassle just for SWL use. Maybe not even if he transmitted. I guess would depend on the particular band to be used. The patterns will be different on the various higher bands, but I doubt different enough to make or break things with most signals. If he's not hearing a certain station on the dipole, he probably wouldn't on the loop either. MK

442. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 05:00:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f596b6e$1_8@corp.newsgroups.com>
Source record: 108758

kd1@sympatico.ca wrote:
> Just to make sure I understand correctly, are you saying that
> Vrev**2/Z0 can never be greater than Vfwd**2/Z0

What the heck does Vrev**2 mean? If you are talking about squaring
a term, the standard is Vrev^2. Netscape even changes that to a
2 superscript.
--
73, Cecil http://www.qsl.net/w5dxp

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443. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 05:01:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f596bbc$1_8@corp.newsgroups.com>
Source record: 108759

Richard Clark wrote:
> You've been offered an instrument, ...

Unfortunately, I know better than to bend over. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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444. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 05:11:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f2rilvcm0hllj2cd32n7jhi5tph7uhg8pf@4ax.com>
Source record: 108760

On Sat, 06 Sep 2003 00:01:22 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> You've been offered an instrument, ...
>
>Unfortunately, I know better than to bend over. :-)

Would that put your head under water?

73's
Richard Clark, KB7QHC

445. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 05:12:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f596e65$1_8@corp.newsgroups.com>
Source record: 108761

kd1@sympatico.ca wrote:
> Perhaps completing the arithmetic would demonstrate whether the
> definitions you think represent Pfwd and Prev actually do.

It ain't rocket science. Everything flowing toward the load is Pfwd.
Everything flowing toward the source is Pref. There's no third term
because there's no third direction. The directional possibilities of
power in a transmission line = binary. There's no magic third term
pointing toward Alpha Centauri.
--
73, Cecil http://www.qsl.net/w5dxp

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446. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 05:30:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlis8g7fvv495c@corp.supernews.com>
Source record: 108762

I'm trying to stay out of this, but can't avoid mentioning that although Cecil insists on only one Pref and one Pfwd, he has different criteria for voltage waves, and requires multiple Vfwd and Vref. So there are four directions for voltage, but only two for power?

Roy Lewallen, W7EL

Cecil Moore wrote:
> kd1@sympatico.ca wrote:
>
>> Perhaps completing the arithmetic would demonstrate whether the
>> definitions you think represent Pfwd and Prev actually do.
>
>
> It ain't rocket science. Everything flowing toward the load is Pfwd.
> Everything flowing toward the source is Pref. There's no third term
> because there's no third direction. The directional possibilities of
> power in a transmission line = binary. There's no magic third term
> pointing toward Alpha Centauri.

447. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 07:52:05 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <UCaffFFIIZW$EAWw@ifwtech.co.uk>
Source record: 108763

Richard Clark wrote:
>On Fri, 5 Sep 2003 12:02:02 -0500 (CDT), richardharrison@webtv.net
>(Richard Harrison) wrote:
>
>>Richard Clark wrote:
>>"Motorola (in their confusion) offers:
>>For example, in the 180 Watt version the input transformer is of 16:1
>>impedance ratio, making the secondatry impedance 3.13 Ohm with a 50 Ohm
>>interface."
>>
>>Does not seem confused to me.
>>16 x 3.13-ohm= 50 ohms by my calculation.
>
>Hi Richard,
>
>The expression of "confusion" is not original, nor embraced by myself.
>It represents my wry comment, an irony in that this term (confusion)
>applied to Motorola's specifications is rejected by data, experience,
>Motorola (except through a particular reading of one application note
>that seems to bear no relation to any known experience), and at least
>three more vendors that I have supplied who all conform to this
>practice.
>
>Technical literature for RF Design Engineers is chock full of this
>consideration that is taken for granted in academic texts (it would
>only muddy the waters for students, I suppose). However, when
>unmentioned, except in the footnotes, endnotes, or appendix (all
>unread at hazard to speed readers) this academic shortfall gives the
>impression that the topic is of no interest. Hence we read of
>Motorola being confused about their specification of source Z that
>everywhere in their literature is expressed with deliberation and
>planning. To date, and through more than several inquiries to expand
>upon this "confusion" I have been offered no data, other form of
>specification, how it bears on application, or any correlation to
>personal experience.
>
>If you follow the thread back up several, you will find Tam struggling
>to find negative confirmations, and through his lack of close reading
>his "condemnatory" sources in fact supply me with all the engineering
>details I had described as being part and parcel to a common RF
>Finals' Deck.

Tam is innocent!

I take full responsibility for planting the word "confusion" in
Richard's mind. What he's done with it is something else again...

As the records of this newsgroup show, the context in which I used the
word (actually, the word was "confused") was:

QUOTE **********

Some manufacturers state the conjugate, others don't. Even Motorola have
changed their terminology over the years: sometimes it's "output
impedance" or "Zout", sometimes it's "Z(subscript OL)", sometimes it's
"Z(superscript *)(subscript OL)".

Motorola's AN1526 was written in the 1990s to clear up this mess.

[...]

AN282, from which you quote, was first published in 1968. The truth
about load impedance is in there to be seen, but I'd be the first to
agree that it's not stated clearly. Motorola then confused the issue by
continuing to talk ambiguously about "output impedance" for at least
another 20 years.

AN1526, from which I'm quoting above, supersedes AN282. It was written
about 25 years later in an attempt to clear up that inherited mess of
loose definitions.

END QUOTE **********

I stand by those statements and take full responsibility for them.
Motorola's ambiguous use of "output impedance" - and three different
symbols, over the years - when all the time they meant "load"
impedance", has indeed been confusing.

The way Richard has subsequently misused the word is purely his
responsibility.

If he twists the facts again, to mislead others about what was actually
said (as he has just attempted to mislead Richard H, carelessly accusing
Tam in the process) then I will simply post the above quotation again.

The beauty of newsgroups is that everything that anyone has ever posted
is on the record, for any reader to judge.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

448. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 08:31:54 UTC
From: kd1@sympatico.ca
Message-ID: <3F599B7A.DC99CB07@sympatico.ca>
Source record: 108764

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Just to make sure I understand correctly, are you saying that
> > Vrev**2/Z0 can never be greater than Vfwd**2/Z0
>
> What the heck does Vrev**2 mean? If you are talking about squaring
> a term, the standard is Vrev^2.

My, aren't we picky tonight. But you didn't seem to have much
trouble figuring out what was meant.

> Netscape even changes that to a 2 superscript.

Not mine.

So, with that clarification...

Just to make sure I understand correctly, are you saying that
Vrev^2/Z0 can never be greater than Vfwd^2/Z0
(these being the common definitions of Prev and Pfwd) or did
you have another set of defintions in mind for Prev and Pfwd
when you state that Prev can never be greater than Pfwd?

...Keith

449. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 08:39:46 UTC
From: kd1@sympatico.ca
Message-ID: <3F599D52.C525B651@sympatico.ca>
Source record: 108765

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Perhaps completing the arithmetic would demonstrate whether the
> > definitions you think represent Pfwd and Prev actually do.
>
> It ain't rocket science. Everything flowing toward the load is Pfwd.
> Everything flowing toward the source is Pref.

Well, I suppose. If that is the extent of the concept of Pfwd and Prev
its pretty simple.

But without some equations defining Pfwd and Prev, the concept is
not particularly useful since there are no predictions which you
can make from it.

...Keith

450. Re: rho = (ZL - Zo) / (ZL + Zo }

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 08:50:38 UTC
From: kd1@sympatico.ca
Message-ID: <3F599FDE.80D72ED7@sympatico.ca>
Source record: 108766

Reg Edwards wrote:
> I've just spent 3 hours on this. Please address any questions to Dr Slick.

Thank you. The effort is appreciated.

...Keith

451. Re: Derivation of the Reflection Coefficient?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 11:11:17 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309060311.3c6f163e@posting.google.com>
Source record: 108767

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<LPCdnX3Uds0L88WiU-KYgw@crocker.com>...
> "David Robbins" <k1ttt@arrl.net> wrote in message
> news:6cSdnWpR_9okSsqiU-KYvA@crocker.com...
> >
> ok, thanks to radio913 who sent me the Kurokawa paper.... here is the basis
> of the new 'power reflection coefficient'.
>
> Step 1: DEFINE two waves:
>
> a=V+ZI/sqrt(|Re Z|)
> b=V-Z*I/sqrt(|Re Z|)
>
> (note, each term is subscripted by i in the paper as each voltage, current
> and impedance is for the i-th port of a network)
>
> these waves are called 'power waves'. (note, i was chastised in one reply
> to my long dissertation on powers last night about not being able to do
> 'phasor' powers.... that is sure what this looks like, much more than the
> 'complex' power i used from Desoer and Kuh's book.)
> they actually look more like the square root of power calculated from the
> sums of voltages and currents in and out of the port.
>
> Step 2: DEFINE the 'power wave reflection coefficient' as b/a
>
> b/a=(V-Z*I)sqrt(|Re Z|)/(V+ZI)sqrt(|Re Z|)
> cancel terms, replace V=Zl I, factor out I and voila:
> b/a=(Zl-Z*)/(Zl+Z)
>
>
> so in order to use this equation for reflection you must be using the power
> wave's defined which are obviously different than either voltage or current
> waves. so therefore this 'power wave reflection coefficient' can not be
> applied to simple voltage or current reflection in transmission lines. nor
> would it appear to make sense to use it for calculating VSWR through the
> formula with rho, since it is not a voltage reflection coefficient.
>
> discussion over.

Sorry David, life isn't that easy.

If you look at the footnotes, the "power wave RC" is also the
Voltage RC when Zi (i'm not even sure what he refers to here) is
positive and real.

Then he squares the magnitude to get the power RC, which is fine.

Slick

452. Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 11:37:43 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309060337.7cbd3ba0@posting.google.com>
Source record: 108768

Hello,

Consider a source impedance of Zo=50+j200 and Zl=0-j200.

Since these are both series equivalent impedances, Zo
is like a 50 ohm resistor with a series inductor, and Zl
is like a series capacitor.

At ONE test frequency, the inductive and capacitive
reactances will cancel out (series resonance). When this happens,
is will be equivalent to Zo=50 and Zl=0, which is a short.

If you incorrectly use the "normal" equation for rho (when
Zo is complex), you will get:

Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
= 403.1 /_ -97 degrees

So some silly people on this NG think that a
short will reflect a voltage 403.1 times the incident voltage,
which is absolutely insane.

Now try the correct "conjugate" equation (for complex
Zo):

Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1

Which is exactly what you should get for a short,
a full reflection with a phase shift of 180 degrees, but the ratio
can never be more than one for a passive network.

And consequently, the ratio of the reflected to incident
powers can also never be more than 1 for a passive network:

If you use ratios, it doesn't matter whether you use
peak or RMS voltages.

([Vpeak.incident/Vpeak.reflected])=
([Vrms.incident/Vrms.reflected])=sqrt(Pi/Pr)=[rho]

This is because the sqrt(2) is in the numerator and denominator.
And the 2 (after squaring) is also factored out in the Power RC!

And...the Zo is also factored out for Power RC!

The Zo is not needed for the Power RC, because the
impedance of the source is identical to the load for the
reflected power! Sure, you use the Zo in relation to Zl to
get rho, but once you get rho, you have the power RC.

Hah! the plot thickens a bit....

Slick

453. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 12:43:47 UTC
From: k9sqg@aol.com
Message-ID: <20030906084347.19477.00000559@mb-m20.aol.com>
Source record: 108619

Rich,

It is much more of an advantage to run open wire line for multiband operation due to the much lower losses.

73s,

Evan

454. Re: Antenna Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 13:12:39 UTC
From: Drink <drink@gnt.net>
Message-ID: <vljqi2tepcg031@corp.supernews.com>
Source record: 108620

Mornin' Ed,
You read my mind about the dipole over the 50ft wall. All I'd add is to get it as high above the wall as you can because of rebar and other things in the wall. The bazooka sounds good to me, too.
So, if I were in your shoes, I'd go with a quality vertical over that huge metal roof. You've achieved your all-band performance requirement but the folded dipole has a reputation for less than optimum performance. You could make sure the pieces parts of the metal roof are connected, tell your club you need some money for a quality vertical. That'd put your vertical up at about 45ft over what sounds like a great ground plane. It's kinda hard to beat that for long-haul DX unless you want a boomer yagi swiveling atop a tower (read: $1,000's).
o_o_o_o
Best Regards, /| ,[_____],
Jim, WP3JQ |���L --O|||||||O-
()_)�()_) ������)_)
EM60qk 30.447439N 086.628959W

455. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 14:04:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f59eb10_7@corp.newsgroups.com>
Source record: 108621

Roy Lewallen wrote:
> I'm trying to stay out of this, but can't avoid mentioning that although
> Cecil insists on only one Pref and one Pfwd, he has different criteria
> for voltage waves, and requires multiple Vfwd and Vref. So there are
> four directions for voltage, but only two for power?

There are four voltage components flowing in two directions. Add up the two voltages flowing in the forward direction and you have total forward voltage. Add up the two voltages flowing in the reverse direction and you have total reverse voltage. From the total forward voltage, you can calculate the total forward power. From the total reverse voltage, you can calculate the total reverse power. There are no magic third terms after superposition.

Vfwd2 = Vfwd1(tau1) + Vref2(rho2)

Vref1 = Vfwd1(rho1) + Vref2(tau2)

Four voltage components, two total voltages, two directions.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

456. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 14:12:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f59ecf1_7@corp.newsgroups.com>
Source record: 108622

kd1@sympatico.ca wrote:
> Just to make sure I understand correctly, are you saying that
> Vrev^2/Z0 can never be greater than Vfwd^2/Z0
> (these being the common definitions of Prev and Pfwd) or did
> you have another set of defintions in mind for Prev and Pfwd
> when you state that Prev can never be greater than Pfwd?

Assuming a single source, single feedline, a passive load,
RMS voltage, and a real Z0, yes, average Prev can never be
greater than average Pfwd, i.e. the total Poynting vector
can never point away from the load. Such would be a violation
of the conservation of energy principle.

The fact that the Poynting vector still points toward the
load in Roy's example means that reverse power cannot be
greater than forward power.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

457. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 14:35:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f59f250_7@corp.newsgroups.com>
Source record: 108623

kd1@sympatico.ca wrote:
> But without some equations defining Pfwd and Prev, the concept is
> not particularly useful since there are no predictions which you
> can make from it.

The equations are to be found in Dr. Best's Nov/Dec 2001 QEX article,
"Wave Mechanics of Transmission Lines: Part 3" and in _Optics_, by
Hecht. When the characteristic impedances are real:

V1 = Vfwd1(tau1) V2 = Vref2(rho2) V3 = Vfwd1(rho1) V4 = Vref2(tau2)

Vfwd2 = V1 + V2 Vref1 = V3 + V4

P1 = Pfwd1(1-|rho|^2) P2 = Pref2(|rho|^2) forward components

P3 = Pfwd1(|rho|^2) P4 = Pref2(1-|rho|^2) reverse components

Pfwd2 = P1 + P2 + 2*Sqrt(P1*P2)cos(delta-1)

Pref1 = P3 + P4 + 2*Sqrt(P3*P4)cos(delta-2)

where (delta-1) is the angle between V1 and V2, (delta-2) is the angle
between V3 and V4, and that last term is called the interference term.

In _Optics_, average power is called irradiance (I) and the equation is:

I1 + I2 + 2*Sqrt(I1*I2)cos(delta)

For further information, check out my Part 1 energy analysis article
on my web page. Part 2 will appear shortly.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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458. Skyloops

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 15:08:43 UTC
From: Sgordon <noshoes2@yahoo.com>
Message-ID: <%Lm6b.37904$Vx2.16974160@newssvr28.news.prodigy.com>
Source record: 108624

I have quite a bit of info on Skyloop antenna on my website
http://www.kq8rp.com if you have a website that has good info on a loop feel
free to add your link to our wite.
--
Sincerely,
Scott Gordon

459. TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 16:16:26 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <sLn6b.8616$Ci1.1449824@newsfep2-win.server.ntli.net>
Source record: 108625

I have just got hold of a TB3 tribander 3ele beam I think it is a mosley but
they do not have any instructions for it I intend to put it up as a 2 ele
can anybody tell me the distance between the driven ele and the reflector
please

--
Derek

460. HF Beam help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 17:23:52 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <2Lo6b.233$mi4.193@newsfep1-gui.server.ntli.net>
Source record: 108626

I have just got hold of a TB3 tribander 3ele beam I think it is a mosley but
they do not have any instructions for it I intend to put it up as a 2 ele
can anybody tell me the distance between the driven ele and the reflector
please

--
Derek
G1NRE / M3NRE

461. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 18:07:57 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <bg8klvsb91cdituue1isvt32np1k9ctop5@4ax.com>
Source record: 108627

On 6 Sep 2003 04:37:43 -0700, radio913@aol.com (Dr. Slick) wrote:

>Hello,
>
> Consider a source impedance of Zo=50+j200 and Zl=0-j200.
>
> Since these are both series equivalent impedances, Zo
>is like a 50 ohm resistor with a series inductor, and Zl
>is like a series capacitor.
>
> At ONE test frequency, the inductive and capacitive
>reactances will cancel out (series resonance). When this happens,
>is will be equivalent to Zo=50 and Zl=0, which is a short.
>
> If you incorrectly use the "normal" equation for rho (when
>Zo is complex), you will get:
>
> Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> = 403.1 /_ -97 degrees
>
> So some silly people on this NG think that a
>short will reflect a voltage 403.1 times the incident voltage,
>which is absolutely insane.
>
>
> Now try the correct "conjugate" equation (for complex
>Zo):
>
> Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1
>
> Which is exactly what you should get for a short,
>a full reflection with a phase shift of 180 degrees, but the ratio
>can never be more than one for a passive network.
>
>
>
>
> And consequently, the ratio of the reflected to incident
>powers can also never be more than 1 for a passive network:
>
> If you use ratios, it doesn't matter whether you use
>peak or RMS voltages.
>
>([Vpeak.incident/Vpeak.reflected])=

>([Vrms.incident/Vrms.reflected])=sqrt(Pi/Pr)=[rho]
>
> This is because the sqrt(2) is in the numerator and denominator.
>And the 2 (after squaring) is also factored out in the Power RC!
>
> And...the Zo is also factored out for Power RC!
>
> The Zo is not needed for the Power RC, because the
>impedance of the source is identical to the load for the
>reflected power! Sure, you use the Zo in relation to Zl to
>get rho, but once you get rho, you have the power RC.
>
> Hah! the plot thickens a bit....
>

Hmm.... so you manually typed off page 13 of some
transmission line school book, so
what was the purpose of your exercise?
Typing skill increase?

Or did I miss something?

w.
--
On the Internet nobody knows that I am a dog.

462. Re: Complex Z0 - Power : A Proof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 18:34:27 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjd9bmbtn1@nic.grnet.gr>
Source record: 108628

```
The Missing Step
[Please use fixed-space font]

For any patient reader,
the Missing Step
of the validation of the
Principle of Conservation of Energy
at the Terminal Load,
is now possible to be reproduced here...

[1]
---
Given a Transmission Line with

Zo = Ro + j Xo
Yo = 1/Zo

the following are defined

Vi = V1.Exp[-g.l]
Vr = V2.Exp[+g.l]
V = Vi + Vr

p = Vr/Vi
V = Vi.(1 + p)

Ii = I1.Exp[-g.l]
Ir = I2.Exp[+g.l]
I = Ii + Ir

I1 = Yo.V1
I2 =-Yo.V2
Ii = Yo.Vi
Ir =-Yo.Vr
I = Yo.[Vi - Vr]
I = Yo.Vi.(1 - p)

Z = V/I
Z = Zo.(1 + p)/(1 - p)
p =(Z - Zo)/(Z + Zo)

[2]
---
At any point
the Complex Power is given by

P = V.I* = Vi.(1 + p).Yo*.Vi*.(1 - p*)
```

where

Yo*= Yo.Yo*/Yo = Zo/|Zo|^2

therefore

P =(|Vi/Zo|^2).Zo.(1 + p).(1 - p*)
P =(|Vi/Zo|^2).Zo.(1 - p* + p -|p|^2)
P =(|Vi/Zo|^2).(Ro + j Xo).[(1 -|p|^2) + (p - p*)]
P =(|Vi/Zo|^2).Ro.[1 + j (Xo/Ro)].[(1 -|p|^2) + (p - p*)]

and since

Vi = V1.Exp[-2.a.l].Exp[-j 2.b.l]
|Vi|^2 = (|V1|^2).Exp[-2.a.l]

we can define

k = (|Vi/Zo|^2).Ro = (|V1/Zo|^2).Ro.Exp[-2.a.l] > 0

The Complex Power becomes

P = k.[1 + j (Xo/Ro)].[(1 -|p|^2) + (p - p*)]

where

p - p* = j 2 Im{p}

therefore

P = k.[1 + j (Xo/Ro)].[(1 -|p|^2) + j 2 Im{p}]
P = k.{[(1 -|p|^2) - 2.(Xo/Ro).Im{p}] + j [(Xo/Ro).(1 -|p|^2) + 2 Im{p}]

But

P = PR + j PI
PR = k.{[(1 -|p|^2) - 2.(Xo/Ro).Im{p}]

and

-2.Im{p} = j (p - p*)

Finally,
at any point,
the Average Power is

PR = k.[(1 -|p|^2) + j (Xo/Ro).(p - p*)]

[3]

At any point at a distance l from the input

0 =< l =< L
p =(V2/V1).Exp[2.g.l]

At the Terminal Load

l = L
pt =(V2/V1).Exp[2.g.L]
Z = Zt
pt =(Zt - Zo)/(Zt + Zo)

hence

Wt = PR(p=pt)
Wt = k.T
T = 1 -|pt|^2 + j (Xo/Ro).(pt - pt*)

But we have

|pt|^2 =(|Zt - Zo|^2)/(|Zt + Zo|^2)

pt - pt* = (Zt - Zo)/(Zt + Zo) - (Zt* - Zo*)/(Zt* + Zo*) =
= [(Zt - Zo).(Zt* + Zo*) - (Zt + Zo).(Zt* - Zo*)]/(|Zt + Zo|^2)

Therefore

T.(|Zt + Zo|^2).Ro =
=(|Zt + Zo|^2).Ro - (|Zt - Zo|^2).Ro +
j Xo.[(Zt - Zo).(Zt* + Zo*) - (Zt + Zo).(Zt* - Zo*)]

= Ro.[(Rt + Ro)^2 + (Xt + Xo)^2 - (Rt - Ro)^2 - (Xt - Xo)^2] +
+ j Xo.[Zt.Zt* + Zt.Zo* - Zo.Zt* - Zo.Zo* - Zt.Zt* + Zt.Zo* - Zo.Zt* + Zo.Zo*) =

= Ro.[Rt^2 + Ro^2 + 2.Rt.Ro + Xt^2 + Xo^2 + 2.Xt.Xo -
-Rt^2 - Ro^2 + 2.Rt.Ro - Xt^2 - Xo^2 + 2.Xt.Xo]
+j 2.Xo.(Zt.Zo* - Zo.Zt*)

= 4.Ro.[Rt.Ro + Xt.Xo] + j 2.Xo.(Zt.Zo* - Zo.Zt*)

But

j 2.Xo.(Zt.Zo* - Zo.Zt*) =
j 2.Xo.[(Rt + j Xt).(Ro - j Xo) - (Ro + j Xo)(Rt - j Xt)} =
j 2.Xo.[Rt.Ro - j Rt.Xo + j Xt.Ro + Xt.Xo - Ro.Rt + j Ro.Xt -j Xo.Rt - Xo.Xt]=
j 2.Xo.[j {-Rt.Xo + Xt.Ro + Ro.Xt - Xo.Rt}]=
-2.Xo.[-Rt.Xo + Xt.Ro + Ro.Xt - Xo.Rt]

Hence

T.(|Zt + Zo|^2).Ro =
4.Ro^2.Rt + 4.Ro.Xt.Xo + 2.Rt.Xo^2 - 2.Xo.Xt.Ro - 2.Xo.Ro.Xt + 2.Xo^2.Rt =
4.Ro^2.Rt + 4.Xo^2.Rt =
4.(|Zo|^2).Rt

Finally we take

T.(|Zt + Zo|^2).Ro = 4.(|Zo|^2).Rt

from which

[Wt >= 0] <=> [T => 0] <=> [Rt >= 0]

QED, I hope.

And as usually d;^)
"Comments are welcomed"...

Sincerely,

pez
SV7BAX

463. Re: Complex Z0 - Power : A Proof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 18:46:41 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjda2kclm1@nic.grnet.gr>
Source record: 108629

...
&
YIN
SV7DMC

464. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 18:52:05 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-0609031152050001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108630

In article <1d15af91.0309060337.7cbd3ba0@posting.google.com>,
radio913@aol.com (Dr. Slick) wrote:

> Hello,
>
> Consider a source impedance of Zo=50+j200 and Zl=0-j200.
******

(1) A *source* impedance of Z_0 = 50 + 200j is easily arranged. A
transmission line surge impedance of Z_0 = 50 + 200j is impossible;
surge impedances of transmission lines must have angles between - Pi/4
radians and + Pi/4 radians.

> Since these are both series equivalent impedances, Zo
> is like a 50 ohm resistor with a series inductor, and Zl
> is like a series capacitor.
>
> At ONE test frequency, the inductive and capacitive
> reactances will cancel out (series resonance). When this happens,
> is will be equivalent to Zo=50 and Zl=0, which is a short.
****

(2) Not equivalent in any reasonable sense. 50 and 50 + 200j aren't equal,
nor are - 200j and 0 equal.

> If you incorrectly use the "normal" equation for rho (when
> Zo is complex), you will get:
>
> Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> = 403.1 /_ -97 degrees

(3) You forgot the factor of 50 in the denominator. The quantity you are
calculating above is approximately a magnitude of 8.062257748 at an angle
of about - 97.12501636 degrees. Of course this is silly for a value of rho
(but not as silly as 403.1 at an angle of - 97 degrees). However see my
comment (1) above.

> So some silly people on this NG think that a
> short will reflect a voltage 403.1 times the incident voltage,
> which is absolutely insane.

(4) I hope most readers believe the way to calculate rho when Z_L = 0 is
rho = (Z_L - Z_0)/(Z_L + Z_0) = (0 - Z_0)/(0 + Z_0) = - 1.

> Hah! the plot thickens a bit....

Yes, it does.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

465. Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 19:19:48 UTC
From: totojepast@atlas.cz
Message-ID: <1445a2d7.0309061119.626f170d@posting.google.com>
Source record: 108631
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

According to the July 1999 issue of Scientific American (available online at http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7), Motorola started using the fractal antennas inside its cellphones. Do they still use them? And what about the other manufacturers?

"(....) Cohen, who founded Fractal Antenna Systems four years ago, is now working with T&M Antennas, which makes cellular phone antennas for Motorola. T&M engineer John Chenoweth says that the fractal antennas are 25 percent more efficient than the rubbery "stubby" found on most phones. (...)
Just why these fractal antennas work so well was answered in part in the March issue of the journal Fractals. Cohen and his colleague Robert Hohlfeld proved mathematically that for an antenna to work equally well at all frequencies, it must satisfy two criteria. It must be symmetrical about a point. And it must be self-similar, having the same basic appearance at every scale--that is, it has to be fractal."

466. vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 20:16:41 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <8rKdnZII89cy3ceiU-KYgw@comcast.com>
Source record: 108632

can anyone point me to an article that has the details right, for vhf/uhf use.

i don't understand how the velocity factor of the coax used in the elements, works in this antenna.

467. Re: Icom IC 2000 manual wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 22:23:11 UTC
From: "LA9EHA, Svein" <la9eha.nospam@online.no>
Message-ID: <v5t6b.20528$os2.283693@news2.e.nsc.no>
Source record: 108633

"Bernard B&#65533;lisle" <belisleb@webnet.qc.ca> wrote in message
news:YZ66b.2132$f7.162182@localhost...
> Used manual or copy of it.
> Thank's
>

```
Checkout this URL:

http://www.icom.co.jp/world/support/download/menu.html

--
73 de LA9EHA, Svein
Kristiansand, Norway
```

468. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 22:31:45 UTC
From: kd1@sympatico.ca
Message-ID: <3F5A6051.5B8F2DF4@sympatico.ca>
Source record: 108634

"Dr. Slick" wrote:
>
> Hello,
>
> Consider a source impedance of Zo=50+j200 and Zl=0-j200.

An excellent example.

> Since these are both series equivalent impedances, Zo
> is like a 50 ohm resistor with a series inductor, and Zl
> is like a series capacitor.
>
> At ONE test frequency, the inductive and capacitive
> reactances will cancel out (series resonance). When this happens,
> is will be equivalent to Zo=50 and Zl=0, which is a short.
>
> If you incorrectly use the "normal" equation for rho (when
> Zo is complex), you will get:
>
> Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> = 403.1 /_ -97 degrees

Corrected arithmetic error -> -1-j8 = 8.062/_ -97.125

> So some silly people on this NG think that a
> short will reflect a voltage 403.1 times the incident voltage,
> which is absolutely insane.
>
> Now try the correct "conjugate" equation (for complex
> Zo):
>
> Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1
>
> Which is exactly what you should get for a short,
> a full reflection with a phase shift of 180 degrees, but the ratio
> can never be more than one for a passive network.

So for this example using the 'revised' rho Vr = -Vi
so the voltage across the capacitor would be Vi + Vr = 0 .

Let us do some circuit analysis.

As you say above, the equivalent circuit is 3 elements in
series: a 50 ohm resister, a +j200 ohm inductor and -j200
ohm capacitor.

Let us apply 1 volt to this circuit...
Total impedance
50+j200+0-j200 = 50 ohms
Total current (volts/impedance)
1/50 = .02 A
Voltage across resistor
.02 * 50 = 1 V
Voltage across inductor
.02 * (0+j200) = 4/_ 90 Volts
Voltage across capacitor (the load)
.02 * (0-j200) = 4/_ -90

Now for the check...
Vi = 0.5 V
With classic rho
Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
The same as computed using circuit theory.

With revised rho
Vr = -.5
Vload = 0.5 -0.5 = 0

Which is more useful?
classic rho which properly predicts the voltage across the load
or
revised rho which just provides some number

I know which one I'd pick.

The thing to remember is that in circuits with inductors it is
very easy to achieve voltages greater than any of the supplies.

...Keith

469. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 23:10:06 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309061510.61dbe883@posting.google.com>
Source record: 108635

radio913@aol.com (Dr. Slick) wrote in message
news:<1d15af91.0309060337.7cbd3ba0@posting.google.com>...
>
> Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> = 403.1 /_ -97 degrees
>

Oops! that should be Rho = 8.06 /_ -97 degrees.

Forgot to divide by 50.

A multiple of 8 is still insane for a short.

Slick

470. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 23:12:32 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309061512.7481333b@posting.google.com>
Source record: 108636

Helmut Wabnig <hXXXwabnig@aXXXon.at> wrote in message
news:<bg8klvsb91cdituue1isvt32np1k9ctop5@4ax.com>...
> >
>
> Hmm.... so you manually typed off page 13 of some
> transmission line school book, so
> what was the purpose of your exercise?
> Typing skill increase?
>
> Or did I miss something?
>

You weren't following the discussion, were you.

Slick

471. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 23:32:15 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309061532.51796256@posting.google.com>
Source record: 108637

ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609031152050001@bni030qny8kc.bc.hsia.telus.net>...
> In article <1d15af91.0309060337.7cbd3ba0@posting.google.com>,
> radio913@aol.com (Dr. Slick) wrote:
>
> > Hello,
> >
> > Consider a source impedance of Zo=50+j200 and Zl=0-j200.
> ******
>
> (1) A *source* impedance of Z_0 = 50 + 200j is easily arranged. A
> *transmission line surge impedance* of Z_0 = 50 + 200j is impossible;
> surge impedances of transmission lines must have angles between - Pi/4
> radians and + Pi/4 radians.
>

Ok, a source impedance then.

I don't fully understand why your last statement needs to be so.

> > Since these are both series equivalent impedances, Zo
> > is like a 50 ohm resistor with a series inductor, and Zl
> > is like a series capacitor.
> >
> > At ONE test frequency, the inductive and capacitive
> > reactances will cancel out (series resonance). When this happens,
> > is will be equivalent to Zo=50 and Zl=0, which is a short.
> **********
>
> (2) Not equivalent in any reasonable sense. 50 and 50 + 200j aren't equal,
> nor are - 200j and 0 equal.
>

I understand your point, but the reactances WILL cancel. And if
you are feeding from a lossless 50 ohm transmission line, the circuit
won't know the difference.

> > If you incorrectly use the "normal" equation for rho (when
> > Zo is complex), you will get:
> >
> > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > = 403.1 /_ -97 degrees
>
> (3) You forgot the factor of 50 in the denominator. The quantity you are
> calculating above is approximately a magnitude of 8.062257748 at an angle
> of about - 97.12501636 degrees. Of course this is silly for a value of rho

> (but not as silly as 403.1 at an angle of - 97 degrees). However see my
> comment (1) above.
>

My mistake. Wrote too quickly. A gain of about 8 is STILL insane
for a passive network!

>
> (4) I hope most readers believe the way to calculate rho when Z_L = 0 is
> rho = (Z_L - Z_0)/(Z_L + Z_0) = (0 - Z_0)/(0 + Z_0) = - 1.
>

rho = (Z_L - Z_0*)/(Z_L + Z_0)

I agree with you. But the incident voltage in this case will be
coming
out of a series inductor of +j200 reactance at the test frequency.

It will be charging up a capacitor, but the reflected voltage will
not be
8 times the incident.

Again, the reactances will cancel at the series resonance, so in
effect, if you are feeding a lossless 50 ohm tranmission line, you
will not be able to tell the difference. It will appear exactly like
a 50 ohm line shorted at the end.

Where do you stand David?

Slick

472. Pixie II questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-06 23:40:31 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <vlks3bsldfqda@corp.supernews.com>
Source record: 108638

OK, I've put my Pixie II together and I see where there's a simple mod to go to 40 meters instead of 80 meters by switching the crystal and one inductor. Does anyone know if this mod could be carried a little farther and take this little gem up to 20 meters??

Any help is greatly appreciated. 80 meters is OK but, here in Alaska, you can't reach very many people..

Thanks,

Paul Jordan
kl0an

473. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 00:02:38 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <nM-dnSkTZdI_6MeiXTWJkg@crocker.com>
Source record: 108639

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309061510.61dbe883@posting.google.com...
> radio913@aol.com (Dr. Slick) wrote in message
news:<1d15af91.0309060337.7cbd3ba0@posting.google.com>...
> >
> > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > = 403.1 /_ -97 degrees
> >
>
>
> Oops! that should be Rho = 8.06 /_ -97 degrees.
>
> Forgot to divide by 50.
>
> A multiple of 8 is still insane for a short.
>
>
> Slick

you really don't understand resonances do you.

and you obviously haven't read and understood the paper that derived the
'power wave reflection coefficient' that you are misapplying to voltage and
current waves.

474. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 01:14:54 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-0609031814540001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108640

In article <1d15af91.0309061532.51796256@posting.google.com>,
radio913@aol.com (Dr. Slick) wrote:

> ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609031152050001@bni030qny8kc.bc.hsia.telus.net>...
> > In article <1d15af91.0309060337.7cbd3ba0@posting.google.com>,
> > radio913@aol.com (Dr. Slick) wrote:
> >
> > > Hello,
> > >
> > > Consider a source impedance of Zo=50+j200 and Zl=0-j200.
> > ******
> >
> > (1) A *source* impedance of Z_0 = 50 + 200j is easily arranged. A
> > *transmission line surge impedance* of Z_0 = 50 + 200j is impossible;
> > surge impedances of transmission lines must have angles between - Pi/4
> > radians and + Pi/4 radians.
> >
>
> Ok, a source impedance then.

In that case you shouldn't be using a formula intended to apply to the
surge impedance of a transmission line.

> I don't fully understand why your last statement needs to be so.

I assume that by "last statement" you mean

"A *transmission line surge impedance* of Z_0 = 50 + 200j is impossible;
surge impedances of transmission lines must have angles between - Pi/4
radians and + Pi/4 radians."

This follows immediately from the formula Z_0 = sqrt((R + jwL)/(G + jwC)),
the facts that none of w, R, L, G, or C are negative, the way angles work
when one divides complex numbers and takes square roots, and the fact that
the real part of Z_0 can't be negative (which decides which of the two
square roots should be used).

> Where do you stand David?

I believe that algebra speaks for itself. I believe that whether a model
accurately depicts reality has to be tested by experiment. And I believe
that when many such experiments have been previously carried out, all
confirming the accuracy of the depiction, any claim that the model is
inaccurate and that another one is accurate has to be supported with
extraordinarily strong empirical evidence.

David, ex-W8EZE

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

475. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 01:56:54 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f5a91a0_2@news1.prserv.net>
Source record: 108641

The outside of the coax radiates as the antenna. The inside of the coax, where the velocity factor comes into play, does the phase inversion. Then, there are end effects at each joint.....

If you ever have the opportunity to disassemble an old Prodelin, or Phelps-Dodge antenna, which is the commercial implementation of this design, you will find it very different from any of the ham construction articles. This design has many interdependent variables, and due to many disappointments, the ham interest had waned by the time a real, correct analysis was published.

As far as I know, the original disclosure of this design appeared in the Proceedings of the IRE just after WW2, and is likely the closest to correct. But, for the life of me, I can't remember the inventor's name.

--
Crazy George
Remove NO and SPAM from return address
"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:8rKdnZIl89cy3ceiU-KYgw@comcast.com...
>
> can anyone point me to an article that has the details right, for vhf/uhf
> use.
>
> i don't understand how the velocity factor of the coax used in the
elements,
> works in this antenna.
>
>

476. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 02:10:00 UTC
From: kd1@sympatico.ca
Message-ID: <3F5A9378.8E4321C5@sympatico.ca>
Source record: 108642

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Just to make sure I understand correctly, are you saying that
> > Vrev^2/Z0 can never be greater than Vfwd^2/Z0
> > (these being the common definitions of Prev and Pfwd) or did
> > you have another set of defintions in mind for Prev and Pfwd
> > when you state that Prev can never be greater than Pfwd?
>
> Assuming a single source, single feedline, a passive load,
> RMS voltage, and a real Z0, yes, average Prev can never be
> greater than average Pfwd, i.e. the total Poynting vector
> can never point away from the load. Such would be a violation
> of the conservation of energy principle.

Yes indeed. But in the original example Z0 was complex. So once
again, with the clarification that the following question was
phrased in general terms and not constrained to lines where
Z0 is real...

Just to make sure I understand correctly, are you saying that
Vrev^2/Z0 can NEVER be greater than Vfwd^2/Z0
(these being the common definitions of Prev and Pfwd) or did
you have another set of defintions in mind for Prev and Pfwd
when you state that Prev can NEVER be greater than Pfwd?

...Keith

477. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 02:17:48 UTC
From: kd1@sympatico.ca
Message-ID: <3F5A954C.F1953FC3@sympatico.ca>
Source record: 108643

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > But without some equations defining Pfwd and Prev, the concept is
> > not particularly useful since there are no predictions which you
> > can make from it.
>
> The equations are to be found in Dr. Best's Nov/Dec 2001 QEX article,
> "Wave Mechanics of Transmission Lines: Part 3" and in _Optics_, by
> Hecht. When the characteristic impedances are real:

Do recall that this discussion started with a line whose characteristic
was complex not real, so all that follows here is moot.

> V1 = Vfwd1(tau1) V2 = Vref2(rho2) V3 = Vfwd1(rho1) V4 = Vref2(tau2)
>
> Vfwd2 = V1 + V2 Vref1 = V3 + V4
>
> P1 = Pfwd1(1-|rho|^2) P2 = Pref2(|rho|^2) forward components
>
> P3 = Pfwd1(|rho|^2) P4 = Pref2(1-|rho|^2) reverse components
>
> Pfwd2 = P1 + P2 + 2*Sqrt(P1*P2)cos(delta-1)
>
> Pref1 = P3 + P4 + 2*Sqrt(P3*P4)cos(delta-2)
>
> where (delta-1) is the angle between V1 and V2, (delta-2) is the angle
> between V3 and V4, and that last term is called the interference term.
>
> In _Optics_, average power is called irradiance (I) and the equation is:
>
> I1 + I2 + 2*Sqrt(I1*I2)cos(delta)
>
> For further information, check out my Part 1 energy analysis article
> on my web page. Part 2 will appear shortly.

But, going back to the original question, is Pfwd and Prev on a line
with complex Z0?

...Keith

478. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 02:20:23 UTC
From: kd1@sympatico.ca
Message-ID: <3F5A95E7.CB53687@sympatico.ca>
Source record: 108644

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > But without some equations defining Pfwd and Prev, the concept is
> > not particularly useful since there are no predictions which you
> > can make from it.
>
> The equations are to be found in Dr. Best's Nov/Dec 2001 QEX article,
> "Wave Mechanics of Transmission Lines: Part 3" and in _Optics_, by
> Hecht. When the characteristic impedances are real:

Do recall that this discussion started with a line whose characteristic
was complex not real, so all that follows here is moot.

> V1 = Vfwd1(tau1) V2 = Vref2(rho2) V3 = Vfwd1(rho1) V4 = Vref2(tau2)
>
> Vfwd2 = V1 + V2 Vref1 = V3 + V4
>
> P1 = Pfwd1(1-|rho|^2) P2 = Pref2(|rho|^2) forward components
>
> P3 = Pfwd1(|rho|^2) P4 = Pref2(1-|rho|^2) reverse components
>
> Pfwd2 = P1 + P2 + 2*Sqrt(P1*P2)cos(delta-1)
>
> Pref1 = P3 + P4 + 2*Sqrt(P3*P4)cos(delta-2)
>
> where (delta-1) is the angle between V1 and V2, (delta-2) is the angle
> between V3 and V4, and that last term is called the interference term.
>
> In _Optics_, average power is called irradiance (I) and the equation is:
>
> I1 + I2 + 2*Sqrt(I1*I2)cos(delta)
>
> For further information, check out my Part 1 energy analysis article
> on my web page. Part 2 will appear shortly.

But, going back to the original question, wbat is Pfwd and Prev on a
line
with complex Z0?

...Keith

479. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 03:15:02 UTC
From: Bob Nielsen <nielsen@remove_this.oz.net>
Message-ID: <bje7rmiai0@216.39.144.81>
Source record: 108645

On Sat, 6 Sep 2003 20:56:54 -0500, Crazy George wrote:
> The outside of the coax radiates as the antenna. The inside of the coax,
> where the velocity factor comes into play, does the phase inversion. Then,
> there are end effects at each joint.................
>
> If you ever have the opportunity to disassemble an old Prodelin, or
> Phelps-Dodge antenna, which is the commercial implementation of this design,
> you will find it very different from any of the ham construction articles.
> This design has many interdependent variables, and due to many
> disappointments, the ham interest had waned by the time a real, correct
> analysis was published.
>
> As far as I know, the original disclosure of this design appeared in the
> Proceedings of the IRE just after WW2, and is likely the closest to correct.
> But, for the life of me, I can't remember the inventor's name.
>
> --
> Crazy George
> Remove NO and SPAM from return address

I recall that it was not in the Proceedings, but one of the IRE Transactions
(on Vehicular Communications or something like that).

Bob, N7XY

> "Dave VanHorn" <dvanhorn@cedar.net> wrote in message
> news:8rKdnZIl89cy3ceiU-KYgw@comcast.com...
>>
>> can anyone point me to an article that has the details right, for vhf/uhf
>> use.
>>
>> i don't understand how the velocity factor of the coax used in the
> elements,
>> works in this antenna.
>>
>>
>
>

480. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 04:13:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5ab1eb_6@corp.newsgroups.com>
Source record: 108646

kd1@sympatico.ca wrote:
> Cecil Moore wrote:
>>Assuming a single source, single feedline, a passive load,
>>RMS voltage, and a real Z0, yes, average Prev can never be
>>greater than average Pfwd, i.e. the total Poynting vector
>>can never point away from the load. Such would be a violation
>>of the conservation of energy principle.
>
> Yes indeed. But in the original example Z0 was complex. So once
> again, with the clarification that the following question was
> phrased in general terms and not constrained to lines where
> Z0 is real...

I believe my statement holds true for any possible Z0. Here's the
logical proof. Replace the following:

source---Z01 lossy line---x--passive load
Pfwd1-->
<--Pref1

with an extra 1WL of lossless line that doesn't change anything.
The lossy line still sees the same impedance looking into point 'x'.

source---Z01 lossy line---x---1WL lossless Z02---+--passive load
Pfwd1--> Pfwd2-->
<--Pref1 <--Pref2

Pfwd1 and Pref1 exist just to the left of point 'x'. We know that
(Pfwd1-Pref1) has to equal (Pfwd2-Pref2) which equals the power
delivered to the load. Everything to the right of point 'x' is easy
to analyze. We know that Pfwd2 > Pref2 if there is any resistance
in the load. If resistance in the load is zero, Pfwd2 = Pref2. In
any possible case of a passive load, Pref2 cannot be greater than
Pfwd2. Therefore, just to the left of point 'x', Pref1 cannot be
greater than Pfwd1. Backtracking from the load, the lossy line really
doesn't enter into the discussion at all.

Note that Pfwd1 will not equal Pfwd2 and Pref1 will not equal Pref2
but the difference between forward power and reflected power must be
equal to the power delivered to the load in order to satisfy the
conservation of energy principle.
--
73, Cecil http://www.qsl.net/w5dxp

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481. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 04:14:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5ab235_6@corp.newsgroups.com>
Source record: 108647

kd1@sympatico.ca wrote:
> But, going back to the original question, is Pfwd and Prev on a line
> with complex Z0?

See my logical proof in another posting.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

482. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 04:26:29 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062026.10ab8b79@posting.google.com>
Source record: 108648

kd1@sympatico.ca wrote in message news:<3F5A6051.5B8F2DF4@sympatico.ca>...
> "Dr. Slick" wrote:
> >
> > Hello,
> >
> > Consider a source impedance of Zo=50+j200 and Zl=0-j200.
>
> An excellent example.
>
> > Since these are both series equivalent impedances, Zo
> > is like a 50 ohm resistor with a series inductor, and Zl
> > is like a series capacitor.
> >
> > At ONE test frequency, the inductive and capacitive
> > reactances will cancel out (series resonance). When this happens,
> > is will be equivalent to Zo=50 and Zl=0, which is a short.
> >
> > If you incorrectly use the "normal" equation for rho (when
> > Zo is complex), you will get:
> >
> > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > = 403.1 /_ -97 degrees
>
> Corrected arithmetic error -> -1-j8 = 8.062/_ -97.125
>

i corrected this.

> > So some silly people on this NG think that a
> > short will reflect a voltage 403.1 times the incident voltage,
> > which is absolutely insane.
> >
> > Now try the correct "conjugate" equation (for complex
> > Zo):
> >
> > Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1
> >
> > Which is exactly what you should get for a short,
> > a full reflection with a phase shift of 180 degrees, but the ratio
> > can never be more than one for a passive network.
>
> So for this example using the 'revised' rho Vr = -Vi
> so the voltage across the capacitor would be Vi + Vr = 0 .
>
> Let us do some circuit analysis.

>
> As you say above, the equivalent circuit is 3 elements in
> series: a 50 ohm resister, a +j200 ohm inductor and -j200
> ohm capacitor.
>
> Let us apply 1 volt to this circuit...
> Total impedance
> 50+j200+0-j200 = 50 ohms
> Total current (volts/impedance)
> 1/50 = .02 A
> Voltage across resistor
> .02 * 50 = 1 V
> Voltage across inductor
> .02 * (0+j200) = 4/_ 90 Volts
> Voltage across capacitor (the load)
> .02 * (0-j200) = 4/_ -90
>
> Now for the check...
> Vi = 0.5 V
> With classic rho
> Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
> Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
> The same as computed using circuit theory.
>

Ok, well this seems to make a bit of sense,
but where did the circuit theory predict the
Vr=4.031/_ -97.125?

> With revised rho
> Vr = -.5
> Vload = 0.5 -0.5 = 0
>
> Which is more useful?
> classic rho which properly predicts the voltage across the load
> or
> revised rho which just provides some number
>
> I know which one I'd pick.
>
> The thing to remember is that in circuits with inductors it is
> very easy to achieve voltages greater than any of the supplies.
>
> ...Keith

483. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 04:59:03 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062059.3234b6e6@posting.google.com>
Source record: 108649

kd1@sympatico.ca wrote in message news:<3F5A6051.5B8F2DF4@sympatico.ca>...
> >
> > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > = 403.1 /_ -97 degrees
>
> Corrected arithmetic error -> -1-j8 = 8.062/_ -97.125
>
> > So some silly people on this NG think that a
> > short will reflect a voltage 403.1 times the incident voltage,
> > which is absolutely insane.
> >
> > Now try the correct "conjugate" equation (for complex
> > Zo):
> >
> > Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1
> >
> > Which is exactly what you should get for a short,
> > a full reflection with a phase shift of 180 degrees, but the ratio
> > can never be more than one for a passive network.
>
> So for this example using the 'revised' rho Vr = -Vi
> so the voltage across the capacitor would be Vi + Vr = 0 .
>
> Let us do some circuit analysis.
>
> As you say above, the equivalent circuit is 3 elements in
> series: a 50 ohm resister, a +j200 ohm inductor and -j200
> ohm capacitor.
>
> Let us apply 1 volt to this circuit...
> Total impedance
> 50+j200+0-j200 = 50 ohms
> Total current (volts/impedance)
> 1/50 = .02 A
> Voltage across resistor
> .02 * 50 = 1 V
> Voltage across inductor
> .02 * (0+j200) = 4/_ 90 Volts
> Voltage across capacitor (the load)
> .02 * (0-j200) = 4/_ -90
>

But you need to define Vi as the voltage
coming out of the series inductor. I don't believe

you do that here.

> Now for the check...
> Vi = 0.5 V
> With classic rho
> Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
> Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
> The same as computed using circuit theory.
>

Where does circuit theory predict
Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

> Vr = -.5
> Vload = 0.5 -0.5 = 0
>
> Which is more useful?
> classic rho which properly predicts the voltage across the load
> or
> revised rho which just provides some number
>
> I know which one I'd pick.
>
> The thing to remember is that in circuits with inductors it is
> very easy to achieve voltages greater than any of the supplies.
>
> ...Keith

i agree with your last statement, but do you think that the
power RC is around 64 for this circuit?

If you use ratios, it doesn't matter whether you use
peak or RMS voltages.

([Vpeak.incident/Vpeak.reflected])=
([Vrms.incident/Vrms.reflected])=sqrt(Pi/Pr)=[rho]

This is because the sqrt(2) is in the numerator and denominator.
And the 2 (after squaring) is also factored out in the Power RC!

And...the Zo is also factored out for Power RC!

The Zo is not needed for the Power RC, because the
impedance of the source is identical to the load for the
reflected power! Sure, you use the Zo in relation to Zl to
get rho, but once you get rho, you have the power RC.

Slick

484. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:00:23 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <1OKdnSooY_GgJseiU-KYuA@comcast.com>
Source record: 108650

> > If you ever have the opportunity to disassemble an old Prodelin, or
> > Phelps-Dodge antenna, which is the commercial implementation of this
design,
> > you will find it very different from any of the ham construction
articles.
> > This design has many interdependent variables, and due to many
> > disappointments, the ham interest had waned by the time a real, correct
> > analysis was published.
> >
> > As far as I know, the original disclosure of this design appeared in the
> > Proceedings of the IRE just after WW2, and is likely the closest to
correct.
> > But, for the life of me, I can't remember the inventor's name.

all that i've seen on the net just says that the vf affects the segment
lengths.
of course the radiating segments are significantly shorter than free space
half wavelengths, depending on velocity factor.

it seems the the ideal coax for this would have a very high vf, but i may be
missing something.

i can't see how it works so well, when the radiating elements are only 66pct
of what they should be.

485. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:04:08 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062104.50c17ef0@posting.google.com>
Source record: 108651

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<nM-dnSkTZdI_6MeiXTWJkg@crocker.com>...
> "Dr. Slick" <radio913@aol.com> wrote in message
> news:1d15af91.0309061510.61dbe883@posting.google.com...
> > radio913@aol.com (Dr. Slick) wrote in message
> news:<1d15af91.0309060337.7cbd3ba0@posting.google.com>...
> > >
> > > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > > = 403.1 /_ -97 degrees
> > >
> >
> >
> > Oops! that should be Rho = 8.06 /_ -97 degrees.
> >
> > Forgot to divide by 50.
> >
> > A multiple of 8 is still insane for a short.
> >
> >
> > Slick
>
> you really don't understand resonances do you.
>
> and you obviously haven't read and understood the paper that derived the
> 'power wave reflection coefficient' that you are misapplying to voltage and
> current waves.

I did read some of Kurokawas paper, and it IS a bit confusing.
Have you figured it out David?

Please tell us how the conjugate equation was derived.

Please explain where the fallacy of my logic lies for you.

Slick

486. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:12:06 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062112.28d1d341@posting.google.com>
Source record: 108652

ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609031814540001@bni030qny8kc.bc.hsia.telus.net>...
> In article <1d15af91.0309061532.51796256@posting.google.com>,
> radio913@aol.com (Dr. Slick) wrote:
>
> > ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
> news:<ryeburn-0609031152050001@bni030qny8kc.bc.hsia.telus.net>...
> > > In article <1d15af91.0309060337.7cbd3ba0@posting.google.com>,
> > > radio913@aol.com (Dr. Slick) wrote:
> > >
> > > > Hello,
> > > >
> > > > Consider a source impedance of Zo=50+j200 and Zl=0-j200.
> > > ******
> > >
> > > (1) A *source* impedance of Z_0 = 50 + 200j is easily arranged. A
> > > *transmission line surge impedance* of Z_0 = 50 + 200j is impossible;
> > > surge impedances of transmission lines must have angles between - Pi/4
> > > radians and + Pi/4 radians.
> > >
> >
> > Ok, a source impedance then.
>
> In that case you shouldn't be using a formula intended to apply to the
> surge impedance of a transmission line.
>

You mean i can't use Zo=50 + j200 with

Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo?

Only up to Zo=50 + j50?

Ok, well, the conjugate formula still makes more sense to
me.

>
> > Where do you stand David?
>
> I believe that algebra speaks for itself. I believe that whether a model
> accurately depicts reality has to be tested by experiment. And I believe
> that when many such experiments have been previously carried out, all
> confirming the accuracy of the depiction, any claim that the model is
> inaccurate and that another one is accurate has to be supported with
> extraordinarily strong empirical evidence.
>

> David, ex-W8EZE

If the algebra speaks for itself, what does it say to you? Is Besser and Kurokawa and the ARRL incorrect? If you're not too sure and you don't wanna say, i wouldn't blame you.

Slick

487. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:19:39 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062119.50f67732@posting.google.com>
Source record: 108653

kd1@sympatico.ca wrote in message news:<3F5A95E7.CB53687@sympatico.ca>...
>
> But, going back to the original question, wbat is Pfwd and Prev on a
> line
> with complex Z0?
>
> ...Keith

I'd like to know the answer to this question too!

If we are talking about only DISSIPATED power, do we have
to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
And if phase doesn't mean anything for power, how can we use a
complex Zo in the denominator?

And if the Pfrd originates in Zo, Prev is loaded by Zo,
then even if Zo is complex, can you still not say:

[rho]**2 = power RC? Because the Zo cancels out anyways
(a ratio)?

??????????????????????????????????????

Slick

488. What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:21:19 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309062121.593cfaba@posting.google.com>
Source record: 108654

kd1@sympatico.ca wrote in message news:<3F5A95E7.CB53687@sympatico.ca>...
>
> But, going back to the original question, wbat is Pfwd and Prev on a
> line
> with complex Z0?
>
> ...Keith

I'd like to know the answer to this question too!

If we are talking about only DISSIPATED power, do we have
to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
And if phase doesn't mean anything for power, how can we use a
complex Zo in the denominator?

And if the Pfrd originates in Zo, Prev is loaded by Zo,
then even if Zo is complex, can you still not say:

[rho]**2 = power RC? Because the Zo cancels out anyways
(a ratio)?

??????????????????????????????????????

Slick

489. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 05:24:56 UTC
From: "mkelly@powerup.com.au" <mkelly@powerup.com.au>
Message-ID: <3F5AC128.1BEFEED5@powerup.com.au>
Source record: 108655

Since the VF is 66% (or whatever the coax you use is) what
good (?)
effect would tophats have at the end of each section in an
effort
to make them resonant?

Just a thought.
Murray

Dave VanHorn wrote:
>
> > > If you ever have the opportunity to disassemble an old Prodelin, or
> > > Phelps-Dodge antenna, which is the commercial implementation of this
> design,
> > > you will find it very different from any of the ham construction
> articles.
> > > This design has many interdependent variables, and due to many
> > > disappointments, the ham interest had waned by the time a real, correct
> > > analysis was published.
> > >
> > > As far as I know, the original disclosure of this design appeared in the
> > > Proceedings of the IRE just after WW2, and is likely the closest to
> correct.
> > > But, for the life of me, I can't remember the inventor's name.
>
> all that i've seen on the net just says that the vf affects the segment
> lengths.
> of course the radiating segments are significantly shorter than free space
> half wavelengths, depending on velocity factor.
>
> it seems the the ideal coax for this would have a very high vf, but i may be
> missing something.
>
> i can't see how it works so well, when the radiating elements are only 66pct
> of what they should be.
Murray Kelly vk4aok

490. Hf Beam help TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 06:30:05 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <LfA6b.8851$Ci1.1561113@newsfep2-win.server.ntli.net>
Source record: 108656

I have just got hold of a TB3 tribander 3ele beam I think it is a mosley but
they do not have any instructions for it I intend to put it up as a 2 ele
can anybody tell me the distance between the driven ele and the reflector
please

--
Derek

--

491. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 06:39:21 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-0609032339210001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108657

In article <1d15af91.0309062112.28d1d341@posting.google.com>,
radio913@aol.com (Dr. Slick) wrote:

> ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609031814540001@bni030qny8kc.bc.hsia.telus.net>...
> > In article <1d15af91.0309061532.51796256@posting.google.com>,
> > radio913@aol.com (Dr. Slick) wrote:
> >
> > > ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
> > news:<ryeburn-0609031152050001@bni030qny8kc.bc.hsia.telus.net>...
> > > > In article <1d15af91.0309060337.7cbd3ba0@posting.google.com>,
> > > > radio913@aol.com (Dr. Slick) wrote:
> > > >
> > > > > Hello,
> > > > >
> > > > > Consider a source impedance of Zo=50+j200 and Zl=0-j200.
> > > > ******
> > > >
> > > > (1) A *source* impedance of Z_0 = 50 + 200j is easily arranged. A
> > > > *transmission line surge impedance* of Z_0 = 50 + 200j is impossible;
> > > > surge impedances of transmission lines must have angles between - Pi/4
> > > > radians and + Pi/4 radians.
> > > >
> > >
> > > Ok, a source impedance then.
> >
> > In that case you shouldn't be using a formula intended to apply to the
> > surge impedance of a transmission line.
> >
>
> You mean i can't use Zo=50 + j200 with
>
> Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo?
>
> Only up to Zo=50 + j50?

If Z_0 is supposed to be the surge impedance of a transmission line, then
yes, you *can't* use Z_0 = 50 + 200j, because God doesn't make
transmission lines of such an impedance. If Z_0 is supposed to mean
something else, then I'm not talking about whatever your Z_0 is, except to
say that you shouldn't talk about the voltage standing wave ratio and
expect others to understand your English, if there isn't any transmission
line.

> Ok, well, the conjugate formula still makes more sense to
> me.

And never mind that it gives measurably *wrong* answers when used to
determine the voltage standing wave ratio on transmission lines?

> > > Where do you stand David?
> >
> > I believe that algebra speaks for itself. I believe that whether a model
> > accurately depicts reality has to be tested by experiment. And I believe
> > that when many such experiments have been previously carried out, all
> > confirming the accuracy of the depiction, any claim that the model is
> > inaccurate and that another one is accurate has to be supported with
> > extraordinarily strong empirical evidence.
> >
> > David, ex-W8EZE
>
>
> If the algebra speaks for itself, what does it say to you?

It says exactly what the formula says. Translating mathematics into some
other language is dangerous.

> Is
> Besser and Kurokawa and the ARRL incorrect?

It depends upon what they expect to be able to do with their formula for
rho. If they expect to be able to use the conjugate formula for rho to
determine the voltage standing wave ratio, by using VSWR = (1 + |rho|)/|1
- |rho||, then yes, they're incorrect -- demonstrably, *measurably*,
incorrect. The conjugate formula simply gives wrong answers (wrong in the
sense of disagreeing with measurements) while the non-conjugate formula
gives right answers. It also conflicts, mathematically, with the usual
formula for which you have seen a proof (based upon the two Kirkhoff laws
and Ohm's law). So there are theoretical as well as experimental reasons
for rejecting the conjugate formula. It's hard to argue against success or
for failure.

> If you're not too sure
> and you don't wanna say, i wouldn't blame you.

I'm more sure of this than I am of many things. If I had any doubts, then,
logically, I would also have to have doubts about at least two of the
following: (a) the Kirkhoff voltage law; (b) the Kirkhoff current law; (c)
Ohm's law; (d) many empirical measurments that have confirmed the
predictions that can be made using the non-conjugate version of the
formula for rho. It would be logically inconsistent to have confidence in
all four of these four things and, at the same time, doubt that the model
in question describes reality accurately.

David, ex-W8EZE

--
David or Jo Anne Ryeburn

ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

492. Re: Hf Beam help TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 10:28:45 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <np0mlv0umsh31a9elvralf879tok5cpgim@4ax.com>
Source record: 108658

On Sun, 7 Sep 2003 07:30:05 +0100, "Derek" <danda95@hotmail.com>
wrote:

>I have just got hold of a TB3 tribander 3ele beam I think it is a mosley but
>they do not have any instructions for it I intend to put it up as a 2 ele
>can anybody tell me the distance between the driven ele and the reflector
>please
>
>--
> Derek

Hi Derek,

The TB-3 Was Marketed for many years by Swan , think they were made by
Wilson but not sure of that. .. Don't recall the spacing but it should
be about .1 wave length on 20 Meters that would be about 6 feet.
A quick net search did not reveal a source for the manual , but
someone must have one.
G.L.
73 Dave KC1DI

493. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 10:38:13 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309070238.842a6fd@posting.google.com>
Source record: 108659

ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609032339210001@bni030qny8kc.bc.hsia.telus.net>...
> > >
> >
> > You mean i can't use Zo=50 + j200 with
> >
> > Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo?
> >
> > Only up to Zo=50 + j50?
>
> If Z_0 is supposed to be the surge impedance of a transmission line, then
> yes, you *can't* use Z_0 = 50 + 200j, because God doesn't make
> transmission lines of such an impedance. If Z_0 is supposed to mean
> something else, then I'm not talking about whatever your Z_0 is, except to
> say that you shouldn't talk about the voltage standing wave ratio and
> expect others to understand your English, if there isn't any transmission
> line.
>

Ok, well use Zo=50 + j50, and Zload = 50 - j50 and
the conjugate formula is correct again.

> > Ok, well, the conjugate formula still makes more sense to
> > me.
>
> And never mind that it gives measurably *wrong* answers when used to
> determine the voltage standing wave ratio on transmission lines?
>

Where is it wrong? It's the "normal" equation that is wrong when
Zo is complex! Nobody has explained how a rho>1 will NOT lead to a
power RC that is also greater than one, thus violating conservation of
energy.

>
> It says exactly what the formula says. Translating mathematics into some
> other language is dangerous.
>
> > Is
> > Besser and Kurokawa and the ARRL incorrect?
>
> It depends upon what they expect to be able to do with their formula for
> rho. If they expect to be able to use the conjugate formula for rho to
> determine the voltage standing wave ratio, by using VSWR = (1 + |rho|)/|1
> - |rho||, then yes, they're incorrect -- demonstrably, *measurably*,

> incorrect.

Where and when and how did you do a measurement? When you get a rho
greater than 1, the VSWR = (1 + |rho|)/(1 - |rho|) gives ridiculous
NEGATIVE SWRs. And rho WILL give you the SWR, assuming your tranmission
isn't extremely lossy. This is why people say that the SWR meter has to
be at the antenna, instead of at the end of 100' of RG-58.

The conjugate formula simply gives wrong answers (wrong in the
> sense of disagreeing with measurements) while the non-conjugate formula
> gives right answers. It also conflicts, mathematically, with the usual
> formula for which you have seen a proof (based upon the two Kirkhoff laws
> and Ohm's law). So there are theoretical as well as experimental reasons
> for rejecting the conjugate formula. It's hard to argue against success or
> for failure.
>

I saw the derivation, but i don't totally agree with it, yet.

Again, what actual bench measurement did you make?

What test setup, circuit did you use?

Did you actually get more reflected power that incident?
I'd really like to see THAT!

> > If you're not too sure
> > and you don't wanna say, i wouldn't blame you.
>
> I'm more sure of this than I am of many things. If I had any doubts, then,
> logically, I would also have to have doubts about at least two of the
> following: (a) the Kirkhoff voltage law; (b) the Kirkhoff current law; (c)
> Ohm's law; (d) many empirical measurments that have confirmed the
> predictions that can be made using the non-conjugate version of the
> formula for rho. It would be logically inconsistent to have confidence in
> all four of these four things and, at the same time, doubt that the model
> in question describes reality accurately.
>
> David, ex-W8EZE

Please! No Straw man! I never debated a-c.

For (d), certainly, assuming Zo is purely real.

Slick

494. G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 12:13:17 UTC
From: tmg9252@aol.com
Message-ID: <f4575ed5.0309070413.366e66fe@posting.google.com>
Source record: 108660

I plan on installing a G5RV mini. Due to limited space I would need to cut off about 2 feet from the antenna.
I was wondering how much would this effect the antennas performance and should I trim equal ends off the span or just take the 2 feet from one end.

Thanks in advance

Tom

495. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 12:42:15 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <HIF6b.38179$Vx2.17151206@newssvr28.news.prodigy.com>
Source record: 108661

"Tom" <tmg9252@aol.com> wrote in message
news:f4575ed5.0309070413.366e66fe@posting.google.com...
> I plan on installing a G5RV mini. Due to limited space I would need to
> cut off about 2 feet from the antenna.
> I was wondering how much would this effect the antennas performance
> and should I trim equal ends off the span or just take the 2 feet from
> one end.
>
> Thanks in advance
>
> Tom

It would be better to let the ends droop or bend the ends in other
directions rather than cutting it. A mini is already probably as short as
is reasonable to make one.

Dee D. Flint, N8UZE

496. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 12:46:27 UTC
From: Eskay <sieb_kNOS@PAMyahoo.ca>
Message-ID: <1KF6b.67320$PD3.4698026@nnrp1.uunet.ca>
Source record: 108662

Tom wrote:

> I plan on installing a G5RV mini. Due to limited space I would need to
> cut off about 2 feet from the antenna.
> I was wondering how much would this effect the antennas performance
> and should I trim equal ends off the span or just take the 2 feet from
> one end.
>
> Thanks in advance
>
> Tom

I have no idea what would happen if you cut the ends..
Why don't you just fit the antenna in the space you have and dangle the
ends straught down?
Eskay..

497. Re: Hf Beam help TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 12:51:17 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <9RF6b.9980$Ci1.1633084@newsfep2-win.server.ntli.net>
Source record: 108663

Thanks Dave

"KC1DI" <elbc2@gwi.net> wrote in message
news:np0mlv0umsh31a9elvralf879tok5cpgim@4ax.com...
> On Sun, 7 Sep 2003 07:30:05 +0100, "Derek" <danda95@hotmail.com>
> wrote:
>
> >I have just got hold of a TB3 tribander 3ele beam I think it is a mosley
but
> >they do not have any instructions for it I intend to put it up as a 2 ele
> >can anybody tell me the distance between the driven ele and the reflector
> >please
> >
> >--
> > Derek
>
> Hi Derek,
>
> The TB-3 Was Marketed for many years by Swan , think they were made by
> Wilson but not sure of that. .. Don't recall the spacing but it should
> be about .1 wave length on 20 Meters that would be about 6 feet.
> A quick net search did not reveal a source for the manual , but
> someone must have one.
> G.L.
> 73 Dave KC1DI
>
>
>

498. Re: Would this work as a patio antenna for SWL 3-30Mhz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 13:02:22 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <ktamlvk9s5feu64t2m8i6ckas2g7m6p5pa@4ax.com>
Source record: 108664

Versus no antenna at all....probably just a tad if at all. (who knows
for certain)

Sounds to me like a UHF/VHF for line of site milcom.

Shortwave antennas tend to be much larger as a rule given the much
lower frequencies. (larger wavelengths)

mike

On Thu, 04 Sep 2003 22:24:51 GMT, "Joe Strain" <jstrain1@cfl.rr.com>
wrote:

>
>http://www.fairradio.com/0mk-12.htm
>
>12 foot Military Mast Kit . Comes with: three 47" long x 1 3/8" diameter
> fiberglass mast sections, one 8" top mast section which holds two
>horizontal aerial antennas and also has 16 feet of RG-58 coax with a
>male BNC connection at the end, two 28" antenna elements that thread
>to the top section, one guy ring with guy rope, three 9" stainless
>steel stakes, one 27" long mast base which mounts directly into the
>ground, and O.D. green carrying bag with handle. There is no indication
>of a model number on the assembly. Excellent for field day or other
>portable antenna use. 12 lbs sh. #MK-12, $
>59.50 each;
>2 for $99.50
>

499. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 13:25:26 UTC
From: kd1@sympatico.ca
Message-ID: <3F5B31C6.A2FCA75F@sympatico.ca>
Source record: 108665

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5A6051.5B8F2DF4@sympatico.ca>...
> > >
> > > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > > = 403.1 /_ -97 degrees
> >
> > Corrected arithmetic error -> -1-j8 = 8.062/_ -97.125
> >
> > > So some silly people on this NG think that a
> > > short will reflect a voltage 403.1 times the incident voltage,
> > > which is absolutely insane.
> > >
> > > Now try the correct "conjugate" equation (for complex
> > > Zo):
> > >
> > > Rho = (Zload-Zo*)/(Zload+Zo) = -50/50= -1
> > >
> > > Which is exactly what you should get for a short,
> > > a full reflection with a phase shift of 180 degrees, but the ratio
> > > can never be more than one for a passive network.
> >
> > So for this example using the 'revised' rho Vr = -Vi
> > so the voltage across the capacitor would be Vi + Vr = 0 .
> >
> > Let us do some circuit analysis.
> >
> > As you say above, the equivalent circuit is 3 elements in
> > series: a 50 ohm resister, a +j200 ohm inductor and -j200
> > ohm capacitor.
> >
> > Let us apply 1 volt to this circuit...
> > Total impedance
> > 50+j200+0-j200 = 50 ohms
> > Total current (volts/impedance)
> > 1/50 = .02 A
> > Voltage across resistor
> > .02 * 50 = 1 V
> > Voltage across inductor
> > .02 * (0+j200) = 4/_ 90 Volts
> > Voltage across capacitor (the load)
> > .02 * (0-j200) = 4/_ -90
> >
>

> But you need to define Vi as the voltage
> coming out of the series inductor. I don't believe
> you do that here.

If Vi was the voltage on the inductor then it would also
be Vload which it usually isn't. Vi is only equal to
Vload when the line is terminated in Z0. Vi is always
one half of the source voltage in the Thevenin equivalent
generator.

> > Now for the check...
> > Vi = 0.5 V
> > With classic rho
> > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
> > Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
> > The same as computed using circuit theory.
> >
>
> Where does circuit theory predict
> Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

This isn't circuit theory, it is from the definition of reflection
coefficient: Vr = Vi * rho.

> > Vr = -.5
> > Vload = 0.5 -0.5 = 0
> >
> > Which is more useful?
> > classic rho which properly predicts the voltage across the load
> > or
> > revised rho which just provides some number
> >
> > I know which one I'd pick.
> >
> > The thing to remember is that in circuits with inductors it is
> > very easy to achieve voltages greater than any of the supplies.
> >
> > ...Keith
>
> i agree with your last statement, but do you think that the
> power RC is around 64 for this circuit?

Yes, errrr no! I think that power reflection coefficient as normally
defined has no utility with lossy lines since it can not be used
to make any useful predictions.

With a lossless line, power reflection coefficient has some utility
since knowing Pfwd, you can compute Prev using the the power
reflection coefficient and subtracting Prev from Pfwd will
give you Pnet.

Since this does not work for a lossy line, power reflection
coefficient (as normally computed) is simply not a useful number
in that environment. (Some might use this lack of generality as
a reason to call into question the interpretation of power
reflection coefficient on lossless lines as well. But that is
for another discussion.)

In any case, for power reflection coefficient to be of value in
the lossy line situation, we would first have to derive a
definition of Pfwd and Prev such that Pfwd - Prev = Pnet.
Then lossy line power reflection coefficient would be Prev/Pfwd
and all would be well again. Of course after these new definitions
are obtained, power reflection coefficient would not be rho^2.

But until a useful definition of Pfwd and Prev for lossy lines
arises, power reflection coefficient will have no value.

> If you use ratios, it doesn't matter whether you use
> peak or RMS voltages.
>
> ([Vpeak.incident/Vpeak.reflected])=
> ([Vrms.incident/Vrms.reflected])=sqrt(Pi/Pr)=[rho]
>
> This is because the sqrt(2) is in the numerator and denominator.
> And the 2 (after squaring) is also factored out in the Power RC!
>
> And...the Zo is also factored out for Power RC!
>
> The Zo is not needed for the Power RC, because the
> impedance of the source is identical to the load for the
> reflected power! Sure, you use the Zo in relation to Zl to
> get rho, but once you get rho, you have the power RC.

Except that on lossy lines, power reflection coefficient
(rho^2) does not enable one to make any useful predications.

So it comes back to the question...

What is a useful defintion of Pfwd and Prev in a lossy line?

...Keith

500. Re: Hf Beam help TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 13:41:04 UTC
From: K4SQR@juno.com
Message-ID: <7c8be5b4.0309070541.2fd97e2f@posting.google.com>
Source record: 108666

Derek;

That is a SWAN or HORNET tri-bander. (Swan bought Hornet) Neither in
biz any longer. Check www.w7fg.com for a manual.

I owned a TB-4 in the former Panama Canal Zone & it worked well for
years.
GL,
Jim, K4SQR

KC1DI <elbc2@gwi.net> wrote in message
news:<np0mlv0umsh31a9elvralf879tok5cpgim@4ax.com>...
> On Sun, 7 Sep 2003 07:30:05 +0100, "Derek" <danda95@hotmail.com>
> wrote:
>
> >I have just got hold of a TB3 tribander 3ele beam I think it is a mosley but
> >they do not have any instructions for it I intend to put it up as a 2 ele
> >can anybody tell me the distance between the driven ele and the reflector
> >please
> >
> >--
> > Derek
>
> Hi Derek,
>
> The TB-3 Was Marketed for many years by Swan , think they were made by
> Wilson but not sure of that. .. Don't recall the spacing but it should
> be about .1 wave length on 20 Meters that would be about 6 feet.
> A quick net search did not reveal a source for the manual , but
> someone must have one.
> G.L.
> 73 Dave KC1DI

501. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 14:20:59 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <J3udnacJJ4JNo8aiXTWJiQ@crocker.com>
Source record: 108667

<kd1@sympatico.ca> wrote in message news:3F5A9378.8E4321C5@sympatico.ca...
> Vrev^2/Z0 can NEVER be greater than Vfwd^2/Z0
> (these being the common definitions of Prev and Pfwd) or did
> you have another set of defintions in mind for Prev and Pfwd

this is another of the basic misconceptions that is being applied over and over on there. note from my big message about powers a couple days ago that from phasor notation there are really only two types of power that can be discussed:

average power:
Pav= .5 |I|^2 Re[Z] = .5 |V|^2 Re[Y]

and complex power.
P=.5 V I*

now, note that given Pav you can NOT recover enough information about V to know its proper phase and magnitude in order to be able to compare it with anything properly. Complex power on the other had requires the conjugate of the current, which when expanded gives an equation like:
P=.5 |V| |I| cos(/_V-/_I) + j.5 |V| |I| sin(/_V-/_I)

where again, it is not possible to back up from the power to the full phasor description of the voltage to be able to use it in calculations or comparisons.

now, you CAN do this if you restrict Z0 to be purely real, you can NOT do it if you use a complex Z0 because you can't extract the imaginary term back out of a power calculation that has specifically removed it.

so all these places where you guys start doing sqrt(Pref/Pfwd)=Vfwd/Vref or Vrev^2/Z0/Vfwd^2/Z0 are worthless in the general case.

502. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 14:25:27 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <FgGdnSu8wb5BosaiXTWJjg@crocker.com>
Source record: 108668

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309070238.842a6fd@posting.google.com...
> ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
news:<ryeburn-0609032339210001@bni030qny8kc.bc.hsia.telus.net>...

> Where and when and how did you do a measurement? When you get a rho
> greater than 1, the VSWR = (1 + |rho|)/(1 - |rho|) gives ridiculous
> NEGATIVE SWRs. And rho WILL give you the SWR, assuming your tranmission
> isn't extremely lossy. This is why people say that the SWR meter has to
> be at the antenna, instead of at the end of 100' of RG-58.
>

ok, i quit... i have shown several times that the calculation of vswr from
rho only applies in ideal lines, you can not use it in lossy lines because
of the simplifications that went into deriving it. if you insist on harping
on this point how can you ever open your eyes to see the rest of the errors
in your calculations.

plonk.

503. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 14:32:38 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <f_CdnSGEEusX3MaiXTWJkA@crocker.com>
Source record: 108570

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309062104.50c17ef0@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<nM-dnSkTZdI_6MeiXTWJkg@crocker.com>...
> > "Dr. Slick" <radio913@aol.com> wrote in message
> > news:1d15af91.0309061510.61dbe883@posting.google.com...
> > > radio913@aol.com (Dr. Slick) wrote in message
> > news:<1d15af91.0309060337.7cbd3ba0@posting.google.com>...
> > > >
> > > > Rho = (Zload-Zo)/(Zload+Zo) = (-50-j400)/50
> > > > = 403.1 /_ -97 degrees
> > > >
> > >
> > >
> > > Oops! that should be Rho = 8.06 /_ -97 degrees.
> > >
> > > Forgot to divide by 50.
> > >
> > > A multiple of 8 is still insane for a short.
> > >
> > >
> > > Slick
> >
> > you really don't understand resonances do you.
> >
> > and you obviously haven't read and understood the paper that derived the
> > 'power wave reflection coefficient' that you are misapplying to voltage
and
> > current waves.
>
>
> I did read some of Kurokawas paper, and it IS a bit confusing.
> Have you figured it out David?
>
> Please tell us how the conjugate equation was derived.
>
> Please explain where the fallacy of my logic lies for you.
>
>
> Slick

it wasn't derived, it was defined. formula (1) defines the power waves.
formula (11) defines the 'power wave reflection coefficient' in terms of the
two waves in (1). it is then just algebra to rearrange the terms to get the

formula in (12).

i have given up on convincing any one on here that this equation can not be applied to voltage and current waves on lossy lines. unfortunately it will give the right answers but for the wrong reason on ideal lines. so go read the paper, understand what he is doing, and realize that it is a different domain than the 'classical' voltage and current waves that have been used for many years and work just fine.

504. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 14:35:43 UTC
From: kd1@sympatico.ca
Message-ID: <3F5B423F.76F21B67@sympatico.ca>
Source record: 108571

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Cecil Moore wrote:
> >>Assuming a single source, single feedline, a passive load,
> >>RMS voltage, and a real Z0, yes, average Prev can never be
> >>greater than average Pfwd, i.e. the total Poynting vector
> >>can never point away from the load. Such would be a violation
> >>of the conservation of energy principle.
> >
> > Yes indeed. But in the original example Z0 was complex. So once
> > again, with the clarification that the following question was
> > phrased in general terms and not constrained to lines where
> > Z0 is real...
>
> I believe my statement holds true for any possible Z0. Here's the
> logical proof. Replace the following:
>
> source---Z01 lossy line---x--passive load
> Pfwd1-->
> <--Pref1
>
> with an extra 1WL of lossless line that doesn't change anything.
> The lossy line still sees the same impedance looking into point 'x'.
>
> source---Z01 lossy line---x---1WL lossless Z02---+--passive load
> Pfwd1--> Pfwd2-->
> <--Pref1 <--Pref2
>
> Pfwd1 and Pref1 exist just to the left of point 'x'. We know that
> (Pfwd1-Pref1) has to equal (Pfwd2-Pref2) which equals the power
> delivered to the load.

While Pnet = Pfwd - Prev using the classic definitions
Pfwd = Vi^2/R0 and Prev = Vr^2/R0
works for lossless line, we do not yet have an equivalent set of
definitions for Pfwd and Prev on a lossy line.

When we do find appropriate definitions for Prev and Pfwd on a
lossy line such that Pnet = Pfwd - Prev, then
Prev/Pfwd
will not be greater than one and it definitely will not be equal
to rho^2 (which can be greater than one).

So we are still looking for appropriate definitions of Pfwd and Prev on a lossy line.

Or we could just throw this whole power analysis thing away and stick with voltage analysis which works just fine and lets us compute everything of interest.

...Keith

505. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 15:27:13 UTC
From: Paul Victor Birke <nonlinear@rogers.com>
Message-ID: <3F5B4E9C.8080003@rogers.com>
Source record: 108572
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

this is a very good question
why couldn't we have a big rubbery fractal that folded up so to say.
They have them stuck inside the unit and your have is wrapped around the
antenna, no such a good idea, why not make it in a rubber matrix and be
about 2" * 4" folding up. That would be goog for added sensitivity I
would suspect
Paul (EE)

totojepast wrote:

> According to the July 1999 issue of Scientific American (available
> online at
> http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
> Motorola started using the fractal antennas inside its cellphones. Do
> they still use them? And what about the other manufacturers?
>
> "(....) Cohen, who founded Fractal Antenna Systems four years ago, is
> now working with T&M Antennas, which makes cellular phone antennas for
> Motorola. T&M engineer John Chenoweth says that the fractal antennas
> are 25 percent more efficient than the rubbery "stubby" found on most
> phones. (...)
> Just why these fractal antennas work so well was answered in part in
> the March issue of the journal Fractals. Cohen and his colleague
> Robert Hohlfeld proved mathematically that for an antenna to work
> equally well at all frequencies, it must satisfy two criteria. It must
> be symmetrical about a point. And it must be self-similar, having the
> same basic appearance at every scale--that is, it has to be fractal."

506. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 15:29:55 UTC
From: Paul Victor Birke <nonlinear@rogers.com>
Message-ID: <3F5B4F3F.2020502@rogers.com>
Source record: 108573
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

This is a very good question!!

Why couldn't we have a big rubbery fractal that folded up so to say.

They have them stuck inside the unit and you have your hand wrapped
around the antenna-not such a good idea since you are conducting, at
least partially, and therefore shielding the inside antenna.

Why not make it in a rubber matrix and be about 2" * 4" folding up.
That would be goog for added sensitivity I would strongly suspect.

Paul Birke (EE)

totojepast wrote:

> According to the July 1999 issue of Scientific American (available
> online at
>
http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
> Motorola started using the fractal antennas inside its cellphones. Do
> they still use them? And what about the other manufacturers?
>
> "(....) Cohen, who founded Fractal Antenna Systems four years ago, is
> now working with T&M Antennas, which makes cellular phone antennas for
> Motorola. T&M engineer John Chenoweth says that the fractal antennas
> are 25 percent more efficient than the rubbery "stubby" found on most
> phones. (...)
> Just why these fractal antennas work so well was answered in part in
> the March issue of the journal Fractals. Cohen and his colleague
> Robert Hohlfeld proved mathematically that for an antenna to work
> equally well at all frequencies, it must satisfy two criteria. It must
> be symmetrical about a point. And it must be self-similar, having the
> same basic appearance at every scale--that is, it has to be fractal."

507. yaesu G-1000sdx rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 15:46:53 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <8ql6b.3502$Ve3.1896@newsfep4-winn.server.ntli.net>
Source record: 108574

Hi all,

I've trying to rotate a 20M home made Magnetic loop using an old yaesu rotator. Unforntunately, it hasn't got the manual or 5 core cable & the two connecting plugs with it.

I also understand that although the rotator shaft goes around, the direction pointer does not. (Possibly transistor drivers?)

I can't find any schematics on the 'net and was hoping that someone on this newsgroup might have some info that at least would let me connect up the five wires to the connectors to check out its operation. I think other models may be similar.

The rotator body has a seven pin plug and there's a six pin chassis mounted socket on the rear over the main controller unit.

regards,
Roger G7JAQ
England.

This mailbox protected from junk email by Matador
from MailFrontier, Inc. http://info.mailfrontier.com

508. Re: Skyloops

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 15:58:07 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309070758.25261407@posting.google.com>
Source record: 108575

"Sgordon" <noshoes2@yahoo.com> wrote in message
news:<%Lm6b.37904$Vx2.16974160@newssvr28.news.prodigy.com>...
> I have quite a bit of info on Skyloop antenna on my website
> http://www.kq8rp.com if you have a website that has good info on a loop feel
> free to add your link to our wite.

thanks I added a link to the yahoo group Skywires. for Skywire loop antennas.

http://groups.yahoo.com/group/SkyWires/

509. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 16:03:06 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <7IicnUa1HtUQy8aiXTWJjg@comcast.com>
Source record: 108576

<mkelly@powerup.com.au> wrote in message
news:3F5AC128.1BEFEED5@powerup.com.au...
> Since the VF is 66% (or whatever the coax you use is) what
> good (?)
> effect would tophats have at the end of each section in an
> effort
> to make them resonant?

it would make the antenna a whole lot larger, that's for sure.

510. Re: yaesu G-1000sdx rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 16:06:45 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <b7adnZHuP9EHysaiU-KYgg@crocker.com>
Source record: 108577

"Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message
news:8qI6b.3502$Ve3.1896@newsfep4-winn.server.ntli.net...
> Hi all,
>
> I've trying to rotate a 20M home made Magnetic loop using an old yaesu
> rotator. Unforntunately, it hasn't got the manual or 5 core cable & the
> two connecting plugs with it.
>
> I also understand that although the rotator shaft goes around, the
direction
> pointer does not. (Possibly transistor drivers?)
>
> I can't find any schematics on the 'net and was hoping that someone on
this
> newsgroup might have some info that at least would let me connect up the
> five wires to the connectors to check out its operation. I think other
> models may be similar.
>
> The rotator body has a seven pin plug and there's a six pin chassis
mounted
> socket on the rear over the main controller unit.
>
> regards,
> Roger G7JAQ
> England.
>
>
> ----------
> This mailbox protected from junk email by Matador
> from MailFrontier, Inc. http://info.mailfrontier.com
>
>

511. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 16:12:29 UTC
From: Swan Radioman <Swanradio@lycos.com>
Message-ID: <l3mmlv854vu5hq6h1jvb32a02ann1iucfv@4ax.com>
Source record: 108578

On Thu, 04 Sep 2003 10:09:25 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Caveat Lector wrote:
>> Folks -- the URL should be http://arrowantennas.com/
>
>UNIX strikes again! :-)

Unix?

512. Re: Icom IC 2000 manual wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 16:21:15 UTC
From: Bernard B�lisle <belisleb@webnet.qc.ca>
Message-ID: <QoM6b.2366$f7.173611@localhost>
Source record: 108586

Thank you for the information..... It exactly what I was looking for.
73 Bernard

LA9EHA, Svein <la9eha.nospam@online.no> a �crit dans le message :
v5t6b.20528$os2.283693@news2.e.nsc.no...
>
> "Bernard B�lisle" <belisleb@webnet.qc.ca> wrote in message
> news:YZ66b.2132$f7.162182@localhost...
> > Used manual or copy of it.
> > Thank's
> >
>
> Checkout this URL:
>
>
> http://www.icom.co.jp/world/support/download/menu.html
>
> --
> 73 de LA9EHA, Svein
> Kristiansand, Norway
>
>

513. 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 16:43:44 UTC
From: Stephen Saunders <kd6eut@earthlink.net>
Message-ID: <4fJ6b.4757$BG6.2246@newsread1.news.atl.earthlink.net>
Source record: 108579

Just checking to see if anyone has built a 2 meter antenna for base satation
use out of #14 copper antenna wire and fed with 50 ohm coax. If so,
describe how you made it and how it performs.

Stephen Saunders, KD6EUT

514. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 17:11:56 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <wFJ6b.15603$rb3.541302@twister.southeast.rr.com>
Source record: 108580

Rather than cutting it, bend the dipole back on itself or bend it at an angle to reduce space. This would not affect the antenna. Shape does not matter as much as length with antennas.

Good luck,

Bill, W4WNT

"Tom" <tmg9252@aol.com> wrote in message news:f4575ed5.0309070413.366e66fe@posting.google.com...
> I plan on installing a G5RV mini. Due to limited space I would need to
> cut off about 2 feet from the antenna.
> I was wondering how much would this effect the antennas performance
> and should I trim equal ends off the span or just take the 2 feet from
> one end.
>
> Thanks in advance
>
> Tom

515. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 17:53:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5b723c_2@corp.newsgroups.com>
Source record: 108581

kd1@sympatico.ca wrote:
> Cecil Moore wrote:
>
>>kd1@sympatico.ca wrote:
>>
>>>Cecil Moore wrote:
>>>
>>>>Assuming a single source, single feedline, a passive load,
>>>>RMS voltage, and a real Z0, yes, average Prev can never be
>>>>greater than average Pfwd, i.e. the total Poynting vector
>>>>can never point away from the load. Such would be a violation
>>>>of the conservation of energy principle.
>>>
>>>Yes indeed. But in the original example Z0 was complex. So once
>>>again, with the clarification that the following question was
>>>phrased in general terms and not constrained to lines where
>>>Z0 is real...
>>
>>I believe my statement holds true for any possible Z0. Here's the
>>logical proof. Replace the following:
>>
>>source---Z01 lossy line---x--passive load
>> Pfwd1-->
>> <--Pref1
>>
>>with an extra 1WL of lossless line that doesn't change anything.
>>The lossy line still sees the same impedance looking into point 'x'.
>>
>>source---Z01 lossy line---x---1WL lossless Z02---+--passive load
>> Pfwd1--> Pfwd2-->
>> <--Pref1 <--Pref2
>>
>>Pfwd1 and Pref1 exist just to the left of point 'x'. We know that
>>(Pfwd1-Pref1) has to equal (Pfwd2-Pref2) which equals the power
>>delivered to the load.
>
> So we are still looking for appropriate definitions of Pfwd and
> Prev on a lossy line.

For conceptual purposes only, we don't need a definition. In the
above example, we know that Pfwd1 > Pref1 by the amount of power
accepted by the load. We also know the average Pfwd1 increases
on the lossy line as we move toward the source. We also know that
the average Pref1 decreases as we move toward the source. Therefore,

for a lossy line the average forward power at the source is greater
than at point 'x' above due to losses in the line. The average reflected
power at the source is less than at point 'x' above due to losses in
the line.

Note that the average total Poynting vector always points toward the
load if the load has any resistance at all. That fact tells us that
the average forward power can NEVER be less than the average reflected
power.

This appears to be one of the pitfalls of trying to use instantaneous
power(s) which, according to my EE prof, are as "useless as tits on a
boar hog".

At the source above, the average forward power minus the average reflected
power minus the total losses in the line, is the power delivered to the load.
It's virtually a no-brainer. It can be measured with a 50 ohm directional
wattmeter by configuring the system the following way and measuring the
forward and reflected powers on the sections of (near)lossless line:

source--1WL lossless coax--x--lossy line--+--1WL lossless coax--+--load
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

516. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 18:03:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5b747a$1_2@corp.newsgroups.com>
Source record: 108582

Swan Radioman wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>UNIX strikes again! :-)
>
> Unix?

UNIX, a computer operating system, and its derivitives, are case-sensitive.
If I download graphic.GIF to my web page instead of graphic.gif, the
QSL.NET server barfs.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

517. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 18:24:03 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F5B77C3.F8FB15E3@cwis.net>
Source record: 108583

Stephen,
I've made several 2 meter dipoles, they worked just fine
since the repeater wasn't that far from me. Could hit one
or two 80-90 miles away. Also used a 38-39 wave length
doublet (80 meter dipole), it worked just fine too.
'Doc

518. Complex Z0 mini-Compendium for Example Builders

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 19:05:46 UTC
From: pez7sv@hotmail.com
Message-ID: <8b03b1ec.0309071105.693a47d8@posting.google.com>
Source record: 108584

```
Complex Z0 mini-Compendium for Example Builders
-----------------------------------------------------------------
[Please use fixed-space font with at least 90 Characters per Line]

A lot of numerical examples have been appeared lately
which are related to the
Uniform Transmission Line "UTL" Theory
with a "Passive" Complex Z0.

After a try to follow a few of them,
I summoned up my courage
to suggest a mini-Compendium,
especially to those of the Example Builders
who maybe they don't feel any need for.

Table (R/C = Real/Complex. Angles in Degrees)
--:----:-------------------------:---:-------------------------------|
0 1 2 3 4 5 6 7
12345678901234567890123456789012345678901234567890123456789012345678901234567890
--:----:-------------------------:---:-------------------------------|
# :Symb: Quantity :R/C: Conditions
--:----:-------------------------:---:-------------------------------|
01: w : Circular Frequency : R : 0 < w
--:----:-------------------------:---:-------------------------------|
A : UTL Analysis - Distributed Coefficients
--:----:-------------------------:---:-------------------------------|
02: R' : Series Resistance : R : 0 =< R'
03: L' : Series Inductance : R : 0 =< L'
04: Z' : Series Impedance : C : Z' = R' + jw.L',(R',L')=/=(0,0)
--:----:-------------------------:---:-------------------------------|
05: G' : Shunt Conductance : R : 0 =< G'
06: C' : Shunt Capacitance : R : 0 =< L'
07: Y' : Shunt Admittance : C : Y' = G' + jw.C',(G',L')=/=(0,0)
--:----:-------------------------:---:-------------------------------|
B : UTL Design - Propagation Characteristics
--:----:-------------------------:---:-------------------------------|
08: Ro : Char/tic Resistance : R : 0 < Ro
09: Xo : Char/tic Reactance : R :|Xo|/Ro =< 1
10: Zo : Char/tic Impedance : C : Zo = Ro + jXo
11:|Zo|: Magnitude of Zo : R : 0 < |Zo|
12: to : Argument of Zo : R : -45 =< to =< +45
--:----:-------------------------:---:-------------------------------|
13: a : Attenuation Factor : R : 0 =< a
14: b : Phase Factor : R : 0 =< b
15: g : Propagation Factor : C : g = a + jb, (a,b)=/=(0,0)
```

```
--:----:------------------------:---:--------------------------------|
C : UTL Fundamentals
--:----:------------------------:---:--------------------------------|
16: Z : Impedance [Passive] : C : Z = R + jX, 0 =< R
17: T : Argument of Z : R : -90 =< T =< 90
18: z :"Normalized" Impedance : C : z = Z/Zo,
19: t : Argument of z : R : -90-to =< t =< -to+90
20: p : Reflection Coefficient : C : p = (Z -Zo)/(Z + Zo)
21:|p| : Magnitude of p : R :|p|=<Sqrt[(1+Sin|to|)/(1-Sin|to|]
22: W : Average Power : R : 0 =< W
--:----:------------------------:---:--------------------------------|
```

Some Applications of the mini-Compendium to Example Threads

I.
The following characteristic Impedance is proposed
in some Thread

Zo = 50 + j 200

But,
as it is readily seen from the Table,
these values are not obey the #09 -or its equivalent #12- condition
[as already has been noticed by David or Jo Anne Ryeburn, ex-W8EZE].

Therefore this Example is
inconsistent
with the UTL Theory.

II.
On the contrary,
the thread
"Complex Line Z0 : A Numerical Example"
by Roy Lewallen,
31 Aug 2003
forms a complete system
as far as both
the following Real values
which are given
either explicitly

Ro = 68 [Ohm]
Xo = -39 [Ohm]

or implicitly,
under the assumption that the involved calculations
have been carried out correctly,

w = 20,000 Pi [Hz]
a = 2.46526 10^-4 [Np]/[m]
b = 4.25879 10^-4 [rad]/[m]

since they are not violated any of the Tabled conditions,
all are
consistent
with the UTL Theoretical Design.

Indeed,
if we calculate
the design parameters,
we find

R' = 3.33731 10^-2 [Ohm]/[m]
L' = 3.07890 10^-8 [H]/[m]
G' = 2.51387 10^-11 [Mho]/[m]
C' = 9.99071 10^-11 [F]/{m]

which are all positive quantities
which of course
they don't violate any Tabled condition too.

Therefore
the UTL Theory applies,
at least in principle,
and we can attempt to check
any of the subsequent conclusions of this example,
although,
I am afraid,
a vaporization of this pseudo-RG-58
finally will happen...

Sincerely,

pez
SV7BAX

P.S.
Please feel free
to made any correction
or addition of your favorites,
as far as these are consistent
with the UTL Theory,
by yourselves alone.
Whether or not,
either welcomed or not,
comments do not appear...

519. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 19:13:21 UTC
From: "WB3FUP (Mike Hall)" <wb3fup@msn.com>
Message-ID: <bjg00k$iom7o$1@ID-204390.news.uni-berlin.de>
Source record: 108585

I owned a 2 meter dipole made from 1/2" copper pipe. Worked great - and
talk about bandwidth.

--
73 es cul

wb3fup
a Salty Bear

"'Doc" <w5lz@cwis.net> wrote in message news:3F5B77C3.F8FB15E3@cwis.net...
>
>
> Stephen,
> I've made several 2 meter dipoles, they worked just fine
> since the repeater wasn't that far from me. Could hit one
> or two 80-90 miles away. Also used a 38-39 wave length
> doublet (80 meter dipole), it worked just fine too.
> 'Doc

520. FS: Hy-Gain 203BA-S, 3 Element 20 Meter Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:22:02 UTC
From: a6au6 <xxxa6au6z@hotmail.com>
Message-ID: <KrM6b.4948$BG6.3218@newsread1.news.atl.earthlink.net>
Source record: 108587
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

This is a USED 20 meter three element full size monoband 20 meter beam:

Boom Length - 16.5 feet
Longest Element - 37 feet
Weight - 35 pounds
Wind Surface - 5.4 square feet
Turning Radius - 20 feet
Gain - 8.5 dB
FTB - 29-25 dB

The bean was installed on a tower for several years. I took it down to install a tri-bander.

It was carefully taken down with a bucket truck, disassembled and packaged in the original box; with all the hardware necessary to reassemble the beam. It is in excellent physical and electrical condition. The original assembly manual is included. However, the elements are tarnished (i.e. not shiny) due to exposure to the weather.

The box is 7 feet long by 6 inches by 5 inches and weighs about 45 pounds.

$175.00 plus shipping from 08809.

Please contact me at xxxa6au6z@hotmail.com Remove the "xxx" to reply.

Thanks,

521. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:26:03 UTC
From: kd1@sympatico.ca
Message-ID: <3F5B945B.13489B5B@sympatico.ca>
Source record: 108588

```
Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Cecil Moore wrote:
> >
> >>kd1@sympatico.ca wrote:
> >>
> >>>Cecil Moore wrote:
> >>>
> >>>>Assuming a single source, single feedline, a passive load,
> >>>>RMS voltage, and a real Z0, yes, average Prev can never be
> >>>>greater than average Pfwd, i.e. the total Poynting vector
> >>>>can never point away from the load. Such would be a violation
> >>>>of the conservation of energy principle.
> >>>
> >>>Yes indeed. But in the original example Z0 was complex. So once
> >>>again, with the clarification that the following question was
> >>>phrased in general terms and not constrained to lines where
> >>>Z0 is real...
> >>
> >>I believe my statement holds true for any possible Z0. Here's the
> >>logical proof. Replace the following:
> >>
> >>source---Z01 lossy line---x--passive load
> >> Pfwd1-->
> >> <--Pref1
> >>
> >>with an extra 1WL of lossless line that doesn't change anything.
> >>The lossy line still sees the same impedance looking into point 'x'.
> >>
> >>source---Z01 lossy line---x---1WL lossless Z02---+--passive load
> >> Pfwd1--> Pfwd2-->
> >> <--Pref1 <--Pref2
> >>
> >>Pfwd1 and Pref1 exist just to the left of point 'x'. We know that
> >>(Pfwd1-Pref1) has to equal (Pfwd2-Pref2) which equals the power
> >>delivered to the load.
> >
> > So we are still looking for appropriate definitions of Pfwd and
> > Prev on a lossy line.
>
> For conceptual purposes only, we don't need a definition. In the
> above example, we know that Pfwd1 > Pref1 by the amount of power
> accepted by the load.
```

So Pload = Pfwd1 - Prefl.

There are many pairs of Pfwd1 and Pref1 which will satisfy this relationship. Is there a particular pair of Pfwd1 and Pref1 that we should prefer because they have some particularly useful properties.

For example, in the low loss case, the usual derivations of
Pfwd = Vf^2/R0 and Pref = Vr^2/R0
have the useful property that it is easy to construct an instrument to measure and display them and once both are measured it is easy to compute Pload.

Is there a corresponding derivation for a preferred pair for the lossy case?

...Keith

522. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:48:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vv4nlvgk9p5gg6hfvqfp5sgh9gqps7pfgh@4ax.com>
Source record: 108589
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

On Sun, 07 Sep 2003 15:29:55 GMT, Paul Victor Birke
<nonlinear@rogers.com> wrote:

>This is a very good question!!

Unfortunately for such a good question, the answer reveals a mediocre
reality compared to the glowing claims.

>
>Why couldn't we have a big rubbery fractal that folded up so to say.

Proximity often leads to increasing loss, and rarely opportunity for
boundless gain.
>
>They have them stuck inside the unit and you have your hand wrapped
>around the antenna-not such a good idea since you are conducting, at
>least partially, and therefore shielding the inside antenna.

Quite so, but hardly the fault of the antenna and has nothing to do
with any perceived characteristic.
>
>Why not make it in a rubber matrix and be about 2" * 4" folding up.
>That would be goog for added sensitivity I would strongly suspect.
>
>Paul Birke (EE)

Hi Paul,

Soothe your suspicions. A randomly crushed antenna is just as
effective. However "just as effective" means equally in-effective.

>
>totojepast wrote:
>
> > According to the July 1999 issue of Scientific American (available
> > online at
> >
>http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
> > Motorola started using the fractal antennas inside its cellphones. Do
> > they still use them? And what about the other manufacturers?

They could. Some manufacturers sell antennas complete with resistors
for their own novel characteristics. Some cellphone users paste in a
foil do-dad sold at two for $19.95 on TV too (never mind that a piece
of aluminum foil works just as well for a penny's worth of material
and no shipping/handling fee).

> >
> > "(....) Cohen, who founded Fractal Antenna Systems four years ago, is
> > now working with T&M Antennas, which makes cellular phone antennas for
> > Motorola. T&M engineer John Chenoweth says that the fractal antennas
> > are 25 percent more efficient than the rubbery "stubby" found on most
> > phones. (...)

They could also claim to be 55% more efficient than a resistor too.

> > Just why these fractal antennas work so well was answered in part in
> > the March issue of the journal Fractals. Cohen and his colleague
> > Robert Hohlfeld proved mathematically that for an antenna to work
> > equally well at all frequencies, it must satisfy two criteria. It must
> > be symmetrical about a point. And it must be self-similar, having the
> > same basic appearance at every scale--that is, it has to be fractal."
>

Others, who were not employed selling fractals have proven mathematically that they are not. Now, if you replace antennas with cigarettes and mathematics with reports on cancer, guess what clash of reports you would find there. A simple review into the quality of science of fractals "antenna research" reveals not very much range nor depth. Most announcements are repetition of unique examples that you will never find in that cellphone.

As one poster pointed out YEARS ago, was that if fractals were such a good idea, we would all have replaced our antennas with them by now.

This, of course, has lead one fractal proponent to simply declare that all the antennas we do use today, are already fractal! This oddball of recursive thought leads us to then ask, what merit is there in your particular kind? That's where you get into math 4 places to the right of the decimal for complex geometries that could only begin to make economic sense in the GHz frequencies (if you cared). Anyone could as easily make the same claims for the unique color of ink in their sales brochures giving boosted performance.

73's
Richard Clark, KB7QHC

523. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:52:08 UTC
From: Swan Radioman <Swanradio@lycos.com>
Message-ID: <od6nlvsoir7fs5i7ood38b80nmeba12cra@4ax.com>
Source record: 108590

On Sun, 07 Sep 2003 13:03:05 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Swan Radioman wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>>UNIX strikes again! :-)
>>
>> Unix?
>
>UNIX, a computer operating system, and its derivitives, are case-sensitive.
>If I download graphic.GIF to my web page instead of graphic.gif, the
>QSL.NET server barfs.

Thanks, I know what unix is, what does it have to do with his problem?

524. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:53:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5b9c6b$1_5@corp.newsgroups.com>
Source record: 108592

kd1@sympatico.ca wrote:
> So Pload = Pfwd1 - Prefl.
>
> There are many pairs of Pfwd1 and Pref1 which will satisfy this
> relationship. Is there a particular pair of Pfwd1 and Pref1 that
> we should prefer because they have some particularly useful
> properties.

Yes, the pair that satisfies the conservation of energy principle
including source power and losses in the feedline. For instance,
if a load is accepting 100 watts when the power reflection coefficient
is 0.25, Pfwd(0.75) = 100W, so Pfwd = 133.33W, Pref = 33.33W.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

525. Re: Web Page Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:58:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5b9d7d$1_5@corp.newsgroups.com>
Source record: 108593

Swan Radioman wrote:
> Thanks, I know what unix is, what does it have to do with his problem?

If a problem goes away when you switch from upper case to lower case,
it is usually caused by a UNIX system in the loop somewhere that
wasn't programmed to ignore case.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

526. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 20:58:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vr6nlv0fkl20hkcp7svj41htm49blcf0ra@4ax.com>
Source record: 108591

On 6 Sep 2003 22:19:39 -0700, radio913@aol.com (Dr. Slick) wrote:

>kd1@sympatico.ca wrote in message news:<3F5A95E7.CB53687@sympatico.ca>...
>>
>> But, going back to the original question, wbat is Pfwd and Prev on a
>> line with complex Z0?
>>
>> ...Keith

> I'd like to know the answer to this question too!

Hi Fellows,

Such intense interest and no comments to SV7DMC for his work to this
matter?

73's
Richard Clark, KB7QHC

527. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:12:13 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vln7saqgg32h0e@corp.supernews.com>
Source record: 108594
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

This explains most clearly why MOT has been a bad investment since I quit in '97.

When I went there in '81 it was a good investment.
We used to have perfect yields.
Now the factories are shut.

Fractal Geometry and Classical Electrodynamics have little to do with one another at HF.
Or elsewhere.
Mandelbrot's office door had one picture on it when I made my observation in '84:
Gauss's.
Buy a book.
Drink bourbon; Do math. Die anyway.
nite
H.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:vv4nlvgk9p5gg6hfvqfp5sgh9gqps7pfgh@4ax.com...
> On Sun, 07 Sep 2003 15:29:55 GMT, Paul Victor Birke
> <nonlinear@rogers.com> wrote:
>
> >This is a very good question!!
>
> Unfortunately for such a good question, the answer reveals a mediocre
> reality compared to the glowing claims.
>
snip-
>
>http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
> > > Motorola started using the fractal antennas inside its cellphones. Do
> > > they still use them? And what about the other manufacturers?
>
> They could. Some manufacturers sell antennas complete with resistors
> for their own novel characteristics. Some cellphone users paste in a
> foil do-dad sold at two for $19.95 on TV too (never mind that a piece
> of aluminum foil works just as well for a penny's worth of material
> and no shipping/handling fee).
> > >
> > > "(....) Cohen, who founded Fractal Antenna Systems four years ago, is
> > > now working with T&M Antennas, which makes cellular phone antennas for
> > > Motorola. T&M engineer John Chenoweth says that the fractal antennas

> > > are 25 percent more efficient than the rubbery "stubby" found on most
> > > phones. (...)
>
> They could also claim to be 55% more efficient than a resistor too.
>
snip-
>Anyone could as
> easily make the same claims for the unique color of ink in their sales
> brochures giving boosted performance.
>
> 73's
> Richard Clark, KB7QHC

528. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:34:29 UTC
From: kd1@sympatico.ca
Message-ID: <3F5BA465.4A203F01@sympatico.ca>
Source record: 108596

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > So Pload = Pfwd1 - Prefl.
> >
> > There are many pairs of Pfwd1 and Pref1 which will satisfy this
> > relationship. Is there a particular pair of Pfwd1 and Pref1 that
> > we should prefer because they have some particularly useful
> > properties.
>
> Yes, the pair that satisfies the conservation of energy principle
> including source power and losses in the feedline. For instance,
> if a load is accepting 100 watts when the power reflection coefficient
> is 0.25, Pfwd(0.75) = 100W, so Pfwd = 133.33W, Pref = 33.33W.

So we have the following requirements
Pload = Pfwd - Prev
Prho = Prev/Pfwd

There is still a very large selection of pairs which will satisfy
these constraints. Are there more constraints available so that
we can compute Pref, Pfwd and then derive Prho?

...Keith

529. Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:45:13 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <JFN6b.17596$rb3.579183@twister.southeast.rr.com>
Source record: 108595

I am considering connecting a coil from the base of my vertical antenna to ground, not for impedance matching, but to allow the charge on the ground to slowly leak off at the top of the antenna. I will also use a lightning arrestor but wonder if this additional step will further reduce the chance of a lightning strike.

73,

Ron, W4TQT

530. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:53:48 UTC
From: Paul Victor Birke <nonlinear@rogers.com>
Message-ID: <3F5BA94F.9030708@rogers.com>
Source record: 108597
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

Richard Clark wrote:

>
> Proximity often leads to increasing loss, and rarely opportunity for
> boundless gain.

I was thinking only of more sustainable gain, certainly not boundless!!
>
>>They have them stuck inside the unit and you have your hand wrapped
>>around the antenna-not such a good idea since you are conducting, at
>>least partially, and therefore shielding the inside antenna.
>
>
> Quite so, but hardly the fault of the antenna and has nothing to do
> with any perceived characteristic.

Indeed but not a clever design idea wrt antenna placement was my point.
>
>>Why not make it in a rubber matrix and be about 2" * 4" folding up.
>>That would be goog for added sensitivity I would strongly suspect.
>>
>>Paul Birke (EE)
>
>
> Hi Paul,
>
> Soothe your suspicions. A randomly crushed antenna is just as
> effective. However "just as effective" means equally in-effective.

Ouch!

>
> As one poster pointed out YEARS ago, was that if fractals were such a
> good idea, we would all have replaced our antennas with them by now.
>
Yes well that would be the case except maybe for Patent monies.

all the best
Paul

531. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:54:04 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vlnaapa5e1sj63@corp.supernews.com>
Source record: 108598

Just use an RF choke

"Ron" <rmrippy@hotmail.com> wrote in message
news:JFN6b.17596$rb3.579183@twister.southeast.rr.com...
> I am considering connecting a coil from the base of my vertical antenna to
> ground, not for impedance matching, but to allow the charge on the ground
to
> slowly leak off at the top of the antenna. I will also use a lightning
arrestor
> but wonder if this additional step will further reduce the chance of a
lightning
> strike.
>
> 73,
>
> Ron, W4TQT
>

532. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 21:58:30 UTC
From: Josechu <josechu8ERASE_THIS@wanadoo.es>
Message-ID: <bjg9m7$in08t$1@ID-143599.news.uni-berlin.de>
Source record: 108599
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

I think that the tree antenna in:

http://www.josechu.com/moving_fractal/index.htm

would be good for cellphones, provided that the length of the (horizontal or vertical) branches is a fraction of the wavelength.

Take into account that a grandson branch has exactly half the length of its grandfather's length.

Josechu

"totojepast" <totojepast@atlas.cz> wrote in message
news:1445a2d7.0309061119.626f170d@posting.google.com...
> According to the July 1999 issue of Scientific American (available
> online at
>
http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
> Motorola started using the fractal antennas inside its cellphones. Do
> they still use them? And what about the other manufacturers?
>
> "(....) Cohen, who founded Fractal Antenna Systems four years ago, is
> now working with T&M Antennas, which makes cellular phone antennas for
> Motorola. T&M engineer John Chenoweth says that the fractal antennas
> are 25 percent more efficient than the rubbery "stubby" found on most
> phones. (...)
> Just why these fractal antennas work so well was answered in part in
> the March issue of the journal Fractals. Cohen and his colleague
> Robert Hohlfeld proved mathematically that for an antenna to work
> equally well at all frequencies, it must satisfy two criteria. It must
> be symmetrical about a point. And it must be self-similar, having the
> same basic appearance at every scale--that is, it has to be fractal."

533. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:05:51 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309071505.69ba9b72@posting.google.com>
Source record: 108600

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<FgGdnSu8wb5BosaiXTWJjg@crocker.com>...
> "Dr. Slick" <radio913@aol.com> wrote in message
> news:1d15af91.0309070238.842a6fd@posting.google.com...
> > ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
> news:<ryeburn-0609032339210001@bni030qny8kc.bc.hsia.telus.net>...
>
>
> ok, i quit... i have shown several times that the calculation of vswr from
> rho only applies in ideal lines, you can not use it in lossy lines because
> of the simplifications that went into deriving it. if you insist on harping
> on this point how can you ever open your eyes to see the rest of the errors
> in your calculations.
>

25' of RG-8 isn't THAT lossy.

Once again, where and when and how did you do a measurement? When
you get a rho greater than 1, the VSWR = (1 + |rho|)/(1 - |rho|) gives
ridiculous
NEGATIVE SWRs. And rho WILL give you the SWR, assuming your
tranmission
isn't extremely lossy. This is why people say that the SWR meter has
to
be at the antenna, instead of at the end of 100' of RG-58.

You are quitting because you can't really answer this question.

Slick

534. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:06:16 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <UgydnSZ2PopwJMaiXTWJiw@crocker.com>
Source record: 108601

"Ron" <rmrippy@hotmail.com> wrote in message
news:JFN6b.17596$rb3.579183@twister.southeast.rr.com...
> I am considering connecting a coil from the base of my vertical antenna to
> ground, not for impedance matching, but to allow the charge on the ground
to
> slowly leak off at the top of the antenna. I will also use a lightning
arrestor
> but wonder if this additional step will further reduce the chance of a
lightning
> strike.
>

no, it won't reduce the chance of a lightning strike... though it may help prevent charge build up between the antenna and ground preceding a stroke that may help protect your equipment. in fact equalizing the charge between the antenna and ground may actually make it easier for the antenna to initiate the upward streamer that connects with the downward moving leader to trigger a lightning discharge.

535. MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:20:13 UTC
From: Neil <g0jhc@blueyonder.co.uk>
Message-ID: <3f5bbd2d$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 108602

MFJ-1792 80/40m Vertical Antenna
* Bands: 80, 40m * Power rating: 1.5kW PEP SSB * VSWR: 1.2:1 (typical) * Bandwidth (2:1): Full band * 1/4 wave: 40m radiator * Radiation Angle: Low * Freq. Selection: Automatic * High-Q coil & capacitance hat * Requires radials or ground * Includes heavy duty mount * Requires guying * Height: 10m

The MFJ-1792 high performance vertical antenna for 80 and 40m. End loading the most efficient form of loading is used for 80m. It uses a 1.37m top capacitance hat and a high-Q coil and features a full size quarter wave radiator for 40m.

Box never opened £150. Can deliver to HF convention in Manchester end of Oct, or meet buyer by arrangement or buyer pays shipping costs.

Contact g0jhc@blueyonder.co.uk

536. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:22:02 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309071522.50bb0151@posting.google.com>
Source record: 108603

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<f_CdnSGEEusX3MaiXTWJkA@crocker.com>...
> >
> > I did read some of Kurokawas paper, and it IS a bit confusing.
> > Have you figured it out David?
> >
> > Please tell us how the conjugate equation was derived.
> >
> > Please explain where the fallacy of my logic lies for you.
> >
> >
> > Slick
>
> it wasn't derived, it was defined. formula (1) defines the power waves.
> formula (11) defines the 'power wave reflection coefficient' in terms of the
> two waves in (1). it is then just algebra to rearrange the terms to get the
> formula in (12).
>

Please show us if he correctly defines formula (1) and why. And i'd also
like to see if someone can derive these:

ai= (Vi+Zi*Ii)/(2*sqrt(Re(Zi))
bi= (Vi-conj(Zi)*Ii)/(2*sqrt(Re(Zi))

For what he calls the incident and reflected power waves.

And he does say that this is also the voltage RC when Zi is real and
positive.

And then he does square the MAGNITUDE of this, to get the Power RC.

> i have given up on convincing any one on here that this equation can not be
> applied to voltage and current waves on lossy lines. unfortunately it will
> give the right answers but for the wrong reason on ideal lines. so go read
> the paper, understand what he is doing, and realize that it is a different
> domain than the 'classical' voltage and current waves that have been used
> for many years and work just fine.

You are giving up because you don't understand the paper either.

Slick

537. RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:23:41 UTC
From: Jim Leder <jleder@cinci.rr.com>
Message-ID: <qvenlvsiha1ddk5au8l7dte206l5a0c8h8@4ax.com>
Source record: 108604
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I have a good ham friend who has been creating a lot of RFI with a nearby neighbor. The RFI is mainly coming through the neighbor's PC speakers and TV speaker. No one else in the neighborhood is affected. It doesn't matter what band or how much power he runs, 2-40 meters, 5-100 watts, he creates RFI. His own home equipment, including a TV and PC in the shack are not affected. The only odd thing we can think of, is his neighbor's roof is all tin. We don't know if there is a ground on it not, but the question is: Could the tin roof be a contributor to his problem? Would a good ground of the tin roof help?

Thanks...

538. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:25:05 UTC
From: Paul Victor Birke <nonlinear@rogers.com>
Message-ID: <3F5BBEB7.7070007@rogers.com>
Source record: 108605
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

Dear Josechu

I saw these about a year ago.
How well do they work? How well could they work wrt to gain sensitivity
which I have just noticed in a cottage situation where reception was
most borderline and involved location phone in a unique spatial vector
postion. Would this antenna somehow be better in this situation re
short whip.

BTW I think there is a US patent on these, yes?

Josechu wrote:
> I think that the tree antenna in:
>
> http://www.josechu.com/moving_fractal/index.htm
>
> would be good for cellphones, provided that the length of the (horizontal or
> vertical) branches is a fraction of the wavelength.
>
> Take into account that a grandson branch has exactly half the length of its
> grandfather's length.
>
>
> Josechu
>
>
> "totojepast" <totojepast@atlas.cz> wrote in message
> news:1445a2d7.0309061119.626f170d@posting.google.com...
>
>>According to the July 1999 issue of Scientific American (available
>>online at
>>
>
> http://www.sciam.com/article.cfm?articleID=000712A2-9190-1C72-9EB7809EC588F2D7),
>
>>Motorola started using the fractal antennas inside its cellphones. Do
>>they still use them? And what about the other manufacturers?
>>
>>"(....) Cohen, who founded Fractal Antenna Systems four years ago, is
>>now working with T&M Antennas, which makes cellular phone antennas for
>>Motorola. T&M engineer John Chenoweth says that the fractal antennas
>>are 25 percent more efficient than the rubbery "stubby" found on most
>>phones. (...)
>>Just why these fractal antennas work so well was answered in part in

>>the March issue of the journal Fractals. Cohen and his colleague
>>Robert Hohlfeld proved mathematically that for an antenna to work
>>equally well at all frequencies, it must satisfy two criteria. It must
>>be symmetrical about a point. And it must be self-similar, having the
>>same basic appearance at every scale--that is, it has to be fractal."
>
>
>

539. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:33:29 UTC
From: NN7K@reno.rmci.net
Message-ID: <a5P6b.2929$h5.1795@fe01.atl2.webusenet.com>
Source record: 108606

For those, have disected (you have to when these trashed, unless have trailer, after lightning hit them!) These are actually 1/2 wave length sections (NOT USEING VELOCITY FACTOR!) , at least in the "Green Hornet" versions, Alternating with the inside to outside(shield), and outside(shield), to inside , all the way to the top of the antenna, EXCEPT, the TOP 1/4 wave stinger, which is attached to BOTH THE SHIELD, and CENTER of the Last section of coax in this antenna. The base (shield of coax) is counterpoised to 1/4 wavelength radials, and a matching 1/4 wave piece of coax (value unknown), is attached to bottom connector of antenna.
In other words, forget the velocity factor, EXCEPT for the 1/4 wave matching section !! and, the after effects of a lightning strike are CATASTROPHIC, as the Beeswax, that held this mess, inside the fiberglass tube has literally evaporated . one other thing, when these go bad, measure for a DEAD SHORT . got it?? , well, now wait for the wind to blow -- or take it down and flex it . if it goes to "OPEN circuit, it is BAD!! Been there, done that (in 80 mph winds, at better than 100 feet up in air, no thasnks any more)!! Jim NN7K

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:7IicnUa1HtUQy8aiXTWJjg@comcast.com...
>
> <mkelly@powerup.com.au> wrote in message
> news:3F5AC128.1BEFEED5@powerup.com.au...
> > Since the VF is 66% (or whatever the coax you use is) what
> > good (?)
> > effect would tophats have at the end of each section in an
> > effort
> > to make them resonant?
>
> it would make the antenna a whole lot larger, that's for sure.
>
>

540. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:46:46 UTC
From: NN7K@reno.rmci.net
Message-ID: <ChP6b.2971$h5.1406@fe01.atl2.webusenet.com>
Source record: 108607

Also, can make Ground Plane , with SO-239 connector, 1/4 wave (19 inch) piece of wire in center of connector, Straight up. from EACH hole in connector, another 19 inch Radial, soldered to connector, bent down about 40-45 degrees, below the horizontal plane. not the greatest, but cheap, and small!! Jim NN7K

"WB3FUP (Mike Hall)" <wb3fup@msn.com> wrote in message news:bjg00k$iom7o$1@ID-204390.news.uni-berlin.de...
> I owned a 2 meter dipole made from 1/2" copper pipe. Worked great - and
> talk about bandwidth.
>
> --
> 73 es cul
>
> wb3fup
> a Salty Bear
>
> "'Doc" <w5lz@cwis.net> wrote in message news:3F5B77C3.F8FB15E3@cwis.net...
> >
> >
> > Stephen,
> > I've made several 2 meter dipoles, they worked just fine
> > since the repeater wasn't that far from me. Could hit one
> > or two 80-90 miles away. Also used a 38-39 wave length
> > doublet (80 meter dipole), it worked just fine too.
> > 'Doc
>
>

541. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:53:00 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309071552.10aac687@posting.google.com>
Source record: 108608

kd1@sympatico.ca wrote in message news:<3F5B31C6.A2FCA75F@sympatico.ca>...
> > >
> >
> > But you need to define Vi as the voltage
> > coming out of the series inductor. I don't believe
> > you do that here.
>
> If Vi was the voltage on the inductor then it would also
> be Vload which it usually isn't. Vi is only equal to
> Vload when the line is terminated in Z0. Vi is always
> one half of the source voltage in the Thevenin equivalent
> generator.
>

But were not looking for the sum of the forward and reflected
voltages at one point. You can say that a short is always at zero
volts, but that doesn't mean that there isn't a forward and reflected
voltage moving through it.

We're looking for a incident Peak voltage (and i say peak because
that's what the magnitude is in phasor notation) at a particular
angle,
and a reflected peak voltage at a particular angle.

> > > Now for the check...
> > > Vi = 0.5 V
> > > With classic rho
> > > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
> > > Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
> > > The same as computed using circuit theory.
> > >
> >
> > Where does circuit theory predict
> > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
>
> This isn't circuit theory, it is from the definition of reflection
> coefficient: Vr = Vi * rho.
>

Right, but if you are going to compare...how does circuit
theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

> >
> > i agree with your last statement, but do you think that the
> > power RC is around 64 for this circuit?
>

> Yes, errrr no! I think that power reflection coefficient as normally
> defined has no utility with lossy lines since it can not be used
> to make any useful predictions.
>

Not too sure, are we! And when i say we, i mean WE. "Yes, errrr
no!"
is very much like "maybe" and "sometimes", which a lot of people use
for
fear of making an absolute statement which they may have to (God
Forbid!) retract later, as everything you type is recorded FOREVER.

("FOREVER" used for scary effect for those who are terrified to
admit they were WRONG!)

> With a lossless line, power reflection coefficient has some utility
> since knowing Pfwd, you can compute Prev using the the power
> reflection coefficient and subtracting Prev from Pfwd will
> give you Pnet.
>
> Since this does not work for a lossy line, power reflection
> coefficient (as normally computed) is simply not a useful number
> in that environment. (Some might use this lack of generality as
> a reason to call into question the interpretation of power
> reflection coefficient on lossless lines as well. But that is
> for another discussion.)
>

I disagree with you completely, because a Bird or Daiwa meter will
do exactly that, measure Pfwd and Prev, and then with two cross
needles,
you read off the VSWR! That stands for "VOLTAGE stand wave ratio".

And this is all at ONE point on the line, and they are always
some losses on the bench.

And it certainly is useful to know the Power RC and VSWR is you
wanna match your final PA to 50 Ohms.

> In any case, for power reflection coefficient to be of value in
> the lossy line situation, we would first have to derive a
> definition of Pfwd and Prev such that Pfwd - Prev = Pnet.
> Then lossy line power reflection coefficient would be Prev/Pfwd
> and all would be well again. Of course after these new definitions
> are obtained, power reflection coefficient would not be rho^2.
>

Power reflection coefficient will be [rho]**2. Notice the
absolute brackets.

> But until a useful definition of Pfwd and Prev for lossy lines
> arises, power reflection coefficient will have no value.
>

By lossy lines, you mean complex Zo.

I'd like to know the answer to this question too!

If we are talking about only DISSIPATED power, do we have
to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
And if phase doesn't mean anything for power, how can we use a
complex Zo in the denominator?

And if the Pfrd originates in Zo, Prev is loaded by Zo,
then even if Zo is complex, can you still not say:

[rho]**2 = power RC? Because the Zo cancels out anyways
(a ratio)?

??????????????????????????????????????

Slick

542. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:58:47 UTC
From: "&#65533; StormTrooper &#65533;"
Message-ID: <vlnhho265ufic6@corp.supernews.com>
Source record: 108609

"Neil" <g0jhc@blueyonder.co.uk> wrote in message
news:3f5bbd2d$1_1@mk-nntp-1.news.uk.worldonline.com...
> MFJ-1792 80/40m Vertical Antenna
> * Bands: 80, 40m * Power rating: 1.5kW PEP SSB * VSWR: 1.2:1 (typical) *
> Bandwidth (2:1): Full band * 1/4 wave: 40m radiator * Radiation Angle: Low
*
> Freq. Selection: Automatic * High-Q coil & capacitance hat * Requires
> radials or ground * Includes heavy duty mount * Requires guying * Height:
> 10m
>
> The MFJ-1792 high performance vertical antenna for 80 and 40m. End loading
> the most efficient form of loading is used for 80m. It uses a 1.37m top
> capacitance hat and a high-Q coil and features a full size quarter wave
> radiator for 40m.

MFJ, and high performance should not be used in the same sentence.

>
> Box never opened &#65533;150. Can deliver to HF convention in Manchester end of
> Oct, or meet buyer by arrangement or buyer pays shipping costs.
>
> Contact g0jhc@blueyonder.co.uk
>
>
>
>
>
>
>
>
>

543. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-07 23:59:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5bc7eb_6@corp.newsgroups.com>
Source record: 108610

kd1@sympatico.ca wrote:
> So we have the following requirements
> Pload = Pfwd - Prev
> Prho = Prev/Pfwd
>
> There is still a very large selection of pairs which will satisfy
> these constraints.

Nope, there are not. Assuming Pload is known and Prho is known, you have two equations and two unknowns which can be solved for with unique solutions. For instance, in my previous example:

Pload = 100 watts, Prho = 0.25. Prho can be calculated.

Prev = Pfwd*Prho and substituting, we have: 100W = Pfwd - 0.25*Pfwd
100W = 0.75*Pfwd, therefore Pfwd = 133.33W, a unique solution.

Incidentally, if you want a reference for losses in low-loss lines, _Fields_and_Waves_... by Ramo, Whinnery, and Van Duzer has a section 1.22 on page 41 titled, "Physical Approximations for Low-Loss Lines". They assume an average loss per unit length. I won't even try to reproduce the equations in ASCII.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

544. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 00:13:04 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309071613.390022bc@posting.google.com>
Source record: 108611

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f5b723c_2@corp.newsgroups.com>...
>
> Note that the average total Poynting vector always points toward the
> load if the load has any resistance at all. That fact tells us that
> the average forward power can NEVER be less than the average reflected
> power.
>

I totally agree with your last sentence, as long as we are talking
about a passive network with return LOSS (and not an active circuit
with
possible return Gain or positive feedback).

From Pozar:

For a lossless 2-port network,

[s11]**2 + [s21]**2 = 1

If the sum of the squares is less than one, you have
losses in the network. This is conservation of energy, as these are
ratios of peak voltages squared, giving you ratios of power. If you
had
short for a network, you would have full reflections and no
transmission,
and:
[s11]**2 + [0]**2 = 1
[s11]**2 = 1

But [s11]**2 can NEVER be greater than 1 for a passive network, as
the average forward power can NEVER be less than the average reflected
power, as
you have stated.

And if i may take one more step...

[s11]**2 = 1, and squaring both sides:

[s11] = 1, for a lossless, ideal short. But once again,
Magnitude of voltage RC =[s11]=[rho] can never be greater than one for
a passive system.

Corrections and comments welcome.

Slick

545. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 00:21:53 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <xYP6b.287144$Oz4.76499@rwcrnsc54>
Source record: 108612

I have not followed the whole thread, but at the bottom line, the impact of a complex Zo on power is an attenuation factor. It can be shown as follows.

The general equations are:

Vf = [[(R+jwL)/(G+jwC)]^0.5]*If

Vr = [[(R+1wL)/(G+jwC)]^0.5]*Ir.

A numerical example for typical 50 ohm cable at 30 MHZ follows:

Assume C = 30E-12 F/ft. Therefore L = 0.075E-6 H/ft [50 ohm lossless].

Assume 1/R [G] > 1E-8 [100 megohms][lossy dielectric]

Finally, assume R = 10 ohm [moderate rf resistance].

The resulting Zo for the assumed conditions is
[[(10+jw7.5E-8)/(1E-8+jw30E-12)]^0.5] ohms.

|Zo| = [[(10+j14.137)/(1E-8+j0.00565)]^0.5] = 55.360 ohms.

Determine the relative phase shift as follows:

atan[10+j14.137] = 54.7257 degrees.

atan[1E-8+j0.00565] = 89.99989859 degrees [approximately 90].

The relative phase shift for the assumed complex Zo at 30 MHZ is 54.7257 - 89.99989 degrees [35.274 degrees].

Result: Zo = 55.360 ohms @ 35.274 degrees.

Therefore Vf = If*[55.360 ohms@35.274 degrees]

Therefore Pf(load) = Vf(source)*If(source)*cos(35.274) = 81.63% of maximum.

The transmission line does not care if the signal is left to right or right to left; or forward and reflected. The effect is to introduce a mirror image to both the Vr and Ir terms.

I hope I have not been redundant to other posts on this thread!

Deacon Dave, W1MCE

546. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 00:29:08 UTC
From: Bob McConnell <rmcconne.NOSPAM@lightlink.com>
Message-ID: <63jnlv0qavlkj7leeuee5jduef5fa3n1dh@4ax.com>
Source record: 108613

On Sun, 07 Sep 2003 16:43:44 GMT, "Stephen Saunders"
<kd6eut@earthlink.net> wrote:

>Just checking to see if anyone has built a 2 meter antenna for base satation
>use out of #14 copper antenna wire and fed with 50 ohm coax. If so,
>describe how you made it and how it performs.
>
>Stephen Saunders, KD6EUT
>

I didn't use copper, but I have a pair of TV rabbit ears that adjust
180 degrees apart. I replaced the 75 ohm coax with 50 ohm, extended
the ears to 19 3/8" on each side and hung it vertically in a first
floor window. With 5 watts I can hit all of the repeaters and
digipeaters I can hear, which covers about a 30 mile radius. The best
part is that it folds up and packs in a suitcase very easily.When I
get out of this antenna restricted neighborhood, I want to put a
J-Pole up about 30 feet, but until then, this is working.

Bob McConnell
N2SPP

547. Re: RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 00:44:06 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <qhQ6b.188312$2x.53205@rwcrnsc52.ops.asp.att.net>
Source record: 108614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I don't believe the roof is any part of the issue. This sounds like a simple case of inability of the computer speaker system reject nearby RF signals. The roof may possibly be a contributor to generating harmonics due to poor bonding of each element but you are not describing anything that sounds like harmonic generation.

The issue, in my opinion, is the speakers, speaker amplifiers and/or sound board in the computer cannot reject the presence of nearby RF signals..

In the USA the Ham is not legally responsible for the deficiencies in the computer equipment! He has demonstrated that his station does NOT interfere with his computer. So, the problem has to be in the offending computer!

The owner of the computer has the responsibility of adding the necessary suppression devices to eliminate the RFI. This is generally a series of snap on toroids on the various wires in the computer system. Very severe RFI cases may require input from the manufacturer to solve the problem.

The Ham should not become involved with any add-ons, clamp on ferrites, or modifications to the offending computer because of legal liability issues.

Diplomacy and Tact are the key issues for the Ham.

Deacon Dave, W1MCE

Jim Leder wrote:
[SNIP]

but the question is: Could the tin roof be a
> contributor to his problem? Would a good ground of the tin roof help?
>
> Thanks...

548. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 00:49:20 UTC
From: Tom Coates <tecoates@comcast.net>
Message-ID: <tJ2cnWydjO2XT8aiXTWJiQ@comcast.com>
Source record: 108615

1/8 inch bronze welding rod worked well in my version. I put a small loop at the top of the vertical piece and suspended it with a piece of fishline from a nail in the attic rafter. Ran the coax down the chase next to the heat return duct into the basement shack.

Tom, N3IJ

<NN7K@reno.rmci.net> wrote in message
news:ChP6b.2971$h5.1406@fe01.atl2.webusenet.com...
> Also, can make Ground Plane , with SO-239 connector, 1/4 wave (19 inch)
> piece of wire in center of connector, Straight up. from EACH hole in
> connector, another 19 inch Radial, soldered to connector, bent down about
> 40-45 degrees, below the horizontal plane. not the greatest, but cheap,
> and small!! Jim NN7K
>
>
>
>
> "WB3FUP (Mike Hall)" <wb3fup@msn.com> wrote in message
> news:bjg00k$iom7o$1@ID-204390.news.uni-berlin.de...
> > I owned a 2 meter dipole made from 1/2" copper pipe. Worked great - and
> > talk about bandwidth.
> >
> > --
> > 73 es cul
> >
> > wb3fup
> > a Salty Bear
> >
> > "'Doc" <w5lz@cwis.net> wrote in message
news:3F5B77C3.F8FB15E3@cwis.net...
> > >
> > >
> > > Stephen,
> > > I've made several 2 meter dipoles, they worked just fine
> > > since the repeater wasn't that far from me. Could hit one
> > > or two 80-90 miles away. Also used a 38-39 wave length
> > > doublet (80 meter dipole), it worked just fine too.
> > > 'Doc
> >
> >
>
>
>

549. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 01:09:04 UTC
From: kd1@sympatico.ca
Message-ID: <3F5BD6B0.1576FFD8@sympatico.ca>
Source record: 108616

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > So we have the following requirements
> > Pload = Pfwd - Prev
> > Prho = Prev/Pfwd
> >
> > There is still a very large selection of pairs which will satisfy
> > these constraints.
>
> Nope, there are not. Assuming Pload is known and Prho is known, you
> have two equations and two unknowns which can be solved for with
> unique solutions. For instance, in my previous example:
>
> Pload = 100 watts, Prho = 0.25.

Nice example. But...

> Prho can be calculated.

This is the sticking point. How do we compute Prho for a line
with a non-real impedance?

Prho = Prev/Pfwd ?

But then we are right back where we started. Many pairs of Pfwd and
Prev will satisfy the two equations previously presented.

We need more equations (perhaps one for Prho?) to allow all
the unknowns to be computed.

...Keith

550. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 01:16:39 UTC
From: kd1@sympatico.ca
Message-ID: <3F5BD877.CF9E2858@sympatico.ca>
Source record: 108617

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5B31C6.A2FCA75F@sympatico.ca>...
> > > > >
> > > >
> > > But you need to define Vi as the voltage
> > > coming out of the series inductor. I don't believe
> > > you do that here.
> > >
> > If Vi was the voltage on the inductor then it would also
> > be Vload which it usually isn't. Vi is only equal to
> > Vload when the line is terminated in Z0. Vi is always
> > one half of the source voltage in the Thevenin equivalent
> > generator.
>
> But were not looking for the sum of the forward and reflected
> voltages at one point.

We are when we want THE voltage at the load.

> You can say that a short is always at zero
> volts, but that doesn't mean that there isn't a forward and reflected
> voltage moving through it.

True. But if the voltage is always 0, then the sum of the forward
and reflected voltage is always 0.

> We're looking for a incident Peak voltage (and i say peak because
> that's what the magnitude is in phasor notation) at a particular
> angle, and a reflected peak voltage at a particular angle.
>
> > > > Now for the check...
> > > > Vi = 0.5 V
> > > > With classic rho
> > > > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
> > > > Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
> > > > The same as computed using circuit theory.
> > >
> > > Where does circuit theory predict
> > > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> >
> > This isn't circuit theory, it is from the definition of reflection
> > coefficient: Vr = Vi * rho.
>
> Right, but if you are going to compare...how does circuit

> theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

Circuit theory gives the voltage across the capacitor as
.02 * (0-j200) = 4/_ -90 (current time impedance)
Reflection theory (can I call it that) using classic rho
gives the voltage across the capacitor as Vr + Vi
0.5 + 4.031/_ -97.125 = 4/_ -90
So both provide the same voltage across the capacitor.

If you use 'revised' rho, then circuit theory and reflection theory
disagree. I vote for circuit theory.

> > > i agree with your last statement, but do you think that the
> > > power RC is around 64 for this circuit?
> >
> > Yes, errrr no! I think that power reflection coefficient as normally
> > defined has no utility with lossy lines since it can not be used
> > to make any useful predictions.
>
> Not too sure, are we! And when i say we, i mean WE. "Yes, errrr
> no!"
> is very much like "maybe" and "sometimes", which a lot of people use
> for
> fear of making an absolute statement which they may have to (God
> Forbid!) retract later, as everything you type is recorded FOREVER.
>
> ("FOREVER" used for scary effect for those who are terrified to
> admit they were WRONG!)

I find, in practice, that the answer to many apparently simple
questions is 'yes and no'. This simply means the question was
incompletely specified.

If you define power reflection coeffecient as voltage reflection
coefficient squared then it is indeed around 64.

If you define power reflection coefficient as the actual reflected
power divided by the actual incident power (assuming such real
powers exist), then, indeed, it can not be 64 since that would
violate some generally accepted rules about conservation of energy.

So we have quite a contrast between the meaning implied by the name
and the resulting value. So the value IS 64, but the meaning is
NOT 'power reflection coefficient', though the name may be.

> > With a lossless line, power reflection coefficient has some utility
> > since knowing Pfwd, you can compute Prev using the the power
> > reflection coefficient and subtracting Prev from Pfwd will
> > give you Pnet.
> >
> > Since this does not work for a lossy line, power reflection
> > coefficient (as normally computed) is simply not a useful number
> > in that environment. (Some might use this lack of generality as

> > a reason to call into question the interpretation of power
> > reflection coefficient on lossless lines as well. But that is
> > for another discussion.)
>
> I disagree with you completely, because a Bird or Daiwa meter will
> do exactly that, measure Pfwd and Prev, and then with two cross
> needles,
> you read off the VSWR! That stands for "VOLTAGE stand wave ratio".

Since directional wattmeters simply compute Vf and Vi and square
the scalar, they will show that factor of 64 mentioned earlier.
This strongly suggests they are not doing a good job of computing
real powers.

> And this is all at ONE point on the line, and they are always
> some losses on the bench.
>
> And it certainly is useful to know the Power RC and VSWR is you
> wanna match your final PA to 50 Ohms.

In practice, none of this matters (for RF -- to keep Peter quiet),
since the line losses are sufficiently low that the line impedance
is sufficiently close to 50 ohms, that the Daiwa gives sufficiently
useful information to allow matching.

Despite this, the examples we are using here have far from real Z0
and are interesting to further our understanding.

> > In any case, for power reflection coefficient to be of value in
> > the lossy line situation, we would first have to derive a
> > definition of Pfwd and Prev such that Pfwd - Prev = Pnet.
> > Then lossy line power reflection coefficient would be Prev/Pfwd
> > and all would be well again. Of course after these new definitions
> > are obtained, power reflection coefficient would not be rho^2.
>
> Power reflection coefficient will be [rho]**2. Notice the
> absolute brackets.
>
> > But until a useful definition of Pfwd and Prev for lossy lines
> > arises, power reflection coefficient will have no value.
>
> By lossy lines, you mean complex Zo.

Yes.

> I'd like to know the answer to this question too!
> If we are talking about only DISSIPATED power, do we have
> to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
> And if phase doesn't mean anything for power, how can we use a
> complex Zo in the denominator?
>
> And if the Pfrd originates in Zo, Prev is loaded by Zo,

> then even if Zo is complex, can you still not say:
>
> [rho]**2 = power RC? Because the Zo cancels out anyways
> (a ratio)?

Yup, its a puzzler all right.

And the escape?

-- Stick to incident and reflected voltage (or current) waves for
analysis. They work.
-- Don't bother trying to compute the incident and reflected powers.
-- They have no meaning in the general case.
-- Only instantaneous and time averaged power really exist and
they CAN be computed in all cases.
-- Forget power reflection coefficient for it only misleads.
-- And never forget that all a 'directional watt' meter does is
compute and respond to Vf and Vr.

...Keith

551. Re: 2 Meter Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 01:31:51 UTC
From: James <jimbo@nospam.com>
Message-ID: <3F5BDC05.5198A8F4@nospam.com>
Source record: 108618

Hi Stephen,

here are a few links for you to look at:

http://www.cebik.com/hs.html nice inexpensive antenna direct fed
coax

http://www.cebik.com/moxbld.html interesting design similar performance as
a yagi but smaller.

I've built both of these and they work well.

73 james

Stephen wrote:

> Just checking to see if anyone has built a 2 meter antenna for base satation
> use out of #14 copper antenna wire and fed with 50 ohm coax. If so,
> describe how you made it and how it performs.
>
> Stephen Saunders, KD6EUT

552. Two transmitters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 02:04:59 UTC
From: pmolsen@one.net.au
Message-ID: <6ba442b.0309071804.3c512e7a@posting.google.com>
Source record: 108519

I have two small 433MHz transmitter kits that I use for some remote switching. Only one is on at a time. I want to run a coax from them to a roof mounted aerial but don't want two coaxes and two aerials so what is the simplest method of joining the two aerial outputs together? I am assuming that they won't like just being directly connected together.

553. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 02:10:35 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <qsonlvs5q37pu9obghjnru8a7qrurm77dk@4ax.com>
Source record: 108569

On 7 Sep 2003 05:13:17 -0700, tmg9252@aol.com (Tom) wrote:

>I plan on installing a G5RV mini. Due to limited space I would need to
>cut off about 2 feet from the antenna.
>I was wondering how much would this effect the antennas performance
>and should I trim equal ends off the span or just take the 2 feet from
>one end.
>
>Thanks in advance
>
>Tom

In g5rv's article at http://www.qsl.net/aa3px/g5rv.htm he recommends
dangling the ends if you don't have the room.

The article makes interesting reading, if you're installing a g5rv.

Bob
k5qwg

554. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 03:00:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b9rnlvc3hpasr3p021j1vpij32bpg87qbr@4ax.com>
Source record: 108520
Cross-posted to: sci.fractals,rec.radio.amateur.antenna

On Sun, 7 Sep 2003 23:58:30 +0200, "Josechu"
<josechu8ERASE_THIS@wanadoo.es> wrote:

>I think that the tree antenna in:
>
>http://www.josechu.com/moving_fractal/index.htm
>
>would be good for cellphones, provided that the length of the (horizontal or
>vertical) branches is a fraction of the wavelength.
>
>Take into account that a grandson branch has exactly half the length of its
>grandfather's length.
>
>
>Josechu

Hi OM,

Combining a fractal form and scaling it to "a fraction of a/the
wavelength" has no inherent correlation to suitability of application.
There is no fundamental relationship between the physics of gain of an
antenna and any fractal expression drawn out of a hat (or even one
chosen deliberately with a sophisticated guess). Your example is
visually pretty, but that counts for nothing compared to crafted
random path antennas in the hands of a practitioner of the art of
antenna design.

The only way to determine if any particular fractal is suitable, is to
test it against a standard. Few fractals pass this first cut. Worse
yet, no small fractals exhibit any gain beyond that of the
conventional dipole and rarely exhibit more gain than a small dipole.

Physical orientation is another factor if there is gain above and
beyond comparison to a small dipole (which includes a loop form by the
way). Fractals do not exhibit radiation patterns that are intuitive
from their shape (a dipole's best characteristics are broadside, a
fractal could be off at a skew - if you could first guess what the
major axis was).

Let's just cut to the chase and let me point out the poor performance
that fractals exhibit, specifically one of the best fractal examples
from the owner of Fractal Antenna Systems compared to six designs that
trounced it here in this group in open competition. These six designs
have yet to be surpassed by any product from FAS. One might say that
the pretty boy was pounded into the ground by six ugly sticks.

73's
Richard Clark, KB7QHC

555. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 03:54:10 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f5c8b4e_4@news1.prserv.net>
Source record: 108532

Harold A. Wheeler: A Vertical Antenna Made of Transposed Sections of Coaxial Cable; March 1956, IRE National Convention Record, Part 1, Pp. 160 - 164

I seem to recall an addenda or correction published later, but It isn't mentioned in the 1967 text where I found this.
--
Crazy George
Remove NO and SPAM from return address

556. Re: Setting up a vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 03:55:31 UTC
From: Talisman <Inotinterested@cutoff.net>
Message-ID: <T4T6b.3237$Yt.1428@newsread4.news.pas.earthlink.net>
Source record: 108521

Pay attention to your feed point impedance depending upon the length of your antenna the characteristic feed point impedance will change (C or L), and if your planning on making a multi-band installation you can use rotor wire and clip the wires to the various bands you plan to use for the radial system. That should save you some on space and still provide a good counter poise.

The rest of the considerations that I would suggest would be structural. PVC works well for that, providing good insulation, and still providing good strong support. If you can lay your hands on some marine mooring line that will provide a nice strong "non-conductive" support as well.

Good Luck and I'll look for you on the bands!

73

Lynn
K7LW

"Jo&#65533;o Paulo Carvalho" <jvaz.carvalho@netcabo.pt> wrote in message
news:BB75B3DC.9C7%jvaz.carvalho@netcabo.pt...
> Hello everybody.
>
> I want to set up an antenna in my new home and I'm searching for
suggestions
> on how to do it.
>
> I have a large balcony in the corner top floor of the building. The north
> and west side of the balcony are facing the street and on the south and
east
> of it there are walls that go up to the roof. The higher point of the wall
> is about 5,5 meters tall. I want to set up a vertical antenna with nearly
5
> meters tall and weights about 10 kilograms.
>
> I thing the best thing to do would be attaching a mast to the higher wall
> and the antenna on the top but I don't know if it's the best.
>
> Can someone give a suggestion?
>
> Thank you all.
>

557. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 05:16:34 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjh3bj$4ep$1@nic.grnet.gr>
Source record: 108522

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vr6nlv0fkl20hkcp7svj41htm49blcf0ra@4ax.com...
|
| Hi Fellows,
|
| Such intense interest and no comments to SV7DMC for his work to this
| matter?
|

Dear Mr. Richard Clark,

Thank you very much for your kind interest!

You have absolutely right.
It's a pity indeed
but unfortunately
there are but very few comments for our point of view.
However at least,
all of them which are centered on the heard of the matter,
I have a feeling that,
are rather positive.
I hope.
Perhaps we have to put the blame
on this damned language barrier.
Who knows?
Too much silence...

Sincerely yours,

pez
SV7BAX

P.S.
Permit me please to correct you on that:
It is not "his work" but "her work".

558. Re: RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 05:18:52 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bjh3fsisb0@208.206.142.112>
Source record: 108523
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Jim Leder wrote:

> I have a good ham friend who has been creating a lot of RFI with a
> nearby neighbor. The RFI is mainly coming through the neighbor's PC
> speakers and TV speaker. No one else in the neighborhood is affected.
> It doesn't matter what band or how much power he runs, 2-40 meters,
> 5-100 watts, he creates RFI. His own home equipment, including a TV
> and PC in the shack are not affected. The only odd thing we can think
> of, is his neighbor's roof is all tin. We don't know if there is a
> ground on it not, but the question is: Could the tin roof be a
> contributor to his problem? Would a good ground of the tin roof help?

IMO the RF is probably coupling from the roof, where it IS gathered with the roof acting as a pretty efficient antenna, but it's then coupled into the house wiring then into the computer and probably into the speaker leads, perhaps independently.
If it was my problem I'd install decoupling ferrite chokes on every line/cable involved with the effected computer system. It's almost certainly travelling on the AC power wiring. I'd make sure that the computer & all peripherals (monitor, printer, etc) power from one source-a single outlet probably to a power strip where a single AC source can easily be choke-decoupled.
And I'd let the computer owner take care of the fix, possibly with advice from hams. Attempting to work on someone else's problem/gear is not a good plan in case all does not go well....

Such problems are the common result of transmitting antennas in too close proximity to susceptable devices. The metal roof undoubtedly enhances this effect by concentrating the RF in close proximity to the house power wiring.

I once had a lot of in-house RFI when I had my antennas mounted close to the hosue. Since I moved all them at least 100 feet behind the house I have *NO* RFI whatever, no matter what power I run.

Dick

559. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 06:05:16 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjh66v$6mr$1@nic.grnet.gr>
Source record: 108524

Dear Mr. Richard Clark,

Here it is, once again!
I do my best but it happens constantly.
As I just told you for the Language Barrier,
now it is
"The heart of the matter",
not
"The heard of the matter".
But I keep try...

Sincerely yours,

pez
SV7BAX

560. Re: RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 07:40:45 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <1oW6b.13853$QT5.5588@fed1read02>
Source record: 108525
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

"Jim Leder" <jleder@cinci.rr.com> wrote in message
news:qvenlvsiha1ddk5au8l7dte206l5a0c8h8@4ax.com...
> I have a good ham friend who has been creating a lot of RFI with a
> nearby neighbor. The RFI is mainly coming through the neighbor's PC
> speakers and TV speaker. No one else in the neighborhood is affected.
> It doesn't matter what band or how much power he runs, 2-40 meters,
> 5-100 watts, he creates RFI. His own home equipment, including a TV
> and PC in the shack are not affected. The only odd thing we can think
> of, is his neighbor's roof is all tin. We don't know if there is a
> ground on it not, but the question is: Could the tin roof be a
> contributor to his problem? Would a good ground of the tin roof help?
>
> Thanks...

Odd, but try having the neighbor operate his computer inside the ham's house while transmitting. Does the neighbor's computer still act improperly? If so, that eliminates the roof question.

Also, try a couple of the ham's electronic gadgets in the neighbor's house. Do the gadgets still work OK? If so, another reason to absolve the roof.

Ed
WB6WSN

561. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 09:38:37 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309080138.19f2de7@posting.google.com>
Source record: 108526

kd1@sympatico.ca wrote in message news:<3F5BD877.CF9E2858@sympatico.ca>...
> > You can say that a short is always at zero
> > volts, but that doesn't mean that there isn't a forward and reflected
> > voltage moving through it.
> >
> True. But if the voltage is always 0, then the sum of the forward
> and reflected voltage is always 0.
> >

Well, there is no phasor notation in your overly simplistic
example. So we don't see the forward and reflected waves.

> > > > >
> > > > > Where does circuit theory predict
> > > > > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> > > >
> > > > This isn't circuit theory, it is from the definition of reflection
> > > > coefficient: Vr = Vi * rho.
> > >
> > > Right, but if you are going to compare...how does circuit
> > > theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> >
> > Circuit theory gives the voltage across the capacitor as
> > .02 * (0-j200) = 4/_ -90 (current time impedance)
> > Reflection theory (can I call it that) using classic rho
> > gives the voltage across the capacitor as Vr + Vi
> > 0.5 + 4.031/_ -97.125 = 4/_ -90
> > So both provide the same voltage across the capacitor.
> >

Right, but if you are going to compare...how does circuit
theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

This would convince me quite a bit, if you could derive this
with circuit theory.

> > > > > Yes, errrr no! I think that power reflection coefficient as normally
> > > > > defined has no utility with lossy lines since it can not be used
> > > > > to make any useful predictions.
> > > >
> > > > Not too sure, are we! And when i say we, i mean WE. "Yes, errrr
> > > > no!"
> > > > is very much like "maybe" and "sometimes", which a lot of people use
> > > > for

> > fear of making an absolute statement which they may have to (God
> > Forbid!) retract later, as everything you type is recorded FOREVER.
> >
> > ("FOREVER" used for scary effect for those who are terrified to
> > admit they were WRONG!)
>
> I find, in practice, that the answer to many apparently simple
> questions is 'yes and no'. This simply means the question was
> incompletely specified.
>

Or not understood.

> If you define power reflection coeffecient as voltage reflection
> coefficient squared then it is indeed around 64.
>
> If you define power reflection coefficient as the actual reflected
> power divided by the actual incident power (assuming such real
> powers exist), then, indeed, it can not be 64 since that would
> violate some generally accepted rules about conservation of energy.
>
> So we have quite a contrast between the meaning implied by the name
> and the resulting value. So the value IS 64, but the meaning is
> NOT 'power reflection coefficient', though the name may be.
>

Very nice dancing around the point, Keith!

You're more confused than me!

> >
> > I disagree with you completely, because a Bird or Daiwa meter will
> > do exactly that, measure Pfwd and Prev, and then with two cross
> > needles,
> > you read off the VSWR! That stands for "VOLTAGE stand wave ratio".
>
> Since directional wattmeters simply compute Vf and Vi and square
> the scalar, they will show that factor of 64 mentioned earlier.
> This strongly suggests they are not doing a good job of computing
> real powers.
>

I'll agree that power meters recitify the signal, and actually get
a DC voltage from the line. In a certain sense, they are more like
RMS voltmeters than power meters.

I'd like to see ANY power RC over 1 for a passive network,

please show us the circuit to build on the bench!

>
> In practice, none of this matters (for RF -- to keep Peter quiet),
> since the line losses are sufficiently low that the line impedance

> is sufficiently close to 50 ohms, that the Daiwa gives sufficiently
> useful information to allow matching.
>
> Despite this, the examples we are using here have far from real Z0
> and are interesting to further our understanding.
>

Or lack of understanding...

>
> > I'd like to know the answer to this question too!
> > If we are talking about only DISSIPATED power, do we have
> > to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
> > And if phase doesn't mean anything for power, how can we use a
> > complex Zo in the denominator?
> >
> > And if the Pfrd originates in Zo, Prev is loaded by Zo,
> > then even if Zo is complex, can you still not say:
> >
> > [rho]**2 = power RC? Because the Zo cancels out anyways
> > (a ratio)?
>
> Yup, its a puzzler all right.
>
> And the escape?
>

Ha! As if you knew! Should we say P=Vrms**2/Re(Zo)? Taking
only the real part of the Zo?

> -- Stick to incident and reflected voltage (or current) waves for
> analysis. They work.

You don't do this in your circuit theory example. How does
circuit
theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

> -- Don't bother trying to compute the incident and reflected powers.
> -- They have no meaning in the general case.
> -- Only instantaneous and time averaged power really exist and
> they CAN be computed in all cases.

You can't compute average incident and reflected powers when
Zo is complex? Your proof or references, please?

> -- Forget power reflection coefficient for it only misleads.
> -- And never forget that all a 'directional watt' meter does is
> compute and respond to Vf and Vr.
>
> ...Keith

I'll agree that power meters recitify the signal, and actually
get

a DC voltage from the line. In a certain sense, they are more like
RMS voltmeters than power meters.

I'd like to see ANY power RC over 1 for a passive network,

please show us the circuit to build on the bench!

Slick

562. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 10:02:16 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309080202.12f1afa5@posting.google.com>
Source record: 108527

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f5b9c6b$1_5@corp.newsgroups.com>...
> kd1@sympatico.ca wrote:
> > So Pload = Pfwd1 - Prefl.
> >
> > There are many pairs of Pfwd1 and Pref1 which will satisfy this
> > relationship. Is there a particular pair of Pfwd1 and Pref1 that
> > we should prefer because they have some particularly useful
> > properties.
>
> Yes, the pair that satisfies the conservation of energy principle
> including source power and losses in the feedline. For instance,
> if a load is accepting 100 watts when the power reflection coefficient
> is 0.25, Pfwd(0.75) = 100W, so Pfwd = 133.33W, Pref = 33.33W.

From Pozar:

For a lossless 2-port network,

[s11]**2 + [s21]**2 = 1

0.25 + 0.75 = 1

So hopefully this would be a lossless, passive network.

If any heat was generated in this passive network
(NOT the load, the network itself), then the sum of the power
reflection coefficient and the power transmission coefficient would
be less than one.

Slick

563. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 10:52:59 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <U52dnfmo0u4PwsGiXTWJhA@crocker.com>
Source record: 108528

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309071505.69ba9b72@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<FgGdnSu8wb5BosaiXTWJjg@crocker.com>...
> > "Dr. Slick" <radio913@aol.com> wrote in message
> > news:1d15af91.0309070238.842a6fd@posting.google.com...
> > > ryeburn@sfu.caz (David or Jo Anne Ryeburn) wrote in message
> > news:<ryeburn-0609032339210001@bni030qny8kc.bc.hsia.telus.net>...
> >
> >
> > ok, i quit... i have shown several times that the calculation of vswr
from
> > rho only applies in ideal lines, you can not use it in lossy lines
because
> > of the simplifications that went into deriving it. if you insist on
harping
> > on this point how can you ever open your eyes to see the rest of the
errors
> > in your calculations.
> >
>
>
> 25' of RG-8 isn't THAT lossy.
>
> Once again, where and when and how did you do a measurement? When
> you get a rho greater than 1, the VSWR = (1 + |rho|)/(1 - |rho|) gives
> ridiculous
> NEGATIVE SWRs. And rho WILL give you the SWR, assuming your
> tranmission
> isn't extremely lossy. This is why people say that the SWR meter has
> to
> be at the antenna, instead of at the end of 100' of RG-58.
>
> You are quitting because you can't really answer this question.
>
>
> Slick
you really are hopeless... that formula for VSWR is not valid when the line
has losses, and you can only get rho >1 when the line has losses.... see the
catch 22????

564. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 10:55:25 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <08GdnQNJmaa5_cGiXTWJkA@crocker.com>
Source record: 108529

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309071522.50bb0151@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<f_CdnSGEEusX3MaiXTWJkA@crocker.com>...
> > >
> > > I did read some of Kurokawas paper, and it IS a bit confusing.
> > > Have you figured it out David?
> > >
> > > Please tell us how the conjugate equation was derived.
> > >
> > > Please explain where the fallacy of my logic lies for you.
> > >
> > >
> > > Slick
> >
> > it wasn't derived, it was defined. formula (1) defines the power waves.
> > formula (11) defines the 'power wave reflection coefficient' in terms of
the
> > two waves in (1). it is then just algebra to rearrange the terms to get
the
> > formula in (12).
> >
>
> Please show us if he correctly defines formula (1) and why. And i'd
also
> like to see if someone can derive these:
>
> ai= (Vi+Zi*Ii)/(2*sqrt(Re(Zi))
> bi= (Vi-conj(Zi)*Ii)/(2*sqrt(Re(Zi))
>
> For what he calls the incident and reflected power waves.

re-read my reply above until you understand it... (1) is GIVEN, it is the
starting point, he DEFINED ai and bi to be those values... the then goes on
for several paragraphs explaining why he thinks those are better waves than
other types of waves.

565. Re: RFI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 13:09:58 UTC
From: Jim Leder <jleder@cinci.rr.com>
Message-ID: <divolvgmdv3gihp1okf9mdhchbss6brdor@4ax.com>
Source record: 108530
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

I have forwarded these suggestions to my friend ,who lives in Florida,
I'm in Ohio. He isn't a newsgroup user, so I presented the question
for him to these 2 groups. Thanks for the very good ideas. I've had
RFI before, but never with someone who has had a metal roof and
frankly don't have any idea if it's contributing to his problem or
not. If we figure it out, I'll post it. Thanks again.

566. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 13:11:50 UTC
From: MD <morco@bellnet.ca>
Message-ID: <sh%6b.3012$k81.153496@news20.bellglobal.com>
Source record: 108531

<� StormTrooper ?> wrote in message
news:vlnhho265ufic6@corp.supernews.com...

> MFJ, and high performance should not be used in the same sentence.

Hehe too funny!

567. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 14:52:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5c9935$1_4@corp.newsgroups.com>
Source record: 108545

Dr. Slick wrote:
> Cecil Moore <Cecil.A.Moore@ieee.org> wrote:
>>Yes, the pair that satisfies the conservation of energy principle
>>including source power and losses in the feedline. For instance,
>>if a load is accepting 100 watts when the power reflection coefficient
>>is 0.25, Pfwd(0.75) = 100W, so Pfwd = 133.33W, Pref = 33.33W.
>
> From Pozar: For a lossless 2-port network,
> [s11]**2 + [s21]**2 = 1
> 0.25 + 0.75 = 1
> So hopefully this would be a lossless, passive network.

Yes, the above is from an earlier lossless Z0-matched example.

> If any heat was generated in this passive network
> (NOT the load, the network itself), then the sum of the power
> reflection coefficient and the power transmission coefficient would
> be less than one.

My example was the impedance discontinuity point between 50 ohm
feedline and 150 ohm feedline. Not much room for losses in 0.1"
of copper.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

568. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 15:05:02 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bji5quicb0@208.207.71.146>
Source record: 108533

David Robbins wrote:

> "Ron" <rmrippy@hotmail.com> wrote in message
> news:JFN6b.17596$rb3.579183@twister.southeast.rr.com...
> > I am considering connecting a coil from the base of my vertical antenna to
> > ground, not for impedance matching, but to allow the charge on the ground
> to
> > slowly leak off at the top of the antenna. I will also use a lightning
> arrestor
> > but wonder if this additional step will further reduce the chance of a
> lightning
> > strike.
> >
>
> no, it won't reduce the chance of a lightning strike... though it may help
> prevent charge build up between the antenna and ground preceding a stroke
> that may help protect your equipment. in fact equalizing the charge between
> the antenna and ground may actually make it easier for the antenna to
> initiate the upward streamer that connects with the downward moving leader
> to trigger a lightning discharge.

Well stated. Some authorities insist that grounding a tower/building just attracts lightning, but that hasn't been the case here. After some 20 years of standing on this hilltop, my 60 ft Rohn25 with 10 feet of mast and a 5/8 wave two meter vertical topping that still hasn't been hit, though several times I sure thought it had, from the proximity of the strike. I do have several very large oak trees within 150 ft of the tower, and evidently each near strike got one of those instead, despite the tower being well grounded with #6 solid wire and an 8 foot copper plated driven rod.. Makes one wonder about the theory. But lightning seems to follow it's own calling!

Of course the feedlines don't stay hooked to the house overnight when there's bad weather within 400 miles...

Dick

569. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 16:14:41 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <raCdnR_xLOZIN8GiXTWJjA@crocker.com>
Source record: 108534

"Dick Carroll;" <dixie@townsqr.com> wrote in message
news:bji5quicb0@208.207.71.146...
>
>
> David Robbins wrote:
>
> > "Ron" <rmrippy@hotmail.com> wrote in message
> > news:JFN6b.17596$rb3.579183@twister.southeast.rr.com...
> > > I am considering connecting a coil from the base of my vertical
antenna to
> > > ground, not for impedance matching, but to allow the charge on the
ground
> > to
> > > slowly leak off at the top of the antenna. I will also use a lightning
> > arrestor
> > > but wonder if this additional step will further reduce the chance of a
> > lightning
> > > strike.
> > >
> >
> > no, it won't reduce the chance of a lightning strike... though it may
help
> > prevent charge build up between the antenna and ground preceding a
stroke
> > that may help protect your equipment. in fact equalizing the charge
between
> > the antenna and ground may actually make it easier for the antenna to
> > initiate the upward streamer that connects with the downward moving
leader
> > to trigger a lightning discharge.
>
> Well stated. Some authorities insist that grounding a tower/building just
attracts
> lightning, but that hasn't been the case here. After some 20 years of
standing on this
> hilltop, my 60 ft Rohn25 with 10 feet of mast and a 5/8 wave two meter
vertical topping
> that still hasn't been hit, though several times I sure thought it had,
from the proximity
> of the strike. I do have several very large oak trees within 150 ft of the
tower, and
> evidently each near strike got one of those instead, despite the tower
being well grounded
> with #6 solid wire and an 8 foot copper plated driven rod.. Makes one

wonder about the
> theory. But lightning seems to follow it's own calling!
>
> Of course the feedlines don't stay hooked to the house overnight when
there's bad weather
> within 400 miles...
>
> Dick
>
lightning definately does follow its own calling. but if you look at some statistics it may make more sense. you didn't say where you were, so i'll use some generic averages and rough approximations...

a 70' tower can actually be hit by lightning from as far as about 500' away. but an average 30ka stroke could hit a 70' tall structure from about 300'.. so lets look at a 300' circle. that is about .003 square miles. in the central u.s. statistics show there are about 10 strokes to the ground per square mile per year. this varies from <.1 along the pacific coast to about 33 in the tampa-orlando lightning alley. for the average of 10 multiplied by the .003 square miles you get .03 strokes to the ground in that 300' circle per year... now obviously you don't get .003 strokes per year, so invert that and you should expect one stroke to that tower every 33 years. tall trees near it will reduce that number, the hilltop location will increase it, but it won't be that much of a change. over a 20 year period you would have about a 60% chance of seeing a single stroke to the tower.

now, another side of the story... not all strokes are killers. while the 'average' 30ka stroke could cause considerable damage, the probability of a stroke being that strong or stronger is only 50%. strokes of <10ka may not cause any visible damage to a decently grounded structure unless they happen to hit something really vulnerable... this range accounts for about 5% of all strokes (though low current statistics are still in question because of the difficulty in detecting them with the existing network... they may actually be much more common). so it is possible that the tower could be struck by a low current stroke and not show any damage, and if the radios are disconnected or well protected they should not be damaged either.

570. Re: Two transmitters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 16:44:37 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <jradnTwIzvBmLMGiXTWJhA@comcast.com>
Source record: 108535

"Peter" <pmolsen@one.net.au> wrote in message
news:6ba442b.0309071804.3c512e7a@posting.google.com...
> I have two small 433MHz transmitter kits that I use for some remote
> switching. Only one is on at a time. I want to run a coax from them to
> a roof mounted aerial but don't want two coaxes and two aerials so
> what is the simplest method of joining the two aerial outputs
> together? I am assuming that they won't like just being directly
> connected together.

Sure fire way is to use a Daiwa, MFJ, etc coax switch.

Tam/WB2TT

571. Re: yaesu G-1000sdx rotator

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 16:52:13 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <i4CdnZQl1tBfLsGiU-KYuQ@comcast.com>
Source record: 108536

Roger,

I have the G1000. It requires a 6 conductor cable. When you rotate the antenna clockwise, that is approach S from E, the indicator does not stop on S. It will go all the way to W if you have enough slack. If nobody comes up with a web address for you, I can scan in the connection info for you. You can email me at my call letters dot arrl.net.

Tam/WB2TT
"Roger Adam" <roger.adam@remove_this.virgin.net> wrote in message news:8qI6b.3502$Ve3.1896@newsfep4-winn.server.ntli.net...
> Hi all,
>
> I've trying to rotate a 20M home made Magnetic loop using an old yaesu
> rotator. Unforntunately, it hasn't got the manual or 5 core cable & the
> two connecting plugs with it.
>
> I also understand that although the rotator shaft goes around, the
direction
> pointer does not. (Possibly transistor drivers?)
>
> I can't find any schematics on the 'net and was hoping that someone on
this
> newsgroup might have some info that at least would let me connect up the
> five wires to the connectors to check out its operation. I think other
> models may be similar.
>
> The rotator body has a seven pin plug and there's a six pin chassis
mounted
> socket on the rear over the main controller unit.
>
> regards,
> Roger G7JAQ
> England.
>
>
> ----------
> This mailbox protected from junk email by Matador
> from MailFrontier, Inc. http://info.mailfrontier.com
>
>

572. Re: Two transmitters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 17:02:13 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <4ZydnZ23j5OQK8GiU-KYuA@comcast.com>
Source record: 108537

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:jradnTwIzvBmLMGiXTWJhA@comcast.com...
>
> "Peter" <pmolsen@one.net.au> wrote in message
> news:6ba442b.0309071804.3c512e7a@posting.google.com...
> > I have two small 433MHz transmitter kits that I use for some remote
> > switching. Only one is on at a time. I want to run a coax from them to
> > a roof mounted aerial but don't want two coaxes and two aerials so
> > what is the simplest method of joining the two aerial outputs
> > together? I am assuming that they won't like just being directly
> > connected together.

at these low power levels, a wilkinson combiner will work.
you'll loose 3db i think.
basically, it's the same thing as a catv splitter.

573. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 17:40:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <queplvknt6vf38lc2dcjkbcobsuq1mcal0@4ax.com>
Source record: 108538

On Mon, 8 Sep 2003 08:16:34 +0300, "pez" <pez7sv@hotmail.com> wrote:

>P.S.
>Permit me please to correct you on that:
>It is not "his work" but "her work".

Hi,

I am at a loss for the equivalent to OM in your regard, and initials do mask you further. I should have been able to surmise this essential difference from your listing on Buckmaster.

Another essential difference is that you performed the work that others simply meander around in the hopes of being mistaken as workers.

Myself, I cannot task myself to publish complete derivations for two reasons. One, very few here are here to resolve anything but a sagging ego - hence the lack of standards in maintaining a progressive dialog. Two, I abide by a maxim that if one cannot express the key argument to the limited confines of one screen, then that argument lacks focus. I hope you do not take this as a diminution of your work, but more as a statement of stylistic variation. Keep up your effort, you are doing well.

73's
Richard Clark, KB7QHC

574. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 17:51:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5cc35f$1_4@corp.newsgroups.com>
Source record: 108547

Dick Carroll; wrote:
> Well stated. Some authorities insist that grounding a tower/building just attracts
> lightning, but that hasn't been the case here. After some 20 years of standing on this
> hilltop, my 60 ft Rohn25 with 10 feet of mast and a 5/8 wave two meter vertical topping
> that still hasn't been hit, though several times I sure thought it had, from the
proximity
> of the strike.

And in 50 years of ungrounded antennas, mine have never been hit
even though I have lived in some of the highest lightning areas.

As an aside: I have an antenna farm on my lot. The last thing lightning
hit was a five foot tall live oak tree, the shortest thing on my lot.
Lightning is like a 400 pound gorilla. Where does a 400 pound gorilla
go? Anywhere it wants. The fact that there is a difference of opinion
among experts about lightning only proves how puny human efforts are
in the face of Mother Nature.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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575. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 17:59:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5cc532_4@corp.newsgroups.com>
Source record: 108546

Richard Clark wrote:
> As I said, all achievable through references that many here have
> available to them, but fail to read, or practice at the bench through
> the angst of low self confidence or being too imbued with the kulture
> of institutionalized ignorance. There are other sources that approach
> this problem through more elegant means, but they are equivalent to
> reaching for the stars when NONE here can pick the fruit from their
> own orchard.

I tend to deal with these problems on a conceptual level:
"There's no such thing as a free lunch!" :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

576. Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:00:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <orfplv0a3grsug8h9nl0s34q85kba01r18@4ax.com>
Source record: 108539

On Thu, 28 Aug 2003 07:20:28 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>The scenario begins:
>
> "A 50-Ohm line is terminated with a load of 200+j0 ohms.
> The normal attenuation of the line is 2.00 decibels.
> What is the loss of the line?"
>
>Having stated no more, the implication is that the source is matched
>to the line (source Z = 50+j0 Ohms). This is a half step towards the
>full blown implementation such that those who are comfortable to this
>point (and is in fact common experience) will observe their answer and
>this answer are:
>
> "A = 1.27 + 2.00 = 3.27dB"
>
> "This is the dissipation or heat loss...."
>
>we then proceed:
>
> "...the generator impedance is 100+0j ohms, and the line is 5.35
> wavelengths long."
>
>Beware, this stumper has so challenged the elite that I have found it
>dismissed through obvious embarrassment of either lacking the means to
>compute it, or the ability to simply set it up and measure it. It
>takes two resistors and a hank of transmission line, or what has been
>described by one correspondent as:
>>>There is no institutionalized ignorance, just a
>>>lot of skepticism regarding the reliability of the
>>>analysis methods and the measurement methods.

Hi All,

One emailer provided the following solution:
> Total loss = 2.0 + 1.26639 + 1.57316 = 4.83955 dB
which varies from the citation by about 0.06dB.

The math offered:
>1.Effective length of 50-ohm coax is 5.35 l ï¿½ 5.0 l = 0.35 l = 126ï¿½.
>2.Using W2DU program HP2, Page 15-35, Reflections, 1st ed.,
> input impedance on 50-ohm line = Zin =31.10025 ï¿½ j26.14159 ohms.
>3.Using W2DU SWR program (Appendix 4, Page Appendix 23.7),
> mismatch between the 100 -ohm generator and impedance

> ZL = 31.10025 ï¿½j26.14159 = 3.456687:1
>4.The problem now simplifies to determining the insertion loss
> due to the mismatch between the 100-ohm source resistance
> R of the generator and load ZL = 31.10025 ï¿½ j26.14159 ohms.
>5.Input voltage reflection coefficient rin = 0.55125
>6.Input power reflection coefficient r2in = 0.551252 = 0.30388
>7.Input power transmission coefficient t2 = (1 ï¿½ 0.30388) = 0.69612
>8.Power transmitted is then 69.612%, insertion loss expressed in dB, 1.57316 dB.
>9. Using ITT terminology, P/Pm = 1.43654, which is also 1.57316 dB.

As I said, all achievable through references that many here have
available to them, but fail to read, or practice at the bench through
the angst of low self confidence or being too imbued with the kulture
of institutionalized ignorance. There are other sources that approach
this problem through more elegant means, but they are equivalent to
reaching for the stars when NONE here can pick the fruit from their
own orchard.

73's
Richard Clark, KB7QHC

577. Re: Lightning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:05:25 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <IWbYKZBITMX$EAs4@ifwtech.co.uk>
Source record: 108549

David Robbins wrote:
>you get .03 strokes to the ground in that 300' circle per year... now
>obviously you don't get .03 strokes per year, so invert that and you
>should expect one stroke to that tower every 33 years.

It's more correct - and actually makes a lot more sense - to call it "a
1 in 33 chance of a lightning stroke in any given year."

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

578. Re: vertical colinear

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:18:59 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309081018.70bfa55f@posting.google.com>
Source record: 108540

I was frustrated that the ARRL design never worked right, and quite a few years ago thought through the problem pretty carefully. Since then, I've been able to build them "at will" since I know what's needed now. I've posted this in the past, and you can probably find it in the Google archives. Keys, as with essentially any antenna, are to arrange elements to get the pattern you want and then feed them properly, and decouple from other conductors (esp. the feedline). In a coaxial collinear, the feed is tied closely to the elements. If you feed between each adjacent element pair with in-phase equal-amplitude voltages, even though the elements are shorter than 1/2 wave, the currents in the elements will be very nearly in-phase (though of differing magnitudes). It's fairly easy to simulate in EZNEC to see what happens. The "end-fed" half-waves show high feedpoint impedance, but the coax puts them all in parallel, and what I see with typical ten element antennas is a net ROUGHLY 150 ohms with some reactance, easily matched with an "L" network to 50 ohms.

Though I prefer using foam Teflon dielectric line (which has about 0.82 VF), the coaxial collinear DOES work with solid polyethylene line with 0.66 VF. I prefer the foam Teflon because it's really nice to solder, more than anything else, and an 1100' roll was very cheap...

Others have posted (on web sites) similar findings, with designs similar to what I've used. You will find people who tell you you can't build one, but I know better: I've simulated them and built them, and the performance as-built matches what I expect from the simulation.

Cheers,
Tom

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:<8rKdnZIl89cy3ceiU-KYgw@comcast.com>...
> can anyone point me to an article that has the details right, for vhf/uhf
> use.
>
> i don't understand how the velocity factor of the coax used in the elements,
> works in this antenna.

579. Mobile Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:27:42 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <bS37b.245$_u1.220@bignews6.bellsouth.net>
Source record: 108541

I have not posted about mobile antennas lately, but I just
wanted those in the market for a good-looking, good- performing mobile
antenna to visit my site at www.qsl.net/k4kwh . Based on the famous
screwdriver
antenna, it is a solid value for the money, cheaper on the old wallet and
handles much higher power than many of
those in the market today. Its parts are of high-quality, rugged materials
to take the harsh enviroment dealt out in
mobile service. Also type in "Carolina Cyclone" on Google for descriptions
and eham review. I have these
antennas represented from coast to coast and Alaska!

BTW, if your coil cover has cracked, split, or crumbled
despite efforts to patch it, I offer replacement covers that
will LAST for years to come! They are made of 1/8" wall
Lexan and will last for many years without cracking, dis-
coloring, or splitting!

And for those of you who run any version of Icom 706,
746 or 756 I also include the little tune module for your Cyclone I or II
for FREE! These simple, effective litttle
units plug into the back of your set, "fool" the rig into thinking there's a
tuner attached, and emit a tone and carrier for about 15 secs. This lets
the driver/operator
resonate his screwdriver (hopefully Carolina Cyclone, LOL!) easily, quickly
and safely without having to spend
time looking down his driving. Separately, they are $15.00 or 2 for $25.00
shipped within conus.

I am not a big name builder; I build the Carolina Cyclone
as both a hobby and as a small supplement to my pension. I LOVE fooling with
antennas, and it gives me something to do in my shop. You can look anywhere
on
the 'net and find no bad marks about me; my call and
reputation is too important to risk! I build good products,
build them economically (Gosh, how can a screwdriver
cost $500????????), and stand behind what I do. If I say
I will do something, I will do it! Period. If you break one of my antennas,
I will fix it or replace it without no questions (come on, now, don't expect
to bang your antenna under the garage door header and have me fix it
for free-just be reasonable!)

Won't you go mobile with the Carolina Cyclone today??

73
Jerry

K4KWH

580. Re: Two transmitters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:31:21 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309081031.6cbded21@posting.google.com>
Source record: 108542

pmolsen@one.net.au (Peter) wrote in message
news:<6ba442b.0309071804.3c512e7a@posting.google.com>...
> I have two small 433MHz transmitter kits that I use for some remote
> switching. Only one is on at a time. I want to run a coax from them to
> a roof mounted aerial but don't want two coaxes and two aerials so
> what is the simplest method of joining the two aerial outputs
> together? I am assuming that they won't like just being directly
> connected together.

If really only one transmitter is on at a time, I'd use a switch. For "slow" switching, you can use an RF relay. For "fast" switching, you can use PIN diodes. You can use logic to insure that the "off" transmitter stays off, and that the switching has time to take place before a transmitter is actually turned on.

If you want to do it without switching, there are a couple options:

If the two transmitters are on essentially the same frequency, your best bet is probably a Wilkinson divider/combiner. It's made from a 100-ohm resistor and either some inductors and capacitors or a couple 1/4 wave pieces of ~72-ohm coax. You'd like some isolation between the two. But beware that you will lose 1/2 your power.

If the transmitters are different enough in frequency, you can build filters which pass one freq and block the other, for each transmitter. You probably need 10MHz separation, at least, to make it practical for home construction, and even then it's not trivial.

Cheers,
Tom

581. MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 18:41:51 UTC
From: Allen Windhorn <Allen.Windhorn@LSUSA.com>
Message-ID: <un0df5dgq.fsf@LSUSA.com>
Source record: 108543

I just bought an antenna analyzer from MFJ, MFJ-269. Seems to work pretty well, though I have a little doubt about the accuracy. Anyhow, when I bought it from Burghardt, the technician there assured me that it included a schematic as part of the manual, but when I got it, there wasn't one. Has anyone received a schematic of this device? If so, could I possibly get a copy? How about calibration methods.

Thanks in advance.

73,
Allen
--
Allen Windhorn (507) 345-2782 FAX (507) 345-2805
Kato Engineering (Though I do not speak for Kato)
P.O. Box 8447, N. Mankato, MN 56002
Allen.Windhorn@LSUSA.com

582. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 19:03:20 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjijpo$mq2$1@nic.grnet.gr>
Source record: 108544

```
-
| Roy Lewallen" <w7el@eznec.com> wrote:
| ...
| As always, corrections are solicited and welcome.

-

Dear Mr. Roy Lewallen,

There is no doubt
your numerical example is a correct one.
Maybe you have already seen in another thread
a reproduction of your results
which prove that these are consistent
with the Uniform Transmission Line Theory.

So we think that
there is no any reason to check the core of your example
as far as already agree with your conclusions.

What it is remain
is a number of completely minor issues
which we would please you to explain for us,
for the sake of completeness.

1.
-
| I chose an approximate model of RG-58.
| I say
| approximate, because the conductor loss doesn't include the shield loss,
| something I haven't yet accurately included in my calculations.
|
-

Would you help us to understand in which way
this increased accuracy can affect your calculations?

2.
-
| ...
| and velocity factor of 0.492.
| One wavelength of the cable is 14753 meters,
-

We are not fans of the light velocity calculations
but we can't reproduce the above result.
For the Free Space,
```

with the light velocity of 300,000,000 [m]/[s],
the wavelength is 14,760 [m],
for the Empty one, with 299,792,458 [m]/[s], is 14,750 [m]
and if we reverse your calculations,
we take the in-between number 299,857,723 [m]/[s]
based on your wavelength of 14,753 [m].
Of course this is not a big deal,
as far as it doesn't modify any linked to it,
sensitive enough, result.

3.
-
| and the matched loss of
| that length is 31.60 dB.
-

We are not so sure if
under Complex Z0 conditions
it is permitted to characterize this quantity
as a "matched" one.

4.
-
| Again for calculational convenience, I chose a forward voltage at the
| input end of the cable of 1000 + j0 volts. All the results can be scaled
| if wished for any other value.
-

We think it is really more appropriate
to express all the results in terms of the voltage source (Vs,Zs) couple.

5.
-
| I've also run a similar analysis of a hypothetical lossless cable with
| the same Z0. Such a cable, as far as I know, can't be constructed. But
| if there's enough interest I'll be glad to post that also.
-

Of course there is.
It is very interesting to see
how you can achieve this.

Thanking you in advance,

Sincerely yours,

pez
SV7BAX
&
yin
SV7DMC

P.S.

We have to acknowledge that
all of the,
related to these matters,
Newsgroup activity
re-stimulated our interest
for a forgotten
-for about 30 years or so-
subject,
and from this point of view
we had an opportunity
for prolific summer holidays

73

583. Re: Two transmitters on one antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 20:18:08 UTC
From: richardharrison@webtv.net
Message-ID: <4432-3F5CE400-377@storefull-2311.public.lawson.webtv.net>
Source record: 108548

Peter wrote:
"---but don`t want two coaxes and antennas, so what is the simplest method of joining the two aerial outputs together? I am assuming they won`t like just being joined together."

Good assumption. Tom Bruhns and others have excellent answers. An r-f switch is simple and effective. Switch the antenna and its cable between transmitters.

There are duplexers which allow combining the outputs of multiple transmitters to one antenna . They replace an antenna switch or relay when multiple transmitters must have access to an antenna suimultaneously as is the usual case of the usual audio and video transmitters used in TV broadcasting. But, why bother with a duplexer requiring tuned cavities, circuits, and, or, multiple lines if simultaneous operation of the transmitters is not required?

In the case of multiple transmitters to be operated simultaneously, they can get much isolation by end to end antenna stacking. The stacked antennas fall into each other`s null zones and this isolates the individual antennas much as does cross-polarization. I`ve seen estimates of 1/10 as much coupling between end to end antennas as compared to side by side antennas at the same distance from each other. This guess, 10 db, seems reasonable to me. Cross-polarization estimates I`ve seen for coupling are 20 db down from coupling for same polarization of antennas.

Best regards, Richard Harrison, KB5WZI

584. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 22:51:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlq200ecfs9aac@corp.supernews.com>
Source record: 108550

pez, I really appreciate your taking a close look at my analysis. I'm sorry I haven't yet had time to do the same for yours, but I hope to be able to study it soon.

pez wrote:
>
> Dear Mr. Roy Lewallen,
>
> There is no doubt
> your numerical example is a correct one.
> Maybe you have already seen in another thread
> a reproduction of your results
> which prove that these are consistent
> with the Uniform Transmission Line Theory.
>
> So we think that
> there is no any reason to check the core of your example
> as far as already agree with your conclusions.
>
> What it is remain
> is a number of completely minor issues
> which we would please you to explain for us,
> for the sake of completeness.
>
> 1.
> -
> | I chose an approximate model of RG-58.
> | I say
> | approximate, because the conductor loss doesn't include the shield loss,
> | something I haven't yet accurately included in my calculations.
> |
> -
>
> Would you help us to understand in which way
> this increased accuracy can affect your calculations?

It would make no difference to the calculations, analyis, or conclusions. I made that comment only so that people wouldn't spend their time arguing about the accuracy of the RG-58 model instead of the analysis.

> 2.
> -
> | ...

> | and velocity factor of 0.492.
> | One wavelength of the cable is 14753 meters,
> -
>
> We are not fans of the light velocity calculations
> but we can't reproduce the above result.
> For the Free Space,
> with the light velocity of 300,000,000 [m]/[s],
> the wavelength is 14,760 [m],
> for the Empty one, with 299,792,458 [m]/[s], is 14,750 [m]
> and if we reverse your calculations,
> we take the in-between number 299,857,723 [m]/[s]
> based on your wavelength of 14,753 [m].
> Of course this is not a big deal,
> as far as it doesn't modify any linked to it,
> sensitive enough, result.
>

I used 299,793,000 m/s as the speed of light in free space, and a velocity factor of 0.4921222, which is the velocity factor produced by my model to get that length. Of course, I make no claim that the velocity factor is anywhere near that accurate for an actual piece of RG-58, so it's not important to use an extremely accurate value for the speed of light, either. From the standpoint of the analysis, the only important thing is that the line be assumed to be one wavelength long. While this isn't necessary for the analysis or conclusions to be correct, it simplifies the arithmetic. If the line is some other length, a phase shift term has to be included each time a voltage or current wave traverses the line.

> 3.
> -
> | and the matched loss of
> | that length is 31.60 dB.
> -
>
> We are not so sure if
> under Complex Z0 conditions
> it is permitted to characterize this quantity
> as a "matched" one.
>

The "matched" loss value comes directly from the attenuation constant alpha. If you were to terminate the line with a load equal to its characteristic impedance, the loss would equal that value, so I think the term is appropriate.

> 4.
> -
> | Again for calculational convenience, I chose a forward voltage at the
> | input end of the cable of 1000 + j0 volts. All the results can be

scaled
> | if wished for any other value.
> -
>
> We think it is really more appropriate
> to express all the results in terms of the voltage source (Vs,Zs) couple.
>
I agree that equations with the forward voltage as the independent variable are not in general the most useful. Personally, I've found that the load voltage is often the most convenient reference and, in later postings, I revised the equation for total average power to be in terms of the load voltage. For the analysis, I chose the forward voltage at the line input for the independent variable because it made it very simple to calculate from it the forward voltage at the load end of the line, and the reverse voltages at both ends. Hopefully, anyone reading the analysis with any care can easily see how each value was calculated from the previous one. Of course, many other standards could be used, but they would make calculations more complex and perhaps obscure where the various values came from. Because all the voltages and currents have been calculated, it's a simple matter to normalize them to any reference desired, although of course converting the independent variable in the equations involves more work. I also acknowledge that a different reference might make certain relationships more clear, so I certainly have no objection to using any other value as a reference.

Note that no source impedance Zs is used in my analysis. It makes no difference to the result except for scaling all values by the same amount, so I omitted it to avoid unnecessary complexity.

> 5.
> -
> | I've also run a similar analysis of a hypothetical lossless cable with
> | the same Z0. Such a cable, as far as I know, can't be constructed. But
> | if there's enough interest I'll be glad to post that also.
> -
>
> Of course there is.
> It is very interesting to see
> how you can achieve this.

You've been the only one to show any interest so far. If one other person requests it, I'll post it. Otherwise, I'll email it to you.
>
> Thanking you in advance,
>
> Sincerely yours,
>
> pez
> SV7BAX
> &
> yin

> SV7DMC
> 73

Thank you again for the comments and for the careful reading of the analysis. All other comments are welcome.

Roy Lewallen, W7EL

585. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 22:56:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlq296nijbpq88@corp.supernews.com>
Source record: 108551

pez, your English is no barrier. It's better than many Americans posting on this and other newsgroups. The "language" of the "language barrier" here is the language of mathematics. Some of the posters who have been the most verbal and insistent don't seem to able to deal with the math necessary to understand the concepts involved, so they're reduced to arguments which can't be mathematically demonstrated.

Roy Lewallen, W7EL

pez wrote:
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vr6nlv0fkl20hkcp7svj41htm49blcf0ra@4ax.com...
> |
> | Hi Fellows,
> |
> | Such intense interest and no comments to SV7DMC for his work to this
> | matter?
> |
>
> Dear Mr. Richard Clark,
>
> Thank you very much for your kind interest!
>
> You have absolutely right.
> It's a pity indeed
> but unfortunately
> there are but very few comments for our point of view.
> However at least,
> all of them which are centered on the heard of the matter,
> I have a feeling that,
> are rather positive.
> I hope.
> Perhaps we have to put the blame
> on this damned language barrier.
> Who knows?
> Too much silence...
>
> Sincerely yours,
>
> pez
> SV7BAX
>
> P.S.
> Permit me please to correct you on that:
> It is not "his work" but "her work".

586. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 23:03:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f5d0c60$1_1@corp.newsgroups.com>
Source record: 108554

pez wrote:
> Dear Mr. Roy Lewallen, There is no doubt
> your numerical example is a correct one.

What about Roy's refusal to superpose like terms? With only
two directions in a transmission line, it is impossible for
there to exist a "third term" when there's no third possible
direction.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

587. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 23:10:33 UTC
From: Bud Rogers <budr@netride.net>
Message-ID: <3f5d0c6f_2@nntp2.nac.net>
Source record: 108552

Jeffdeham wrote:

> I was looking at the rainbow tuner which matches a
> half wave end fed antenna to 50 ohms using a quarter
> wave radial. I am guessing it
> works like a transformer but not sure. Here is
> the schematic;
>
> Ant |----- quarter wave radial
> | |
> | GND
> ----------
> |)
> ---)
> Variable)<----- 50 ohm
> ---)
> |)
> |)
> ----------
> |
> GND
>
>
> If it does work like a transformer how does it do it?
> How is the matching done?

I'm not familiar with the rainbow tuner, but if I read your schematic right, the tapped coil functions as an autotransformer. Autos are commonly used as step-up and step-down transformers in power substations. A functional equivalent using separate windings would look like this.

```
|
|
|
----------------
| )
| )
| )
----- )
----- ) ( <----------- 50 ohm
| ) (
| ) (
| ) (
-----------------------------------
|
```

GND

73 de KD5SZ

588. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-08 23:28:03 UTC
From: Bud Rogers <budr@netride.net>
Message-ID: <3f5d108c_2@nntp2.nac.net>
Source record: 108553

Bud Rogers wrote:

```
> |
> |
> |
> ----------------
> | )
> | )
> | )
> ----- )
> ----- ) ( <----------- 50 ohm
> | ) (
> | ) (
> | ) (
> ----------------------------------
> |
> GND
```

Gak. I screwed that up. Let's see if this comes out any better.

```
|
|
|
-----------------------
| )
| )
| )
----- )
----- ) ( <----------- 50 ohm
| ) (
| ) (
| ) (
---------------------------------
|
GND
```

73 de KD5SZ

589. Western Connecticut Hamfest this Sunday

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 00:03:34 UTC
From: IGotYerNameRightHere <jimkd1yv@snet.net>
Message-ID: <3F5D18F5.7ABFBF43@snet.net>
Source record: 108555

WESTERN CONNECTICUT HAMFEST
Sponsored by: Candlewood Amateur Radio Association - CARA
http://www.danbury.org/cara/

Sunday, September 14, 2002 Open to the public 8:30 AM to 12:30 PM

Table Set-up at 7:00 AM.
Commercial Amateur Radio Vendors, Tables, Tailgating
Edmond Town Hall, Route 25, Newtown, CT Exit 10 off of I-84

Admission $5.00, Kids Under 12 FREE.
Tables $12.50 Tailgating $8.00. (Both INCLUDE 1 admission).

ARRL Sanctioned. Talk-in on 147.3 (+) PL 100.0. Handicapped
Access. Ham Radio Equipment. Computers. Door Prizes.
Refreshments. Ample Parking. Rain or shine.

Only 12 minutes from Brewster, NY, 15 minutes from Waterbury, CT.

For information
call: (203) 438 6781 or (203) 798 2831

-------------- Table Reservation ----------------
Mail to: Candlewood Amateur Radio Association (CARA) Hamfest
c/o John Ahle, W1JMA
120 Firehill Rd.
Ridgefield, CT 06877

Name:_____
Address:_____
City/State:_____

Please reserve _____ tables at $12.50 each.
Yes / No : I need electricity

Make checks payable to CARA

590. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 00:17:14 UTC
From: XL5 <xl5@yahoo.com>
Message-ID: <3f5d1c09$1_2@mk-nntp-1.news.uk.worldonline.com>
Source record: 108556

<\u0000 StormTrooper \u0000> wrote in message

MFJ, and high performance should not be used in the same sentence.

"Unlike Dickhead and StormTrooper" !!!

591. Re: Western Connecticut Hamfest this Sunday

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 00:31:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlq7qu17fd5j22@corp.supernews.com>
Source record: 108557

Hey, I'll run right down and get an airplane ticket!

Seriously, can you imagine what this newgroup would look like if every local hamfest posted an announcement? I'm glad this is an aberration, and hope it stays that way!

Roy Lewallen, W7EL

IGotYerNameRightHere wrote:
> WESTERN CONNECTICUT HAMFEST
> Sponsored by: Candlewood Amateur Radio Association - CARA
> http://www.danbury.org/cara/
>
> Sunday, September 14, 2002 Open to the public 8:30 AM to 12:30 PM
>. . .

592. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 00:53:21 UTC
From: Ken Bessler <kg0wx@yahoo.com>
Message-ID: <5iadnVTytbMeucCiXTWJkQ@comcast.com>
Source record: 108558

"XL5" <xl5@yahoo.com> wrote in message
news:3f5d1c09$1_2@mk-nntp-1.news.uk.worldonline.com...
>
> <? StormTrooper ?> wrote in message
>
> MFJ, and high performance should not be used in the same sentence.
>
>
> "Unlike Dickhead and StormTrooper" !!!
>
>
>

PLOINK!! XL5 to the kill file.... so sorry.....

593. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 01:06:42 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309081706.ef9bd6@posting.google.com>
Source record: 108559

Roy Lewallen <w7el@eznec.com> wrote in message news:<vlq296nijbpq88@corp.supernews.com>...
> pez, your English is no barrier. It's better than many Americans posting
> on this and other newsgroups. The "language" of the "language barrier"
> here is the language of mathematics. Some of the posters who have been
> the most verbal and insistent don't seem to able to deal with the math
> necessary to understand the concepts involved, so they're reduced to
> arguments which can't be mathematically demonstrated.
>
> Roy Lewallen, W7EL

Pot calling the Kettle Black?

Slick

594. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 01:13:42 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309081713.66b25306@posting.google.com>
Source record: 108560

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<08GdnQNJmaa5_cGiXTWJkA@crocker.com>...
> > >
> >
> > Please show us if he correctly defines formula (1) and why. And i'd
> also
> > like to see if someone can derive these:
> >
> > ai= (Vi+Zi*Ii)/(2*sqrt(Re(Zi))
> > bi= (Vi-conj(Zi)*Ii)/(2*sqrt(Re(Zi))
> >
> > For what he calls the incident and reflected power waves.
>
> re-read my reply above until you understand it... (1) is GIVEN, it is the
> starting point, he DEFINED ai and bi to be those values... the then goes on
> for several paragraphs explaining why he thinks those are better waves than
> other types of waves.

Well, I certainly didn't expect you to provide the derivation,
but maybe someone else can.

And there is the point that if Zi is real and positive, the
power wave is actually a voltage wave.

Slick

595. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 01:16:41 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309081716.5981ea96@posting.google.com>
Source record: 108561

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<U52dnfmo0u4PwsGiXTWJhA@crocker.com>...
> >
> > Once again, where and when and how did you do a measurement? When
> > you get a rho greater than 1, the VSWR = (1 + |rho|)/(1 - |rho|) gives
> > ridiculous
> > NEGATIVE SWRs. And rho WILL give you the SWR, assuming your
> > tranmission
> > isn't extremely lossy. This is why people say that the SWR meter has
> > to
> > be at the antenna, instead of at the end of 100' of RG-58.
> >
> > You are quitting because you can't really answer this question.
> >
> >
> > Slick
> you really are hopeless... that formula for VSWR is not valid when the line
> has losses, and you can only get rho >1 when the line has losses.... see the
> catch 22????

If I'm hopeless, I don't wanna think where YOU are.

If that VSWR formula is not valid for complex Zo, then perhaps the
normal equation isn't either.

You need to use the conjugate equation for complex Zo.

Slick

596. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 01:56:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjjc0gmrn1@hercules.btinternet.com>
Source record: 108562

Roy and others,

Just a suggestion, don't place all your faith for this kind of work in old, unknown, unproven, untrustworthy line-transmission calculating programs, written in languages like insecure modifiable Basic, spreadsheets, etc., you find lying around on the net.

Use programs COAXPAIR and RJELINE3 (balanced lines) for exact classical analysis.

For example, proximity effect in close-spaced balanced lines is taken into account.

Bugs, if any exist, are likely to result in obvious catastrophic errors. After several years no bugs have come to light.

As with all human endeavour, hardware or software, Reliability is Quality versus Time.

Go to http://www.g4fgq.com
==========

PS: Very recently there's been a migration from the usual 'holy saints' towards worship of the hitherto relatively unknown out-of-print works of Chipman. Having had his book since shortly after he wrote it I can assure you he is not infallible. But I hasten to add his few paragraphs about magnitude of voltage and current reflection coefficients being greater than unity seem OK. Well recommended. I wonder if the old timer is still around?

The only error-free book of the very few I still have in my possession is by W.L.Everitt who in 1937 showed how to calculate the internal resistance of Class-A, B and C, RF power ampliers, a simple subject, apparently disregarded by Terman as being of no consequence, but which has generated an enormous amount of heat amongst radio 'amateurs' in this newsgroup during the last few years and is still simmering like molten lava under the surface.

Reg.

597. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 02:23:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjjdj5oue1@hercules.btinternet.com>
Source record: 108563

I make no attempt sort out what your particular problem is.

But 3 loss terms can exist.

If rho1 occurs between generator and line and rho2 occurs between line and load, and rho3 occurs between generator and load before the line is inserted.

Then -

Log(rho1) + Log(rho2) - Log(rho3)

Or something like that. If this doesn't ring any bells then forget it.

598. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 02:28:04 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjjdrk$p92$1@hercules.btinternet.com>
Source record: 108564

Roy, replace "math" with "arithmetic".

599. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 02:36:14 UTC
From: tdonaly@aol.com
Message-ID: <20030908223614.21934.00000815@mb-m04.aol.com>
Source record: 108565

>
>
>Note that no source impedance Zs is used in my analysis. It makes no
>difference to the result except for scaling all values by the same
>amount, so I omitted it to avoid unnecessary complexity.

I used your numbers, Roy, using Zs, Zg and a set of cumbersome
equations involving source and load reflection coefficients, phase
factors, and the rest, and got much the same results you did, allowing for
roundoff errors and such. I'm waiting for Cecil to show us what he got
using scattering parameters. In particular, I'd like to know what number
he would use for a voltage reflection coefficient < 1 that would guarantee
that the voltage across the load, divided by the current through the load
would equal the impedance of the load.
73,
Tom Donaly, KA6RUH

600. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 02:51:45 UTC
From: tdonaly@aol.com
Message-ID: <20030908225145.21934.00000818@mb-m04.aol.com>
Source record: 108566

>
>pez wrote:
>> Dear Mr. Roy Lewallen, There is no doubt
>> your numerical example is a correct one.
>
>What about Roy's refusal to superpose like terms? With only
>two directions in a transmission line, it is impossible for
>there to exist a "third term" when there's no third possible
>direction.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

I'd like to ask you, Cecil, what do the number of terms in
an equation have to do with the number of directions in a
transmission line? Would you like to do your own calculations
and tell us, for instance, what your idea of a reflection
coefficient at the load would be that would satisfy your
conditions for power?
73,
Tom Donaly, KA6RUH

601. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 09:14:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjk5m8$qe9$1@hercules.btinternet.com>
Source record: 108567

```
> I'd like to ask you, Cecil, what do the number of terms in
> an equation have to do with the number of directions in a
> transmission line?

============================

What do the two numbers forming the reflection coefficient have to do with
the minimum number of knobs on a tuner.
```

602. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 10:23:32 UTC
From: "&#65533; StormTrooper &#65533;"
Message-ID: <vlrah4ao1jvt08@corp.supernews.com>
Source record: 108568

Hummmmm, looks like Neil and XL5 post from the same account! Who would have thought.

From: "Neil" <g0jhc@blueyonder.co.uk>
NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com
From: "XL5" <xl5@yahoo.com>
NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com

MFJ products are junk. Read the reviews on e-Ham sweetheart. You know very little about High Performance, and ZERO about posting on Usenet.

"XL5" <xl5@yahoo.com> wrote in message
news:3f5d1c09$1_2@mk-nntp-1.news.uk.worldonline.com...
>
> <&#65533; StormTrooper &#65533;> wrote in message
>
> MFJ, and high performance should not be used in the same sentence.
>
>
> "Unlike Dickhead and StormTrooper" !!!
>
>
>

603. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 10:55:33 UTC
From: kd1@sympatico.ca
Message-ID: <3F5DB1A5.C3FBA01F@sympatico.ca>
Source record: 108469

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5BD877.CF9E2858@sympatico.ca>...
> >
> > > You can say that a short is always at zero
> > > volts, but that doesn't mean that there isn't a forward and reflected
> > > voltage moving through it.
> >
> > True. But if the voltage is always 0, then the sum of the forward
> > and reflected voltage is always 0.
>
> Well, there is no phasor notation in your overly simplistic
> example. So we don't see the forward and reflected waves.

If you follow back through the posts you will find that this
started with phasors.

> > > > > Where does circuit theory predict
> > > > > Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> > > >
> > > > This isn't circuit theory, it is from the definition of reflection
> > > > coefficient: Vr = Vi * rho.
> > >
> > > Right, but if you are going to compare...how does circuit
> > > theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> >
> > Circuit theory gives the voltage across the capacitor as
> > .02 * (0-j200) = 4/_ -90 (current time impedance)
> > Reflection theory (can I call it that) using classic rho
> > gives the voltage across the capacitor as Vr + Vi
> > 0.5 + 4.031/_ -97.125 = 4/_ -90
> > So both provide the same voltage across the capacitor.
>
> Right, but if you are going to compare...how does circuit
> theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
>
> This would convince me quite a bit, if you could derive this
> with circuit theory.

I am unsure what you mean here. The equation Vr = Vi * rho is
used in both cases. In one, 'revised rho' is used. In the other,
'classic rho' is used. The results with 'revised rho' do not
agree with results from circuit theory. Does this not cast
some doubt on the validity of 'revised rho'?

> > > > Yes, errrr no! I think that power reflection coefficient as normally
> > > > defined has no utility with lossy lines since it can not be used
> > > > to make any useful predictions.
> > >
> > > Not too sure, are we! And when i say we, i mean WE. "Yes, errrr
> > > no!"
> > > is very much like "maybe" and "sometimes", which a lot of people use
> > > for
> > > fear of making an absolute statement which they may have to (God
> > > Forbid!) retract later, as everything you type is recorded FOREVER.
> > >
> > > ("FOREVER" used for scary effect for those who are terrified to
> > > admit they were WRONG!)
> >
> > I find, in practice, that the answer to many apparently simple
> > questions is 'yes and no'. This simply means the question was
> > incompletely specified.
>
> Or not understood.

The questioner possed a question. The answerer provided two answers
depending on how the question was interpreted. Wath's the problem?

> > If you define power reflection coeffecient as voltage reflection
> > coefficient squared then it is indeed around 64.
> >
> > If you define power reflection coefficient as the actual reflected
> > power divided by the actual incident power (assuming such real
> > powers exist), then, indeed, it can not be 64 since that would
> > violate some generally accepted rules about conservation of energy.
> >
> > So we have quite a contrast between the meaning implied by the name
> > and the resulting value. So the value IS 64, but the meaning is
> > NOT 'power reflection coefficient', though the name may be.
>
> Very nice dancing around the point, Keith!
>
> You're more confused than me!

It does seem that I am having some difficulty conveying the concept.

Just because a thing has a name, does not mean the name accurately
describes the thing.

> > > I disagree with you completely, because a Bird or Daiwa meter will
> > > do exactly that, measure Pfwd and Prev, and then with two cross
> > > needles,
> > > you read off the VSWR! That stands for "VOLTAGE stand wave ratio".
> >
> > Since directional wattmeters simply compute Vf and Vi and square
> > the scalar, they will show that factor of 64 mentioned earlier.
> > This strongly suggests they are not doing a good job of computing
> > real powers.

>
> I'll agree that power meters recitify the signal, and actually get
> a DC voltage from the line. In a certain sense, they are more like
> RMS voltmeters than power meters.
>
> I'd like to see ANY power RC over 1 for a passive network,
> please show us the circuit to build on the bench!

The passive network you provided in your first post fulfills this
requirement if you define 'power RC' as |rho|^2.

> > In practice, none of this matters (for RF -- to keep Peter quiet),
> > since the line losses are sufficiently low that the line impedance
> > is sufficiently close to 50 ohms, that the Daiwa gives sufficiently
> > useful information to allow matching.
> >
> > Despite this, the examples we are using here have far from real Z0
> > and are interesting to further our understanding.
>
> Or lack of understanding...
>
> > > I'd like to know the answer to this question too!
> > > If we are talking about only DISSIPATED power, do we have
> > > to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
> > > And if phase doesn't mean anything for power, how can we use a
> > > complex Zo in the denominator?
> > >
> > > And if the Pfrd originates in Zo, Prev is loaded by Zo,
> > > then even if Zo is complex, can you still not say:
> > >
> > > [rho]**2 = power RC? Because the Zo cancels out anyways
> > > (a ratio)?
> >
> > Yup, its a puzzler all right.
> >
> > And the escape?
>
> Ha! As if you knew! Should we say P=Vrms**2/Re(Zo)? Taking
> only the real part of the Zo?
>
> > -- Stick to incident and reflected voltage (or current) waves for
> > analysis. They work.
>
> You don't do this in your circuit theory example. How does
> circuit theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

I am not sure what your question is here. Are you questioning...
- rho = (Zl-Z0)/(Zl+Z0) -- this has been derived in several posts
- Vr = Vi * rho -- and this
- Vi -- and this

In any case, this whole discussion was predicated on incident and
reflected voltages. Trouble only arose with also trying to
satisfy some presumptions about incident and reflected power.
I you forget these presumptions you can use incident and
reflected voltages to solve the problems and obtain the
correct answers.

> > -- Don't bother trying to compute the incident and reflected powers.
> > -- They have no meaning in the general case.
> > -- Only instantaneous and time averaged power really exist and
> > they CAN be computed in all cases.
>
> You can't compute average incident and reflected powers when
> Zo is complex? Your proof or references, please?

It is above. One arrives at non-sensical answers like 'the reflected
power is greater than the incident'. What more proof can be needed?

> > -- Forget power reflection coefficient for it only misleads.
> > -- And never forget that all a 'directional watt' meter does is
> > compute and respond to Vf and Vr.
> >
> > ...Keith
>
> I'll agree that power meters recitify the signal, and actually
> get
> a DC voltage from the line. In a certain sense, they are more like
> RMS voltmeters than power meters.
>
> I'd like to see ANY power RC over 1 for a passive network,
> please show us the circuit to build on the bench!

You've provided it yourself. 50 ohm resistor, +j200 inductor,
-j200 capacitor, all in series. (If you define 'power RC' as |rho|^2.)

Measure the voltages. They will agree with the circuit theory
result.

...Keith

604. Re: 13123213213test

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 13:11:10 UTC
From: gabriella <gabriblu@bigpond.com>
Message-ID: <bjkjnokdn8@lust.ihug.co.nz>
Source record: 108470

Re: 13123213213test

---

605. Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 13:51:33 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <FVk7b.1262$c35.979@newsread1.news.atl.earthlink.net>
Source record: 108471

All NewsGroup readers appear to agree that rho is the reflection coefficient.

Beyond that it seems that there are dissenters...

Here's some thoughts which will cause readers to pause... er... delay, when it comes
to complex Zo and complex rho.

rho is the ratio of the reflected voltage wave "b" to the incident voltage wave "a".

rho = b/a = (ZL - Zo)/(ZL + Zo)

rho is then in general a complex function of angular frequency w = 2*pi*f where f
is "cyclic" frequency in Hz simply because both ZL and Zo can themselves be complex.

rho may of course be considered to be a"transfer function" which yeilds the reflected
voltage "b" or voltage echo, sometimes known as the "talker echo", which results from
the application of the incident voltage "a".

rho(jw) = [(ZL(jw) - Zo(jw))/(ZL(jw) + Zo(jw))] = |rho(w)|*exp[j*phie(w)]

Where phie(w) is widely known in the literature as the "echo phase" and |rho(w)| is
the magitude of the reflection coefficient.

Following the literature and taking natural logarithm's of the inverse of rho one finds that:

ln[1/rho(jw)] = -ln|rho(w)| - j*phie(w) = Ae(w) - j*phie(w)

Where Ae(w):

Ae(w) = -ln|rho(jw)| "Echo Attenuation or Return Loss"

Measures the echo attenuation in Nepers and is the so-called "Echo Attenuation" or "Return Loss", in Nepers (Np).

Ae(w) measures how much the talker echo or reflected voltage echo "b" is attenuated below the incident voltage wave "a".

Aside: Europeans seem to prefer the term Echo Attenuation and the symbol Ae(w) and Np units [which is also my personal preference] however North American authors seem to prefer the term "Return Loss" and symbol RL and

prefer to use dB units rather that Np units. For those who need to convert from Np to dB that conversion is simply dB = 20 log(e) = 8.686 Np.

Of more interest to those fans of complex Zo is phie(w), the so-called "Echo Phase" or "Return Phase" measured in radians. The Echo Phase measures the phase lag of the voltage echo as compared to the phase angle of the incident voltage.

Now for some stuff that should really interest Cecil.

:-)

Differentiating the echo phase phie(w) with respect to w, one obtains the well-known "Echo Group Delay", this echo group delay or, as it is sometimes called, the "Return Delay", is always a real function and is given by.

taugre(w) = d[phie(w)]/dw

and has units of seconds.

taugre(w) measures the group delay of the returned voltage echo as a function of frequency. In a differential bandwidth dw the value of taugre(w) measures the average delay of a "packet" of energy launched by the incident wave "a" in that differential frequency band dw and returned to the source in the voltage echo.

Wow, sort of like transmission line radar. Question for Time Domain Reflectometer
fans:

Is this taugre(w) the delay that would be measured by a TDR?

An even more interesting quantity is the echo group velocity or vge(w) which is simply the reciprocal of taugre(w)

vge(w) = 1/taugre(w)

which has units of inverse seconds.

The vge(w) may never be faster than the speed of light in the Zo media. In general the velocity of frequency groups is not constant with frequency!

vge(w) gives the actual group velocity of packets or groups of frequencies in the echo as it passes from the source back around to the source again. It is a function of frequency and illustrates that in transmission lines with
complex Zo not all frequencies in the echo travel with the same velocity and some frequencies actually arrive back at the source before the others.

Should designers of echo cancellers for complex Zo lines care about this?

Of course no such thing occurs with real Zo lines!

Real Zo lines are sooooo dull and unintersting!

Another interesting quantity which I am sure Cecil will enjoy is the so-called echo phase delay or tauphe(w)

tauphe(w) = phie(w)/w

The echo phase delay is an interesting function and I will leave it to the reader to work out its' physical significance. This quantity leads to the very curious echo phase velocity or vpe(w)

vpe(w) = 1/tauphe(w)

It is interesting to note that vpe(w) can actually exceed the speed of light in the Zo media. In a transmission system with a real Zo of course vpe = vge. But in the widely deployed complex Zo telephone twisted pair plant it is not.

Things are really dull and uninteresting when Zo is real, huh?

Finally the arcane "echo signal front delay" tausfe(w), when it exists equals the limit.

tausfe(w) = limit as w -> infinity of the ration phie(w)/w

And of course the reciprocal of the echo signal front delay gives the echo signal front velocity vsfe(w) when it exists, thus:

vsfe(w) = 1/tausfe(w) when it exists.

It is left as an exercise for the reader to find out under what physical circumstances this exotic velocity exists and just what it's physical meaning might be...

A quantity of great great interest to Cecil will be the value of the echo group delay evaluated at the origin (DC)!

taugre(w) evaluated at w = 0 [DC] gives the first "time moment" of the echo!

taugre(0) = T*area of voltage echo = Integral from 0 to infinity of t*b(t)*dt

taugre(0) when divided by the area under the echo voltage gives the average time delay T by which the energy in the echo is delayed.

T = taugre(0)/area under b(t).

It turns out that this is an extremely useful value to know if one is interested in designing or operating an effective and feasible analog or digital talker echo canceller to suppress echos on the line and allow the receiver to receive remotely generated signals in the face of extremely strong incident signals.

Circuitry or algorithms that can make fast real time estimates of T are highly desirable and are held as trade secrets by certain companies.

The design and operation of talker echo cancellers for transmission systems with complex Zo is quite a complicated and challenging task.

That's enough titilating information for fans of complex Zo.

And so... until the next time...

I'd like some thoughts and comments these arcane and exotic functions and about
comparisons between such functions for transmission systems with real Zo and those with complex Zo.

Thoughts, comments?

--
Peter K1PO
Indialantic By-the-Sea, FL.

606. base antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 13:59:57 UTC
From: none <moll_carter@centurytel.net>
Message-ID: <7NI7b.1247$v22.934744@feed2.centurytel.net>
Source record: 108473

anyone have plans on how to build a base antenna would like to build a 3 el beam or moonraker 4 . if so let me know how to .

607. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 14:36:05 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0309090636.7ecb4859@posting.google.com>
Source record: 108472

Bud Rogers <budr@netride.net> wrote in message news:<3f5d108c_2@nntp2.nac.net>...
> Bud Rogers wrote:
> Gak. I screwed that up. Let's see if this comes out any better.
>
> |
> |
> |
> ------------------------
> |)
> |)
> |)
> -----)
> -----) (<----------- 50 ohm
> |) (
> |) (
> |) (
> ----------------------------------
> |
> GND

That's more or less how I thought it worked but just couldn't
visualize it.
If you could answer yet another question. How does a autotransformer
work exactly? I can see how you can tap up and down the coil to hit a
certain point where you can a 50 ohm match. But when I look at the
schematic all I see is a coil in parallel with a variable cap. How
does the autotransformer in essence become a transformer? Or rather
how does it become the above schematic?

Thanks!

Jeff

608. Re: base antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 15:16:57 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <J9m7b.30540$S_.25113@fed1read01>
Source record: 108474

See URL:
http://ac6v.com/antprojects.htm

Lots to choose from

--
73 From The Signal In The Noise
Caveat Lector Ya All

"none" <moll_carter@centurytel.net> wrote in message
news:7Nl7b.1247$v22.934744@feed2.centurytel.net...
> anyone have plans on how to build a base antenna would like to build a 3
el
> beam or moonraker 4 . if so let me know how to .
>
>

609. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 15:48:59 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vlrthrkdkjbf05@corp.supernews.com>
Source record: 108475

Peter O. Brackett wrote:
>
>
> Here's some thoughts which will cause readers to pause... er... delay, when
> it comes
> to complex Zo and complex rho.
>
>

Are you really serious? Do you really want folks
to grind through all of this and propose
counter-arguments, questions, etc?

I suggest most respectfully "enough is enough".

A carefully written QEX article by you on this
entire subject would be a good idea and a
permanent part of the literature.

Bill W0IYH

610. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 15:58:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <62trlvoffc8vsqhd14cl5ljge9i6s3m4s9@4ax.com>
Source record: 108476

On Tue, 09 Sep 2003 13:51:33 GMT, "Peter O. Brackett"
<ab4bc@ix.netcom.com> wrote:
...
>
>It turns out that this is an extremely useful value to know if one is
>interested in designing or operating an effective and feasible analog or
>digital talker echo canceller to suppress echos on the line and allow the
>receiver to receive remotely generated signals in the face of extremely
>strong incident signals.
...
>
>I'd like some thoughts and comments these arcane and exotic functions and
>about
>comparisons between such functions for transmission systems with real Zo and
>those with complex Zo.
>
>Thoughts, comments?

Hi Peter,

Well, if we scrapped all the antennas, killed the RF and
interconnected a million miles of transmission line - this might be
interesting. We could call it telephony. The next wave would be gold
plated 00 wire gauge lines connected to dusty rock band amplifiers
(new-age linears) that had been sitting dormant in the garage since
adolescence. Cecil could then argue the use of the Wah-Wah pedal to
conjugate the group velocity.

The topics discussed would be rec. but not radio. maybe amateur.
(amateur telephony?) and certainly not antenna. There ya' go! Design
a telephony antenna to eliminate all these transmission line problems.
Do it from first principles too. ;-)

73's
Richard Clark, KB7QHC

611. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 16:41:47 UTC
From: richardharrison@webtv.net
Message-ID: <20161-3F5E02CB-477@storefull-2316.public.lawson.webtv.net>
Source record: 108479

Richard Clark wrote:
"These six designs have yet to be surpassed by any product from FAS."

Maybe that`s right. John Kraus and associates are not so dismissive of "Artistic Antennas" (Fractals) on page 772 of "Antennas For All Applications".

The Kraus book does illustrate the more complicated impedance variations of Fractals as compared with a loop or a flat plate used as an antenna.

Best regards, Richard Harrison, KB5WZI

612. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 17:01:49 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F5E077D.4F4A2FF7@uci.edu>
Source record: 108477

Cecil Moore wrote:
> With only
> two directions in a transmission line, it is impossible for
> there to exist a "third term" when there's no third possible
> direction.

I can think of an equation that has three terms and only one direction.
In fact, I think you're familiar with it.

73 ac6xg

613. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 17:20:51 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <ho2slvo8ijtc0i0jpkcli9dghgetp1c37n@4ax.com>
Source record: 108478

On Mon, 08 Sep 2003 18:41:51 GMT, Allen Windhorn
<Allen.Windhorn@LSUSA.com> wrote:

>I just bought an antenna analyzer from MFJ, MFJ-269. Seems to work
>pretty well, though I have a little doubt about the accuracy. Anyhow,
>when I bought it from Burghardt, the technician there assured me that
>it included a schematic as part of the manual, but when I got it,
>there wasn't one. Has anyone received a schematic of this device?
>If so, could I possibly get a copy? How about calibration methods.

Calibrate what?
Where is the problem?

use several ohmic resistors, carbon type,
and measure SWR and Rs.
X should be zero at 50 Ohm
if the resistors are HF usable.

use capacitors with known value, etc., use coils.
use cables of known length.

use your brain.
THINK.

w.
--
On the Internet nobody knows that I am a dog.

614. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 17:23:42 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <r43slv8jldsgs8u5aor7r1btkap5jhdg3n@4ax.com>
Source record: 108480

On Mon, 08 Sep 2003 18:41:51 GMT, Allen Windhorn
<Allen.Windhorn@LSUSA.com> wrote:

>I just bought an antenna analyzer from MFJ, MFJ-269. Seems to work
>pretty well, though I have a little doubt about the accuracy. Anyhow,
>when I bought it from Burghardt, the technician there assured me that
>it included a schematic as part of the manual, but when I got it,
>there wasn't one. Has anyone received a schematic of this device?
>If so, could I possibly get a copy? How about calibration methods.

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Where is the problem?

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and measure SWR and Rs.
X should be zero at 50 Ohm
if the resistors are HF usable.

use capacitors with known value, etc., use coils.
use cables of known length.

use your brain.
THINK.

w.
--
On the Internet nobody knows that I am a dog.

615. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 19:06:31 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <459slvols57som2egj37vc6em3hjakp30v@4ax.com>
Source record: 108481

On Mon, 08 Sep 2003 18:41:51 GMT, Allen Windhorn
<Allen.Windhorn@LSUSA.com> wrote:

>I just bought an antenna analyzer from MFJ, MFJ-269. Seems to work
>pretty well, though I have a little doubt about the accuracy. Anyhow,
>when I bought it from Burghardt, the technician there assured me that
>it included a schematic as part of the manual, but when I got it,
>there wasn't one. Has anyone received a schematic of this device?
>If so, could I possibly get a copy? How about calibration methods.

Calibrate what?
Where is the problem?

use several ohmic resistors, carbon type,
and measure SWR and Rs.
X should be zero at 50 Ohm
if the resistors are HF usable.

use capacitors with known value, etc., use coils.
use cables of known length.

use your brain.
THINK.

w.
--
On the Internet nobody knows that I am a dog.

616. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 20:39:13 UTC
From: jgboyles@aol.com
Message-ID: <20030909163913.24534.00000653@mb-m16.aol.com>
Source record: 108482

>Has anyone received a schematic of this device?
>If so, could I possibly get a copy? How about calibration methods

Allen, As another poster suggested (or demanded), you can check the calibration of the 269 with some standard values of R, L, and C. If it turns out that it does need calibration, then you will need a schematic, and a calibration procedure. W8JI web page has the cal. procedure for the 259B. I don't know how much of that applies to the 269, but they should be very similar. I have not done a cal. on my 259B, but it looks quite involved, there are pages of steps. Not just a matter of tweeking a couple of pots, or just really *thinking* as another poster implied.
73 Gary N4AST

617. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 21:14:41 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <NBGdndqiwdRU38OiU-KYuQ@crocker.com>
Source record: 108483

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0309081713.66b25306@posting.google.com...
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<08GdnQNJmaa5_cGiXTWJkA@crocker.com>...
> > > >
> > >
> > > Please show us if he correctly defines formula (1) and why. And
i'd
> > also
> > > like to see if someone can derive these:
> > >
> > > ai= (Vi+Zi*Ii)/(2*sqrt(Re(Zi))
> > > bi= (Vi-conj(Zi)*Ii)/(2*sqrt(Re(Zi))
> > >
> > > For what he calls the incident and reflected power waves.
> >
> > re-read my reply above until you understand it... (1) is GIVEN, it is
the
> > starting point, he DEFINED ai and bi to be those values... the then goes
on
> > for several paragraphs explaining why he thinks those are better waves
than
> > other types of waves.
>
>
> Well, I certainly didn't expect you to provide the derivation,
> but maybe someone else can.
>
no, no one can derive something that is defined... it is a given. it is the
author's choice to define waves the way he wants, and then to define
whatever he wants to all his reflection coefficient from those waves. that
does not mean it can be generalized to other waves. the waves defined that
result in the normal reflection coefficient happen to be a simple solution
to a second order partial differential equation that results when you
analyze the voltage or current waves in a transmission line.... a different
type of wave, requiring a different reflection coefficient... and never the
twain shall meet!

618. which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 21:49:02 UTC
From: Andy <dx90@blueyonder.co.uk>
Message-ID: <gVr7b.5782$sY3.1469@news-binary.blueyonder.co.uk>
Source record: 108484

Can anyone tell me what is the best 4:1 balun to use with a wire dipole configuration a voltage or current balun?
I want to be able to tune with the FT-1000 MKV Field internal tuner.

Thanks

Andy

619. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 22:02:49 UTC
From: Bud Rogers <budr@netride.net>
Message-ID: <3f5e4e0c_2@nntp2.nac.net>
Source record: 108485

Jeffdeham wrote:

> If you could answer yet another question. How does a autotransformer
> work exactly? I can see how you can tap up and down the coil to hit a
> certain point where you can a 50 ohm match. But when I look at the
> schematic all I see is a coil in parallel with a variable cap. How
> does the autotransformer in essence become a transformer? Or rather
> how does it become the above schematic?

That amounts to two questions that aren't necessarily related. One is how an autotransformer works, the other is how inductance and capacitance can be combined to match an antenna to a feed line.

I'll take a stab at the first question. Think about how a transformer works. If you place two inductances in close proximity, a magnetic field induced in one will induce a current or voltage in the other. By selecting the proper turns ratio between the two inductances, you can transform an AC voltage or current up or down. You can transform high voltage/low current to low voltage/high current or vice versa. Which is another way to say you can transform impedance.

In an autotransformer the same principles apply, but a portion of the inductance is common to both circuits. A voltage applied across the tapped portion of the coil will produce a higher voltage across the whole coil. A voltage applied across the entire coil will produce a proportionately lower voltage across the tapped portion. The current in the tapped portion will be the sum of the currents flowing in the two circuits. Not good if you need isolation, but not an issue if all you want is to transform voltage, current, or impedance. Does that make sense?

On the second question you might be better off to read the antenna matching chapter in any Radio Amateurs Handbook. :}

73 de KD5SZ

620. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 22:29:04 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <Qus7b.30901$S_.3394@fed1read01>
Source record: 108486

Another good reference is at ARRL Site URL:
http://www.arrl.org/tis/info/pdf/9401070.pdf
Titled "Do You Need An Antenna Tuner"

73 From The Signal In The Noise
Caveat Lector Ya All

> > If you could answer yet another question. How does a autotransformer
> > work exactly? I can see how you can tap up and down the coil to hit a
> > certain point where you can a 50 ohm match. But when I look at the
> > schematic all I see is a coil in parallel with a variable cap. How
> > does the autotransformer in essence become a transformer? Or rather
> > how does it become the above schematic?
>
> On the second question you might be better off to read the antenna
matching
> chapter in any Radio Amateurs Handbook. :}

621. Re: which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 22:30:55 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <d6adnW849o06ycOiXTWJiQ@crocker.com>
Source record: 108487

"Andy" <dx90@blueyonder.co.uk> wrote in message
news:gVr7b.5782$sY3.1469@news-binary.blueyonder.co.uk...
> Can anyone tell me what is the best 4:1 balun to use with a wire dipole
> configuration a voltage or current balun?
> I want to be able to tune with the FT-1000 MKV Field internal tuner.
>
> Thanks
>
> Andy
>
>
a 4:1 for a dipole?? all you need is a simple choke, especially if you are
going to have a tuner anyway.

622. sometimes simple works too

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 22:42:52 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <q6lslvooc0gb3k8a63cqv7tu8ccmuna5k9@4ax.com>
Source record: 108488

Nice day for Shortwave propagation especialy from South to North America.

Using a Sony 7600GR and about 75 feet of (one half) speaker zip cord shoved out the window and wrapped half way down the south side of my house and teminated at the far west side in the shape of an L. Only 50 feet of this is outside, the rest is dropped to the radio.

Albiet a tad noisy, it cost next to nothing as I used scrap cable. It beats the whip and 3 different low noise coax antennas hands down.

I heard all these well enough to know who it was. Most well enough to listen to if I understood spanish and portugese...etc. Most are powerhouses with 100-500KW.

How much better might a DX sloper be? Less noise? More sensitivity?

Listening location is on New York/Vermont border with Canada @ 52nd parrallel.

2200 - 2230 UTC

12000.0 VOICE OF TURKEY
12010.0 VOICE OF AMERICA
12025.0 R.HCJB QUITO
12050.0 R.CAIRO
12095.0 BBC LONDON
12160.0 WWCR NASHVILLE
13615.0 WEWN VANDIVER
13670.0 VOICE OF AMERICA
13700.0 R.NEDERLAND
13770.0 WSHB CYPRESS CREEK
13780.0 DEUTSCHE WELLE
13815.0 KAIJ DALLAS
13845.0 WORLD UNIVERS.NETWORK
15110.0 CHINA RADIO INT.
15130.0 WYFR OKEECHOBEE
15155.0 R.NEDERLAND
15220.0 R.JAPAN
15230.0 BSKSA RIYADH
15255.0 R.ROMANIA INT.
15275.0 DEUTSCHE WELLE
15285.0 R.CAIRO
15315.0 R.NEDERLAND
15330.0 R.MARTI
15400.0 BBC LONDON

15410.0 DEUTSCHE WELLE
15440.0 CBS TAIPEI (NN1)
15455.0 R.CANADA INT.
15475.0 CHRISTIAN VISION INT.
15495.0 R.KUWAIT
15580.0 VOICE OF AMERICA
15590.0 KTBN SALT LAKE CITY
15600.0 R.TAIWAN.INT.
15695.0 WYFR OKEECHOBEE
15725.0 WRMI MIAMI
15770.0 WYFR OKEECHOBEE
17595.0 WEWN VANDIVER
17650.0 WHRA GREENBUSH
17680.0 CHRISTIAN VISION INT.
17880.0 R.CANADA INT.

623. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-09 23:11:16 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309091511.6f391822@posting.google.com>
Source record: 108489

kd1@sympatico.ca wrote in message news:<3F5DB1A5.C3FBA01F@sympatico.ca>...
> >
> > Well, there is no phasor notation in your overly simplistic
> > example. So we don't see the forward and reflected waves.
>
> If you follow back through the posts you will find that this
> started with phasors.
>

You wrote:

Let us apply 1 volt to this circuit...
Total impedance
50+j200+0-j200 = 50 ohms
Total current (volts/impedance)
1/50 = .02 A
Voltage across resistor
.02 * 50 = 1 V
Voltage across inductor
.02 * (0+j200) = 4/_ 90 Volts
Voltage across capacitor (the load)
.02 * (0-j200) = 4/_ -90

Now for the check...
Vi = 0.5 V
With classic rho
Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125
Vload = Vi+Vr = 0.5 + 4.031/_ -97.125 = 4/_ -90
The same as computed using circuit theory.

So your Vi is a DC voltage here, not a phasor.

> >
> > Right, but if you are going to compare...how does circuit
> > theory give you Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?
> >
> > This would convince me quite a bit, if you could derive this
> > with circuit theory.
>
> I am unsure what you mean here. The equation Vr = Vi * rho is
> used in both cases. In one, 'revised rho' is used. In the other,
> 'classic rho' is used. The results with 'revised rho' do not
> agree with results from circuit theory. Does this not cast
> some doubt on the validity of 'revised rho'?
>

Circuit theory may be wrong.

You never derived how circuit theory gives you
Vr = 0.5 * 8.062/_ -97.125 = 4.031/_ -97.125?

> >
> > Or not understood.
>
> The questioner possed a question. The answerer provided two answers
> depending on how the question was interpreted. Wath's the problem?
>

The problem is you don't really know the answer either, that's for
certain, but you are responding as if you did.

> >
> > Very nice dancing around the point, Keith!
> >
> > You're more confused than me!
>
> It does seem that I am having some difficulty conveying the concept.
>
> Just because a thing has a name, does not mean the name accurately
> describes the thing.
>

Just because you can use a few fancy RF terms, doesn't mean you
understand them fully.

> >
> > I'll agree that power meters recitify the signal, and actually get
> > a DC voltage from the line. In a certain sense, they are more like
> > RMS voltmeters than power meters.
> >
> > I'd like to see ANY power RC over 1 for a passive network,
> > please show us the circuit to build on the bench!
>
> The passive network you provided in your first post fulfills this
> requirement if you define 'power RC' as |rho|^2.
>

I disagree that the voltage RC will be greater than 1.

The tricky part is measuring this correctly, because you
would need an SWR meter that is calibrated for the same Z as
Zo.

Slick

624. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 00:04:35 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309091604.3bdd10d7@posting.google.com>
Source record: 108490

If you go to w8ji.com
the directions for calibration are well laid out.
These instruments are known to loose their calibration so it
is advisable to make a copy of the instructions.
If you send it back to the manufacturer then it will
be weeks before you get it back and it probably will
not be calibrated correctly anyway.
Have no idea what Helmut is trying to say as there is
not any external adjustments one can use by responding to a
particular measurement, so he is the one to put his thinking
cap on instead of pointing the finger at you !
Good luck
Art

Helmut Wabnig <hXXXwabnig@aXXXon.at> wrote in message
news:<r43slv8jldsgs8u5aor7r1btkap5jhdg3n@4ax.com>...
> On Mon, 08 Sep 2003 18:41:51 GMT, Allen Windhorn
> <Allen.Windhorn@LSUSA.com> wrote:
>
> >I just bought an antenna analyzer from MFJ, MFJ-269. Seems to work
> >pretty well, though I have a little doubt about the accuracy. Anyhow,
> >when I bought it from Burghardt, the technician there assured me that
> >it included a schematic as part of the manual, but when I got it,
> >there wasn't one. Has anyone received a schematic of this device?
> >If so, could I possibly get a copy? How about calibration methods.
>
> Calibrate what?
> Where is the problem?
>
> use several ohmic resistors, carbon type,
> and measure SWR and Rs.
> X should be zero at 50 Ohm
> if the resistors are HF usable.
>
> use capacitors with known value, etc., use coils.
> use cables of known length.
>
> use your brain.
> THINK.
>
>
> w.

625. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 00:35:29 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <llu7b.665$ca3.541@newsread1.news.atl.earthlink.net>
Source record: 108491

Bill:

[snip]
> Are you really serious? Do you really want folks
> to grind through all of this and propose
> counter-arguments, questions, etc?
>
> I suggest most respectfully "enough is enough".
>
> A carefully written QEX article by you on this
> entire subject would be a good idea and a
> permanent part of the literature.
>
> Bill W0IYH
[snip]

Hi Bill...

Well a lot of this material is already a permanent part of the professional literature, in both IEEE Publications and Standards Organizations contributions. Not very accessible to amateurs. And so it seems that others
outside the xDSL industry are not aware of all the work that has gone on with
broadband data transmission over complex Zo transmission lines.

I personally believe that the full duplex transmission of broad band multi-megabit data over several thousand foot multi-pair twisted pair complex Zo cables is one of the most challenging transmission line problems ever tackled by man and solved by modern science and engineering. The several extant solutions to that problem developed by the digital subscriber loop [xDSL] industry certainly makes clear a lot of the transmission issues that are sometimes subjected to fuzzy thinking and discussed loosely on this NewsGroup from time to time.

A few months ago, I posted on here a few items of interest from the detailed measurement and characterization work done world wide by ETSI, ITU and ANSI and documented in ANSI T1E1.4 contributions on the details of the Zo of complex Zo transmission lines, but there seemed to be little interest in such data from the NewsGroup participants who seem to concentrate only upon short lossless, distortionless
50 Ohm lines.

Perhaps the amateur radio community is simply not interested in leading edge advances in communications technologies outside of

the conventional amateur communications techniques.

:-)

I would be willing to write such an article for QEX, however...
not without an invitation to do so. An unsolicted contribution would
be a lot of work on the part of anyone who undertook
such a project and it might all be for naught.

Personally I wouldn't do so without a clear indication from the
editor that such an article could be published. This is simply because
time is valuable and the fear that an unsolicited manuscript might be
be rejected simply because, although interesting, it would be of
little interest to the amateur radio community.

I can however provide professional technical references to anyone
who might have a sincere interest in learning about such things.

--
Peter K1PO
Indialantic By-the-Sea, FL.

626. ground radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 01:15:08 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <wWu7b.31448$875.1258005@twister.tampabay.rr.com>
Source record: 108492

hello everyone
i am thinking about putting up the following antenna
http://www.bloomington.in.us/~wh2t/invertedl.html

and i am wondering how many radials i should put down?
i am in florida so the ground is sand
i plan on driving an 8 foot ground rod directly under the radiation
element and tieing the radials to it and also to the chainlink fence
that runs along the back(100feet) and along one side(50feet)
i was thinking of around 20-25 radials most of them would all be around
30 feet long
so my questions are

1) is there a deminisoning return on the number of radials?

2) is there a high voltage issue connecting to the fence?

3) would there be an increased noise level by tieing into the fence posts?

if you could please reply via email rather than the NG
thanks much

627. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 01:40:08 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <b40tlv4kff23h8n0u72pa45s9mfjh7ulrk@4ax.com>
Source record: 108493

On Mon, 08 Sep 2003 12:59:42 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> As I said, all achievable through references that many here have
>> available to them, but fail to read, or practice at the bench through
>> the angst of low self confidence or being too imbued with the kulture
>> of institutionalized ignorance. There are other sources that approach
>> this problem through more elegant means, but they are equivalent to
>> reaching for the stars when NONE here can pick the fruit from their
>> own orchard.
>
>I tend to deal with these problems on a conceptual level:
>"There's no such thing as a free lunch!" :-)

Cecil, what does a free lunch have to do with rho?

Walt

628. Re: ground radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 01:45:45 UTC
From: "&#65533; StormTrooper &#65533;"
Message-ID: <vlt0ibeg4j8j8c@corp.supernews.com>
Source record: 108494

I just installed a Hustler 5-BTV, and I used 4 1/4 wavelength radials per band (12 ga insulated). The 1st contact I made was a "G", with 100 Watts, and received a 5/8 report. According to the manual, only 2 are actually required, and I also read that someplace else. I'm happy with my installation, your mileage may vary.

"Dennis Kaylor" <k4oxg@tampabay.rr.com> wrote in message news:wWu7b.31448$875.1258005@twister.tampabay.rr.com...
> hello everyone
> i am thinking about putting up the following antenna
> http://www.bloomington.in.us/~wh2t/invertedl.html
>
> and i am wondering how many radials i should put down?
> i am in florida so the ground is sand
> i plan on driving an 8 foot ground rod directly under the radiation
> element and tieing the radials to it and also to the chainlink fence
> that runs along the back(100feet) and along one side(50feet)
> i was thinking of around 20-25 radials most of them would all be around
> 30 feet long
> so my questions are
>
> 1) is there a deminisoning return on the number of radials?
>
> 2) is there a high voltage issue connecting to the fence?
>
> 3) would there be an increased noise level by tieing into the fence posts?
>
> if you could please reply via email rather than the NG
> thanks much
>

629. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 01:57:45 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <hi0tlv4ovm3sf6p2nkhvs8j4sq1paparhc@4ax.com>
Source record: 108495

On 6 Sep 2003 22:21:19 -0700, radio913@aol.com (Dr. Slick) wrote:

>kd1@sympatico.ca wrote in message news:<3F5A95E7.CB53687@sympatico.ca>...
>>
>> But, going back to the original question, wbat is Pfwd and Prev on a
>> line
>> with complex Z0?
>>
>> ...Keith
>
>
> I'd like to know the answer to this question too!
>
> If we are talking about only DISSIPATED power, do we have
>to say P=Vrms**2/Re(Zo)? Taking only the real part of the Zo?
>And if phase doesn't mean anything for power, how can we use a
>complex Zo in the denominator?
>
> And if the Pfrd originates in Zo, Prev is loaded by Zo,
>then even if Zo is complex, can you still not say:
>
> [rho]**2 = power RC? Because the Zo cancels out anyways
>(a ratio)?
>
> ??????????????????????????????????????
>
>
>
>Slick

I've been reading a lot concerning this subject on this NG. It appears to me that a lot of words have been spilt over only an academic issue. The reason is that the loss in coax the we use at HF, or maybe even at MF, is so low as to be insignificant. The voltage/current phase angle becomes significant on the lines we use only at low frequencies in the audio range. If the discussion is only to provide further education on the subject, fine, but some readers might get the impression that a little line attenuation is a worrisome thing.

Walt, W2DU

630. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 02:02:09 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vlt1fipnbl79b7@corp.supernews.com>
Source record: 108496

Peter O. Brackett wrote:
>
>
> A few months ago, I posted on here a few items of interest from the
> detailed measurement and characterization work done world wide
> by ETSI, ITU and ANSI and documented in ANSI T1E1.4
> contributions on the details of the Zo of complex Zo transmission lines,
> but there seemed to be little interest in such data from the NewsGroup
> participants who seem to concentrate only upon short lossless,
> distortionless
> 50 Ohm lines.

Being an RF guy, mostly, I am interested in
complex Z0 values of low loss lines, where
Imag(Z0) is no more than a few percent of
Real(Z0). I use exact equations in a Mathcad
program to get detailed answers. I find this
interesting and useful. The "classical" formula
for rho is quite satisfactory, for me.

Bill W0IYH

631. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 02:13:45 UTC
From: kd1@sympatico.ca
Message-ID: <3F5E88D9.CC22DA32@sympatico.ca>
Source record: 108497

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5DB1A5.C3FBA01F@sympatico.ca>...
> > The passive network you provided in your first post fulfills this
> > requirement if you define 'power RC' as |rho|^2.
>
> I disagree that the voltage RC will be greater than 1.
>
> The tricky part is measuring this correctly, because you
> would need an SWR meter that is calibrated for the same Z as
> Zo.

It is not nearly that tricky. 'Revised' rho, as you state,
predicts 0 Volts across the capacitor. This will be easy to
measure with any AC voltmeter that can handle your test frequency.

I predict, using circuit theory, that if you excite the
test circuit with a 1 Volt sinusoid at a frequency that
makes the impedances j200 and -j200, that you will measure
4 Volts across the capacitor, not 0. This aligns with the
result expected from 'classic' rho.

...Keith

PS Please consider dispensing with the insults. They do not
further the discussion and are quite unbecoming.

632. Re: How does the rainbow tuner work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 04:08:28 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0309092008.699b98df@posting.google.com>
Source record: 108498

Bud Rogers <budr@netride.net> wrote in message news:<3f5e4e0c_2@nntp2.nac.net>...

> In an autotransformer the same principles apply, but a portion of the
> inductance is common to both circuits. A voltage applied across the tapped
> portion of the coil will produce a higher voltage across the whole coil. A
> voltage applied across the entire coil will produce a proportionately lower
> voltage across the tapped portion. The current in the tapped portion will
> be the sum of the currents flowing in the two circuits. Not good if you
> need isolation, but not an issue if all you want is to transform voltage,
> current, or impedance. Does that make sense?

It makes sense now. That's the main question that I wanted answered. I
had a faint notion that was how it worked. You clarified it quite well
for me!

Thanks!

Jeff

633. Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 06:18:21 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309092218.2c535362@posting.google.com>
Source record: 108499

Here is an article on how to cheaply and easily run a wire antenna
using a slingshot, and a fishing pole.

http://groups.yahoo.com/group/SkyWires/message/37

634. Yagi Antenna Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 07:40:08 UTC
From: adahan@vyyo.co.il
Message-ID: <6e55df79.0309092340.74d1382a@posting.google.com>
Source record: 108500

Hello there,

I would like to ask the following please,
1.What is the typically impedance of most popular Yagi antenna?
2.Does transformer is necessery or recommended to achieve best match
any way? (does it depend on the cable length etc)

Regards,

Avihai.

635. Re: ground radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 07:52:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F5ED83B.5F5DED4@cwis.net>
Source record: 108501

Dennis,
In order;

1. Yes, and that 'number' just depends on the conductivity
of the soil, and when you get tired of putting in radials.

2. Not really, but there is an RFI issue. How close is the
fence to a neighbor? Does the neighbor's fence connect to
yours? If the fence is part of the antenna system it radiates,
will your neighbor(s) like having an antenna that close to
their house (depends on the previous answers)?

3. Probably. All contact points of the fence are not 'good'
electrical connections and will change with wind etc. The act
of making/breaking contact makes noise.

Chainlink fencing doesn't make the best ground in the world.
The fence posts vary in how well they are grounded and the fence
it's self isn't grounded well at all. But, it doesn't hurt to
try it and see what happens...
'Doc

636. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 08:10:02 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <BGEa+2HaxtX$EA8O@ifwtech.co.uk>
Source record: 108504

Peter O. Brackett wrote:
>
>I would be willing to write such an article for QEX, however... not
>without an invitation to do so. An unsolicted contribution would be a
>lot of work on the part of anyone who undertook such a project and it
>might all be for naught.
>
>Personally I wouldn't do so without a clear indication from the editor
>that such an article could be published. This is simply because time
>is valuable and the fear that an unsolicited manuscript might be be
>rejected simply because, although interesting, it would be of little
>interest to the amateur radio community.
>
Looking at this from a writer and an editor's point of view (though obviously not speaking for the editor of QEX)...

First of all, QEX is not an academic journal but a technical magazine. The difference is that an academic journal has a guaranteed income from college libraries, and thus can publish material that is stunningly boring, provided only that it's original and of high academic merit.

QEX on the other hand has to earn its living by publishing articles that are *interesting* and *useful* to subscribers. Every single issue will determine whether a substantial fraction of subscribers decide to renew, or not. This cold commercial fact tends to concentrate the editor's mind - and it also improves the quality of articles that he or she chooses to publish.

Editors don't like giving open-ended invitations to writers whose work they don't already know. On the other hand, they love receiving e-mails asking if they'd consider an article on a certain subject. The more professional you are about this, by justifying why that article would be interesting, outlining the topics you'd like to cover, showing that you understand the needs of the magazine, and estimating an overall length that's appropriate to both the topic and the magazine... why, the more they'll like you.

Oh, by the way, that e-mail will also be read as a sample of your writing style...

But even then, no editor will say "Go ahead - you write it, we'll publish it." No self-respecting editor ever *should* say that! The best any author can legitimately expect is an enthusiastic promise to "consider it". It's then up to you to write an article that the editor cannot refuse.

>I can however provide professional technical references to anyone who
>might have a sincere interest in learning about such things.
>
Very few people - even in this learned newsgroup - would be interested in learning about the subject for its own academic sake. But enough people have become intrigued by the topic of complex Zo to feel the foundations of our understanding(?) of transmission lines shifting underneath us. We now need to know which of the formulae and relationships that we've been using are universally correct, and which of them are actually only approximations. An article with that focus really *would* be interesting!

An article really is needed now. Sorry, Walt, we can't go back to sleep - the genie is out of the bottle, and only more understanding (not less) will put it back. Reg's program is not the solution either. I'd trust that particular program all the way, but I also want to understand *why*, and using a program won't show me that.

What's needed here is more like an academic review article. Such articles don't normally contain new, original results. The originality of a good review consists in pulling together existing results from a whole field of study and *explaining* what they mean.

Reviews generally shouldn't go into the same heavy detail as the original references. For this particular topic, the mathematical level of a magazine article would be a make-or-break issue... and another very good reason why editors always say "Show me first." Academic papers tend to deal in high-level general concepts that are already familiar to academic readers, but that is not appropriate for an amateur readership. To emphasize the difference, it's not that amateur readers are stupid (far from it!) but that very few of us have covered this particular academic territory. As an author, don't take us into there unless there's absolutely no other way. If the same results can be obtained using lower-level concepts such as Ohm's and Kirchhoff's laws, then - for this readership - that's how it should be done.

The existence of academic papers would allow you to skip over some of the heavy math, and keep your article interesting and moving forward. For example, it's legitimate in an article of this kind to work with a simplified example of a complex-Zo problem, derive a useful result, and quote a reference that proves (at the expense of much heavier math) that that result is actually a general one. A review-type article is one of the few cases where the notorious "it can be shown that" is actually a legitimate and useful tool to keep your story moving.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

637. Re: ground radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 08:14:59 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <0VSna$ID2tX$EAbe@ifwtech.co.uk>
Source record: 108505

Dennis Kaylor wrote:
>hello everyone
>i am thinking about putting up the following antenna
>http://www.bloomington.in.us/~wh2t/invertedl.html
>
>and i am wondering how many radials i should put down?
>i am in florida so the ground is sand
>i plan on driving an 8 foot ground rod directly under the radiation
>element and tieing the radials to it and also to the chainlink fence
>that runs along the back(100feet) and along one side(50feet)
>i was thinking of around 20-25 radials most of them would all be around
>30 feet long
>so my questions are
>
>1) is there a deminisoning return on the number of radials?
>
>2) is there a high voltage issue connecting to the fence?
>
>3) would there be an increased noise level by tieing into the fence posts?
>
There was an article in August QST about making the best possible use of
a given total length of radial wire.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

638. Re: which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 09:55:06 UTC
From: Andy <dx90@blueyonder.co.uk>
Message-ID: <YxC7b.10493$sY3.9042@news-binary.blueyonder.co.uk>
Source record: 108502

Hi Dave

I am new to all this. I have heard that the tuner might have problems
tunning on all bands if I don't use a 4:1 balun.

Are you saying that I don't need a balun just a choke?

What sort of choke would you reccomend buying for the job?

Thanks

Andy

"David Robbins" <k1ttt@arrl.net> wrote in message
news:d6adnW849o06ycOiXTWJiQ@crocker.com...
>
> "Andy" <dx90@blueyonder.co.uk> wrote in message
> news:gVr7b.5782$sY3.1469@news-binary.blueyonder.co.uk...
> > Can anyone tell me what is the best 4:1 balun to use with a wire dipole
> > configuration a voltage or current balun?
> > I want to be able to tune with the FT-1000 MKV Field internal tuner.
> >
> > Thanks
> >
> > Andy
> >
> >
> a 4:1 for a dipole?? all you need is a simple choke, especially if you
are
> going to have a tuner anyway.
>
>

639. Re: ground radials?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 09:55:26 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjmseeqkq1@hercules.btinternet.com>
Source record: 108503

Den,

All depends on whether soil surface layer is bone-dry, damp or wet sand, and depth of water level if there is any.

The behaviour of an inverted-L antenna above 1 to N shallow-buried radials can be studied with program ENDFEED.

For given antenna dimensions ENDFEED will also calculate the L and C component values of L-match and T-match antenna tuners. Saves experimenting time but takes some of the fun out of it. ;o)

Program EARTHRES estimates ground 'connection' loss resistance for rods, arrays of rods, plates, and from 1 to any number of radials. One rod is fairly useless unless you have a half-wavelength long antenna.

Download these two progs in a few seconds from website below and run immediately.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

"Dennis Kaylor" wrote
>
> and i am wondering how many radials i should put down?
> i am in florida so the ground is sand
> i plan on driving an 8 foot ground rod directly under the radiation
> element and tieing the radials to it and also to the chainlink fence
> that runs along the back(100feet) and along one side(50feet)
> i was thinking of around 20-25 radials most of them would all be around
> 30 feet long
> so my questions are
>
> 1) is there a deminisoning return on the number of radials?
>
> 2) is there a high voltage issue connecting to the fence?
>
> 3) would there be an increased noise level by tieing into the fence posts?
>
> if you could please reply via email rather than the NG
> thanks much
>

640. Seeking tapered tubing 3/8 5/16 1/4

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 12:04:13 UTC
From: Jim Davis <jim.davis51@verizon.net>
Message-ID: <3F5F11CB.48ADFB07@verizon.net>
Source record: 108506

I have not enough aluminum tubing
for making tapered antenna elements :

OD ID (inches)
1/4 3/16
5/16 1/4
3/8 5/16

Where best to acquire more ?

Thanks ... Jim D

641. Re: which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 12:08:12 UTC
From: Ken Bessler <kg0wx@yahoo.com>
Message-ID: <1XKdnWYnFLywicKiXTWJgA@comcast.com>
Source record: 108507

"Andy" <dx90@blueyonder.co.uk> wrote in message
news:YxC7b.10493$sY3.9042@news-binary.blueyonder.co.uk...
> Hi Dave
>
> I am new to all this. I have heard that the tuner might have problems
> tunning on all bands if I don't use a 4:1 balun.
>
> Are you saying that I don't need a balun just a choke?
>
> What sort of choke would you reccomend buying for the job?
>
> Thanks
>
> Andy

Andy - I went through this with the group a few weeks ago. I
wound up winding 9 turns of rg8x coax around a 2-1/2" form
giving a coil with a 2-5/8" diameter (at the centerline of the coax).
I ended up with an inductance of 4.798 uH.

If you made the coil bigger it might be better - some on this
group expressed worries that such a tight coil would have
problems with the center conductor migrating to the inside
of the coil..... I simply used a form that I had.

After winding the coil, I glued it together with superglue,
dusted with baking soda (to set the glue instantly).....

BTW my antenna is a 153'2" dipole, wrapped around a
brick building - the antenna tunes 1.8-30 mhz with a Z11
tuner just fine. The antenna has a 1:1 swr at 2.390 mhz.....

Good luck!

Ken KG0WX

642. Re: Seeking tapered tubing 3/8 5/16 1/4

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 13:55:55 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F5F2B1A.D77619F3@gte.net>
Source record: 108508

Jim Davis wrote:

> I have not enough aluminum tubing
> for making tapered antenna elements :
>
> OD ID (inches)
> 1/4 3/16
> 5/16 1/4
> 3/8 5/16
>
> Where best to acquire more ?
>
> Thanks ... Jim D

Small quantities of 6061-T6 from Wick's Aircraft 800 221 9425.
Perhaps Texas Towers also.

W4OP

643. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 14:30:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <aAG7b.3411$TC1.2392@newsread2.news.atl.earthlink.net>
Source record: 108510

Bill:

[snip]
> Being an RF guy, mostly, I am interested in
> complex Z0 values of low loss lines, where
> Imag(Z0) is no more than a few percent of
> Real(Z0). I use exact equations in a Mathcad
> program to get detailed answers. I find this
> interesting and useful. The "classical" formula
> for rho is quite satisfactory, for me.
>
> Bill W0IYH
[snip]

That's the same approach most xDSL experts take
to complex Zo lines. Mathematical simulations
using say MatLab and such are used for designs.

The telephone twisted pair plant certainly has a
very complex Zo although it has extremely
high loss compared to most RF applications which
I know of.

Typically most lines world wide start out with
an approximate 1500 Ohm design basis. That
is the DC resistance of the lines are aimed at
no more than a DC resistance of 1500 Ohms
end to end. The R, L, C, and G primary parameters
of the line vary quite widely. Especially when
one considers there may be one or more
un removeable bridged taps [transmission line stubs]
floating across the line at unknown locations having
resonances directly in band!

A typical xDSL transceiver has a terminating
resistance of 100 Ohms... thus the transmitters
are attempting to transmit energy into a 100 Ohm
load at the end of 1500 Ohms of DC and even
higher at higher frequencies of loss!

Should the transmitter really be adjusted for
maximum power transfer, i.e. a conjugate
match into the local driving point impedance,
when most of the transmit power will be lost
heating up the line and never reach the load?

How will the poor suffering receiver be able to
copy weak signals from the far end of such
a line in the presence of the enormous QRM
from it's own transmitter blasting away on
the same pair it is listening on?

What kinds of line equalizers [tuners?] are used?
What kinds of echo cancellers are used?
What kinds of modulation are used?
What kinds of coding are used?
What is the bandwidth [bps/Hz] efficiency obtained?

Is any of this advanced technology
applicable to amateur radio of the future?

Is anyone interested?

What?

--
Peter K1PO
Indialantic By-the-Sea, FL.

644. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 14:43:30 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <mMG7b.3422$TC1.2475@newsread2.news.atl.earthlink.net>
Source record: 108511

Ian:

Hey thanks for the thoughtful remarks here below.

I understand and agree with everything you discussed
with the single exception of the word "academic". Being a
published author and reviewer I do understand the demands
of editors. My earlier remarks were meant to be a rhetorical
critique of the "modern" amateur press and it's audience, not a
plea for an editor to invite publications. :-)

Modern technology such as xDSL is in wide use on literally millions of lines
with extremely complex Zo world wide and has been made available
for very feasible prices! This is not academe! Such devices are very
practical,
not academic, and have been developed within the industrial community by
thousands of practicising Engineers not academicians. A lot of this very
advanced
work has been "exposed" in the Standards Committee arenas of ETSI, ITU and
ANSI. And so I consider this wide exploitation of extremely complex Zo
lines
to be practical Engineering and technology and not academic.

In fact apart from John Cioffi's small group of students at Stanford [John,
although
a Stanford professor is an entrepreneur and practicing Engineer] there are
no
members of academe who have made any substantial contributions
to this very practical work.

Thanks again for the comments.

--
Peter K1PO
Indialantic By-the-Sea, FL.

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:BGEa+2HaxtX$EA8O@ifwtech.co.uk...
> Peter O. Brackett wrote:
> >
> >I would be willing to write such an article for QEX, however... not
> >without an invitation to do so. An unsolicted contribution would be a
> >lot of work on the part of anyone who undertook such a project and it
> >might all be for naught.
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> >Personally I wouldn't do so without a clear indication from the editor

> >that such an article could be published. This is simply because time
> >is valuable and the fear that an unsolicited manuscript might be be
> >rejected simply because, although interesting, it would be of little
> >interest to the amateur radio community.
> >
> Looking at this from a writer and an editor's point of view (though
> obviously not speaking for the editor of QEX)...
>
> First of all, QEX is not an academic journal but a technical magazine.
> The difference is that an academic journal has a guaranteed income from
> college libraries, and thus can publish material that is stunningly
> boring, provided only that it's original and of high academic merit.
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> QEX on the other hand has to earn its living by publishing articles that
> are *interesting* and *useful* to subscribers. Every single issue will
> determine whether a substantial fraction of subscribers decide to renew,
> or not. This cold commercial fact tends to concentrate the editor's mind
> - and it also improves the quality of articles that he or she chooses to
> publish.
>
> Editors don't like giving open-ended invitations to writers whose work
> they don't already know. On the other hand, they love receiving e-mails
> asking if they'd consider an article on a certain subject. The more
> professional you are about this, by justifying why that article would be
> interesting, outlining the topics you'd like to cover, showing that you
> understand the needs of the magazine, and estimating an overall length
> that's appropriate to both the topic and the magazine... why, the more
> they'll like you.
>
> Oh, by the way, that e-mail will also be read as a sample of your
> writing style...
>
> But even then, no editor will say "Go ahead - you write it, we'll
> publish it." No self-respecting editor ever *should* say that! The best
> any author can legitimately expect is an enthusiastic promise to
> "consider it". It's then up to you to write an article that the editor
> cannot refuse.
>
> >I can however provide professional technical references to anyone who
> >might have a sincere interest in learning about such things.
> >
> Very few people - even in this learned newsgroup - would be interested
> in learning about the subject for its own academic sake. But enough
> people have become intrigued by the topic of complex Zo to feel the
> foundations of our understanding(?) of transmission lines shifting
> underneath us. We now need to know which of the formulae and
> relationships that we've been using are universally correct, and which
> of them are actually only approximations. An article with that focus
> really *would* be interesting!
>

> An article really is needed now. Sorry, Walt, we can't go back to sleep
> - the genie is out of the bottle, and only more understanding (not less)
> will put it back. Reg's program is not the solution either. I'd trust
> that particular program all the way, but I also want to understand
> *why*, and using a program won't show me that.
>
> What's needed here is more like an academic review article. Such
> articles don't normally contain new, original results. The originality
> of a good review consists in pulling together existing results from a
> whole field of study and *explaining* what they mean.
>
> Reviews generally shouldn't go into the same heavy detail as the
> original references. For this particular topic, the mathematical level
> of a magazine article would be a make-or-break issue... and another very
> good reason why editors always say "Show me first." Academic papers tend
> to deal in high-level general concepts that are already familiar to
> academic readers, but that is not appropriate for an amateur readership.
> To emphasize the difference, it's not that amateur readers are stupid
> (far from it!) but that very few of us have covered this particular
> academic territory. As an author, don't take us into there unless
> there's absolutely no other way. If the same results can be obtained
> using lower-level concepts such as Ohm's and Kirchhoff's laws, then -
> for this readership - that's how it should be done.
>
> The existence of academic papers would allow you to skip over some of
> the heavy math, and keep your article interesting and moving forward.
> For example, it's legitimate in an article of this kind to work with a
> simplified example of a complex-Zo problem, derive a useful result, and
> quote a reference that proves (at the expense of much heavier math) that
> that result is actually a general one. A review-type article is one of
> the few cases where the notorious "it can be shown that" is actually a
> legitimate and useful tool to keep your story moving.
>
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> Editor, 'The VHF/UHF DX Book'
> http://www.ifwtech.co.uk/g3sek

645. Re: Yagi Antenna Impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 14:52:15 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <y32dnRVXZ5s4p8KiXTWJkw@comcast.com>
Source record: 108512

Mosley and some others give up gain and front/back to get around 50 Ohms.
More typical for an antenna designed for decent gain and front/back ratio is
about 20 - 25 Ohms. Generally a beta match, hairpin, or gamma match is used.
You could also use a 2:1 (Impedance, not turns ratio) transformer if you
can find it. A 1/4 wave section of 35 Ohm coax, made up of two pieces of 75
Ohm coax in parallel, might also work.

Note that the transformer and 1/4 wave sections are not adjustable, the
others are.

Tam/WB2TT
"Avihai dahan" <adahan@vyyo.co.il> wrote in message
news:6e55df79.0309092340.74d1382a@posting.google.com...
> Hello there,
>
> I would like to ask the following please,
> 1.What is the typically impedance of most popular Yagi antenna?
> 2.Does transformer is necessary or recommended to achieve best match
> any way? (does it depend on the cable length etc)
>
> Regards,
>
> Avihai.

646. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 14:56:01 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <upyhV3ABuzX$EA6$@ifwtech.co.uk>
Source record: 108419

Peter O. Brackett wrote:
>
>Modern technology such as xDSL is in wide use on literally millions of
>lines with extremely complex Zo world wide and has been made available
>for very feasible prices! This is not academe! Such devices are very
>practical, not academic, and have been developed within the industrial
>community by thousands of practicising Engineers not academicians. A
>lot of this very advanced work has been "exposed" in the Standards
>Committee arenas of ETSI, ITU and ANSI. And so I consider this wide
>exploitation of extremely complex Zo lines to be practical Engineering
>and technology and not academic.
>
Fair point, Peter. Although the theory behind xDSL is still the province of academic journals, this is a good example of theory into practice.

Even if we don't ever use the information within amateur radio purposes, we may well have to deal with problems when it hasn't been implemented correctly; so yes, we do need to know something about it.

The theory of transmission lines with complex Zo is where the two areas, xDSL and amateur radio, touch and maybe overlap just a little. All the more reason for writing an article!

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

647. Re: which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 14:58:41 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Z3edne_ODNm1ocKiXTWJhg@comcast.com>
Source record: 108513

Ken,

I thought you were using a real tuner. Having it work with a 1000MP internal
tuner seems optimistic. What's your SWR on 10m ?

Tam/WB2TT
"Ken Bessler" <kg0wx@yahoo.com> wrote in message
news:1XKdnWYnFLywicKiXTWJgA@comcast.com...
> Andy - I went through this with the group a few weeks ago. I
> wound up winding 9 turns of rg8x coax around a 2-1/2" form
> giving a coil with a 2-5/8" diameter (at the centerline of the coax).
> I ended up with an inductance of 4.798 uH.
>
> If you made the coil bigger it might be better - some on this
> group expressed worries that such a tight coil would have
> problems with the center conductor migrating to the inside
> of the coil..... I simply used a form that I had.
>
> After winding the coil, I glued it together with superglue,
> dusted with baking soda (to set the glue instantly).....
>
> BTW my antenna is a 153'2" dipole, wrapped around a
> brick building - the antenna tunes 1.8-30 mhz with a Z11
> tuner just fine. The antenna has a 1:1 swr at 2.390 mhz.....
>
> Good luck!
>
> Ken KG0WX
>
>
>

648. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 15:26:51 UTC
From: richardharrison@webtv.net
Message-ID: <24059-3F5F42BB-1@storefull-2318.public.lawson.webtv.net>
Source record: 108515

Richard Clark wrote:
"As I said, all achievable through references that many have available to them---."

Richard Clark`s question was:
"A 50-Ohm line is terminated with a load of 200+ j0 Ohms. The normal attenuation of the line is 2.00 decibels. What is the loss of the line?"

The ARRL Antenna Book is a reference designed for radio amateurs and available to many..

(Eq 13) on page 24-9 gives: SWR = R/Zo, or 4 in Richard Clark`s question.

(Fig 13) on page 24-10 gives a reflected power of 36 W from a 4:1 mismatch when 100 W is applied.

(Fig 14) on page 24-11 gives an additional 1.2 dB loss when an SWR of 4 applies to a cable with a matched loss of 2 dB. Total is 3.2 dB loss.

The 19th edition of the "ARRL Antenna Book" eliminates most of the arithmetic needed to calculate loss added by SWR. Just use the convenient figures on pages 24-10 and 24-11.

Next to Terman`s "Radio Engineering", I think the ARRL`s "Antenna Book" is the best reference you can have on your shelf.

Best regards, Richard Harrison, KB5WZI

649. Half square idea

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 15:28:45 UTC
From: Jim Leder <jleder@cinci.rr.com>
Message-ID: <begulvov6r5m57asrupk4gnk8d7td1is0m@4ax.com>
Source record: 108514

Currently I'm using a half square on 20 meters with fair results.
I've been considering building a dual band half square for 17 and 10
meters. My idea is to use plastic coat hangers for the driven element
spreaders (the quarter wave vertical tail) and for the 10 meter
vertical tail, measuring off the proper distance on the phasing line
and dropping the other 10 meter element off of it. The other 17 meter
tail will be at the end of the horizontal phasing line. This means a
common horizontal phasing line instead of a second line for 10 meters
(sharing the same horizontal line). Does this seem like it will work?
Anyone tried it?

650. Re: Reflection Coefficient Smoke Clears a Bit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 17:11:08 UTC
From: richardharrison@webtv.net
Message-ID: <28692-3F5F5B2C-58@storefull-2311.public.lawson.webtv.net>
Source record: 108420

Richard Clark wrote:
"---don`t you think you might want to prove you can turn on a
transmitter and read a meter?"

Reminds me of an experience at a SW broadcast plant many years ago.

I strolled into a transmitter hall and a crowd was assembled around a small 3-5 KW multipurpose transmitter. It had a telephone dial used instruct the the transmitter as to the desired mode and frequency. The transmitter followed the instructions automatically and tuned itsself to accomplish the desired task. It was a low powered machine as that particular hall had (8) 50-KW shortwave broadcast transmitters sharing space with it. We used the little Collins as an orderwire between Portugal and Germany. The crowd was watching as the transmitter was keyed on, then quickly keyed off because the plate current meter pegged.

I weatched several cycles, then told the guys to turn it on and leave it on. An oh no! chorous followed. I replied, "There`s nothing wrong with this transmitter, it`s the meter. You don`t see any sparks in the PA tubes or any trouble other than the pegged meter, do you?" Well no. OK, just do it and I`ll take responsibility for any adverse consequences. The little Collins hit the air and stayed on like a champ, pumping out the MHz without any visible problem save the pegged meter. So, I told the guys to kill it, ground the high-voltage supply, and check the meter and its shunt.

After the shunt was replaced, the plate current indication was normal and no expenses were deducted from my paycheck.The crowd faded away to their normal occupations.

Best regards, Richard Harrison, KB5WZI

651. Auto tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 17:11:20 UTC
From: Gene <multiuseguy@NOSPAMSyahoo.com>
Message-ID: <YWI7b.37384$A%3.483979@ord-read.news.verio.net>
Source record: 108516

Anyone have any experience or comments about using autotuners such as the
Alinco EDX-2 automatic wire antenna tuner or SGC antenna tuners ?

652. Re: Half square idea

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 17:34:15 UTC
From: James <jimbo@nospam.com>
Message-ID: <3F5F6095.20A95D3B@nospam.com>
Source record: 108517

Hi,

Check http://www.cebik.com lots of info on many antenna including
the half squares etc.

jimbo

Jim Leder wrote:

> Currently I'm using a half square on 20 meters with fair results.
> I've been considering building a dual band half square for 17 and 10
> meters. My idea is to use plastic coat hangers for the driven element
> spreaders (the quarter wave vertical tail) and for the 10 meter
> vertical tail, measuring off the proper distance on the phasing line
> and dropping the other 10 meter element off of it. The other 17 meter
> tail will be at the end of the horizontal phasing line. This means a
> common horizontal phasing line instead of a second line for 10 meters
> (sharing the same horizontal line). Does this seem like it will work?
> Anyone tried it?

653. Re: Auto tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 17:43:06 UTC
From: dt <NOSPAM.net>
Message-ID: <e5oulv4im9coa2poa8p2m4i771aaf6op1i@4ax.com>
Source record: 108518

On Wed, 10 Sep 2003 17:11:20 GMT, "Gene"
<multiuseguy@NOSPAMSyahoo.com> wrote:

>Anyone have any experience or comments about using autotuners such as the
>Alinco EDX-2 automatic wire antenna tuner or SGC antenna tuners ?
>

I've used the Icom AH2 (forerunner to AH3 and similar to the SGC &
others) in both mobile and fixed (Field Day) opertation. Mobile using
108" whip, Field Day using random length end-fed wire. The device
autotunes quickly, within a second or so, and makes the rig happy.
Operation results depend on the merits/demerits of the particular
antenna chosen. With short antennas, the tuner sometimes has
difficulty finding a match at 80M (as one would expect), and cannot
operate at 160M. If your antenna/feedline have a complex impedance,
these relay-switched capactor/inductor tuners may not do as well as a
manual one with variable caps and inductors. I also tried feeding
various antennas with coax (instead of single wire feed) and this
particular tuner did not like that. Worked (sometimes) but had
problems with RFI, pickup up digital noises from the rig & car, etc.
Finally, these tuners are generally limited to around 100W. If you
have an application that demands a tuner, 100W power levels, and
signle wire feed (coax feed available on some models) then I would not
hesitate to recommend one. GL & 73
dan (k0dan)
nospamk0dan@arrl.net

654. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 17:53:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <38nulv4cf1jit95olm2iq47o0p6hc3i5l4@4ax.com>
Source record: 108421

On Wed, 10 Sep 2003 10:26:51 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark wrote:
>"As I said, all achievable through references that many have available
>to them---."
>
>Richard Clark`s question was:
>"A 50-Ohm line is terminated with a load of 200+ j0 Ohms. The normal
>attenuation of the line is 2.00 decibels. What is the loss of the line?"
>
>The ARRL Antenna Book is a reference designed for radio amateurs and
>available to many..
>
>(Eq 13) on page 24-9 gives: SWR = R/Zo, or 4 in Richard Clark`s
>question.
>
>(Fig 13) on page 24-10 gives a reflected power of 36 W from a 4:1
>mismatch when 100 W is applied.
>
>(Fig 14) on page 24-11 gives an additional 1.2 dB loss when an SWR of 4
>applies to a cable with a matched loss of 2 dB. Total is 3.2 dB loss.
>
>The 19th edition of the "ARRL Antenna Book" eliminates most of the
>arithmetic needed to calculate loss added by SWR. Just use the
>convenient figures on pages 24-10 and 24-11.
>
>Next to Terman`s "Radio Engineering", I think the ARRL`s "Antenna Book"
>is the best reference you can have on your shelf.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Justifiably good resources, yes, but they do not encompass the
complete problem. You will note that your answer only deals with a
characteristic source Z of 50 Ohms. You will also note that the
remainder of the challenge stipulated what was sought was the loss of
the cable for a characteristic source Z of 100 Ohms.

This first pass evaluation for the standard rig most employ at their
station serves adequately. No one is likely to suffer additional loss
due to their transmitter exhibiting a value very far from 50 Ohms.
Design engineers have done their job well in engineering the finals
deck to meet the commonplace expectation of coax cable (even to the

point of employing their connector's mates at the bulkhead).

The point of the challenge was to illuminate the invalidity of claims that the usual Ham transmitter does NOT exhibit 50 Ohms and that any power returning to it from a mismatched load is reflected fully back toward the load. This notion is absurd on the face of it, as it negates any purpose for tuners following such an illusion of reflection. In other words, if those who maintain this strange thought in the nature of full reflection were to ever sit down at the bench to make this measurement, they would indeed be able to measure an insertion loss greater than the value you present above - that is inescapable logic, and it has not been demonstrated by those same advocates.

Thus, I sit back and enjoy the lethargic contest from those who can boast what the characteristic source Z is not, when they fall into a vacuum of discussion as to what it IS. If it is not 50 Ohms, I have offered two means to prove it and none have stepped up with their data to claim their crown.

The other underlying proof is that the discussion of SWR (of any form) discussed commonly in texts ALL presume that the source characteristic Z matches the line applied to it. After having offered readings from Chipman, I notice another vacuum of discussion. These then validate my charge of a kulture of institutionalized ignorance.

The comedy of it is found in those who rail against my comments diverging from "Truth" and then offer "it doesn't matter as it is not important." Umm, fellows, I pointed that out a long time ago. This topic is only of concern for those who are interested in accuracy. That is generally not the province of the amateur nor typically within the average amateur's means. As I pointed out above, it is not even commercially available (the problem of the mismatched source).

73's
Richard Clark, KB7QHC

655. Re: HF Beam help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 18:12:21 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <9QJ7b.929$zx2.557@newsread1.news.atl.earthlink.net>
Source record: 108422

Derek,

The TB3 was the number for a Swan/Hornet 3 el beam. Mosley would be TA-33
and Hy-Gain is TH3 (I have a TH3 MK III). If its a Swan/Hornet the boom to
mast and element to boom are all cast magnesium and one solid piece with
holes for the boom and element. The TB series used
equal 8 foot spacing. The TB2 had an 8 foot boom the TB3 a 16 foot boom
and the TB4 (TB4H)
and earlier TB-1000-4 had a 24 foot boom.
73 Dave K4JRB

Derek <danda95@hotmail.com> wrote in message
news:2Lo6b.233$mi4.193@newsfep1-gui.server.ntli.net...
> I have just got hold of a TB3 tribander 3ele beam I think it is a mosley
but
> they do not have any instructions for it I intend to put it up as a 2 ele
> can anybody tell me the distance between the driven ele and the reflector
> please
>
>
>
> --
> Derek
> G1NRE / M3NRE
>
>

656. Re: Hf Beam help TB3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 18:15:51 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <rTJ7b.934$zx2.245@newsread1.news.atl.earthlink.net>
Source record: 108423

Jim, K4SQR is right. I too had a TB4H made by Swan and called the
Swan/Hornet beam. They used a simple 8 foot spacing so the TB2 was 8 feet
(driven/reflector), the TB3 was 16 feet and the TB4 was 24 feet.
73 Dave K4JRB

Derek <danda95@hotmail.com> wrote in message
news:LfA6b.8851$Ci1.1561113@newsfep2-win.server.ntli.net...
> I have just got hold of a TB3 tribander 3ele beam I think it is a mosley
but
> they do not have any instructions for it I intend to put it up as a 2 ele
> can anybody tell me the distance between the driven ele and the reflector
> please
>
> --
> Derek
>
>
> --
>
>

657. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 19:01:59 UTC
From: richardharrison@webtv.net
Message-ID: <13355-3F5F7527-80@storefull-2316.public.lawson.webtv.net>
Source record: 108424

Richard Clark wrote:
"The point of the challenge was to illuminate the invalidity of claims that the usual Ham transmitter does NOT exhibit 50 Ohms and that any power returning to it from a mismatched load is reflected fully back toward the load."

The impedance a transmitter presents to a reflection is seldom advertised as far as I know. I think it could be measured.

If a matchbox exists between the transmitter and the line, it may be adjusted to get the most out of the transmitter. If so, this match should prevent a reflection from reaching the transmitter. If the reflection doesn`t reach the transmitter, there is no place else for the reflection to go other than for another go at the load, given low losses in the matching and feeding systems.

Best regards, Richard Harrison, KB5WZI

658. Re: HF Beam help update

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 19:22:15 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <vSK7b.29$wo4.86073@newsfep2-gui.server.ntli.net>
Source record: 108425

"David L Thompson" <thompson@mindspring.com> wrote in message
news:9QJ7b.929$zx2.557@newsread1.news.atl.earthlink.net...
> Derek,
>
> The TB3 was the number for a Swan/Hornet 3 el beam. Mosley would be
TA-33
> and Hy-Gain is TH3 (I have a TH3 MK III). If its a Swan/Hornet the boom
to
> mast and element to boom are all cast magnesium and one solid piece with
> holes for the boom and element. The TB series used
> equal 8 foot spacing. The TB2 had an 8 foot boom the TB3 a 16 foot boom
> and the TB4 (TB4H)
> and earlier TB-1000-4 had a 24 foot boom.
> 73 Dave K4JRB
>
> Derek <danda95@hotmail.com> wrote in message
> news:2Lo6b.233$mi4.193@newsfep1-gui.server.ntli.net...
> > I have just got hold of a TB3 tribander 3ele beam I think it is a mosley
> but
> > they do not have any instructions for it I intend to put it up as a 2
ele
> > can anybody tell me the distance between the driven ele and the
reflector
> > please
> >
> >
> >
> > --
> > Derek
> > > >

The beam is not a TB3 as my friend has a TB3 and I have been to check it
today. The one I have got has only two traps on the driven ele one either
side and so has the driven ele and the reflector the reflector is about
8.100 mtrs long the director is 6.200 mtrs long and the driven ele is up in
the air as a dipole so can not measure that also the traps on the driven ele
are larger. His is a Jaybeam TB3 as I have the leaflet on his
Any ideas????
Derek

659. Re: HF Beam help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 19:50:17 UTC
From: Derek <danda95@hotmail.com>
Message-ID: <o9N7b.594$Cg3.290@newsfep3-gui.server.ntli.net>
Source record: 108434

HF beam Update
The beam is not a TB3 as I was told. a friend of mine has a TB3 and I
have been to check it
today. The one I have got has only two traps on the driven ele one either
side and so has the driven ele and the reflector the reflector is about
8.100 mtrs long the director is 6.200 mtrs long and the driven ele is up in
the air as a dipole so can not measure that also the traps on the driven ele
are larger. His is a Jaybeam TB3 as I have the leaflet on his and that has 4
traps on each element 2 either side
Any ideas????
Derek

"David L Thompson" <thompson@mindspring.com> wrote in message
news:9QJ7b.929$zx2.557@newsread1.news.atl.earthlink.net...
> Derek,
>
> The TB3 was the number for a Swan/Hornet 3 el beam. Mosley would be
TA-33
> and Hy-Gain is TH3 (I have a TH3 MK III). If its a Swan/Hornet the boom
to
> mast and element to boom are all cast magnesium and one solid piece with
> holes for the boom and element. The TB series used
> equal 8 foot spacing. The TB2 had an 8 foot boom the TB3 a 16 foot boom
> and the TB4 (TB4H)
> and earlier TB-1000-4 had a 24 foot boom.
> 73 Dave K4JRB
>
> >
>
>

660. Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 20:07:35 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309101207.4e423700@posting.google.com>
Source record: 108426

Aren't you glad we don't generally have to worry about nonlinearities in the propagation of our waves (through space or along transmission lines)? (Well, maybe you do if you aren't using a reasonable model for your lines...) Following is from an e-newsletter I get:

"Did you know that a wave breaks when the water underneath supporting the wave is only about 1.3 times as deep as the wave is high? When that happens, the water at the crest is moving faster than the water below. Most often, waves break in shallow water near the shore, but waves may also break father off if the wave is high enough."

661. Re: Reflection Coefficient Challenge Solved

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 20:29:39 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <TQL7b.311488$Oz4.100378@rwcrnsc54>
Source record: 108427

I've been in and out of the large number of posts on this subject. My eyes have glazed over at some of the statements. I've deliberately skipped many posts. It seems that much has been made of the following. There are two different reflection coefficients in every transmission line.

The first is the 'normal' reflection coefficient at the intended load.

The second is the 'unstated' reflection coefficient for the reflected wave as it returns to the source.

In reality, a portion of the load reflection is re-reflected by the source back to the load where it is re-reflected back towards the source where it is re-reflected ... ad infinitum.

Others can solved all the equations, define all the terms, recalculate rho(1) and rho(2) [load and source], estimate the effect of line loss on the signals, try to estimate source driving impedance, etc. The fact still remains: there are two reflection coefficients in every transmission line, as seen by the transmission line, one at the load and one at the source. The reflected and re-reflected signals superimpose on one another in a decreasing series as a function of transmission line losses.

This was/is the transmission line physics from 1958 and I presume it is still the physics today.

Deacon Dave, W1MCE

Richard Clark wrote:
> On Wed, 10 Sep 2003 10:26:51 -0500 (CDT), richardharrison@webtv.net
> (Richard Harrison) wrote:
>
>
>>Richard Clark wrote:
>>"As I said, all achievable through references that many have available
>>to them---."
>>
>>Richard Clark`s question was:
>>"A 50-Ohm line is terminated with a load of 200+ j0 Ohms. The normal
>>attenuation of the line is 2.00 decibels. What is the loss of the line?"
>>
>>The ARRL Antenna Book is a reference designed for radio amateurs and
>>available to many..
>>
>>(Eq 13) on page 24-9 gives: SWR = R/Zo, or 4 in Richard Clark`s
>>question.

>>
>>(Fig 13) on page 24-10 gives a reflected power of 36 W from a 4:1
>>mismatch when 100 W is applied.
>>
>>(Fig 14) on page 24-11 gives an additional 1.2 dB loss when an SWR of 4
>>applies to a cable with a matched loss of 2 dB. Total is 3.2 dB loss.
>>
>>The 19th edition of the "ARRL Antenna Book" eliminates most of the
>>arithmetic needed to calculate loss added by SWR. Just use the
>>convenient figures on pages 24-10 and 24-11.
>>
>>Next to Terman`s "Radio Engineering", I think the ARRL`s "Antenna Book"
>>is the best reference you can have on your shelf.
>>
>>Best regards, Richard Harrison, KB5WZI
>
>
> Hi Richard,
>
> Justifiably good resources, yes, but they do not encompass the
> complete problem. You will note that your answer only deals with a
> characteristic source Z of 50 Ohms. You will also note that the
> remainder of the challenge stipulated what was sought was the loss of
> the cable for a characteristic source Z of 100 Ohms.
>
> This first pass evaluation for the standard rig most employ at their
> station serves adequately. No one is likely to suffer additional loss
> due to their transmitter exhibiting a value very far from 50 Ohms.
> Design engineers have done their job well in engineering the finals
> deck to meet the commonplace expectation of coax cable (even to the
> point of employing their connector's mates at the bulkhead).
>
> The point of the challenge was to illuminate the invalidity of claims
> that the usual Ham transmitter does NOT exhibit 50 Ohms and that any
> power returning to it from a mismatched load is reflected fully back
> toward the load. This notion is absurd on the face of it, as it
> negates any purpose for tuners following such an illusion of
> reflection. In other words, if those who maintain this strange
> thought in the nature of full reflection were to ever sit down at the
> bench to make this measurement, they would indeed be able to measure
> an insertion loss greater than the value you present above - that is
> inescapable logic, and it has not been demonstrated by those same
> advocates.
>
> Thus, I sit back and enjoy the lethargic contest from those who can
> boast what the characteristic source Z is not, when they fall into a
> vacuum of discussion as to what it IS. If it is not 50 Ohms, I have
> offered two means to prove it and none have stepped up with their data
> to claim their crown.
>

> The other underlying proof is that the discussion of SWR (of any form)
> discussed commonly in texts ALL presume that the source characteristic
> Z matches the line applied to it. After having offered readings from
> Chipman, I notice another vacuum of discussion. These then validate
> my charge of a kulture of institutionalized ignorance.
>
> The comedy of it is found in those who rail against my comments
> diverging from "Truth" and then offer "it doesn't matter as it is not
> important." Umm, fellows, I pointed that out a long time ago. This
> topic is only of concern for those who are interested in accuracy.
> That is generally not the province of the amateur nor typically within
> the average amateur's means. As I pointed out above, it is not even
> commercially available (the problem of the mismatched source).
>
> 73's
> Richard Clark, KB7QHC

662. Twisting a Stack of Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 20:31:35 UTC
From: ac6la@arrl.net
Message-ID: <960228f1.0309101231.4fb5533f@posting.google.com>
Source record: 108428

I recently sent this off as a letter to the editor of the National Contest Journal. I thought it might be of interest here as well, although [g] I'm afraid it has nothing to do with reflection coefficients.

# # #

In recent issues of the National Contest Journal, Eric Scace K3NA presents a unique way of showing the radiation pattern for an antenna. He runs a model through NEC to generate far field data across a "sky hemisphere" of directions (similar to a 3D pattern) and then uses some post-processor tools to project the far field dBi values onto a flat sheet for display and statistical analysis. Full details are included in the article, which is available on the NCJ web site. (See references below.)

One of the examples included in Part II of the article is a stack of two 20m Yagis, mounted at heights of 50 and 100 feet and separately rotatable. The initial configuration has both Yagis pointed towards Europe, compass bearing 46ï¿½ from the Washington DC area. Then the upper Yagi is rotated counterclockwise and the sky hemisphere pattern is captured at intervals along the way. The final position of the upper Yagi is 90ï¿½ counterclockwise from the lower, compass bearing 316ï¿½ towards Japan.

I thought this example was very interesting and I exchanged several emails with Eric concerning a follow-up. My idea was to twist the stack as Eric had done and show the results in a variety of different ways including 2D plots, 3D plots, and VOACAP area coverage maps.

The original example output is available for downloading but you must have Microsoft PowerPoint to show it, so the first thing I did was to extract a subset of the images and assemble them into an animated gif. The animation shows reduced-size versions of Eric's "Eckert IV" flat projections of the sky hemisphere, representing the top Yagi twisted by amounts of 0ï¿½, 15ï¿½, 30ï¿½, 45ï¿½, 60ï¿½, 75ï¿½, and 90ï¿½. See
www.qsl.net/ac6la/adhoc/twist_scace.html
(You may wish to open this link and the following links in separate browser windows so that you can easily switch from one to another. Note that some browsers do not let you stop a gif animation and some "ad blocker" software will prevent animations from being shown at all.)

Then I imported Eric's NEC format antenna model into the MultiNEC program. MultiNEC has a "Rotate Wire(s)" function and the amount of rotation can be controlled by a variable. I created a series of test

cases with the rotation amount for the top Yagi set to the 0ï¿½ through 90ï¿½ steps mentioned above, and plotted a set of 2D elevation patterns at the azimuth angle representing the initial bearing towards Europe. This shows how the original main beam is degraded as the top Yagi is twisted away. See
www.qsl.net/ac6la/adhoc/twist_2d.html

Next I used the MultiNEC interface to Arie Voor's very nice 4nec2 program. I requested a 3D plot at each twist interval and used the 4nec2 DirectX viewer to show the results, taking care to insure that all the 3D plots used the same scale for color coding and had the same XYZ orientation. In this series of plots the initial bearing of 46ï¿½ towards Europe is towards the lower left corner of the screen. See
www.qsl.net/ac6la/adhoc/twist_3d.html

Finally I used the MultiNEC interface to the VOACAP program to automatically create a series of area coverage maps representing a different twist amount. These maps, like Eric's originals, show results that are projected onto a 2D surface. But in this case the surface is the Earth and the parameter shown is not transmitted signal strength but received signal strength. See
www.qsl.net/ac6la/adhoc/twist_voa.html

All of these animations are just different ways of looking at the same scenario. Each offers different insights.

Dan Maguire, AC6LA
ac6la@arrl.net

References:
1. Eric Scace K3NA, "Antenna Interactions, Parts I and II," National Contest Journal, Jul/Aug and Sep/Oct 2003. Available in pdf format at www.ncjweb.com/bonus.php. The example discussed above is available as a PowerPoint slide show in file 'twisting_open_2_yagis.ppt' (5.92 MB).
2. 4nec2 program, see www.qsl.net/wb6tpu/swindex.html.
3. MultiNEC program, see www.qsl.net/ac6la/. File www.qsl.net/ac6la/adhoc/2stack_Europe.zip contains the 'weq' format (MultiNEC) model for the above scenario. This format preserves all Excel formulas, variable definitions, and test case parameters as well as the wire specifications and other details for a model.

663. Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:08:33 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjo3sh$o8f$1@sparta.btinternet.com>
Source record: 108429

I've been stating John Cleese's 'bleeding obvious' for years but nobody seems to take a scrap of notice.

All the power which leaves the transmitter MUST be dissipated in the load - there's nowhere else for it to go.

(Apart, of course, from the insignificant fraction of an S-unit, even on Roy's meter, which gets lost in the line).

If anybody should mention re-re-re-reflections or power waves, I shall 'squeam' and 'squeam' and 'squeam' as did "Just William" 's 5-year-old pretty little golden-haired girl friend who lived next door.

For the younger generation of US citizens who may not have heard of 12-year old William, he was the middle-class, naughty but well-intentioned, 10-year-old leading character in Richmal Crompton's series of "Just William" books.

Heinkels and Messersmidts, V1's and V2's in the azure blue skies over the sunny green fields and pretty, finished, English villages, where William and friend Ginger enjoyed their schooldays, finally put paid to the English class system of farm-labourers living in tied thatched cottages and the English Country-gentlemen farmers.

Kids now have to be content with porn and football all day on the telly and on most pages of the daily papers while becoming obese gorging Mac's many-layered hamburgers while standing up.

And now, can you believe it, Morse Code is on its way out !

664. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:20:29 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309101320.277d2083@posting.google.com>
Source record: 108430

radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309062121.593cfaba@posting.google.com>...
...
> If we are talking about only DISSIPATED power, do we have
> to say P=Vrms**2/Re(Zo)?

Well, you'll probably find a way to argue about it, but for a long
time a lot of people have been using P=Irms^2*Re(Z). Note that that
equation does NOT tell you where the power actually ends up.

If you want dissipated power in a TEM line, then P=Irms^2*R+Erms^2*G
(at a particular frequency where R and G have fixed values). Since
Irms and Erms are functions of position along the line, P is a
per-unit-length quantity like R and G, and total power is found from
integrating the incremental P over the length of line you're
interested in. Note that Zo isn't directly involved. In fact, if you
do it that way, you don't even need to use uniform line: R and G can
vary with distance along the line, as can L and C. (Knowing the exact
value of Zo DOES NOT give enough information to find the dissipation
in a line, even knowing Irms and Erms at every point along the line.)

If you do THAT instead of worrying your head over rho applied to
power, you'll get the right answers. Use rho, if you wish, to help
you find Irms and Erms along the line. Those right answers are all
self-consistent, and consistent with what's predicted by all the usual
transmission line equations which are all derived from the normal
L,C,R,G TEM model, and it's all verifiable by experiment, if you wish.
Have fun.

Cheers,
Tom

665. Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:34:06 UTC
From: pmolsen@one.net.au
Message-ID: <6ba442b.0309101334.73c4e51a@posting.google.com>
Source record: 108431

In a recent posting "Directional 433 MHz transmit/receive aerial" I asked about improving the reception of a 433.92MHz transmitter/receiver. I was told to "get a 70cm Yagi". I discovered that they are around $179 here in Sydney and I need 3 of them so that ruled out buying them. The next option was to build one. "Simple" everyone said, just look them up on the web. Oh yeah...

After spending 3 or 4 days researching every web site I could find on Yagis and downloading and running every simulation program I could find, I am now more confused that I was to start with (and that is saying something!) I still don't know the difference between dB and SWR (SWR means "South West Roads" here in Sydney), but now I have to try to figure out how to build a Yagi in which every single dimension has 10 possible different values, varying by up to nearly 4" (100mm) and yet every one of them "has to be" within 1-2mm of the "correct" value or it "just won't work".

I also read about a thingy called a balun that matches something with something else but likewise I could find no consensus on whether I needed one or what it should look like.

I did manage to figure out that the dimensions are dependent on things like the thickness of the elements, hollow or solid elements, type of boom (metallic or non-conducting), type of DE (straight or folded dipole), and I did learn that they are supposedly scalable, so to convert from a 450MHz to 433.92 I multiply all dimensions by 433.92/450. But even comparing like for like and doing the conversions, I could still not find any two specifications that were even close to the same.

Most sites agreed that the elements get progressively shorter but several sites had the directors longer than the Ref and DE. The only value that everyone agreed on was that the Reflector is 0" from itself! So how on earth (especially in the absence of a SWR meter) do I decide which of the 10 different values for each other measurement is correct? I am not going to buy the Amateur Radio Handbook just to find the answer, given that this is probably my one and only foray into the mysterious world of radio antenna theory and given that it will simply give me an 11th opinion.

What I tried to compare in my research was Yagi's that had a non-metallic boom, folded dipole DE and in the range 430-450 MHz. The possible values (in mm) I found for the various measurements were as follows. Even though they are often for slightly different frequencies and element thickness, etc. even allowing for scaling they still are nowhere near a consensus position:

Ref length: 330, 336, 338, 340, 342, 343, 349, 400
DE length: 267, 280, 320, 325, 327, 328, 330
DE height: 8, 10, 12, 15, 25, 38
DE position from Ref: 64, 114, 115, 120, 127, 130, 138, 140, 146
D1 length: 299, 300, 303, 305, 312, 313, 315, 318
D1 position: 140, 142, 181, 185, 192, 222, 235
D2 length: 284, 295, 298, 305, 306, 308
D2 position: 286, 292, 304, 310, 341, 385, 406, 455

...AAAAAAAAAAAArrrrrrrrrrrrrrrrrrrrggggggggggggggggggggggg!!!!!!

Here are the web sites that I gleaned the above jumble of results
from:

http://www.clarc.org/Articles/uhf.htm
http://www.ifwtech.co.uk/g3sek/diy-yagi/dubus/bvo70.htm
http://www.ilstu.edu/~rtmansb/Handitenna.htm
http://home.t-online.de/home/df8gh/handitenna.htm
http://members.aol.com/k5oejerry/handi-tenna.htm
http://users.skynet.be/on1dht/schemas/uhf4el.gif
http://www.qsl.net/w4sat/antlegn.htm
http://www.qsl.net/ok1cdj/dj9bv70.pdf
http://www.ifwtech.co.uk/g3sek/diy-yagi/dipoles.htm
http://www.tfs.net/~petek/rockets/RDF/70ant.html

Here are the simulation programs I downloaded and ran:
Yagicad 4.1
Yagi Analysis 3.54
Yagimax 3.11
DL6WU Antenna Design Program

I actually plan to use a 20mm plastic tube boom and 5mm aluminium rod
for the elements. Before I go completelh nuts can someone please
enlighten me on what dimensions I should use, or does this just
confirm that all this stuff really is "black magic".

666. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:41:49 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <u4ZM1xXdq5X$Ewql@pickmere.demon.co.uk>
Source record: 108435

In message <3200347.0309101207.4e423700@posting.google.com>, Tom Bruhns
<k7itm@aol.com> writes
>Aren't you glad we don't generally have to worry about nonlinearities
>in the propagation of our waves (through space or along transmission
>lines)? (Well, maybe you do if you aren't using a reasonable model
>for your lines...) Following is from an e-newsletter I get:

But propagation is non-linear through the ionosphere. The velocity
varies with the electron density. Otherwise the wave wouldn't bend.

Mike
--
M.J.Powell

667. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:47:13 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <BZM7b.33815$875.1377322@twister.tampabay.rr.com>
Source record: 108432

i dont know why you cant seem to find what your looking for other than
your not wording the search right
below is a few 70cm yagis you can build they should do as you wish keep
in mind most of these will be figured for 440mhz or 432mhz but it doesnt
take a rocket scienciest to tune it to the freq you need

http://www.clarc.org/Articles/uhf.htm

http://www.arrl.org/tis/info/Yagi-V.html

http://members.aol.com/n2kbk/quagi.html

http://www.6mt.com/432tech.htm

let me know if you need more

668. Re: MFJ 269 schematic?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 21:58:24 UTC
From: Allen Windhorn <Allen.Windhorn@LSUSA.com>
Message-ID: <u3cf4gva1.fsf@LSUSA.com>
Source record: 108433

aunwin@insightbb.com (Art Unwin KB9MZ) writes:

> If you go to w8ji.com
> the directions for calibration are well laid out.
> These instruments are known to loose their calibration so it
> is advisable to make a copy of the instructions.
> If you send it back to the manufacturer then it will
> be weeks before you get it back and it probably will
> not be calibrated correctly anyway.

Thanks -- in fact someone pointed me to a calibration procedure on the
mfr's website which I had not noticed. Still want a schematic though.

73
Allen
--
Allen Windhorn (507) 345-2782 FAX (507) 345-2805
Kato Engineering (Though I do not speak for Kato)
P.O. Box 8447, N. Mankato, MN 56002
Allen.Windhorn@LSUSA.com

669. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 22:06:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vlv83k694o229a@corp.supernews.com>
Source record: 108436

Geez, I'm glad too. It must happen only on certain frequencies. Just t'other day I was listenin to th' Chicken Band, and all these guys was yellin "Breaker! Breaker!". . . And sure enough, there was all this splatter. . .

Roy Lewallen, W7EL

Tom Bruhns wrote:
> Aren't you glad we don't generally have to worry about nonlinearities
> in the propagation of our waves (through space or along transmission
> lines)? (Well, maybe you do if you aren't using a reasonable model
> for your lines...) Following is from an e-newsletter I get:
>
> "Did you know that a wave breaks when the water underneath
> supporting the wave is only about 1.3 times as deep as the
> wave is high? When that happens, the water at the crest is
> moving faster than the water below. Most often, waves break
> in shallow water near the shore, but waves may also break
> father off if the wave is high enough."

670. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 22:18:16 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <I6M7b.28710$mp.12886@rwcrnsc51.ops.asp.att.net>
Source record: 108437

Physics people worry about 'non-linearities' all the time.

A recent article in QST has an EHF article where the author[s] had to worry about leafs, tree leaves, interfering, absorbing, and scattering their signals.

We worry about HF signals as we model the ground characteristics underneath our antennas. The dielectric term causes a phase shift in the image plane similar to an index of refraction.

Asan RF signal is intercepted by a wire there are boundary conditions that must be satisfied at the wire/EM interface. Really GREAT PHYSICS.

The 'non-linearities' are there. We, being practical people [I hope], just ignore them.

BTW, the 'non-linearities' are not really non-linear. They are boundary conditions at an EM/EM interface in two or more different materials.

Tom Bruhns wrote:

> Aren't you glad we don't generally have to worry about nonlinearities
> in the propagation of our waves (through space or along transmission
> lines)? (Well, maybe you do if you aren't using a reasonable model
> for your lines...) Following is from an e-newsletter I get:
>
> "Did you know that a wave breaks when the water underneath
> supporting the wave is only about 1.3 times as deep as the
> wave is high? When that happens, the water at the crest is
> moving faster than the water below. Most often, waves break
> in shallow water near the shore, but waves may also break
> father off if the wave is high enough."

671. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 23:01:27 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vlvbea3m764r3c@corp.supernews.com>
Source record: 108438

Nontheless Maxwell's Equations remain linear.
73, H.
NQ5H

"M. J. Powell" <mike@pickmere.demon.co.uk> wrote in message
news:u4ZM1xXdq5X$Ewql@pickmere.demon.co.uk...
> In message <3200347.0309101207.4e423700@posting.google.com>, Tom Bruhns
> <k7itm@aol.com> writes
> >Aren't you glad we don't generally have to worry about nonlinearities
> >in the propagation of our waves (through space or along transmission
> >lines)? (Well, maybe you do if you aren't using a reasonable model
> >for your lines...) Following is from an e-newsletter I get:
>
> But propagation is non-linear through the ionosphere. The velocity
> varies with the electron density. Otherwise the wave wouldn't bend.
>
> Mike
> --
> M.J.Powell

672. Re: Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 23:17:18 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnblvc7s.15br.bit-bucket@localhost.config.com>
Source record: 108439

On Wed, 10 Sep 2003 21:08:33 +0000 (UTC), Reg Edwards hath writ:
> I've been stating John Cleese's 'bleeding obvious' for years but nobody
> seems to take a scrap of notice.
>
> All the power which leaves the transmitter MUST be dissipated in the load -
> there's nowhere else for it to go.

Well, of course -- when you realise that *EVERYTHING* past the
output tank on the xmitter _is_ the load for the xmitter.
The first coax connector (if any), the xmission line(s), the
tuner (if in-line), any add'l coax connectors, the matching lash-up
at the antenna (if any), and finally -- taaaa-Daaa -- The Antenna.

> And now, can you believe it, Morse Code is on its way out !

And, so, too, are microphones and speakers!!
A good percentage of the amateurs I meet now-a-days do not
own a microphone -- nor a speaker. Many hams have never
actually _spoken_ to another ham except at a swapfest (rally)
or a club meeting. sigh.....

I have given up honking a "HI" at another call letter plate.
Now-a-days what I usually get in return is a 1-finger salute.

73
jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | config.com | DM68mn SK

673. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 23:21:15 UTC
From: jgboyles@aol.com
Message-ID: <20030910192115.03265.00000556@mb-m11.aol.com>
Source record: 108440

>Nontheless Maxwell's Equations remain linear.
>73, H.
>NQ5H

Transmission of EM waves as predicted by Maxwell is linear, and the propagation of these waves through the ionosphere is non-linear. Sounds good to me.
73 Gary N4AST

674. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 23:36:53 UTC
From: Qwikshot <qwikshot@fuse.net>
Message-ID: <3f5fb5af$0$12613$a0465688@nnrp.fuse.net>
Source record: 108441

Hey Peter, besides driving yourself nuts! BUY the ARRL Hand Book. You will learn a lot from it.

675. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-10 23:38:05 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vlvdj0aag7cs54@corp.supernews.com>
Source record: 108442

Timely thoughts, as I'm building relativistic particle detectors utilizing Cherenkov radiation.
The usual comparison of Cherenkov to the sonic shock wave is only partially useful, as the electromagnetic phenomenon is linear.
Propagation "non-linearities" do not produce radiation at another frequency and are in fact chromatic aberrations.
A non-linearity would produce radiation at new frequencies.
73, H.
NQ5H

"JGBOYLES" <jgboyles@aol.com> wrote in message news:20030910192115.03265.00000556@mb-m11.aol.com...
> >Nontheless Maxwell's Equations remain linear.
> >73, H.
> >NQ5H
>
> Transmission of EM waves as predicted by Maxwell is linear, and the propagation
> of these waves through the ionosphere is non-linear. Sounds good to me.
> 73 Gary N4AST

676. Crank up mast homebrew plans??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 00:04:41 UTC
From: antennas@yahoo.com
Message-ID: <e8be44e3.0309101604.18173e31@posting.google.com>
Source record: 108443

Anyone have plans to make a homebrew version of a crank up mast? I can get some round tubing and want to make a crank up mast support out of it. I have seen some round crank up masts so I thought I would have a go at building one. Anyone have some plans for such a beast??
Andrew VE8AE

677. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 00:15:06 UTC
From: Martin <marty123@optonline.net>
Message-ID: <e8P7b.141731$Ay2.31921371@news4.srv.hcvlny.cv.net>
Source record: 108444

"Walter" <junkmail@altonillinois.com> wrote in message
news:70729ae5.0309092218.2c535362@posting.google.com...
> Here is an article on how to cheaply and easily run a wire antenna
> using a slingshot, and a fishing pole.
>
> http://groups.yahoo.com/group/SkyWires/message/37

Amazing! Amazing, that is, that there has actually been a recent patent
issued
on the slingshot-spinning reel combination: U.S. 6,286,495; filed on
8/2/02!

I used this idea as far back as 1966, copied from other hams who used it
before I did. And in 1990 I built one identical to the one they're selling.
See the ad for EZ Hang on the www.qrz.com site.

Marty K1FHR

678. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 00:29:56 UTC
From: XL5 <xl5@yahoo.com>
Message-ID: <3f5fc206_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 108445

Ooohhhh the insult !! To put you straight, same PC different people posting!
As for high performance if you are the bench mark then the rest of us must
be classed as super efficient!

<� StormTrooper ?> wrote in message
news:vlrah4ao1jvt08@corp.supernews.com...
> Hummmmm, looks like Neil and XL5 post from the same account! Who would
have
> thought.
>
> From: "Neil" <g0jhc@blueyonder.co.uk>
> NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com
> From: "XL5" <xl5@yahoo.com>
> NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com
>
> MFJ products are junk. Read the reviews on e-Ham sweetheart. You know very
> little about High Performance, and ZERO about posting on Usenet.
>
>
> "XL5" <xl5@yahoo.com> wrote in message
> news:3f5d1c09$1_2@mk-nntp-1.news.uk.worldonline.com...
> >
> > <? StormTrooper ?> wrote in message
> >
> > MFJ, and high performance should not be used in the same sentence.
> >
> >
> > "Unlike Dickhead and StormTrooper" !!!
> >
> >
> >
> >
>
>

679. Re: which 4:1 Balun to use

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 01:46:21 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <dgkvlvgudhvp6648cb2u66v3evkr4fppqd@4ax.com>
Source record: 108509

On Wed, 10 Sep 2003 10:55:06 +0100, "Andy" <dx90@blueyonder.co.uk>
wrote:

>Hi Dave
>
>I am new to all this. I have heard that the tuner might have problems
>tunning on all bands if I don't use a 4:1 balun.
>
>Are you saying that I don't need a balun just a choke?
>
>What sort of choke would you reccomend buying for the job?

From the ARRL Antenna Book, for a 3.5-30 mhz choke, coil a 10 foot
section of coax into 7 turns, and tape them together rope-style (this
is for rg-8, 58, 59, 8x or 213).

Bob
k5qwg

>
>Thanks
>
>Andy
>
>
>"David Robbins" <k1ttt@arrl.net> wrote in message
>news:d6adnW849o06ycOiXTWJiQ@crocker.com...
>>
>> "Andy" <dx90@blueyonder.co.uk> wrote in message
>> news:gVr7b.5782$sY3.1469@news-binary.blueyonder.co.uk...
>> > Can anyone tell me what is the best 4:1 balun to use with a wire dipole
>> > configuration a voltage or current balun?
>> > I want to be able to tune with the FT-1000 MKV Field internal tuner.
>> >
>> > Thanks
>> >
>> > Andy
>> >
>> >
>> a 4:1 for a dipole?? all you need is a simple choke, especially if you
>are
>> going to have a tuner anyway.
>>
>>
>

680. Re: MFJ-1792 80/40m Vertical Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 01:50:55 UTC
From: "&#65533; StormTrooper &#65533;"
Message-ID: <vlvl7vn3mpkne2@corp.supernews.com>
Source record: 108446

OMG, we have a "Sybil" in the group.

Who will you be tomorrow? XL10?

Yeah, I'd guess you're about as efficient as your MFJ Antenna. ROTFL.....

Now, get off of mommy's PC, and get to school. You don't want to be late, ya know.

"XL5" <xl5@yahoo.com> wrote in message
news:3f5fc206_3@mk-nntp-1.news.uk.worldonline.com...
> Ooohhhh the insult !! To put you straight, same PC different people posting!
> As for high performance if you are the bench mark then the rest of us must
> be classed as super efficient!
>
>
> <&#65533; StormTrooper &#65533;> wrote in message
> news:vlrah4ao1jvt08@corp.supernews.com...
> > Hummmmm, looks like Neil and XL5 post from the same account! Who would
> have
> > thought.
> >
> > From: "Neil" <g0jhc@blueyonder.co.uk>
> > NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com
> > From: "XL5" <xl5@yahoo.com>
> > NNTP-Posting-Host: dial-62-64-235-181.access.uk.tiscali.com
> >
> > MFJ products are junk. Read the reviews on e-Ham sweetheart. You know very
> > little about High Performance, and ZERO about posting on Usenet.
> >
> >
> > "XL5" <xl5@yahoo.com> wrote in message
> > news:3f5d1c09$1_2@mk-nntp-1.news.uk.worldonline.com...
> > >
> > > <&#65533; StormTrooper &#65533;> wrote in message
> > >
> > > MFJ, and high performance should not be used in the same sentence.
> > >
> > >
> > > "Unlike Dickhead and StormTrooper" !!!
> > >
> > >
> > >

> >
> >
>
>

681. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 01:53:16 UTC
From: pmolsen@one.net.au
Message-ID: <6ba442b.0309101753.473fa1f@posting.google.com>
Source record: 108447

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<BZM7b.33815$875.1377322@twister.tampabay.rr.com>...
> i dont know why you cant seem to find what your looking for other than
> your not wording the search right

Finding them is not the problem. Finding two that come even close to
giving the same dimensions is the problem (apart from ones that are
obvioulsy direct copies of a design on another site.)

I have already been to all the sites you listed and numerous others.
In fact the first one you listed is the same as the first one I
listed. The second one is no good because you have to be a member to
access any details. The third one is a quagi not a yagi and the 4th
one is one of those funny bow-tie types.

682. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 02:09:11 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309101809.81e1710@posting.google.com>
Source record: 108448

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309101320.277d2083@posting.google.com>...
> radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309062121.593cfaba@posting.google.com>...
> ...
> > If we are talking about only DISSIPATED power, do we have
> > to say P=Vrms**2/Re(Zo)?
>
> Well, you'll probably find a way to argue about it, but for a long
> time a lot of people have been using P=Irms^2*Re(Z). Note that that
> equation does NOT tell you where the power actually ends up.
>

Well, the Re(z) part makes a bit of sense.

> If you want dissipated power in a TEM line, then P=Irms^2*R+Erms^2*G
> (at a particular frequency where R and G have fixed values). Since
> Irms and Erms are functions of position along the line,

I would dissagree with this last statement. The root mean square
is a type of averaging (not really just the average though), so how
could it be a function of position??

Slick (GArvin)

683. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 02:26:05 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <bjomftdia0@208.206.142.100>
Source record: 108449

Cecil Moore wrote:

> Dick Carroll; wrote:
> > Well stated. Some authorities insist that grounding a tower/building just attracts
> > lightning, but that hasn't been the case here. After some 20 years of standing on this
> > hilltop, my 60 ft Rohn25 with 10 feet of mast and a 5/8 wave two meter vertical topping
> > that still hasn't been hit, though several times I sure thought it had, from the
proximity
> > of the strike.
>
> And in 50 years of ungrounded antennas, mine have never been hit
> even though I have lived in some of the highest lightning areas.
>
> As an aside: I have an antenna farm on my lot. The last thing lightning
> hit was a five foot tall live oak tree, the shortest thing on my lot.
> Lightning is like a 400 pound gorilla. Where does a 400 pound gorilla
> go? Anywhere it wants. The fact that there is a difference of opinion
> among experts about lightning only proves how puny human efforts are
> in the face of Mother Nature.

I still believe it to be self-evident that lightning is only serving nature's balance by seeking to neutralize charge. How it does that seems to me to be by following the path of least
resistance/lowest impedance. The 30 years I worked around communications installations using
tall (+-300 ft) towers were revealing. Some sites never get struck while others get it every
time a cloud comes along.
Obviiously how the electronic gear fares depends mostly on how well it is all planned out in
advance..

Dick

684. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 02:28:45 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309101828.f2e80dd@posting.google.com>
Source record: 108450

kd1@sympatico.ca wrote in message news:<3F5E88D9.CC22DA32@sympatico.ca>...
> >
> > The tricky part is measuring this correctly, because you
> > would need an SWR meter that is calibrated for the same Z as
> > Zo.
>
> It is not nearly that tricky. 'Revised' rho, as you state,
> predicts 0 Volts across the capacitor. This will be easy to
> measure with any AC voltmeter that can handle your test frequency.
>

Perhaps, but i'm interested in the forward and reflected
waves, which you can only get with directional couplers on a line of
the same Z as the Zo, i suspect. So even if you get 0 volts, there
are still fwd and rev waves.

> I predict, using circuit theory, that if you excite the
> test circuit with a 1 Volt sinusoid at a frequency that
> makes the impedances j200 and -j200, that you will measure
> 4 Volts across the capacitor, not 0. This aligns with the
> result expected from 'classic' rho.
>
> ...Keith
>
> PS Please consider dispensing with the insults. They do not
> further the discussion and are quite unbecoming.

Go ahead and bench test it, and let us know what you find.

Slick

685. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 03:17:13 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <vlvqac3r37sr23@corp.supernews.com>
Source record: 108451

Most of the references you found most likely are giving you correct and accurate numbers. The "ART" of antenna design is just that an art. When you workup an antenna the variables are element length and element spacing. The art is in adjusting these variables to achieve the results you are looking for. I will not attempt to describe the iterations you must go through to get it right, that's what the various texts are for. Get the ARRL or RSGB books, either or both. The ARRL Antenna Book is one of the best.

Good luck
Dave Nagel WD9BDZ

Peter wrote:
> Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<BZM7b.33815$875.1377322@twister.tampabay.rr.com>...
>
>>i dont know why you cant seem to find what your looking for other than
>>your not wording the search right
>
>
> Finding them is not the problem. Finding two that come even close to
> giving the same dimensions is the problem (apart from ones that are
> obvioulsy direct copies of a design on another site.)
>
> I have already been to all the sites you listed and numerous others.
> In fact the first one you listed is the same as the first one I
> listed. The second one is no good because you have to be a member to
> access any details. The third one is a quagi not a yagi and the 4th
> one is one of those funny bow-tie types.

686. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 03:39:30 UTC
From: dplatt@radagast.org
Message-ID: <vlvrjife2f8lb8@corp.supernews.com>
Source record: 108452

>news:<BZM7b.33815$875.1377322@twister.tampabay.rr.com>...
>> i dont know why you cant seem to find what your looking for other than
>> your not wording the search right
>
>Finding them is not the problem. Finding two that come even close to
>giving the same dimensions is the problem (apart from ones that are
>obvioulsy direct copies of a design on another site.)

Why should this be a problem?

Yagi-Uda antennas are complex beasts, due to the interactions between the various elements. There is no single "best" design for all uses... different designs are optimized for different parameters. If you try to push the optimization quite hard in favor of one design factor (e.g. maximum forward gain, or maximum front/back ratio) you're likely to pay a price in terms of sub-optimal behavior in other parameters (e.g. very narrow SWR bandwidth).

Many older Yagi-Uda designs were done by cut/try/measure methods. More recent designs often take advantage of modern computer modelling and optimization techniques, and can vary significantly from the older designs. I would imagine that most (almost all?) of the published designs meet their design goals pretty well, despite the differences in the details of their construction.

Want a simple, direct-coaxial-attachment Yagi with a 50-ohm feedpoint impedance? You can have one. Want a Yagi with a narrower element spacing and lower feedpoint impedance which is conveniently matched using a double-parallel-quarter-wave section of RG59? You can have that, too. Want a ultra-short-beam Yagi to fit on a small roof and not stick out into the neighbor's trees? You can have that, too. These three different Yagi antennas will look rather different from one another, since they're optimized for different goals.

So, you ought to first decide what you want, in an antenna... what the importance of the various design parameters are. Then, choose a decent design tool and go at it! Even better, try two or three different design tools, and see how the resulting antennas model out.

Finally, build the darned thing, get on the air, and don't sweat that last dB or so of gain or F/B ratio. "The best, is often the enemy of the good" - if you focus too hard on having the Ultimate (Yagi, or car, or whatever) you're likely to miss the pleasure of having a good one to use, much sooner.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

687. Re: Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 04:27:06 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <uQS7b.268$%G3.243@newsread2.news.atl.earthlink.net>
Source record: 108453

Reg:

[snip]
> And now, can you believe it, Morse Code is on its way out !
[snip]

What!

Say it isn't so...

--
Peter K1PO
dah di dah

688. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 04:45:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjoul8$409$1@hercules.btinternet.com>
Source record: 108454

Somebody said -

> > > The tricky part is measuring this correctly, because you
> > > would need an SWR meter that is calibrated for the same Z as
> > > Zo.

==========

No problem !

The fixed standard arm of the rho bridge (instead of a 50-ohms resistor) can be just a very long length of transmission line of input impedance Zo = Ro+jXo which, of course, varies with frequency in exactly the required manner.

Or, as I often did 50 years back, make an artificial lumped-LCR line simulating network to any required degree of accuracy.

Reg

689. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 05:19:07 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjp0kb$5m1$1@hercules.btinternet.com>
Source record: 108455

> I would dissagree with this last statement. The root mean square
> is a type of averaging (not really just the average though), so how
> could it be a function of position??
>
==========

No problem - the two voltages (from which we calculate the two power
levels) are referred to two points spaced apart by 1/4-wavelength.

But there's still a complication. Do these two calculated (not measured)
power levels occur simultaneously? Or because of propagation delay are they
spaced in time? This may make a mess of overall power budgets and so-called
conservation of energy checks.

In all these arguments only Cecil's TV-picture echos take TIME into account.
And where there are reflections time is at least as important as frequency.

Reg.

690. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 05:33:27 UTC
From: richardharrison@webtv.net
Message-ID: <21820-3F600927-73@storefull-2315.public.lawson.webtv.net>
Source record: 108456

Tom Bruhns wrote:
"If you want dissipated power in a TEM line, then P = Irms^2*R +
Erms^2*G (at a particular frequency where R and G have fixed values)."

Sure. Total loss is the sum of the series and shunt losses.

Tom also wrote:
"Since Irms and Erms are functions of position along the line, P is a
per-unit-length quantity like R and G and total power is found by
integrating the incremental P over the length of the length of the line
you are interested in."

Yes. Loss is a dB per 100 ft. quantity and loss is cumulative over its length. But, I wouldn`t worry about the volts and amps produced by SWR. The forward and reflected waves don`t oscillate in value. Only their interference pattern does that and it is of no consequence. The forward and reflected waves are smoothly attenuated by "alpha", the attenuation constant, which is a function of frequency.

Alpha has the same value for the incident and reflected waves, but though the dB per 100 ft is the same for a wave traveling in either direction on the line, the reflected wave is likely much smaller than the incident wave, and the loss produced by the reflected wave will be much smaller too. The total loss is the sum of the losses produced by the incident and reflected waves. As was shown yesterday, the ARRL Antenna Book has charts to determine the added loss caused by standing waves (actually caused by the reflected power that produces SWR). These convenient charts almost eliminate arithmetic in determining additional loss to be expected given the SWR.

Best regards, Richard Harrison, KB5WZI

691. Re: Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 05:57:29 UTC
From: richardharrison@webtv.net
Message-ID: <21820-3F600EC9-75@storefull-2315.public.lawson.webtv.net>
Source record: 108458

Marvin Jones, W3DHU wrote:
"Now-a-days what I usually get in return (to hi beeped on the claxon) is
a 1-finger salute."

I`ve been lamenting not buying a bumper sticker seen in San Francisco
last week: "SIGNALS OUT - WATCH FOR FINGER!"

Best regards, Richard Harrison, KB5WZI

692. Complex Z0 - Power : A Proof [Rejected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 06:13:21 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjp3q2$q9i$1@nic.grnet.gr>
Source record: 108457

Unfortunately enough
my proof on this subject is
Wrong and rejected.

Obviously,
the relation

-Tan(|t0|) + Sqrt(Tan(|to|)^2 + 1) =
= Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]

is *not* an identity
but an equation one,
which has probably
only the zero as solution
in the [-45 , 45] degrees
interval of Zo Argument.

For example,
put to = 45 degrees
to get the result

-1 = 1

But further,
it is not just this.

The whole matter of the validation of
the Principle of Conservation of Energy
_at_any_point_
of a
Uniform Transmission Line with Complex Z0,
has to be put under investigation,
starting,
once again,
from the beginning.

I am terribly sorry for any inconvenience.

Sincerely,

pez
SV7BAX

P.S.
As it seems this year,
our Summer holidays
have to be extended...
d;^)

"pez" <pez7sv@hotmail.com> wrote in message news:bjbbdn$a26$1@nic.grnet.gr...
| Complex Z0 - Power : A Proof
| [Please use fixed-space font]
|
| It seems that
| a proof has been carried out
| for the validation
| of the so-called
| Principle of Conservation of Energy
| "P.C.E"
| in any point of a Transmission Line
| with a Complex characteristic impedance,
| which is terminated at any passive load.
|
| But,
| I have to make an appeal
| for some patience...
|
| [1]
| ---
| Let
| the Characteristic Impedance
|
| Zo = Ro + j Xo
|
| and the Gamma
|
| g = a + j b
|
| [2]
| ---
| At the Terminal Load
|
| Zt = Rt + j Xt
|
| a "Reflection Coefficient"
| is defined by
|
| pt = (Zt - Zo)/(Zt + Zo)
| pt = |pt|.Exp(j tt)
|
| On the load
| the Average Power
| "Wt"
| is expressed as
| [*]
|
| Wt = k.T
|
| where k > 0 is a constant
| and

|
| T = 1 - |pt|^2 + j (Xo/Ro)(pt - pt*)
|
| [3]
| ---
| With direct substitution of
| Zt and Zo in the last one
| and after
| _enough_but_straightforward_
| algebraic manipulation,
| which it is impossible to be reproduced here,
| we have for the
| Average Power at the Terminal Load
|
| [Wt >= 0] <=> [T >= 0] <=> [Rt >= 0]
|
| This is an important partial result
| which proves that
| P.C.E. is valid
| on any passive terminal load
| of a Transmission Line with complex Zo.
|
| [4]
| ---
| Now,
| at any other point on the Transmission Line
| at a distance d from the Terminal Load,
| a "Reflection Coefficient" is introduced from
|
| pd = pt.Exp(-2.g.d)
| [*]
|
| and the following are defined
|
| Zd = (1 + pd)/(1 - pd)
| pd = (Zd - Zo)/(Zd + Zo)
| pd = |pd|.Exp(j td)
|
| and the relation
|
| |pd| = |pt|.Exp(-2.a.d)
|
| holds between the two
| Reflection Coefficients
|
| [5]
| ---
| As in above [2],
| the Average Power at any point at distance d is
|

| Wd = k.D
|
| where
|
| D = 1 - |pd|^2 + j (Xo/Ro)(pd - pd*) =>
| D = 1 - Exp(-4.a.d).|pt|^2 - 2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td)
|
| Obviously,
| P.C.E. holds,
| if and only if
|
| D >= 0
|
| or equivalently
|
| 2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 1 - Exp(-4.a.d).|pt|^2
|
| [6]
| ---
| But, we have
|
| 0 < Exp(-4.a.d) =< 1
|
| and
|
| 0 =< |pt|^2
|
| therefore
|
| Exp(-4.a.d)|pt|^2 =< |pt|^2 =>
| -|pt|^2 =< -Exp(-4.a.d)|pt|^2
|
| and finally
|
| 1 - |pt|^2 =< 1 - Exp(-4.a.d).|pt|^2
|
| Hence,
| for P.C.E validation,
| it is sufficient to prove
|
| 2(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 1 - |pt|^2
|
| But, in addition, we have
| for the maximum value of the left part
|
| 0 < Exp(-2.a.d) =< 1
| Sin(td) =< 1
| (Xo/Ro) =< |Xo|/Ro
|
| and therefore the left part

| has the relation,
| to its maximum value
|
| 2.(Xo/Ro).Exp(-2.a.d).|pt|.Sin(td) =< 2.(|Xo|/Ro).|pt|
|
| [7]
| ---
| Consequently,
| it is sufficient to prove
|
| 2.(|Xo|/Ro).|pt| =< 1 - |pt|^2
|
| or
|
| |pt|^2 + 2.(|X0|/R0).|pt| -1 =< 0
|
| (Note:
| (Probably,
| (this is possible
| (with a direct substitution,
| (as in [3]
|
| This is a 2nd degree polynomial in |pt|
| with roots:
|
| |pt|- = -|Xo|/Ro - Sqrt(|Xo|^2/Ro^2 + 1) < 0
| |pt|+ = -|Xo|/Ro + Sqrt(|Xo|^2/Ro^2 + 1) > 0
|
| After that,
| the P.C.E. is valid at any point
| if and only if
| the "Reflection Coefficient"
| at the terminal load is
| lower than or equal to the positive root
|
| 0 =< |pt| =< |pt|+
|
| But
|
| |Xo|/Ro = Tan(|to|)
|
| where tO is the argument of Zo, so
|
| |pt|+ = -Tan(|to|) + Sqrt(Tan(|to|)^2 + 1)
|
| After some trigonometric manipulation
| the identity
| can be proved
|
| -Tan(|t0|) + Sqrt(Tan(|to|)^2 + 1) =

| = Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]
|
| Therefore,
| the P.C.E. is valid,
| at any point,
| if and only if
| the "Reflection Coefficient"
| at the Terminal Load is
|
| |pt| =< Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]
|
| But this is a relation,
| which has been already proved
| in the Thread
|
| "Complex Z0 [Corrected]"
|
| QED
| I hope,
| but,
| as any other time
| d;^)
| your comments are welcomed!
|
| Sincerely,
|
| pez
| SV7BAX
|
| [*]
| ---
| e.g. Chipman, 1968, p.138
|

693. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 06:26:35 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <kBU7b.21672$os2.302353@news2.e.nsc.no>
Source record: 108459

> But propagation is non-linear through the ionosphere. The velocity
> varies with the electron density. Otherwise the wave wouldn't bend.
>

This is not nonlinearity, it is refraction: velocity varies with location in the medium.

Nonlinearity is if the velocity varies with the amplitude of the wave. Like in acoustics where the positive (high-pressure) peaks propagate faster than the negative peaks. It leads to waveform distortion and creation of harmonics. The modern cardiology ultrasound scanners (< 5 years old) usually default to this mode these days, transmitting ultrasound at about 3 MHz, receiving at 6 MHz, as it gives better image quality than the fundamental mode.

Sverre
www.qsl.net/la3za

694. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 06:45:19 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309102245.6a1e8041@posting.google.com>
Source record: 108460

radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309101809.81e1710@posting.google.com>...
> k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309101320.277d2083@posting.google.com>...
...
> > If you want dissipated power in a TEM line, then P=Irms^2*R+Erms^2*G
> > (at a particular frequency where R and G have fixed values). Since
> > Irms and Erms are functions of position along the line,
>
>
> I would dissagree with this last statement. The root mean square
> is a type of averaging (not really just the average though), so how
> could it be a function of position??

Well, not surprising. You seem to dissssagree with just about
everything...

The RMS is of course an average, "the square root of the mean
[average] squared value...," but it's a time average, not a position
average. There is an RMS current associated with every point along
the line, and because of standing waves, it's not the same everywhere.
Similarly with RMS voltage. If you wish, you can use instantaneous
current and voltage and integrate over time as well, but that's just
performing the RMS function. Putting it another way that's even
easier to see, would you expect the RMS current in my refrigerator
power cord to be the same as in my blender power cord? Clearly, RMS
current CAN be a function of location. And with standing waves, or
with attenuation along the line, or both, it SHOULD be pretty clear
that it can be a function of position along a TEM line.

695. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 07:27:47 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjp85kfj1@nic.grnet.gr>
Source record: 108461

Dear Mr. Roy Lewallen,

Thank you very much for the details.

Now,
I would like to acknowledge that
after a one-by-one symbol comparison I made
between the two power formulas,
the one corrected by you and the mine,
I discovered,
beyond to be equivalent,
a fact which was lacked my attention,
since I had packed the two phase factors,
in the _notorious_ third term,
under a common symbol td.

Namely,
following your symbolization for convenience,
we have

From the 2nd article by you

| ...
| <UP> = <fop> - <rap> + (|fee|^2 / |Z0|) * rhea * exp(-ax) *
| 2 * sin(box - 2 * phi) * sin(delta)
| ...
|

and in conjunction with the 1st article by you

| ...
| Interestingly, the right hand term also goes to zero when
| box - 2 * psi = n * 180, where n is any integer including zero.
| That means that,
| even when Z0 is complex, the average total power will be the
| difference between fP and rP at particular points along the line, or at
| the input end of particular line lengths.
| ...

we can conclude that
this is a most interesting correct result, indeed.

But I am afraid
this difference
has its chances to be a negative number.

And
if this is the case
then,
as we can see,
we are running in big troubles...

Sincerely yours,

pez
SV7BAX

P.S.
Please remember to send me the lossless case.
I look forward for it.

| Roy Lewallen wrote:
| ...
| You've been the only one to show any interest so far. If one other
| person requests it, I'll post it. Otherwise, I'll email it to you.
| ...

696. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 08:17:48 UTC
From: richardharrison@webtv.net
Message-ID: <24056-3F602FAC-205@storefull-2318.public.lawson.webtv.net>
Source record: 108463

Rich, K2CPE wrote:
"My first contact with mine (large horizontal loop) was on 20 m to Tierra del Fuego at the southern tip of Argentina (5 watts ssb, got a 5x5 sig report!)."

That`s great performance. It helps that Tierra del Fuego is cold and quiet. I made 2 triops there and spent a total of more than a year there on the Argentine side of the island about 40 years ago.

I was able to listen to a Houston MW 740 KHz station during Hurricane Carla on my little Hitachi transistor radio which was about the size of a package of cigarettes. This does not mean that Rich`s 20m contact wasn`t special. Ionospheric conditions were probably much different on separate occations so widely separated in time. Dan Rather came in loud and clear on 740 KHz from about 1/3 the distance around the globe. I was very interested in what the hurricane was doing in my absence.

The MUF was pretty high when I was in Tierra del Fuego because when I connected a 5W Motorola 33 MHz FM walkie talkie to a vertical dipole at about 20 ft I raised a Midland, Texas oilfield supply company.

I put up a rhombic on the island to communicate with an Argentine public correspondence station which operated between 80 m and 40 m near Buenos Aires. The post office in Rio Grande on the Island had a BC-610 that they used to contact that station, Radio Pacheco, near Buenos Aires. Our transmitter was a Hallicrafters HT-20, surplus from our Bolivian oilfield operations. It had been replaced with a Collins 30K-5. We needed our own radio contact with Buenos Aires because the post office on the island closed during the frequent postal worker strikes.

When we gave Radio Pacheco a call and told them we were calling from Tierra del Fuego, they were incredulous. The rhombic was really rattling their cans.

The only ham active at the time on Tierra del Fuego was Padre Munoz who presided over the local mission. He tried to use equipment in nearly all cases identical with ours to assure a source of replacements for anything that failed. We had Land Rovers. Padre Munoz got a Land Rover for himself. Same with radios, etc. He was a wise old guy.

My assistant was a nuclear physicist but there was no work for his specialty at the time in Argentina. So he accepted a job in the oil patch working with electronics. He was a ham after all and had an excellent scientific preparation. His name was Alex Eusler. Don`t know where he is now or what he is doing. Hope he is doing great things with atoms.

If Bill happened to contact someone on Tierra del Fuego who was using something like the rhombic erected there 40 years ago, he might expect good communications. Its gain at 20m is likely 15 or 20 dBd in the direction of the USA. Even a dipole isn`t bad as evidenced by my Midland, Texas contact. I was probably right at the MUF at the time, and Bill was probably well below the MUF on 20m at the time he made his contact with Tierra del Fuego. His contact was probably much harder to make and keep working if he were far below the MUF at the time.

Best regards, Richard Harrison, KB5WZI

697. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 08:41:24 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjpcfl$44p$1@nic.grnet.gr>
Source record: 108462

Dear Mr. Reg Edwards,

Thank you for your suggestion of the software
at http://www.g4fgq.com

As it seems there is a lot of interesting programs there
and I would like to ensure you
I will try to find
some time to study their function.
But for the moment,
I restrict myself to tell you
how much I enjoy your collection of quotations!

| As with all human endeavour, hardware or software, Reliability is Quality
| versus Time.

As of the book by Chipman:

Okay, you have right.
I do admit it is not an error free one,
as we had the opportunity to found it.
But "in my humble opinion" at the same time
is a distinguish one
for is honesty, therefore a rare one,
by a man who wrote in details
his life working experiences.

In present days
when we have
"to look for a needle in a straw"
to find something reliable
between this tremendously advertised
stack of written garbage
by young ambitious graduates,
any comparison of these with the book by Chipman
is undoubtedly, by no discussion, in favour of him!

All right after that.
Lets say that his book is something
lesser than one of the greatest books in any subject...

| I wonder if the old timer is still
| around?

Me too.

Sincerely yours,

pez
SV7BAX

P.S.
And at the bottom line,
what is it
any
book?
Is it something more than
the opinion of its author?

698. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 09:13:44 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjpec9$5ld$1@nic.grnet.gr>
Source record: 108464

Dear Mr. Richard Clark,

Thank you for the encouragement and your kind words.
but I am not so sure that we deserve them (*).

Yes, you have absolute right about the initials, etc.
But this became the motivation
to discover, with a great deal of surprise I admit,
that someone has given a bunch
of inaccurate details to this site.
We do not have something to hide
therefore we certainly do not belong to those
with an extremely sensitive interest
on private data.
But I have to wonder:
is there any responsibility
by the site owner
to guard the amateurs' personal data
from anybody's will?

Finally,
I do share your point of view for the length of a message
and I try to keep them as short as possible
but anyhow,
take a look please
on their rejection (*)
in the related thread
of our lengthy, indeed, derivations...

do;^)

Sincerely yours,

pez
SV7BAX

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:queplvknt6vf38lc2dcjkbcobsuq1mcal0@4ax.com...
| On Mon, 8 Sep 2003 08:16:34 +0300, "pez" <pez7sv@hotmail.com> wrote:
|
| >P.S.
| >Permit me please to correct you on that:
| >It is not "his work" but "her work".
|
| Hi,
|

| I am at a loss for the equivalent to OM in your regard, and initials
| do mask you further. I should have been able to surmise this
| essential difference from your listing on Buckmaster.
|
| Another essential difference is that you performed the work that
| others simply meander around in the hopes of being mistaken as
| workers.
|
| Myself, I cannot task myself to publish complete derivations for two
| reasons. One, very few here are here to resolve anything but a
| sagging ego - hence the lack of standards in maintaining a progressive
| dialog. Two, I abide by a maxim that if one cannot express the key
| argument to the limited confines of one screen, then that argument
| lacks focus. I hope you do not take this as a diminution of your
| work, but more as a statement of stylistic variation. Keep up your
| effort, you are doing well.
|
| 73's
| Richard Clark, KB7QHC

699. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 09:23:06 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjpetr$64l$1@nic.grnet.gr>
Source record: 108465

Dear Mr. Cecil Moore,

I have already express my point of view
on this matter in another thread so
I can't do something more than to repeat a part of it, here:

-
| But when there is such a steadfast loyalty
| to the existence of some kind of
| "interference"
| between two,
| rather clearly distinct waves,
| the incident and the reflected one,
| it is difficult for anybody
| to compromise himself and accept
| that the same two waves,
| so clearly distinct until now,
| when are coming along a line with complex Z0,
| have to bear in addition
| some kind of
|"interaction".
| -
| Very difficult, indeed.
-

Needless to say it,
but
I imply that I am the very one
who find it very difficult.

Sincerely yours,

pez
SV7BAX

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f5d0c60$1_1@corp.newsgroups.com...
| pez wrote:
| > Dear Mr. Roy Lewallen, There is no doubt
| > your numerical example is a correct one.
|
| What about Roy's refusal to superpose like terms? With only
| two directions in a transmission line, it is impossible for
| there to exist a "third term" when there's no third possible
| direction.
| --

| 73, Cecil http://www.qsl.net/w5dxp
|
|
|
| -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
| http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
| -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

700. Re: Placement of elements along boom (EMC)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 09:35:14 UTC
From: agulesin@hotmail.com
Message-ID: <62155ce7.0309110135.c2e94b0@posting.google.com>
Source record: 108466

Many thanks to all who contributed to this thread, I visited the Lab again today and realised that they have corrected the mistake! :)

I don't know if it's because of my insistence, or that they just couldn't get it to work properly, but to see a result is pleasing!

More power to your (collective) elbow!

701. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 09:46:11 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjpg94$78t$1@nic.grnet.gr>
Source record: 108467

Dear Mr. Roy Lewallen,

Yes!
I do most agree.

"Superposition"

is the definitely right word for this concept
resulting by the summation of all the [2 + (1 + 1)] terms,
and I think that
we can attempt a further distinction to two parts

"Interference"

which is expressed by the summation of the first 2 terms

and

"Interaction"

by the (1 + 1) "third term".

I have to acknowledge your contribution
-once again...-
to build a very meaningful,
at least to me,
categorization
which I intend to use it extensively.

After all
it is at least
a support to comprehension.

Sincerely yours,

pez
SV7BAX

"Roy Lewallen" <w7el@eznec.com> wrote in message news:vlcqra6l3r1ga6@corp.supernews.com...
| Johnson uses the same term of "interaction" to describe the origin of
| the extra power term. However, you can hopefully see from the analysis I
| posted that only ordinary superposition of the forward and reverse
| voltage and current waves is necessary for the term to appear. So I
| don't feel that "interaction" is entirely appropriate. The extra term
| actually is a result of the calculation of average power. I've said many
| times that it's risky to abandon the time information in the power
| waveform and deal only with averages. If the voltage and current in each
| wave aren't in phase with each other, there are components of the total

| VI product that add together but don't show up in the averages of the
| individual forward and reverse average powers. There's no mystery or
| true "interaction" involved. The "problem" lies simply in calculating
| average "forward power" and "reverse power" separately, throwing away
| all time related information, then expecting them to add or subtract to
| get the total.
|
| Roy Lewallen, W7EL
|
| pez wrote:
| > -
| > "The Third Term"
| > -
| > Roy Lewallen wrote:
| > -
| > | No, the average Poynting vector points toward the load.
| > | Power leaves the line and enters the load, as it should.
| > | ...
| > | I imagine your problem
| > | with the solution is your notion that
| > | the total average power
| > | is the difference between the
| > | "forward power" and "reverse power".
| > |
| > | But it's not.
| > |
| > | I gave the equation showing what the total power
| > | is, and as you can see,
| > | there's a third term involved.
| > | When this is
| > | taken into consideration, you see that there's a net power flow out of
| > | the line into the load, as there should be.
| > | ...
| > -
| > As usually,
| > Mr. Roy Lewallen,
| > points the right direction.
| > And this time,
| > it is of:
| > -
| > "The Third Term".
| > -
| > In the whole of the book by R.A.Chipman,
| > a phrase, less than a printed line,
| > is proved enough to cause a major upset:
| > -
| > "The third term
| > on the right
| > represents interaction
| > between the two waves."

| > -
| > But when there is such a steadfast loyalty
| > to the existence of some kind of
| > "interference"
| > between two,
| > rather clearly distinct waves,
| > the incident and the reflected one,
| > it is difficult for anybody
| > to compromise himself and accept
| > that the same two waves,
| > so clearly distinct until now,
| > when are coming along a line with complex Z0,
| > have to bear in addition
| > some kind of
| > "interaction".
| > -
| > Very difficult, indeed.
| > -
| > Sincerely,
| > -
| > pez
| > SV7BAX
| > -
| >
|
"Roy Lewallen" <w7el@eznec.com> wrote in message news:vlcqra6l3r1ga6@corp.supernews.com...
| Johnson uses the same term of "interaction" to describe the origin of
| the extra power term. However, you can hopefully see from the analysis I
| posted that only ordinary superposition of the forward and reverse
| voltage and current waves is necessary for the term to appear. So I
| don't feel that "interaction" is entirely appropriate. The extra term
| actually is a result of the calculation of average power. I've said many
| times that it's risky to abandon the time information in the power
| waveform and deal only with averages. If the voltage and current in each
| wave aren't in phase with each other, there are components of the total
| VI product that add together but don't show up in the averages of the
| individual forward and reverse average powers. There's no mystery or
| true "interaction" involved. The "problem" lies simply in calculating
| average "forward power" and "reverse power" separately, throwing away
| all time related information, then expecting them to add or subtract to
| get the total.
|
| Roy Lewallen, W7EL
|
| pez wrote:
| > -
| > "The Third Term"
| > -
| > Roy Lewallen wrote:
| > -

| > | No, the average Poynting vector points toward the load.
| > | Power leaves the line and enters the load, as it should.
| > | ...
| > | I imagine your problem
| > | with the solution is your notion that
| > | the total average power
| > | is the difference between the
| > | "forward power" and "reverse power".
| > |
| > | But it's not.
| > |
| > | I gave the equation showing what the total power
| > | is, and as you can see,
| > | there's a third term involved.
| > | When this is
| > | taken into consideration, you see that there's a net power flow out of
| > | the line into the load, as there should be.
| > | ...
| > -
| > As usually,
| > Mr. Roy Lewallen,
| > points the right direction.
| > And this time,
| > it is of:
| > -
| > "The Third Term".
| > -
| > In the whole of the book by R.A.Chipman,
| > a phrase, less than a printed line,
| > is proved enough to cause a major upset:
| > -
| > "The third term
| > on the right
| > represents interaction
| > between the two waves."
| > -
| > But when there is such a steadfast loyalty
| > to the existence of some kind of
| > "interference"
| > between two,
| > rather clearly distinct waves,
| > the incident and the reflected one,
| > it is difficult for anybody
| > to compromise himself and accept
| > that the same two waves,
| > so clearly distinct until now,
| > when are coming along a line with complex Z0,
| > have to bear in addition
| > some kind of
| > "interaction".

```
| > -
| > Very difficult, indeed.
| > -
| > Sincerely,
| > -
| > pez
| > SV7BAX
| > -
| >
|
```

702. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 10:10:48 UTC
From: kd1@sympatico.ca
Message-ID: <3F604A28.345E6A4@sympatico.ca>
Source record: 108468

"Dr. Slick" wrote:
>
> k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309101320.277d2083@posting.google.com>...
> > radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309062121.593cfaba@posting.google.com>...
> > If you want dissipated power in a TEM line, then P=Irms^2*R+Erms^2*G
> > (at a particular frequency where R and G have fixed values). Since
> > Irms and Erms are functions of position along the line,
>
> I would dissagree with this last statement. The root mean square
> is a type of averaging (not really just the average though), so how
> could it be a function of position??

Consider a slotted line used to measure voltages for the computation
of VSWR. The measured voltage varies with position along the line
(assuming the line is not terminated by Z0). This voltage is the
Erms in the example above. Current behaves similarly.

...Keith

703. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 10:28:22 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vm0jmnsa194ibe@corp.supernews.com>
Source record: 108370

a patent?
I'm gonna puke!
how ludicrous, next they'll patent throwing a rock........
"Martin" <marty123@optonline.net> wrote in message
news:e8P7b.141731$Ay2.31921371@news4.srv.hcvlny.cv.net...
>
> "Walter" <junkmail@altonillinois.com> wrote in message
> news:70729ae5.0309092218.2c535362@posting.google.com...
> > Here is an article on how to cheaply and easily run a wire antenna
> > using a slingshot, and a fishing pole.
> >
> > http://groups.yahoo.com/group/SkyWires/message/37
>
> Amazing! Amazing, that is, that there has actually been a recent patent
> issued
> on the slingshot-spinning reel combination: U.S. 6,286,495; filed on
> 8/2/02!
>
> I used this idea as far back as 1966, copied from other hams who used it
> before I did. And in 1990 I built one identical to the one they're
selling.
> See the ad for EZ Hang on the www.qrz.com site.
>
> Marty K1FHR
>
>
>
>
>

704. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 10:28:36 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309110228.bc87b51@posting.google.com>
Source record: 108369

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309102245.6a1e8041@posting.google.com>...
> radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309101809.81e1710@posting.google.com>...
> > k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309101320.277d2083@posting.google.com>...
> ...
> > > If you want dissipated power in a TEM line, then P=Irms^2*R+Erms^2*G
> > > (at a particular frequency where R and G have fixed values). Since
> > > Irms and Erms are functions of position along the line,
> >
> >
> > I would dissagree with this last statement. The root mean square
> > is a type of averaging (not really just the average though), so how
> > could it be a function of position??
>
> Well, not surprising. You seem to dissssagree with just about
> everything...
>

As well i should, and so should you. If someone didn't disagree with
me, i would not be aware of the conjugate rho equation.

If we never debated, and always agreed, we would assume that we know
everything...which would be absolutely wrong! The Earth would still be
flat and such...

> The RMS is of course an average, "the square root of the mean
> [average] squared value...," but it's a time average, not a position
> average. There is an RMS current associated with every point along
> the line, and because of standing waves, it's not the same everywhere.

You need to talk to Cecil about this (my God, am I typing this?)!
I don't consider the forward and reflected voltage RMS values to be
zero at a minimum node of infinite SWR!

> Similarly with RMS voltage. If you wish, you can use instantaneous
> current and voltage and integrate over time as well, but that's just
> performing the RMS function. Putting it another way that's even
> easier to see, would you expect the RMS current in my refrigerator
> power cord to be the same as in my blender power cord? Clearly, RMS
> current CAN be a function of location. And with standing waves, or
> with attenuation along the line, or both, it SHOULD be pretty clear
> that it can be a function of position along a TEM line.

But you need to separate the forward and reflected voltage waves from the constuctive or destructive interference at one point, if you wanna calculate the average forward and reflected powers.

Slick

705. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 11:38:48 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <M4Z7b.9848$D82.6932@bignews6.bellsouth.net>
Source record: 108371

Walmart:

One (1) 5.95 Slingshot
One (1) 3.95 or less if on sale, Cheap fishing reel with line
Two (2) (.39) Tiny radiator hose clamps
One Pack (1.99) 1oz. teardrop lead fishing weight
One (1) can Spray Orange Paint (to color lead weight)
One (1) Screwdriver (no cost...from my toolbox)

TADA !!! My version of EZ Hand....works just as good..

Mitch KD4HTW

"H. Adam Stevens" <solo@totalaccess.net> wrote in message
news:vm0jmnsa194ibe@corp.supernews.com...
> a patent?
> I'm gonna puke!
> how ludicrous, next they'll patent throwing a rock........
> "Martin" <marty123@optonline.net> wrote in message
> news:e8P7b.141731$Ay2.31921371@news4.srv.hcvlny.cv.net...
> >
> > "Walter" <junkmail@altonillinois.com> wrote in message
> > news:70729ae5.0309092218.2c535362@posting.google.com...
> > > Here is an article on how to cheaply and easily run a wire antenna
> > > using a slingshot, and a fishing pole.
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> > > http://groups.yahoo.com/group/SkyWires/message/37
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> > Amazing! Amazing, that is, that there has actually been a recent patent
> > issued
> > on the slingshot-spinning reel combination: U.S. 6,286,495; filed on
> > 8/2/02!
> >
> > I used this idea as far back as 1966, copied from other hams who used it
> > before I did. And in 1990 I built one identical to the one they're
> selling.
> > See the ad for EZ Hang on the www.qrz.com site.
> >
> > Marty K1FHR
> >
> >
> >
> >
> >
> >
>

>

706. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 12:02:11 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <7vZ7b.46027$Mb2.1468293@twister.tampabay.rr.com>
Source record: 108372

peter
i dont understand your problem
all you have to do is pick one of the samples i send you and create the
antennas from the design make 3 or 4 of them and make them all alike
from one set of plans and you will be fine i would suggest building
something like the 432mhz one cause its closer to the freq you need
good luck
the next issue you will have is where to get the stuff to make the antenna

707. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 12:56:10 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309110456.cd5168d@posting.google.com>
Source record: 108373

the $100 price tag may reflect the money spent on filing the patent.

I've never used one, but I think I would prefer the fishing pole
method anyway. If for no other reason than it doesn't cost you so
much.

http://groups.yahoo.com/group/SkyWires/message/37

708. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 13:08:57 UTC
From: Jim Leder <jleder@cinci.rr.com>
Message-ID: <cps0mv840il9qv5fjni9a9b8ecaru5iv74@4ax.com>
Source record: 108374

I've been using an old bow and arrow. The arrow has a rubber tip (used for small game hunting). Tie some 20 lb. fishing line on the arrow and fire away. If the arrow goes over too many unwanted branches on it's way down, and it always does, I remove the arrow, tie on a fairly large finger shaped fishing sinker and pull the sinker up and let it drop back over the unwanted branches until I get it where I want it, then let it drop. The rest is easy.

709. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 13:31:11 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f607cad_3@news1.prserv.net>
Source record: 108376

Well, you got the wrong advice anyway. Put the existing equipment in a
corner reflector. Antenna only, or the whole thing. Make each side about
14"-16" square, put them at right angles, locate the existing antenna at 6"
from both surfaces, and in the center top to bottom, and you have 4 or more
dB gain. Solid metal, or any solidly made mesh with holes less than 3/4".
Or rods spaced 1/2". All simple, non-critical assemblies.

--
Crazy George
Remove NO and SPAM from return address
"Peter" <pmolsen@one.net.au> wrote in message
news:6ba442b.0309101334.73c4e51a@posting.google.com...
> In a recent posting "Directional 433 MHz transmit/receive aerial" I
> asked about improving the reception of a 433.92MHz
> transmitter/receiver. I was told to "get a 70cm Yagi". I discovered
> that they are around $179 here in Sydney and I need 3 of them so that
> ruled out buying them. The next option was to build one. "Simple"
> everyone said, just look them up on the web. Oh yeah...
>
> After spending 3 or 4 days researching every web site I could find on
> Yagis and downloading and running every simulation program I could
> find, I am now more confused that I was to start with (and that is
> saying something!) I still don't know the difference between dB and
> SWR (SWR means "South West Roads" here in Sydney), but now I have to
> try to figure out how to build a Yagi in which every single dimension
> has 10 possible different values, varying by up to nearly 4" (100mm)
> and yet every one of them "has to be" within 1-2mm of the "correct"
> value or it "just won't work".
>
> I also read about a thingy called a balun that matches something with
> something else but likewise I could find no consensus on whether I
> needed one or what it should look like.
>
> I did manage to figure out that the dimensions are dependent on things
> like the thickness of the elements, hollow or solid elements, type of
> boom (metallic or non-conducting), type of DE (straight or folded
> dipole), and I did learn that they are supposedly scalable, so to
> convert from a 450MHz to 433.92 I multiply all dimensions by
> 433.92/450. But even comparing like for like and doing the
> conversions, I could still not find any two specifications that were
> even close to the same.
>
> Most sites agreed that the elements get progressively shorter but
> several sites had the directors longer than the Ref and DE. The only

> value that everyone agreed on was that the Reflector is 0" from
> itself! So how on earth (especially in the absence of a SWR meter) do
> I decide which of the 10 different values for each other measurement
> is correct? I am not going to buy the Amateur Radio Handbook just to
> find the answer, given that this is probably my one and only foray
> into the mysterious world of radio antenna theory and given that it
> will simply give me an 11th opinion.
>
> What I tried to compare in my research was Yagi's that had a
> non-metallic boom, folded dipole DE and in the range 430-450 MHz. The
> possible values (in mm) I found for the various measurements were as
> follows. Even though they are often for slightly different frequencies
> and element thickness, etc. even allowing for scaling they still are
> nowhere near a consensus position:
>
> Ref length: 330, 336, 338, 340, 342, 343, 349, 400
> DE length: 267, 280, 320, 325, 327, 328, 330
> DE height: 8, 10, 12, 15, 25, 38
> DE position from Ref: 64, 114, 115, 120, 127, 130, 138, 140, 146
> D1 length: 299, 300, 303, 305, 312, 313, 315, 318
> D1 position: 140, 142, 181, 185, 192, 222, 235
> D2 length: 284, 295, 298, 305, 306, 308
> D2 position: 286, 292, 304, 310, 341, 385, 406, 455
>
> ...AAAAAAAAAAAAArrrrrrrrrrrrrrrrrrrrrgggggggggggggggggggggggg!!!!!!
>
> Here are the web sites that I gleaned the above jumble of results
> from:
>
> http://www.clarc.org/Articles/uhf.htm
> http://www.ifwtech.co.uk/g3sek/diy-yagi/dubus/bvo70.htm
> http://www.ilstu.edu/~rtmansb/Handitenna.htm
> http://home.t-online.de/home/df8gh/handitenna.htm
> http://members.aol.com/k5oejerry/handi-tenna.htm
> http://users.skynet.be/on1dht/schemas/uhf4el.gif
> http://www.qsl.net/w4sat/antlegn.htm
> http://www.qsl.net/ok1cdj/dj9bv70.pdf
> http://www.ifwtech.co.uk/g3sek/diy-yagi/dipoles.htm
> http://www.tfs.net/~petek/rockets/RDF/70ant.html
>
> Here are the simulation programs I downloaded and ran:
> Yagicad 4.1
> Yagi Analysis 3.54
> Yagimax 3.11
> DL6WU Antenna Design Program
>
> I actually plan to use a 20mm plastic tube boom and 5mm aluminium rod
> for the elements. Before I go completelh nuts can someone please
> enlighten me on what dimensions I should use, or does this just
> confirm that all this stuff really is "black magic".

710. Re: Auto tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 13:37:07 UTC
From: Gene <multiuseguy@NOSPAMSyahoo.com>
Message-ID: <7U_7b.37392$A%3.484134@ord-read.news.verio.net>
Source record: 108375

I live in a rented house and wanted to use my Knwd 570 so my thought was to hang one of these tuners under the eve and run a wire to the nearby telephone that is maybe 100 feet away or so, Hopefully getting me on HF without a telltale antenna.

"dt" <NOSPAM.net> wrote in message
news:e5oulv4im9coa2poa8p2m4i771aaf6op1i@4ax.com...
> On Wed, 10 Sep 2003 17:11:20 GMT, "Gene"
> <multiuseguy@NOSPAMSyahoo.com> wrote:
>
> >Anyone have any experience or comments about using autotuners such as the
> >Alinco EDX-2 automatic wire antenna tuner or SGC antenna tuners ?
> >
>
> I've used the Icom AH2 (forerunner to AH3 and similar to the SGC &
> others) in both mobile and fixed (Field Day) opertation. Mobile using
> 108" whip, Field Day using random length end-fed wire. The device
> autotunes quickly, within a second or so, and makes the rig happy.
> Operation results depend on the merits/demerits of the particular
> antenna chosen. With short antennas, the tuner sometimes has
> difficulty finding a match at 80M (as one would expect), and cannot
> operate at 160M. If your antenna/feedline have a complex impedance,
> these relay-switched capactor/inductor tuners may not do as well as a
> manual one with variable caps and inductors. I also tried feeding
> various antennas with coax (instead of single wire feed) and this
> particular tuner did not like that. Worked (sometimes) but had
> problems with RFI, pickup up digital noises from the rig & car, etc.
> Finally, these tuners are generally limited to around 100W. If you
> have an application that demands a tuner, 100W power levels, and
> signle wire feed (coax feed available on some models) then I would not
> hesitate to recommend one. GL & 73
> dan (k0dan)
> nospamk0dan@arrl.net

711. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 13:51:11 UTC
From: Martin <marty123@optonline.net>
Message-ID: <j5%7b.146973$Ay2.35102632@news4.srv.hcvlny.cv.net>
Source record: 108377

"Walter" <junkmail@altonillinois.com> wrote in message
news:70729ae5.0309110456.cd5168d@posting.google.com...
> the $100 price tag may reflect the money spent on filing the patent.
>
> I've never used one, but I think I would prefer the fishing pole
> method anyway. If for no other reason than it doesn't cost you so
> much.
>
>
> http://groups.yahoo.com/group/SkyWires/message/37

I've seen fishing poles used and they do work, but if you're standing too far to the side, and/or it's a flexible fly rod, the whip can really throw the line off course. Having the reel mounted in line with the slingshot avoids that problem.

Marty K1FHR

712. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 13:51:50 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <rIGdncsTzctm4P2iXTWJhA@comcast.com>
Source record: 108378

Peter,

First off, at these frequencies the bandwidth is often 10 MHz or more. So, build a 432 MHz design, and it will work just fine on 433. You have to pick one particular design. For instance, you can't pick a boom diameter from one place, element spacing from a second, and element lengths rom a third. I would pick a design where the matching network is the easiest to build.

Tam/WB2TT
"Peter" <pmolsen@one.net.au> wrote in message
news:6ba442b.0309101334.73c4e51a@posting.google.com...
> In a recent posting "Directional 433 MHz transmit/receive aerial" I
> asked about improving the reception of a 433.92MHz
> transmitter/receiver. I was told to "get a 70cm Yagi". I discovered
> that they are around $179 here in Sydney and I need 3 of them so that
> ruled out buying them. The next option was to build one. "Simple"
> everyone said, just look them up on the web. Oh yeah...
>
> After spending 3 or 4 days researching every web site I could find on
> Yagis and downloading and running every simulation program I could
> find, I am now more confused that I was to start with (and that is
> saying something!) I still don't know the difference between dB and
> SWR (SWR means "South West Roads" here in Sydney), but now I have to
> try to figure out how to build a Yagi in which every single dimension
> has 10 possible different values, varying by up to nearly 4" (100mm)
> and yet every one of them "has to be" within 1-2mm of the "correct"
> value or it "just won't work".
>
> I also read about a thingy called a balun that matches something with
> something else but likewise I could find no consensus on whether I
> needed one or what it should look like.
>
> I did manage to figure out that the dimensions are dependent on things
> like the thickness of the elements, hollow or solid elements, type of
> boom (metallic or non-conducting), type of DE (straight or folded
> dipole), and I did learn that they are supposedly scalable, so to
> convert from a 450MHz to 433.92 I multiply all dimensions by
> 433.92/450. But even comparing like for like and doing the
> conversions, I could still not find any two specifications that were
> even close to the same.
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> Most sites agreed that the elements get progressively shorter but
> several sites had the directors longer than the Ref and DE. The only
> value that everyone agreed on was that the Reflector is 0" from
> itself! So how on earth (especially in the absence of a SWR meter) do

> I decide which of the 10 different values for each other measurement
> is correct? I am not going to buy the Amateur Radio Handbook just to
> find the answer, given that this is probably my one and only foray
> into the mysterious world of radio antenna theory and given that it
> will simply give me an 11th opinion.
>
> What I tried to compare in my research was Yagi's that had a
> non-metallic boom, folded dipole DE and in the range 430-450 MHz. The
> possible values (in mm) I found for the various measurements were as
> follows. Even though they are often for slightly different frequencies
> and element thickness, etc. even allowing for scaling they still are
> nowhere near a consensus position:
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> Ref length: 330, 336, 338, 340, 342, 343, 349, 400
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> DE height: 8, 10, 12, 15, 25, 38
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>
> Here are the web sites that I gleaned the above jumble of results
> from:
>
> http://www.clarc.org/Articles/uhf.htm
> http://www.ifwtech.co.uk/g3sek/diy-yagi/dubus/bvo70.htm
> http://www.ilstu.edu/~rtmansb/Handitenna.htm
> http://home.t-online.de/home/df8gh/handitenna.htm
> http://members.aol.com/k5oejerry/handi-tenna.htm
> http://users.skynet.be/on1dht/schemas/uhf4el.gif
> http://www.qsl.net/w4sat/antlegn.htm
> http://www.qsl.net/ok1cdj/dj9bv70.pdf
> http://www.ifwtech.co.uk/g3sek/diy-yagi/dipoles.htm
> http://www.tfs.net/~petek/rockets/RDF/70ant.html
>
> Here are the simulation programs I downloaded and ran:
> Yagicad 4.1
> Yagi Analysis 3.54
> Yagimax 3.11
> DL6WU Antenna Design Program
>
> I actually plan to use a 20mm plastic tube boom and 5mm aluminium rod
> for the elements. Before I go completelh nuts can someone please
> enlighten me on what dimensions I should use, or does this just
> confirm that all this stuff really is "black magic".

713. LQQKing for Construction Article

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 14:01:45 UTC
From: nedrog@aol.comNOSPAM
Message-ID: <20030911100145.25815.00002955@mb-m07.aol.com>
Source record: 108379

Somewhere back in either 1998 or 1999 os I believe 73 magazine, there was a construction article of a FRACTAL 10m - 2 ele quad.

Yeah, I know that there has been a lot of discussions on this and other newsgroups about FRACTAL Antennas, but I am not looking for that. I am looking for the article.

If you have a copy of the article, and could scan it, I can deal with the following formats: RTS, JPEG, PIF, PDF, etc.

If you have a copy of the article, but cannot scan it, I would be willing to purchase that issue from you.

73's,

Howard W3CQH

714. Re: Crank up mast homebrew plans??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 14:12:10 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3f607992.2738453@news.galilei.com>
Source record: 108380

Hi Andrew

They are not complicated enough to need plans for!

I have built several, after smashing my fingers a few times on those darn push-ups.

One thing I do different now than I did at the beginning was that I feed each section independently. It takes a lot more cable, but it sure makes for a safer install on guyed towers. Albeit a bigger pain playing with all those cables though.

Threading a single external cable unit is fairly easy and straightforward and the addition of pulleys rather than cable guides makes it easier to crank up. Internal cable works basically the same way and the cable is still exposed at the pulleys, unless their are rain caps over the pulleys.

If your wondering how some are cabled, different companies do it different ways, but the most common is for the cable to be affixed to the lower end of the top section, about 1 foot from the bottom of this section. It feeds through a cable guide or pulley on the top of the next section. From this point the feed varies for internal or external showing cable. The norm is internal. So there will be a cable guide just below the pulley, where the cable feeds back into the inside of the second section.

On external fed cables, the cable passes through pulleys or guides about 1 foot from the bottom of the second mast and goes through the mast from one outside edge to the other. On internal fed cables, usually only one pulley or guide is used about a foot from the bottom and the cable passes through the guide and up to the top of the third section where a guide or pully like unto the second section is installed.

The cable from the last section is fed to the winch.

Needless to say, crank-ups need spacers (bushings) to make way for the cable, so you have to start with larger diameter tubing for the base than on push-ups and work in skipped increments of pipe sizes.

I saw something interesting about 3 years ago, a crank up made from a normal push-pole that used a relocatable gear drive instead of cables. I don't know how much weaker it made the push-pole, but it was guyed, so I guess it really didn't matter too much.

The fellow took a standard 50 foot push pole and drilled 1/4 inch diameter holes along the length of each section, except the top two, which are easy to push-up anyhow. Then he had a winch like device that had a large cogged gear that affixed more akin to a gin pole, on the mast below the one being cranked up. Once extended, the clamps are tightened and the winch moved down to the next section below the one being cranked up. The guy wires were measured and attached, so when the last section was cranked up, they all reached a certain tautness, that was later adjusted to the proper tension.

There is one I would have like to find the workings of. It used water from a garden hose, rather than a winch, to raise the pole. Yet no water remained in the pole after it was erected. I don't know if water was used to drive a winch or if it worked on hydraulics. I wasn't that close to it to see. I do know that the top section raised first and was pinned with a pin and spring. Then the second section was raised and pinned. Too many people around to get near the base to see what was going on and I never saw it advertised anywhere after seeing it. I sorta doubt if it was hydraulic though, as the water pressure would have to be much greater than what a garden hose can supply. And it seems water would be spurting out the pinning holes.

Still, it's something to keep pondering on!

TTUL
Gary

715. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 14:28:35 UTC
From: richardharrison@webtv.net
Message-ID: <17795-3F608693-199@storefull-2317.public.lawson.webtv.net>
Source record: 108382

Keith wrote:
"Consider a slotted line used to measure voltages for the computation of VSWR."

O.K. I`m looking at my PRD 250-A. Its slot is about 10 inches long or about 25.4 cm. The distance between a maximum and a minimum voltage point in an standing wave pattern is 1/4-wavelength.

The velocity factor is not quite as high as that of free-space. This tends to shorten the distance between maxima and minima in the slotted line.

If you could get a good voltage sample anywhere within a 25 cm slot, you could get one maximum and one minimum in a standing wave pattern at a frequency where the slot was at least 1/4-wavelength, but you might have to adjust feedline length to place the pattern in a favorable slotted line location.

What frequency has a 1/4-wavelength of 25 cm? My calculation says: 300 MHz.

Slotted lines are called trough lines in the U.K. I believe.

SWR is more easily determined with an SWR meter or a wattmeter. These don`t require a slotted line`s 1/4-wave or more minimum of space for operation.

The maximum and minimum voltages on a transmission line are not as significant as the forward and reflected powers because the difference between these powers is the power delivered to the load and is also the power supplied by the transmitter as the transmission line has no storage capacity beyond that required to completely energize the line in both directions by the traveling wave.

Best regards, Richard Hsarrison, KB5WZI

716. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 14:36:38 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <F4adnRYqluLhFf2iXTWJjA@comcast.com>
Source record: 108381

"pez" <pez7sv@hotmail.com> wrote in message
news:bjpcfl$44p$1@nic.grnet.gr...
>
> As of the book by Chipman:
>
>
> | I wonder if the old timer is still
> | around?
>
> Me too.
>
I did a search, and came up with a Robert A Chipman, age 91, in Toledo OH.
From my recollection, the age is about right, and Toledo is where I saw him

Tam/WB2TT

717. Re: Should I run a Sky-wire loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 15:21:39 UTC
From: richardharrison@webtv.net
Message-ID: <17795-3F609303-204@storefull-2317.public.lawson.webtv.net>
Source record: 108383

Mark Keith wrote:
"As far as noise, if the dipole and loop are both horizontal, there should be little if any difference in noise received, unless the pattern of the particular antenna favors the noise source."

I wrote that the loop was small at lower frequenciues such as those used with power mains and BC band transmitters. This can be equalized by an r-f choke across the receiver input to short out the low-frequency interference. A folded dipole or loop antenna doesn`t need a choke. Their configurations provide a short at low frequencies.

I noticed the hum pickup of car radios using untuned r-f anmplifiers back in the 1940`s. They had no low-frequency, low-impedance path for noise intercepted by the conventional whip antenna. Radios with a conventional antenna coil had bo antenna hum problem.

Best regards, Richard Harrison, KB5WZI

718. Re: Complex Z0 [Corrected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 16:00:14 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F609C0E.501BFEA5@uci.edu>
Source record: 108384

Agreed. Three terms are the inevitable result of the product of two
sums.

73, AC6XG

pez wrote:
>
> Dear Mr. Roy Lewallen,
>
> Yes!
> I do most agree.
>
> "Superposition"
>
> is the definitely right word for this concept
> resulting by the summation of all the [2 + (1 + 1)] terms,
> and I think that
> we can attempt a further distinction to two parts
>
> "Interference"
>
> which is expressed by the summation of the first 2 terms
>
> and
>
> "Interaction"
>
> by the (1 + 1) "third term".
>
> I have to acknowledge your contribution
> -once again...-
> to build a very meaningful,
> at least to me,
> categorization
> which I intend to use it extensively.
>
> After all
> it is at least
> a support to comprehension.
>
> Sincerely yours,
>
> pez
> SV7BAX
>

> "Roy Lewallen" <w7el@eznec.com> wrote in message
news:vlcqra6l3r1ga6@corp.supernews.com...
> | Johnson uses the same term of "interaction" to describe the origin of
> | the extra power term. However, you can hopefully see from the analysis I
> | posted that only ordinary superposition of the forward and reverse
> | voltage and current waves is necessary for the term to appear. So I
> | don't feel that "interaction" is entirely appropriate. The extra term
> | actually is a result of the calculation of average power. I've said many
> | times that it's risky to abandon the time information in the power
> | waveform and deal only with averages. If the voltage and current in each
> | wave aren't in phase with each other, there are components of the total
> | VI product that add together but don't show up in the averages of the
> | individual forward and reverse average powers. There's no mystery or
> | true "interaction" involved. The "problem" lies simply in calculating
> | average "forward power" and "reverse power" separately, throwing away
> | all time related information, then expecting them to add or subtract to
> | get the total.
> |
> | Roy Lewallen, W7EL
> |
> | pez wrote:
> | > -
> | > "The Third Term"
> | > -
> | > Roy Lewallen wrote:
> | > -
> | > | No, the average Poynting vector points toward the load.
> | > | Power leaves the line and enters the load, as it should.
> | > | ...
> | > | I imagine your problem
> | > | with the solution is your notion that
> | > | the total average power
> | > | is the difference between the
> | > | "forward power" and "reverse power".
> | > |
> | > | But it's not.
> | > |
> | > | I gave the equation showing what the total power
> | > | is, and as you can see,
> | > | there's a third term involved.
> | > | When this is
> | > | taken into consideration, you see that there's a net power flow out of
> | > | the line into the load, as there should be.
> | > | ...
> | > -
> | > As usually,
> | > Mr. Roy Lewallen,
> | > points the right direction.
> | > And this time,
> | > it is of:

> | > -
> | > "The Third Term".
> | > -
> | > In the whole of the book by R.A.Chipman,
> | > a phrase, less than a printed line,
> | > is proved enough to cause a major upset:
> | > -
> | > "The third term
> | > on the right
> | > represents interaction
> | > between the two waves."
> | > -
> | > But when there is such a steadfast loyalty
> | > to the existence of some kind of
> | > "interference"
> | > between two,
> | > rather clearly distinct waves,
> | > the incident and the reflected one,
> | > it is difficult for anybody
> | > to compromise himself and accept
> | > that the same two waves,
> | > so clearly distinct until now,
> | > when are coming along a line with complex Z0,
> | > have to bear in addition
> | > some kind of
> | > "interaction".
> | > -
> | > Very difficult, indeed.
> | > -
> | > Sincerely,
> | > -
> | > pez
> | > SV7BAX
> | > -
> | >
> |
> "Roy Lewallen" <w7el@eznec.com> wrote in message
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> | average "forward power" and "reverse power" separately, throwing away
> | all time related information, then expecting them to add or subtract to
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> | pez wrote:
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> | > | is the difference between the
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> | > | is, and as you can see,
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> | > | taken into consideration, you see that there's a net power flow out of
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> | > when are coming along a line with complex Z0,
> | > have to bear in addition
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> | > -
> | > Very difficult, indeed.
> | > -
> | > Sincerely,
> | > -
> | > pez
> | > SV7BAX
> | > -
> | >
> |

719. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 16:54:07 UTC
From: richardharrison@webtv.net
Message-ID: <28321-3F60A8AF-273@storefull-2313.public.lawson.webtv.net>
Source record: 108386

Peter wrote:
"I discovered that they (433 MHz yagi antennas) are around $179 here in Sydney and I need 3 of them so that ruled out buying them."

O.K. Why would 3 antennas be necessary for one 433.92 MHz transmitter / receiver? One antenna could be rotated to cover 360-degrees.

Perhaps the problem is really insufficient antenna height and antenna gain is often not a satisfactory substitute for adequate path clearance as needed for line-of-sight propagation. Height can be increased on either or both path ends for more path clearance in most cases.

A vertical collibear array can be used for more signal without imposing directivity in any azimuth.

There are probably no cheap and easy fixes for too little signal.

Best regards, Richard Harrison, KB5WZI

720. Info on Daiwa CN 101 SWR/Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 17:10:06 UTC
From: Richard Kriss <kriss@gbronline.com>
Message-ID: <kriss-3E88D6.12100611092003@central.isp.giganews.com>
Source record: 108385

I am about to do some trading and may wind up with a Daiwa CN-100 cross needle SWR/Power meter with no documentation. I could not find an online source of manual for any Daiwa products so would like to talk to someone that has one.

Anybody use or have experince with the Daiwa CN 101? The QST review by Steve Ford was not that great on the peak power reading.

If you will send me your address, I will send an SASE for a copy. The manual can't be very big.

Dick, AA5VU

721. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 17:27:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm1c5058smp8bb@corp.supernews.com>
Source record: 108387

Correction:

I found a notational bug in the analysis as written. I inadvertently omitted some magnitude (absolute value) signs in three of the power equations:

> The average power into the line = E1 * I1 * cos(theta), where theta =
> the angle of E1 - the angle of I1 =>
>
> <P1> = 11080 watts

should read

> The average power into the line = |E1| * |I1| * cos(theta), where theta =
> the angle of E1 - the angle of I1 =>
>
> <P1> = 11080 watts

and

> <fP1> = fE1 * fI1 * cos(delta) = 11070 watts
> <rP1> = rE1 * rI1 * cos(delta) = 0.009695 watts

should read

> <fP1> = |fE1| * |fI1| * cos(delta) = 11070 watts
> <rP1> = |rE1| * |rI1| * cos(delta) = 0.009695 watts

I apologize for the errors and any confusion it might have caused.

Roy Lewallen, W7EL

722. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 17:41:17 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309110941.69eff50a@posting.google.com>
Source record: 108388

radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309110228.bc87b51@posting.google.com>...
...
>
> > The RMS is of course an average, "the square root of the mean
> > [average] squared value...," but it's a time average, not a position
> > average. There is an RMS current associated with every point along
> > the line, and because of standing waves, it's not the same everywhere.
>
>
> You need to talk to Cecil about this (my God, am I typing this?)!
> I don't consider the forward and reflected voltage RMS values to be
> zero at a minimum node of infinite SWR!

Under steady-state excitation, there is only one RMS voltage
observable at any point along the line, and similarly only one RMS
current. They determine the power dissipated in the line. If you
wish to mathematically resolve those into "forward" and "reverse", go
right ahead, but it's only the net, measurable value which actually
results in power dissipation.

You can easily see this with batteries and resistors. Connect the
negative side of each of two identical 1.5V cells to "ground".
Connect two 1-ohm resistors in series between the positive terminals
of the two cells. Connect R3, a third 1-ohm resistor, between the
junction of the first two and ground. You can resolve the currents
into one loop through cell 1, R1, and R3, and another loop through
cell 2, R2 and R3. You will find that the two loop currents are 0.5A
each. Would you then say that R3 is dissipating 1*0.5^2 + 1*0.5^2 =
0.50 watts? If you did, you'd be wrong.

>
>
> > Similarly with RMS voltage. If you wish, you can use instantaneous
> > current and voltage and integrate over time as well, but that's just
> > performing the RMS function. Putting it another way that's even
> > easier to see, would you expect the RMS current in my refrigerator
> > power cord to be the same as in my blender power cord? Clearly, RMS
> > current CAN be a function of location. And with standing waves, or
> > with attenuation along the line, or both, it SHOULD be pretty clear
> > that it can be a function of position along a TEM line.
>
>
> But you need to separate the forward and reflected voltage waves
> from the constuctive or destructive interference at one point, if

> you wanna calculate the average forward and reflected powers.

But I don't want to. YOU seem to want to. Perhaps you could explain WHY you want to, given steady-state extitation. Clearly it's only the net voltage and net current that causes power dissipation in the line, and we don't need to resolve the net values into "forward" and "reflected" to understand what happens to all the power we put into the system, given steady-state excitation.

Transient analysis is an entirely different thing. We wouldn't be using RMS values to do that analysis. We'd still use the net (instantaneous) current and voltage to find the (instantaneous) power dissipations, though. Although practical TEM line has R, G and L values (and even C to some extent) which are functions of frequency, and a bit hard to deal with in transient situations, you can run an analysis on an idealized line with frequency-independent R, L, G and C, and you might get some interesting insights into what's really going on. If you're not up to the math, you can even do it in SPICE with a lumped (finely-divided) model and get a pretty good idea about the behavior.

723. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 18:23:59 UTC
From: richardharrison@webtv.net
Message-ID: <13767-3F60BDBF-207@storefull-2314.public.lawson.webtv.net>
Source record: 108390

Tom Bruhns wrote:
"Would you then say that R3 is dissipating---0.50 watts?"

Certainly not. The two 1.5 V cells don`t put any current through each other because they have no potential difference. The two resistors, one in series with each cell, each drop 0.5 wolts from 1/2 amp through 1 ohm in each case. So, there`s one volt across the common 1-ohm resistor, R3.

1 V x 1 A = 1 watt dissipated in R3.

Best regards, Richard Harrison, KB5WZI

724. Re: Crank up mast homebrew plans??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 18:39:37 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <xO2dna4W9PkBXP2iU-KYgw@comcast.com>
Source record: 108389

How did you keep the inner sections from rotating?

Tam/WB2TT

725. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 19:05:48 UTC
From: richardharrison@webtv.net
Message-ID: <13767-3F60C78C-217@storefull-2314.public.lawson.webtv.net>
Source record: 108391

Peter wrote:
"I discovered that they (433 MHz yagi antennas) are around $179 here in sydney and I need 3 of them so that ruled out buying them."

If Peter needs omnidirectional coverage, perhaps a vertical collinear array is a good choice. These are found in many places, including the ARRL Antenna Book, 19th edition, on pages 8-36 and 8-37. These produce a moderate gain.

The Super-J Antenna on page 16-25 is another omnidirectional array with a slight gain. Its advantage is its flexible matching arrangement.

Best regards, Richard Harrison, KB5WZI

726. Re: Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 20:01:08 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <8w48b.1921$vj4.215408@nnrp1.ptd.net>
Source record: 108392

In article <uQS7b.268$%G3.243@newsread2.news.atl.earthlink.net>,
ab4bc@ix.netcom.com says...
>
>
>Reg:
>
>[snip]
>> And now, can you believe it, Morse Code is on its way out !
>[snip]
>
>What!
>
>Say it isn't so...

It isn't so. (Sorry, I just HAD to do that!)

In any case, it's Morse Code testing that's on its
way out. I suspect Morse Code usage will continue
for many years to come.

72/73,
Bob

--
+--+
| Bob Schreibmaier K3PH | E-mail: k3ph@ptd.net |
| Kresgeville, PA 18333 | http://home.ptd.net/~k3ph |
+--+

727. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 20:27:52 UTC
From: Jack Smith <jsmith@mnsinc.com>
Message-ID: <pkm1mv49b02s5vces7d3hk28m23m4rstiu@4ax.com>
Source record: 108393

On Wed, 10 Sep 2003 15:06:36 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Geez, I'm glad too. It must happen only on certain frequencies. Just
>t'other day I was listenin to th' Chicken Band, and all these guys was
>yellin "Breaker! Breaker!". . . And sure enough, there was all this
>splatter. . .
>
>Roy Lewallen, W7EL
>
>Tom Bruhns wrote:
>> Aren't you glad we don't generally have to worry about nonlinearities
>> in the propagation of our waves (through space or along transmission
>> lines)? (Well, maybe you do if you aren't using a reasonable model
>> for your lines...) Following is from an e-newsletter I get:
>>
>> "Did you know that a wave breaks when the water underneath
>> supporting the wave is only about 1.3 times as deep as the
>> wave is high? When that happens, the water at the crest is
>> moving faster than the water below. Most often, waves break
>> in shallow water near the shore, but waves may also break
>> father off if the wave is high enough."

Roy:

What about the Luxemburg effect?

Jack K8ZOA

728. Re: Info on Daiwa CN 101 SWR/Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 20:44:51 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <IDqdnWHa3_9XQ_2iXTWJkw@comcast.com>
Source record: 108394

Richard,

Mine came with about a 4 x 6 inch piece of paper. No schematic. The only
useful information on the paper was that it won't actually read PEP.

As for the QST article, there really was no other meter that was a whole lot
better. I like the 3 power ranges and the wide frequency range on the 101.
(mine is the 101L)

Tam/WB2TT

email: mycallletters at arrldotnet
"Richard Kriss" <kriss@gbronline.com> wrote in message
news:kriss-3E88D6.12100611092003@central.isp.giganews.com...
> I am about to do some trading and may wind up with a Daiwa CN-100 cross
> needle SWR/Power meter with no documentation. I could not find an
> online source of manual for any Daiwa products so would like to talk to
> someone that has one.
>
> Anybody use or have experince with the Daiwa CN 101? The QST review by
> Steve Ford was not that great on the peak power reading.
>
> If you will send me your address, I will send an SASE for a copy. The
> manual can't be very big.
>
> Dick, AA5VU

729. Re: Compact HF antenna (RX-only) for reference in antenna tests?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 20:46:52 UTC
From: Chris Trask <christrask@earthlink.net>
Message-ID: <0b58b.8475$PE6.5764@newsread3.news.pas.earthlink.net>
Source record: 108395

>
> Does anyone have a suggestion for constructing a simple, compact,
> receive-only antenna, that covers reasonably well the HF range (1,8 to
> 30 MHz)? My plan is keep such an antenna as a constant reference when
> I am experimenting with the "real" antennas at my station. Comparing
> signal strenghts on the antennas over some time would at least give me
> a reference on whether directivity in certain directions was improving
> or not, when replacing one antenna with another.
>

You may want to look at my recent 2-part article in QEX on active receiving loop aerials. It doesn't fulfill all of your requirements, but it might give you some ideas.

Chris

--
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlink.net
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

730. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 20:46:56 UTC
From: pmolsen@one.net.au
Message-ID: <6ba442b.0309111246.19c7a9db@posting.google.com>
Source record: 108396

Ok so there are lots of different designs that supposedly have different strong points. Suppose I just want to go for maximum dB. How do I achieve that? Does anyone have a site that explains what parameters to use to achieve that?

And can anyone explain this. When I ran the DL6WU Antenna Design Program and fed in my parameters (433.92MHz, 5mm thick elements, plastic boom) it gave me a set of lengths and spacings and a supposed dB of 12.1. But it had the DE and D1 3.4mm apart from centre to centre meaning that with 5mm rod they were actually touching! I separated them a bit and fed those lengths into Yagi Analysis 3.4 and it gave me a dB of 4.9.

731. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 21:13:40 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <6E80+ECEWOY$EASo@ifwtech.co.uk>
Source record: 108319

Richard Harrison wrote:
>
>Slotted lines are called trough lines in the U.K. I believe.
>
On both sides of the Atlantic, a slotted line is a fully enclosed line with a slot in the shield; and a trough line is a three-sided line with an open top.

One way to approximate a slotted line is to make a very deep trough line, so that may be where the rumor came from.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

732. Tip-of-the-Day: Check your Ham-IV Control Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 21:57:19 UTC
From: "Dick, AA5VU" <aa5vu@arrl.net>
Message-ID: <aa5vu-EF8E58.16571911092003@central.isp.giganews.com>
Source record: 108397

The lamp in my (old) CDE Rotor Control Unit burned out. I opened the lid and found the lamp had melted a hole in the plastic meter. To make a long story short....I called Hy-Gain and found out this is pretty common and they recommended a 28 volt lamp - that should burn cooler. I picked up a smaller 28v lamp at Radio Shack. It is not as bright and I now have a moonbeam display.

The tip is open your control unit to see if the lamp is starting to melt the plastic meter. Don't wait for the moonbeams to change to the smaller 28 volt bulb. BTW, I understand some have been know to have melted the cover as well as the meter. It is pretty easy to check...just remove four screws and take off the cover.

I now wonder if the use of a White LED may be a better solution to this problem?

73 de Dick, AA5VU

ps: The fix for moonbeams is a $69 replacement meter! I am learning to enjoy the moonbeam lighting.

733. Re: Tip-of-the-Day: Check your Ham-IV Control Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 22:15:33 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f60f7bf_1@news1.prserv.net>
Source record: 108398

Dick:

The problem is that there are several 'wattages' of 24 and 28 volt lamps, and the higher current jobs, while very bright, are as you indicate, HOT. I suggest 4 white LEDs in series across the top of the meter. Much more even illumination, and no heat to speak of. Select the dropping resistor for adequate light. Should be only a few mils current. Use a series diode, no cap necessary unless you are really sensitive to flicker, and a resistor.

--
Crazy George
Remove NO and SPAM from return address
"Dick, AA5VU" <aa5vu@arrl.net> wrote in message
news:aa5vu-EF8E58.16571911092003@central.isp.giganews.com...
> The lamp in my (old) CDE Rotor Control Unit burned out. I opened the lid
> and found the lamp had melted a hole in the plastic meter. To make a
> long story short....I called Hy-Gain and found out this is pretty common
> and they recommended a 28 volt lamp - that should burn cooler. I picked
> up a smaller 28v lamp at Radio Shack. It is not as bright and I now have
> a moonbeam display.
>
> The tip is open your control unit to see if the lamp is starting to melt
> the plastic meter. Don't wait for the moonbeams to change to the smaller
> 28 volt bulb. BTW, I understand some have been know to have melted the
> cover as well as the meter. It is pretty easy to check...just remove
> four screws and take off the cover.
>
> I now wonder if the use of a White LED may be a better solution to this
> problem?
>
> 73 de Dick, AA5VU
>
> ps: The fix for moonbeams is a $69 replacement meter! I am learning to
> enjoy the moonbeam lighting.

734. Armageddon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 22:31:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjqt3q$3hj$1@sparta.btinternet.com>
Source record: 108399

God said let there be a Big Bang - and there was one.

He then unkindly left the many Quarks contained in the Universe to sort things out for themselves.

As Hardy relatively recently said to Laurel, both with their legs removed and wrapped around their necks, "Here's another fine mess you've got us into."

Is there oil on Mars ?

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

735. Re: Tip-of-the-Day: Check your Ham-IV Control Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 22:49:45 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <d_68b.1025$%G3.567@newsread2.news.atl.earthlink.net>
Source record: 108400

The white LED is a good way to go. Radio shack carries a 5mm very bright white led - cost is $4.99, so not cheap. I used those in my Ameritron amp meters and they work great. The beamwidth is rather narrow, but you could rig some sort of diffuser to spread the light evenly.

K8AC

"Dick, AA5VU" <aa5vu@arrl.net> wrote in message news:aa5vu-EF8E58.16571911092003@central.isp.giganews.com...
> The lamp in my (old) CDE Rotor Control Unit burned out. I opened the lid
> and found the lamp had melted a hole in the plastic meter. To make a
> long story short....I called Hy-Gain and found out this is pretty common
> and they recommended a 28 volt lamp - that should burn cooler. I picked
> up a smaller 28v lamp at Radio Shack. It is not as bright and I now have
> a moonbeam display.
>
> The tip is open your control unit to see if the lamp is starting to melt
> the plastic meter. Don't wait for the moonbeams to change to the smaller
> 28 volt bulb. BTW, I understand some have been know to have melted the
> cover as well as the meter. It is pretty easy to check...just remove
> four screws and take off the cover.
>
> I now wonder if the use of a White LED may be a better solution to this
> problem?
>
> 73 de Dick, AA5VU
>
> ps: The fix for moonbeams is a $69 replacement meter! I am learning to
> enjoy the moonbeam lighting.

736. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:02:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <98s1mvkg2m15usvl3fo90rquu11tkv9f2i@4ax.com>
Source record: 108401

On Thu, 11 Sep 2003 12:13:44 +0300, "pez" <pez7sv@hotmail.com> wrote:

>Dear Mr. Richard Clark,
>
>Thank you for the encouragement and your kind words.
>but I am not so sure that we deserve them (*).

Hello,

Your manners are superlative, and far better than my own manners
(according to others, and that's fine as this is a characteristic of
my aggressive style).
>
>Yes, you have absolute right about the initials, etc.
>But this became the motivation
>to discover, with a great deal of surprise I admit,
>that someone has given a bunch
>of inaccurate details to this site.
>We do not have something to hide

You offer your call sign, that is far more unique than any signature
that may be applied (like Dr. Slick). We have (as I am sure your part
of the world does also) a history of pseudonyms or nom-de-plume for
writers who wish to obscure their identity. I take care to write
everything such that I can accept responsibility - or take
responsibility. Many here do so too. Others do not, but in this day
and age, anonymity is not guaranteed (again, taking the example of our
same Dr. Slick) nor is it an affront if the writer commits to dialog
and not simply slander or attack. Such occurrences of attack are rare
here, and generally ignored.

>therefore we certainly do not belong to those
>with an extremely sensitive interest
>on private data.
>But I have to wonder:
>is there any responsibility
>by the site owner
>to guard the amateurs' personal data
>from anybody's will?

Well, if by "site owner" you mean this newsgroup, then there is no
"owner." There are nearly 40000 newsgroups that simply exist by
nature of a combination of news-servers that are interconnected and
sharing a protocol called NNTP. This protocol has been around since
the beginning of the Internet (long before the WWW). It is like the
public square where people meet to talk and listen and as in that

square, if you are recognized, others will call you by name and perhaps comment about your ancestors. Such is privacy.

Just as anything may be written here for free, anything written here has no intrinsic value. Value comes through association to the writer and that writer's continuity of thought and logic.

You are already establishing a very good continuity and achieving a good association - to those who care!
>
>Finally,
>I do share your point of view for the length of a message
>and I try to keep them as short as possible
>but anyhow,
>take a look please
>on their rejection (*)
>in the related thread
>of our lengthy, indeed, derivations...
>
>do;^)
>
>Sincerely yours,
>
>pez
>SV7BAX

Rejection is the forge of ideas. It does not condemn your work, it merely marks the critic by the nature of their criticism. If that criticism is weak, so is the critic. If that criticism is strong (not abuse, not refusal), then your argument is weak. Being technically and mathematically correct is not necessarily strength in an argument. You may be quite accurate, but the message is obscured by the bulk of presentation.

A Canadian social scientist, Marshall McCluhan, demonstrated that identical material presented through different media become different messages. For instance, if you were to present you material to a class, they would accept it and work through it for understanding. If you were to present it to that same group of students in the public square, some might scoff, others might wander off with indifference. If you were to present it on TV, you probably wouldn't even make it to the first commercial. If you presented it on radio, you might have a highly interested audience. Same material, different venues, different responses.

The same goes here. The nature of newsgroups is with dialog and hopefully you exchange correspondence with those who will allow you to develop your idea and stick with you to the end. If you attempt to make one presentation that answers all questions in one place, it violates a social contract that excludes them - except for them to accept or reject your work. They are not here to submit. This means you have to allow a style that is dialog in nature that allows their

questions along the way to the end, where you do not find yourself wandering down the wrong path. (Think of the Socratic or Platonic methods of argument.) Unfortunately there are those who will manipulate discussion to the wrong path, or confusion. Dialog over time will reveal these individuals. This is why "lurking" is advised to newcomers so that they recognize personality with the signatures.

One last point. Nothing is done once here. Nothing is solved. Nothing is fixed. The message will need repeating if only because new participants have not read the first message. The message may need repeating because you did not convince your critics, but they have had more time to ponder. This means that you sometimes have to vary your style and presentation so that repeating is not ignored. If you absolutely need the lengthy, mathematical treatment, then publish it at a web site and make a reference to it in your discussion. Offering the complete mathematical treatment each time you write here automatically limits you and reduces your audience. The craft of writing is knowing what to throw away. I generally discard 3/4ths of what I write before I hit the send button (some may groan not enough was thrown away here ;-)

73's
Richard Clark, KB7QHC

737. Re: Complex Z0 - Power : A Proof [Rejected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:21:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vtv1mvgbd8k6gu3i4p4ltkshuddi46pd65@4ax.com>
Source record: 108402

On Thu, 11 Sep 2003 09:13:21 +0300, "pez" <pez7sv@hotmail.com> wrote:

>Unfortunately enough
>my proof on this subject is
>_Wrong_ and rejected.
>
>Obviously,
>the relation
>
>-Tan(|t0|) + Sqrt(Tan(|to|)^2 + 1) =
>= Sqrt[(1 + Sin(|to|)/(1 - Sin(|to|)]
>
>is *not* an identity
>but an equation one,
>which has probably
>only the zero as solution
>in the [-45 , 45] degrees
>interval of Zo Argument.
>
>For example,
>put to = 45 degrees
>to get the result
>
>-1 = 1
>
>But further,
>it is not just this.
>
>The whole matter of the validation of
>the Principle of Conservation of Energy
>_at_any_point_
>of a
>Uniform Transmission Line with Complex Z0,
>has to be put under investigation,
>starting,
>once again,
>from the beginning.
>
>I am terribly sorry for any inconvenience.
>
>Sincerely,
>
>pez
>SV7BAX

>

Hello,

Identity or equation. This is a matter of importance to you alone as others would have moved right past it without close attention (this includes me too). The significance of it is not explained which is more important (part of knowing what to discard from writing). In other words, if it is a deep layer in the logic, then including it adds nothing of insight. If it is pivotal, important, then the rest of the material should be clipped away.

As for "Conservation of Energy" this should be a test at the end, not a goal. Too many correspondents start out proving this "law" and offering nothing notable along the way. Stasis offers a sure proof of the "law" and is very boring. We endure too many static sermons already ;-)

I have to admit that in my other response (other correspondence) to your notice of rejection; that I mistook that to be rejection by others. However, I also offered that the merit of that rejection marks the critic. You, again, show a very commendable trait that associates you with consistent logic.

Develop the math for Web publication, and argue it here by reference.

73's
Richard Clark, KB7QHC

738. Re: Armageddon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:21:41 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vm20vaeijihm1a@corp.supernews.com>
Source record: 108403

That'll get NASA funded!
H., NQ5H

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bjqt3q$3hj$1@sparta.btinternet.com...
> God said let there be a Big Bang - and there was one.
>
>
> He then unkindly left the many Quarks contained in the Universe to sort
> things out for themselves.
>
>
> As Hardy relatively recently said to Laurel, both with their legs removed
> and wrapped around their necks, "Here's another fine mess you've got us
> into."
>
>
> Is there oil on Mars ?
>
> ----
> ========================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com
> ========================
>
>

739. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:41:12 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309111541.10a5d812@posting.google.com>
Source record: 108404

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309110941.69eff50a@posting.google.com>...
> radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309110228.bc87b51@posting.google.com>...
>
> You can easily see this with batteries and resistors. Connect the
> negative side of each of two identical 1.5V cells to "ground".
> Connect two 1-ohm resistors in series between the positive terminals
> of the two cells. Connect R3, a third 1-ohm resistor, between the
> junction of the first two and ground. You can resolve the currents
> into one loop through cell 1, R1, and R3, and another loop through
> cell 2, R2 and R3. You will find that the two loop currents are 0.5A
> each. Would you then say that R3 is dissipating 1*0.5^2 + 1*0.5^2 =
> 0.50 watts? If you did, you'd be wrong.
>

But i wouldn't say that. As Richard has pointed out, it would be
1 watt dissipated in the third resistor.

It seems you are trying to say that i mean that powers add up like
Kirchoffs law for currents. I never said that.

>
> But I don't want to. YOU seem to want to. Perhaps you could explain
> WHY you want to, given steady-state extitation.

Because that's what we are talking about here! The VSWR relies on
the forward and reflected powers, which in turn means voltages too,
whether peak or RMS. Sure, you could measure the net max and min
voltages on a line, and get the SWR.

But i'd rather use what is called a directional coupler, and get the
rho from that.

You need to hit the basic RF books a bit more, my friend.

Slick

740. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:51:18 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309111551.55a3963a@posting.google.com>
Source record: 108405

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<17795-3F608693-199@storefull-2317.public.lawson.webtv.net>...
>
> SWR is more easily determined with an SWR meter or a wattmeter. These
> don`t require a slotted line`s 1/4-wave or more minimum of space for
> operation.
>

That's a good point Richard, as some people seem to believe that
you must measure at two points at an electrical 1/4 wavelength apart to
measure SWR. Not true, as you can measure the [rho] with directional
couplers at only ONE point on the line.

> The maximum and minimum voltages on a transmission line are not as
> significant as the forward and reflected powers because the difference
> between these powers is the power delivered to the load and is also the
> power supplied by the transmitter as the transmission line has no
> storage capacity beyond that required to completely energize the line in
> both directions by the traveling wave.
>
> Best regards, Richard Hsarrison, KB5WZI

This is especially true when the transmission line is short and/or
is very low-loss.

Thanks for being one of the few that makes sense on this NG, Richard.

Slick

741. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-11 23:55:19 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309111555.58722d1a@posting.google.com>
Source record: 108406

kd1@sympatico.ca wrote in message news:<3F604A28.345E6A4@sympatico.ca>...
> >
> > I would dissagree with this last statement. The root mean square
> > is a type of averaging (not really just the average though), so how
> > could it be a function of position??
>
> Consider a slotted line used to measure voltages for the computation
> of VSWR. The measured voltage varies with position along the line
> (assuming the line is not terminated by Z0). This voltage is the
> Erms in the example above. Current behaves similarly.
>
> ...Keith

Read Richard's post. A slotted line would be if you wanted to
measure SWR DIRECTLY, dividing the Vmax by the Vmin. These would
NOT be the same as the forward and reverse Vrms values!

Slick

742. W. Ct. Hamfest This Sunday!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 00:13:47 UTC
From: IGotYerNameRightHere <jimkd1yv@uthinkimatsnet.net>
Message-ID: <3F610FDD.7ECD9248@uthinkimatsnet.net>
Source record: 108407

WESTERN CONNECTICUT HAMFEST
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-------------- Table Reservation ----------------
Mail to: Candlewood Amateur Radio Association (CARA) Hamfest
c/o John Ahle, W1JMA
120 Firehill Rd.
Ridgefield, CT 06877

Name:_____
Address:_____
City/State:_____

Please reserve _____ tables at $12.50 each.
Yes / No : I need electricity

Make checks payable to CARA

743. Effect of whip diameter on resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 00:21:44 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <sk88b.20318$ip5.1584872@twister.southeast.rr.com>
Source record: 108409

Whip A is 72 inches long with a taper that varies from 3/16 inch to 1/8 inch.
Whip B is 62 inches long with a taper that varies from 1/2 inch to 1/4 inch.

Both whips, when connected to the same antenna base, resonate at virtually the same frequency. Would this be because whip B, though 10 inches shorter, has a higher surface area and a higher capacity which makes up for its shorter length? Explanation appreciated.

Ron

744. Re: Complex Z0 - Power : A Proof [Rejected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 00:47:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjr52q$e8v$1@sparta.btinternet.com>
Source record: 108408

"Richard Clark" wrote -

> Develop the math for Web publication, and argue it here by reference.

==========

Why do you persist in inventing non-existent problems?

745. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 01:18:51 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <_998b.420242$Ho3.66277@sccrnsc03>
Source record: 108410

If I understand what you are saying then a vertical EM ground wave
suffers from non-linear [distortion], as you define it.

The surface component of the wave is in a dielectric media, earth
ground, with a propagation constant less than the velocity of light.
While the top of the EM wave is propagating in a 377 ohm medium, air,
with a velocity of propagation close to the velocity of light. So, the
top of the wave travels faster than the bottom and the wave tilts in the
direction of propagation and ultimately 'falls' to earth.

You are implying that a wave from a single source but traveling in two
or more different mediums suffer non-linearity. Doesn't that mean that
non-linearity is applicable to all EM waves involved in different media?

I believe that Maxwell-Heaviside's Curl equations at the boundary
conditions can be solved for this condition. [It's been over 40 years
since I tried it though!]

I have a problem with the words 'non linear as used in this thread.
'Non-linearity' is generally understood to introduce harmonics, i.e.
distortion.

For an EM wave sharing a common boundary in different linear media I
offer that the wave 'rolls' in the direction of propagation but does not
create harmonics from some non-linear process.

Deacon Dave, W1MCE
+ + +

[SNIP]
>
> Nonlinearity is if the velocity varies with the amplitude of the wave. Like
> in acoustics where the positive (high-pressure) peaks propagate faster than
> the negative peaks. It leads to waveform distortion and creation of
> harmonics. The modern cardiology ultrasound scanners (< 5 years old) usually
> default to this mode these days, transmitting ultrasound at about 3 MHz,
> receiving at 6 MHz, as it gives better image quality than the fundamental
> mode.
>
>
> Sverre
> www.qsl.net/la3za
>
>

746. Re: Info on Daiwa CN 101 SWR/Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 01:31:58 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <im98b.417962$YN5.281832@sccrnsc01>
Source record: 108411

I own the CN-101L. I'm the original owner. What manual?

Don't worry about peak power readings. Tune up in FM or RTTY mode, read
your power output, adjust your tuner for reasonable match, go on the air
and have some fun.

In the RTTY mode:

Mine reads 1020 watts while my amplifier reads 1000 watts.

Mine reads 70 watts while my amplifier reads 80 watts

Mine reads approximately 2.5 watts while my amplifier can't read it!!

In the PEP mode mine reads 500 watts while the amplifier reads 850 and
the key down is 1000 watts. So, neither meter faithfully reads the PEP.

Deacon Dave, W1MCE
+ + +

Richard Kriss wrote:

> I am about to do some trading and may wind up with a Daiwa CN-100 cross
> needle SWR/Power meter with no documentation. I could not find an
> online source of manual for any Daiwa products so would like to talk to
> someone that has one.
>
> Anybody use or have experince with the Daiwa CN 101? The QST review by
> Steve Ford was not that great on the peak power reading.
>
> If you will send me your address, I will send an SASE for a copy. The
> manual can't be very big.
>
> Dick, AA5VU

747. stuff laying around

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 01:42:33 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <dw98b.138275$3o3.9838579@bgtnsc05-news.ops.worldnet.att.net>
Source record: 108412

I got kl200(rebuilt, new transistors) 100watt
predator 150 bi linear w/ pre amp, three stages (all original parts, works good) 175 watt
kl300p with fan kit (all new) 250 watt
texas star 350hdv (meter and meter light out, but works great) @400? power supply not handle it for testing
texas star350dx (all original parts, works great) same as above
kris boomer (two tube, works fine) @225 watts
alan1313 (one tube that is brand new!, great condition) 110 watts
Power Pump 200 base (transistor) 300 watts
Cobra 138 23channel am,usb/lsb (works like new) 10 watts
freshley restored D104 base mic, amplified, shinny bronze finish, Loud !!!
battery included, wired standard Cobra,
using with 138 as of last night for the heck of it..
make offer.. I live in North Alabama, email if interested, please dont insult with 10-20 dollar offers etc, I do not need the money, but I will not give them away. If you need them, great ....have a nice day..

--

Those who want to be successful, will find a way,
those that don't, will find an excuse!

748. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 01:54:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm29qql63gtv2a@corp.supernews.com>
Source record: 108413

Some years back I was involved in experiments directed at making a very fast voltage step by using a transmission line periodically loaded with diodes. While this structure can be made with packaged diodes and twinlead, the structures we were working with were balanced microstrip on a GaAs substrate, with integrated diodes. (Stanford University had some patents for this implementation.) It used exactly the principle Sverre is speaking of -- the velocity factor was altered by the diode capacitance, which in turn was a function of the wave amplitude. The net result is that one edge of a pulse was made sharper and the other more gentle as the pulse propagated along the line. Harmonics are generated by this nonlinear operation.

You might be confusing this with dispersion, which is different frequencies traveling at different velocities. This commonly occurs on microstrip lines due to some of the field being in the dielectric and some in the air, with the relative proportions changing with frequency. (It's also common in waveguides and, I believe, optical media.) This is a linear effect and doesn't generate harmonics, and in fact can be produced by linear lumped components in what's known as an allpass filter. The time-domain waveform distortion it causes is due solely to differing phase shifts, or delays, of the constituent frequency-domain components. That's different from the amplitude-related velocity dependence of the nonlinear lines.

Intutitively, a test for harmonic-causing distortion might be to see what happens when you apply a single sine wave. Dispersion and other linear phenomena will change the amplitude and phase of the waveform, but not the shape. But a nonlinear phenomenon like the diode-loaded line or other amplitude sensitive properties will change the shape and, therefore, create new frequencies. It's pretty easy to show that the amplitude related velocity property doesn't satisfy the classical definition and requirement for linearity that the response to the sum of two excitations is the same as the sum of the responses to the individual excitations, while a property like dispersion does.

Roy Lewallen, W7EL

Dave Shrader wrote:
> If I understand what you are saying then a vertical EM ground wave
> suffers from non-linear [distortion], as you define it.
>
> The surface component of the wave is in a dielectric media, earth
> ground, with a propagation constant less than the velocity of light.
> While the top of the EM wave is propagating in a 377 ohm medium, air,
> with a velocity of propagation close to the velocity of light. So, the

> top of the wave travels faster than the bottom and the wave tilts in the
> direction of propagation and ultimately 'falls' to earth.
>
> You are implying that a wave from a single source but traveling in two
> or more different mediums suffer non-linearity. Doesn't that mean that
> non-linearity is applicable to all EM waves involved in different media?
>
> I believe that Maxwell-Heaviside's Curl equations at the boundary
> conditions can be solved for this condition. [It's been over 40 years
> since I tried it though!]
>
> I have a problem with the words 'non linear as used in this thread.
> 'Non-linearity' is generally understood to introduce harmonics, i.e.
> distortion.
>
> For an EM wave sharing a common boundary in different linear media I
> offer that the wave 'rolls' in the direction of propagation but does not
> create harmonics from some non-linear process.
>
> Deacon Dave, W1MCE
> + + +
>
> [SNIP]
>
>>
>> Nonlinearity is if the velocity varies with the amplitude of the wave.
>> Like
>> in acoustics where the positive (high-pressure) peaks propagate faster
>> than
>> the negative peaks. It leads to waveform distortion and creation of
>> harmonics. The modern cardiology ultrasound scanners (< 5 years old)
>> usually
>> default to this mode these days, transmitting ultrasound at about 3 MHz,
>> receiving at 6 MHz, as it gives better image quality than the fundamental
>> mode.
>>
>>
>> Sverre
>> www.qsl.net/la3za
>>
>>
>

749. Re: Complex Z0 - Power : A Proof [Rejected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 02:04:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r8a2mv0l2dq7riihn17pcq4lkq8bnih6f2@4ax.com>
Source record: 108414

On Fri, 12 Sep 2003 00:47:22 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>
>"Richard Clark" wrote -
>
>> Develop the math for Web publication, and argue it here by reference.
>
>==================================
>
>Why do you persist in inventing non-existent problems?

ï¿½because all the others are patented?

750. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 02:07:23 UTC
From: kd1@sympatico.ca
Message-ID: <3F612A5B.11906491@sympatico.ca>
Source record: 108415

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F604A28.345E6A4@sympatico.ca>...
> > >
> > > I would dissagree with this last statement. The root mean square
> > > is a type of averaging (not really just the average though), so how
> > > could it be a function of position??
> >
> > Consider a slotted line used to measure voltages for the computation
> > of VSWR. The measured voltage varies with position along the line
> > (assuming the line is not terminated by Z0). This voltage is the
> > Erms in the example above. Current behaves similarly.
> >
> > ...Keith
>
> Read Richard's post. A slotted line would be if you wanted to
> measure SWR DIRECTLY, dividing the Vmax by the Vmin. These would
> NOT be the same as the forward and reverse Vrms values!

Sometimes ya just gotta wonder.

You ask "How could [RMS voltage] be a function of position?"

I suggest considering a slotted line where the measured RMS
voltage is a function of position along the slot (when a
standing wave is present).

QED

...Keith

751. Re: Effect of whip diameter on resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 03:26:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <53f2mv4j1e1ao117tf8bpmao5gut8otvu6@4ax.com>
Source record: 108416

On Fri, 12 Sep 2003 00:21:44 GMT, Ron <rmrippy@hotmail.com> wrote:

>Whip A is 72 inches long with a taper that varies from 3/16 inch to 1/8 inch.
>Whip B is 62 inches long with a taper that varies from 1/2 inch to 1/4 inch.
>
>Both whips, when connected to the same antenna base, resonate at virtually the
>same frequency. Would this be because whip B, though 10 inches shorter, has a
>higher surface area and a higher capacity which makes up for its shorter length?
>Explanation appreciated.
>
>Ron

Hi Ron,

It also has lower inductance.

73's
Richard Clark, KB7QHC

752. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 04:21:12 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309112021.280006ec@posting.google.com>
Source record: 108417

pmolsen@one.net.au (Peter) wrote in message
news:<6ba442b.0309111246.19c7a9db@posting.google.com>...
> Ok so there are lots of different designs that supposedly have
> different strong points. Suppose I just want to go for maximum dB. How
> do I achieve that? Does anyone have a site that explains what
> parameters to use to achieve that?

You would want to build an "NBS" yagi if you want max gain and so-so
f/b.
There are many examples of these in the ARRL antenna handbook. They
have examples and specs for all vhf/uhf bands, also for differing
numbers of elements. All those examples for 432 use 3/16 inch element
dia. Element diameter is very critical to building a UHF beam. So that
means trying to design one on the puter is a waste of time, unless you
start out using the exact dia tubing you plan to use. This makes
scaling antennas from other bands with fatter tubing a pain. You will
likely end up with an oddball element dia if you scale a normal dia.
So its best to hunt down a good plan, and stick to it. Exactly.
>
> And can anyone explain this. When I ran the DL6WU Antenna Design
> Program and fed in my parameters (433.92MHz, 5mm thick elements,
> plastic boom) it gave me a set of lengths and spacings and a supposed
> dB of 12.1. But it had the DE and D1 3.4mm apart from centre to centre
> meaning that with 5mm rod they were actually touching! I separated
> them a bit and fed those lengths into Yagi Analysis 3.4 and it gave me
> a dB of 4.9.

Dunno... Like I told Art Unwin a while back, I don't have much use for
antenna design programs and "optimizers" etc...Seems to me the vast
majority of the output is junk. I always get better results if I do it
all manually, and let common sense rule. But for UHF, I'd just find a
plan and use it. The examples in the ARRL antenna handbook are exactly
what you want. I don't know of any sources on the web. You can use
eznec demo and scale the "NBS yagi" it has, but then again you are
back to worrying about the element diameter scaling and whether any
real tubing will match what it spits out. The example is for 6m, and
using 1/2 inch tubing. No telling what that would scale to for 432
mhz. MK

753. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 05:25:41 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309112125.2a4e5076@posting.google.com>
Source record: 108418

kd1@sympatico.ca wrote in message news:<3F612A5B.11906491@sympatico.ca>...
> >
> > Read Richard's post. A slotted line would be if you wanted to
> > measure SWR DIRECTLY, dividing the Vmax by the Vmin. These would
> > NOT be the same as the forward and reverse Vrms values!
>
> Sometimes ya just gotta wonder.
>

sometimes you gotta read the basics!

> You ask "How could [RMS voltage] be a function of position?"
>
> I suggest considering a slotted line where the measured RMS
> voltage is a function of position along the slot (when a
> standing wave is present).
>
> QED
>
> ...Keith

Fine. If you want to measure the net voltage at a particular
point. But that won't be the Vrms of the forward or reverse traveling
wave!

It's time for me to cut out, if you don't understand yet.

Slick

754. Re: Armageddon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 07:19:41 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0309112319.2c2f9480@posting.google.com>
Source record: 108320

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<bjqt3q$3hj$1@sparta.btinternet.com>...
> ...
> Is there oil on Mars ?
>
> ----
> ========================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com
> ========================

Hi Reg,
I imagine there is a huge underground lake of class 1 fine petrol on
the Mars. And the polar caps are formed by frozen Coke. Unfortunately
there are no highways nor McDonald's there ...

BR from Ivan OK1SIP

755. HyGain Patriot 40 - 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 09:12:31 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <9c33mv4vs5duq5cch5geq9lutn8hd5ivfi@4ax.com>
Source record: 108322

Any one have any experience with the Patriot 40 through 10 meter antenna?

I'm looking at putting one on the end of my shop. The base of the antenna would be at 32 feet with 4 radials at 45 degrees which also serve as guys,.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

756. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 09:28:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjs3k6$i4q$1@sparta.btinternet.com>
Source record: 108321

```
> I suggest considering a slotted line where the measured RMS
> voltage is a function of position along the slot (when a
> standing wave is present).
>
============================

Voltage is a function of position along the slot even when a standing wave
is NOT present.
```

757. Barrett 910 Automatic Mobilr Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 09:57:12 UTC
From: Kevin & Natalia <sparc1@slingshot.co.nz>
Message-ID: <1063360517.628934@radsrv1.tranzpeer.net>
Source record: 108323
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.antenna

Hi All,

I am interested in any information from any operators that have matched a Barrett 910 Automatic Mobile antenna with a Amateur radio HF rig, in my case a Kenwood TS 450S/AT.

I have contacted Barrett, and they advise me that they do not have any information, but do know that some hams have made a box to mate the antenna with their Amateur rig.

Any information great or small would be a great help. They appear to be a very fine antenna.

Regards

Kevin, ZL1UDD.

758. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 10:17:12 UTC
From: kd1@sympatico.ca
Message-ID: <3F619D28.ACCBF0B2@sympatico.ca>
Source record: 108324

Reg Edwards wrote:
>
> > I suggest considering a slotted line where the measured RMS
> > voltage is a function of position along the slot (when a
> > standing wave is present).
> >
> ==========
>
> Voltage is a function of position along the slot even when a standing wave
> is NOT present.

I think there is one case where it doesn't vary and three where
it does:

Matched lossless line: RMS voltage will be the same everywhere
Mismatched lossless: RMS voltage varies - the standing wave
Matched lossy line: RMS voltage declines towards the load
Mismatched lossy line: RMS voltage varies and declines towards the load

...Keith

759. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 11:35:16 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <4QQ07jA09aY$EAy4@ifwtech.co.uk>
Source record: 108325

Peter wrote:
>Ok so there are lots of different designs that supposedly have
>different strong points. Suppose I just want to go for maximum dB. How
>do I achieve that? Does anyone have a site that explains what
>parameters to use to achieve that?
>
I hope not. If a long yagi is optimized for gain and nothing else, it is usually quite poor in other respects: large sidelobes; narrowed, sharp-pointed main lobe (hard to aim accurately); poor front/back ratio; inconvenient feed impedance; poor gain and SWR bandwidths; and poor tolerance to constructional dimensions, detuning by raindrops, frost etc.

The same has been found many times over, whether you do it by traditional cut-and-try or by computer - the computer only gets you to the same dead-end faster.

Modern optimized yagis achieve almost the same gain, but don't have those vices to anything like the same degree. They are much easier to build, match and aim, so in practice you'll almost certainly achieve *more* gain.

>And can anyone explain this. When I ran the DL6WU Antenna Design
>Program

There are dozens out there, but it's very clear you mean the one on my site.

>and fed in my parameters (433.92MHz, 5mm thick elements,
>plastic boom) it gave me a set of lengths and spacings and a supposed
>dB of 12.1. But it had the DE and D1 3.4mm apart from centre to centre
>meaning that with 5mm rod they were actually touching!

You're so right - sorry, there was a bug.

That program had been reliably getting all the important things right for about 20 years, but recently I blindly accepted someone else's "correction" for a small error... which triggered an even larger error.

As of this message, the revised program is back on the site:
http://www.ifwtech.co.uk/g3sek/diy-yagi/

The bug only ever affected the shortest yagi that the program would design... which was the one Peter wanted. Thanks for spotting it, Peter.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)

Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

760. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 11:39:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Qfi8b.324428$cF.98118@rwcrnsc53>
Source record: 108326

Thanks Roy.

DD

761. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 11:42:31 UTC
From: kd1@sympatico.ca
Message-ID: <3F61B127.D89E4DA2@sympatico.ca>
Source record: 108327

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > >
> > > The tricky part is measuring this correctly, because you
> > > would need an SWR meter that is calibrated for the same Z as
> > > Zo.
> >
> > It is not nearly that tricky. 'Revised' rho, as you state,
> > predicts 0 Volts across the capacitor. This will be easy to
> > measure with any AC voltmeter that can handle your test frequency.
>
> Perhaps, but i'm interested in the forward and reflected
> waves, which you can only get with directional couplers on a line of
> the same Z as the Zo, i suspect. So even if you get 0 volts, there
> are still fwd and rev waves.

But what if you do not get zero volts. Sort of messes up the
'revised' rho theory a bit, does it not?

> > I predict, using circuit theory, that if you excite the
> > test circuit with a 1 Volt sinusoid at a frequency that
> > makes the impedances j200 and -j200, that you will measure
> > 4 Volts across the capacitor, not 0. This aligns with the
> > result expected from 'classic' rho.
>
> Go ahead and bench test it, and let us know what you find.

Rummage. Rummage. Rummage.
2.2 uH +/- 10%, 100 pf tolerance unknown, 33 ohms +/- 5%

R = 34 measured
L = 2.2 uH
C = 100 pF
But wait, there will be a scope probe across C, vendor says
15 pF nominal when compenstaed for a 15 pF scope input, but
the scope input is 20 pF. Oh well, use 15 pF anyway. So:
C = 115 pF

f = 10.006 MHz
Zres = 34 + j0
Zind = 0 + j138.3
Zcap = 0 - j138.3

But it is always wise to predict the outcome before the measurements...

So let's use a 1 Volt sinusoid at 10.006 MHz.

From circuit theory:
Ires = 0.02941 + j0 A
Vcap = 4.067 /_ -90 V

From 'classic' rho:
Vi = 0.5 V
rho = (Zl-Z0)/(Zl+Z0)
= ((0 -j138.3)-(34+j138.3))/((0 -j138.3)+(34+j138.3))
= 8.1965/_ -97.0
Vr = Vi * rho
= 0.5 * 8.1965/_ -97.0
= 4.09826/_ -97.0 V
Vcap = Vload = Vi + Vr
= 0.5 + 4.09826/_ -97.0
= 4.067/_ 90.0 V

So I expect the magnitude of the voltage to be 4.067 volts.

But wait, there are a whole bunch of tolerances so that is unlikely to be the voltage, so what is the expected range?

We are not sure of the capacitor tolerance but it is unlikely to be better than 10% and the scope probe is unknown, so let's call it 10%.
The resistor was measured at 34 +/- 1 digit + meter error, so 5% is probably good.

So if the capacitor is 10% high and resistor is 5% low the error would be 1.1/.95 = 1.16 or about 16%. So if the result is within 16% of 4.067 it will be consistent with expectations.

First adjust frequency for resonance
f = 10.14 MHz, tolerably close to the predicted 10.006 MHz.

And the measured voltage across the capacitor is...

Hold on, before revealing the answer....

In the interests of minimizing the wiggle room, perhaps you would be so kind as to provide your prediction for the voltage across the capacitor. Using 'revised' rho, in a previous post I recall you predicted 0 volts. Is this still your expectation?

...Keith

762. Re: Barrett 910 Automatic Mobilr Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 12:10:48 UTC
From: Den <dedey@bigpond.net.au>
Message-ID: <cJi8b.96844$bo1.91326@news-server.bigpond.net.au>
Source record: 108328
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.antenna

I have just sent a PDF file to your direct email address
Rgds

--

All out going emails scanned by Norton's 2002 Antivirus
"Kevin & Natalia" <sparc1@slingshot.co.nz> wrote in message
news:1063360517.628934@radsrv1.tranzpeer.net...
> Hi All,
>
> I am interested in any information from any operators that have matched a
> Barrett 910 Automatic Mobile antenna with a Amateur radio HF rig, in my
case
> a Kenwood TS 450S/AT.
>
> I have contacted Barrett, and they advise me that they do not have any
> information, but do know that some hams have made a box to mate the
antenna
> with their Amateur rig.
>
> Any information great or small would be a great help. They appear to be a
> very fine antenna.
>
> Regards
>
> Kevin, ZL1UDD.
>
>
>

763. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 13:45:28 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <PhidnQSP1_SOU_yiXTWJhg@crocker.com>
Source record: 108329

<kd1@sympatico.ca> wrote in message news:3F61B127.D89E4DA2@sympatico.ca...
> "Dr. Slick" wrote:
> >
> > kd1@sympatico.ca wrote in message
news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > > >
> > > > The tricky part is measuring this correctly, because you
> > > > would need an SWR meter that is calibrated for the same Z as
> > > > Zo.
> > >
> > > It is not nearly that tricky. 'Revised' rho, as you state,
> > > predicts 0 Volts across the capacitor. This will be easy to
> > > measure with any AC voltmeter that can handle your test frequency.
> >
> > Perhaps, but i'm interested in the forward and reflected
> > waves, which you can only get with directional couplers on a line of
> > the same Z as the Zo, i suspect. So even if you get 0 volts, there
> > are still fwd and rev waves.
>
> But what if you do not get zero volts. Sort of messes up the
> 'revised' rho theory a bit, does it not?

the 'revised' rho predicts zero reflect 'power waves' as defined by
kurokawa... it says nothing about voltage or current waves.

764. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:04:48 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Qo2dnXU2JYUbT_yiXTWJjg@comcast.com>
Source record: 108330

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0309112021.280006ec@posting.google.com...
> pmolsen@one.net.au (Peter) wrote in message
news:<6ba442b.0309111246.19c7a9db@posting.google.com>...
. All those examples for 432 use 3/16 inch element
> dia. Element diameter is very critical to building a UHF beam
.....

Note that 3/16 is 4.76 mm, which is very close to his 5 mm. I would guess
any correction would be very minimal.

Tam/WB2TT

765. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:11:53 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <7fGcnYcsafStSfyiXTWJkw@comcast.com>
Source record: 108331

"Dick Carroll" <dixie@townsqr.com> wrote in message
news:bjomftdia0@208.206.142.100...
> The 30 years I worked around communications installations using
> tall (+-300 ft) towers were revealing. Some sites never get struck while
others get it every
> time a cloud comes along.
> Obviiously how the electronic gear fares depends mostly on how well it is
all planned out in
> advance..
>
> Dick

Reminds me of a time I watched a thunderstorm near some 200+ foot commercial microwave towers. One tower got hit twice in a 5 minute span, but both hits were near the base of the tower, not the top.

Tam/WB2TT

766. Re: Nonlinear wave propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:35:27 UTC
From: richardharrison@webtv.net
Message-ID: <25739-3F61D9AF-11@storefull-2315.public.lawson.webtv.net>
Source record: 108335

Deacon Dave wrote:
"For an EM wave sharing a common boundary in different media, I offer that the wave "rolls" in the direction of propagation but does not create harmonics from some non-linear process."

That sounds right to me.

All those medium wave broadcast signals propagate along the earth`s surface and the differences of peopagation velocities in earth and air tend to give the waves a tilt toward the earth as they travel.. It`s as if the wave were "dragging its feet" as it travels.

Many waves share common paths, but I don`t recall hearing that signals sharing those paths got mixed by the experience. This is a fair indication of linearity of the earth/air boundary.

There has been speculation about the "Luxemburg effect". Radio Luxemburg hit the air with extreme power long ago. Many listeners, to other signals thought to share the same ionospheric volume with Radio Luxemburg, reported hearing Radio Luxemburg`s modulation on their received signals. It was assumed a non-linear effect in the ionosphere caused the mixing and could be triggered somehow by transmitted power were it high enough.

The Luxemburg effect interested propaganda broadcasters and their jammers among others. As far as I know, none has been successful in exploiting the Luxemburg effect. Sometimes we get lucky.

Best regards, Richard Harrison, KB5WZI

767. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:37:26 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjsln7$s9$1@nic.grnet.gr>
Source record: 108332

Dear Mr. Richard Clark,

What can I say?

This is the fourth time,
I have to call on my inadequate English
to justify a misunderstanding.
And this time
it is related to the Buckmaster site
mentioned by you
and that's all.

As for the rest three quarters of your message,
I don't feel that I am in position
to make any comment
since they are looking to me
as advises to successful advertisers.

But, there is one point
which, remarkably enough,
is referenced by you in both of your letters
and about the bottom line of them.
It has to do with the matter
of "maths" publication.
Noticeably,
you show about this matter
a strong predilection to web site publication
and a rejection of any inclusion into newsgroup messages.
Although for the moment
is seems that the right is on your side,
at the same time,
a recall to the need for direct communication
surpasses any other argument.
After all this is the deepest reason
for newsgroups existence, I believe.
Anyway.

Thank you very much for your time.

Sincerely yours,

pez
SV7BAX

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:98s1mvkg2m15usvl3fo90rquu11tkv9f2i@4ax.com...
| On Thu, 11 Sep 2003 12:13:44 +0300, "pez" <pez7sv@hotmail.com> wrote:

|
| >Dear Mr. Richard Clark,
| >
| >Thank you for the encouragement and your kind words.
| >but I am not so sure that we deserve them (*).
|
| Hello,
|
| Your manners are superlative, and far better than my own manners
| (according to others, and that's fine as this is a characteristic of
| my aggressive style).
| >
| >Yes, you have absolute right about the initials, etc.
| >But this became the motivation
| >to discover, with a great deal of surprise I admit,
| >that someone has given a bunch
| >of inaccurate details to this site.
| >We do not have something to hide
|
| You offer your call sign, that is far more unique than any signature
| that may be applied (like Dr. Slick). We have (as I am sure your part
| of the world does also) a history of pseudonyms or nom-de-plume for
| writers who wish to obscure their identity. I take care to write
| everything such that I can accept responsibility - or take
| responsibility. Many here do so too. Others do not, but in this day
| and age, anonymity is not guaranteed (again, taking the example of our
| same Dr. Slick) nor is it an affront if the writer commits to dialog
| and not simply slander or attack. Such occurrences of attack are rare
| here, and generally ignored.
|
| >therefore we certainly do not belong to those
| >with an extremely sensitive interest
| >on private data.
| >But I have to wonder:
| >is there any responsibility
| >by the site owner
| >to guard the amateurs' personal data
| >from anybody's will?
|
| Well, if by "site owner" you mean this newsgroup, then there is no
| "owner." There are nearly 40000 newsgroups that simply exist by
| nature of a combination of news-servers that are interconnected and
| sharing a protocol called NNTP. This protocol has been around since
| the beginning of the Internet (long before the WWW). It is like the
| public square where people meet to talk and listen and as in that
| square, if you are recognized, others will call you by name and
| perhaps comment about your ancestors. Such is privacy.
|
| Just as anything may be written here for free, anything written here
| has no intrinsic value. Value comes through association to the writer

| and that writer's continuity of thought and logic.
|
| You are already establishing a very good continuity and achieving a
| good association - to those who care!
| >
| >Finally,
| >I do share your point of view for the length of a message
| >and I try to keep them as short as possible
| >but anyhow,
| >take a look please
| >on their rejection (*)
| >in the related thread
| >of our lengthy, indeed, derivations...
| >
| >do;^)
| >
| >Sincerely yours,
| >
| >pez
| >SV7BAX
|
| Rejection is the forge of ideas. It does not condemn your work, it
| merely marks the critic by the nature of their criticism. If that
| criticism is weak, so is the critic. If that criticism is strong (not
| abuse, not refusal), then your argument is weak. Being technically
| and mathematically correct is not necessarily strength in an argument.
| You may be quite accurate, but the message is obscured by the bulk of
| presentation.
|
| A Canadian social scientist, Marshall McCluhan, demonstrated that
| identical material presented through different media become different
| messages. For instance, if you were to present you material to a
| class, they would accept it and work through it for understanding. If
| you were to present it to that same group of students in the public
| square, some might scoff, others might wander off with indifference.
| If you were to present it on TV, you probably wouldn't even make it to
| the first commercial. If you presented it on radio, you might have a
| highly interested audience. Same material, different venues,
| different responses.
|
| The same goes here. The nature of newsgroups is with dialog and
| hopefully you exchange correspondence with those who will allow you to
| develop your idea and stick with you to the end. If you attempt to
| make one presentation that answers all questions in one place, it
| violates a social contract that excludes them - except for them to
| accept or reject your work. They are not here to submit. This means
| you have to allow a style that is dialog in nature that allows their
| questions along the way to the end, where you do not find yourself
| wandering down the wrong path. (Think of the Socratic or Platonic
| methods of argument.) Unfortunately there are those who will

| manipulate discussion to the wrong path, or confusion. Dialog over
| time will reveal these individuals. This is why "lurking" is advised
| to newcomers so that they recognize personality with the signatures.
|
| One last point. Nothing is done once here. Nothing is solved.
| Nothing is fixed. The message will need repeating if only because new
| participants have not read the first message. The message may need
| repeating because you did not convince your critics, but they have had
| more time to ponder. This means that you sometimes have to vary your
| style and presentation so that repeating is not ignored. If you
| absolutely need the lengthy, mathematical treatment, then publish it
| at a web site and make a reference to it in your discussion. Offering
| the complete mathematical treatment each time you write here
| automatically limits you and reduces your audience. The craft of
| writing is knowing what to throw away. I generally discard 3/4ths of
| what I write before I hit the send button (some may groan not enough
| was thrown away here ;-)
|
| 73's
| Richard Clark, KB7QHC

768. Re: Complex Z0 - Power : A Proof [Rejected]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:41:15 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjslub$11a$1@nic.grnet.gr>
Source record: 108333

Dear Mr. Richard Clark,

I am most grateful for your useful comments,
especially
for those expressions which amplify my poor vocabulary.

Sincerely yours,

pez
SV7BAX

769. Re: Tip-of-the-Day: Check your Ham-IV Control Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 14:43:27 UTC
From: Richard Kriss <kriss@gbronline.com>
Message-ID: <kriss-375B12.09432612092003@central.isp.giganews.com>
Source record: 108334

I got the following from Hy-Gain that may be of interest

> The correct bulb type is an #1819. What some customers have done is to put
> a couple small strips of reflective tape on the inside of the cover above
> the bulb. They sya that this seems to work well.

In article <aa5vu-EF8E58.16571911092003@central.isp.giganews.com>,
"Dick, AA5VU" <aa5vu@arrl.net> wrote:

> The lamp in my (old) CDE Rotor Control Unit burned out. I opened the lid
> and found the lamp had melted a hole in the plastic meter. To make a
> long story short....I called Hy-Gain and found out this is pretty common
> and they recommended a 28 volt lamp - that should burn cooler. I picked
> up a smaller 28v lamp at Radio Shack. It is not as bright and I now have
> a moonbeam display.
>
> The tip is open your control unit to see if the lamp is starting to melt
> the plastic meter. Don't wait for the moonbeams to change to the smaller
> 28 volt bulb. BTW, I understand some have been know to have melted the
> cover as well as the meter. It is pretty easy to check...just remove
> four screws and take off the cover.
>
> I now wonder if the use of a White LED may be a better solution to this
> problem?
>
> 73 de Dick, AA5VU
>
> ps: The fix for moonbeams is a $69 replacement meter! I am learning to
> enjoy the moonbeam lighting.

770. Re: Tip-of-the-Day: Check your Ham-IV Control Unit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 15:01:09 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f629b8a_3@news1.prserv.net>
Source record: 108358

Gang:

Actually, there is another aspect of this, that meter case style was pretty common before digital displays took over completely. Look for a meter with an intact case at a swapfest and. . . swap.

--
Crazy George
Remove NO and SPAM from return address

771. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 15:14:21 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjsnsd$2ho$1@nic.grnet.gr>
Source record: 108336

Dear Mr. Tarmo Tammaru,

Thank you for this very touching information.

I hope Mr. Robert A. Chipman stands in good health
and I think this is a most appropriate time
for an acknowledgment of his work
which he definitely deserves.

If he does not following this newsgroup,
maybe somebody else
he already informed him
that his name and work is repeatedly mentioned
in a lot of discussions here
for the last one or perhaps two months.

Sincerely yours,

pez,
SV7BAX

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:F4adnRYqluLhFf2iXTWJjA@comcast.com...
|
| "pez" <pez7sv@hotmail.com> wrote in message
| news:bjpcfl$44p$1@nic.grnet.gr...
| >
| > As of the book by Chipman:
| >
| >
| > | I wonder if the old timer is still
| > | around?
| >
| > Me too.
| >
| I did a search, and came up with a Robert A Chipman, age 91, in Toledo OH.
| From my recollection, the age is about right, and Toledo is where I saw him
|
| Tam/WB2TT
|
|

772. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 15:15:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kgo3mv4v1atusgv7ps42hcpkijog2letet@4ax.com>
Source record: 108337

On Fri, 12 Sep 2003 17:37:26 +0300, "pez" <pez7sv@hotmail.com> wrote:

>And this time
>it is related to the Buckmaster site
>mentioned by you
>and that's all.
>

Hello,

Buckmaster makes available information that is already part of the public record. That is the point of licensing so that your activities are not shrouded in secrecy; but it also confirms you have certain rights to engage in activities others would not be allowed to do.

This, of course, has nothing to do with posting to a newsgroup, but it was also your choice to declare your call sign which is related to the activities here, but it is not necessary to reveal to participate.

73's
Richard Clark, KB7QHC

773. Re: Auto tuners

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 15:56:48 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <bjsqc0$24gn$1@news1.tribune.com>
Source record: 108338

I used my EDX-2 with my Alinco DX77T for a couple of years.
Despite the old wives tales, and misunderstandings, I went a head and fed
Balanced line with the tuner. I used it on a short dipole, and also used it
on a horizontal loop. I had the tuner in the shack close to my common
ground point. I was satisfied with its operation. It is "satisfied" with a
2:1 swr. Some times to go lower I hit the button again, and it would retune
and do a better job.
KA9CAR

"Gene" <multiuseguy@NOSPAMSyahoo.com> wrote in message
news:YWI7b.37384$A%3.483979@ord-read.news.verio.net...
> Anyone have any experience or comments about using autotuners such as the
> Alinco EDX-2 automatic wire antenna tuner or SGC antenna tuners ?
>
>

774. Re: Setting up a vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 17:01:19 UTC
From: richardharrison@webtv.net
Message-ID: <9341-3F61FBDF-63@storefull-2312.public.lawson.webtv.net>
Source record: 108339

J. P. Carvalho wrote:
"Can someone give a suggestion?"

Joao has a new top floor apartment, though he didn`t tell us how many floors including the rez do chao that we call floor no. 1, and it includes a large balcony in the northwest corner facing the street.

The roof is some 5.5 meters above his balcony. Joao is considering a vertical antenna about 5 meters tall.

If Joao has access to the roof, maybe he should make a friend of the "porteiro" (building engineer) in his new building. He may be able to use a wire antenna between the roof and his balcony. It could simplify the mechanics.

I recommend the ARRL Antenna Book although it isn`t very strong in placing antennas in and around apartments. It at least begins with "Safety Firsr", and that is as it should be.

A long time ago, I lived several years at several addresses along Avenida da Roma in Lisboa. The last address was described as Estados Unidos da America, Lote 21. It now looks a lot different than it did when newly completed and I moved into the penthouse on top.

Best regards, Richard Harriswon, KB5WZI

775. Diamond CP-6 with rainwater problem ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 17:20:41 UTC
From: "Fam. Mugge" <mugge@castel.nl>
Message-ID: <bjsv95$iu8$1@hermes.castel.nl>
Source record: 108340

Hi All,

Recently I bought a CP-6 groundplane by Diamond. It worked really well till we had one day with rain. That evening I couldn't use the antenna due to very high SWR readings. The day after it was a clear day without any rain and that evening SWR was back to normal. Water in a coax won't go away that quickly and the antennasocket was made waterproof with special tape.
Would it be possible that that dainholes in the coilcompartments are causing trouble?
If so, is there something I can do about it, like clueing small tubes on the coilcompartment, so that condenswater can get out, but rainwater can't come in?
Or is the problem caused by something else?

Best regards,

Willem

PH0WAW

776. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 18:05:26 UTC
From: richardharrison@webtv.net
Message-ID: <16560-3F620AE6-53@storefull-2316.public.lawson.webtv.net>
Source record: 108341

Tam, WB2TT wrote:
"One tower got hit twice in a 5 minute span, but both hits were near the
base of the tower, not the top."

Why was the voltage gradient highest near the base of the tower?

Best regards, Richard Harrison, KB5WZI

777. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 18:40:24 UTC
From: richardharrison@webtv.net
Message-ID: <9341-3F621318-70@storefull-2312.public.lawson.webtv.net>
Source record: 108344

Tam, WB2TT wrote:
"I would guess any correction would be very minimal."

So would I.

The questioner wants a 433 MHz yagi or thereabouts it seems. A wideband log-periodic for the 144 to 148 MHz band is offered on page 7.35 of the third edition of RSGB`s "VHF-UHF Manual". Gain is about 12 dB and bandwidth is about 4%

Divide the measurements shown for the 2m antenna by 3 for the 433 MHz dimensionds.

Best regards, Richard Harrison, KB5WZI

778. Re: HyGain Patriot 40 - 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 18:45:03 UTC
From: Bob Nielsen <nielsen@remove_this.oz.net>
Message-ID: <bjt47fci0@216.39.144.81>
Source record: 108342

On Fri, 12 Sep 2003 09:12:31 GMT, Roger Halstead wrote:
> Any one have any experience with the Patriot 40 through 10 meter
> antenna?
>
> I'm looking at putting one on the end of my shop. The base of the
> antenna would be at 32 feet with 4 radials at 45 degrees which also
> serve as guys,.
>

I've had one for about a year. It is mounted on a pipe alongside my house at ~14 ft. It performs adequately, not spectacularly (in other words, about as I expected) and is an improvement over the low wire antenna I previously used (my location is ~500 ft from salt water, which undoubtedly helps. The built-in ATUs of both my K-2 and TS-570D easily match The AV-640 across the entire 40 to 10 meter ham bands and I have made some use of it on 80 and 160 as well (better than no antenna at all).

I also considered the Cushcraft R-8, which fared quite well in the K7LXC/N0AX report comparing several verticals. They did not test the AV-640, however its design is quite similar to the R-8, except for the use of loading coils and capacity hats instead of traps (all bands are effectively in parallel). The price is significantly less than the R-8 (I bought mine from AES).

Quality of construction is typical of amateur antennas. It was quite easy to assemble and adjust, although two of the mounting brackets were missing. I phoned Hy-Gain, who promised to send them, but they never arrived. A couple of U-bolts from my local hardware store worked fine, however.

Bob, N7XY

779. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 19:11:59 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bjt5q0$f6n$1@nic.grnet.gr>
Source record: 108343

Dear Mr. Richard Clark,

Do you realize that,
this site is unguarded and open to anyone
who would like to modify your personal data,
even if it is "only" for 48 hours at most,
as it claims?
That is the point.
All of the rest are redundant.

Sincerely yours,

pez
SV7BAX

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:kgo3mv4v1atusgv7ps42hcpkijog2letet@4ax.com...
| On Fri, 12 Sep 2003 17:37:26 +0300, "pez" <pez7sv@hotmail.com> wrote:
|
| >And this time
| >it is related to the Buckmaster site
| >mentioned by you
| >and that's all.
| >
|
| Hello,
|
| Buckmaster makes available information that is already part of the
| public record. That is the point of licensing so that your activities
| are not shrouded in secrecy; but it also confirms you have certain
| rights to engage in activities others would not be allowed to do.
|
| This, of course, has nothing to do with posting to a newsgroup, but it
| was also your choice to declare your call sign which is related to the
| activities here, but it is not necessary to reveal to participate.
|
| 73's
| Richard Clark, KB7QHC

780. WTB: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 19:22:44 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <Abp8b.3276$Gr.195672@read1.cgocable.net>
Source record: 108346
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Looking for a copy of:
PRACTICAL ANTENNA HANDBOOK BY JOSEPH J. CARR BY MCGRAW-HILL,NY,1998,THIRD EDITION,
If anyone has one they wish to part with, please advise with price & shipping to Canada.
73...Norm VE3CZI

781. Re: Stating the obvious.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 19:25:02 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309121125.60d359fb@posting.google.com>
Source record: 108345

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<bjo3sh$o8f$1@sparta.btinternet.com>...
> I've been stating John Cleese's 'bleeding obvious' for years but nobody
> seems to take a scrap of notice.
>
> All the power which leaves the transmitter MUST be dissipated in the load -
> there's nowhere else for it to go.
>
> (Apart, of course, from the insignificant fraction of an S-unit, even on
> Roy's meter, which gets lost in the line).
>
> If anybody should mention re-re-re-reflections or power waves, I shall
> 'squeam' and 'squeam' and 'squeam' as did "Just William" 's 5-year-old
> pretty little golden-haired girl friend who lived next door.
>
> For the younger generation of US citizens who may not have heard of 12-year
> old William, he was the middle-class, naughty but well-intentioned,
> 10-year-old leading character in Richmal Crompton's series of "Just William"
> books.

> When the cry went out...Willliaaam all went quiet
hoping that the accumulator in the radio would not give up.

> Heinkels and Messersmidts, V1's and V2's in the azure blue skies over the
> sunny green fields and pretty, finished, English villages, where William and
> friend Ginger enjoyed their schooldays, finally put paid to the English
> class system of farm-labourers living in tied thatched cottages and the
> English Country-gentlemen farmers.

Used to count the doodle bugs that came from the N.E. at the same time
I countyed the flares emitted from returning fortresses.
Land army girls were to old for me.
Who on earth picks the malt hops now, that used to serve as a vacation
in the country for me?

> Kids now have to be content with porn and football all day on the telly and
> on most pages of the daily papers while becoming obese gorging Mac's
> many-layered hamburgers while standing up.
>
> And now, can you believe it, Morse Code is on its way out !

Could that mean that the audio will now take over those
quiet frequencies when the last O.T.leaves?

Art

782. Re: HF Beam help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 19:36:39 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <9pCdnWkiGvvQvf-iU-KYuA@comcast.com>
Source record: 108347

Sounds like a Mosley. They put the 10 and 15 m traps in the same housing.
Never took one apart, but I suspect the juncture of the two traps is
connected to the metal sleeve that covers the traps. Check out their web
site at
http://www.mosley-electronics.com/amateur.htm
They will give some dimensions there.

Tam/WB2TT
"Derek" <danda95@hotmail.com> wrote in message
news:o9N7b.594$Cg3.290@newsfep3-gui.server.ntli.net...
> HF beam Update
> The beam is not a TB3 as I was told. a friend of mine has a TB3 and I
> have been to check it
> today. The one I have got has only two traps on the driven ele one either
> side and so has the driven ele and the reflector the reflector is about
> 8.100 mtrs long the director is 6.200 mtrs long and the driven ele is up
in
> the air as a dipole so can not measure that also the traps on the driven
ele
> are larger. His is a Jaybeam TB3 as I have the leaflet on his and that has
4
> traps on each element 2 either side
> Any ideas????
> Derek
>
>
>
>
>
>
>
> "David L Thompson" <thompson@mindspring.com> wrote in message
> news:9QJ7b.929$zx2.557@newsread1.news.atl.earthlink.net...
> > Derek,
> >
> > The TB3 was the number for a Swan/Hornet 3 el beam. Mosley would be
> TA-33
> > and Hy-Gain is TH3 (I have a TH3 MK III). If its a Swan/Hornet the
boom
> to
> > mast and element to boom are all cast magnesium and one solid piece with
> > holes for the boom and element. The TB series used
> > equal 8 foot spacing. The TB2 had an 8 foot boom the TB3 a 16 foot
boom

> > and the TB4 (TB4H)
> > and earlier TB-1000-4 had a 24 foot boom.
> > 73 Dave K4JRB
> >
> > >
> >
> >
>
>
>

783. Re: Impossible-to-build Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 19:48:58 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <7JnkNqHqMiY$EASK@ifwtech.co.uk>
Source record: 108350

Richard Harrison wrote:
>Tam, WB2TT wrote:
>"I would guess any correction would be very minimal."
>
>So would I.
>
>The questioner wants a 433 MHz yagi or thereabouts it seems. A wideband
>log-periodic for the 144 to 148 MHz band is offered on page 7.35 of the
>third edition of RSGB`s "VHF-UHF Manual". Gain is about 12 dB and
>bandwidth is about 4%
>
That's only claimed gain, I'm afraid. The developer was an old friend,
but no way could we agree over that figure.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

784. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 20:51:56 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309121251.6d74f8cb@posting.google.com>
Source record: 108348

kd1@sympatico.ca wrote in message news:<3F61B127.D89E4DA2@sympatico.ca>...
> "Dr. Slick" wrote:
> >
> > kd1@sympatico.ca wrote in message news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > > >
> > > > The tricky part is measuring this correctly, because you
> > > > would need an SWR meter that is calibrated for the same Z as
> > > > Zo.
> > >
> > > It is not nearly that tricky. 'Revised' rho, as you state,
> > > predicts 0 Volts across the capacitor. This will be easy to
> > > measure with any AC voltmeter that can handle your test frequency.
> > >
> > Perhaps, but i'm interested in the forward and reflected
> > waves, which you can only get with directional couplers on a line of
> > the same Z as the Zo, i suspect. So even if you get 0 volts, there
> > are still fwd and rev waves.
>
> But what if you do not get zero volts. Sort of messes up the
> 'revised' rho theory a bit, does it not?
>

Perhaps.

> > > I predict, using circuit theory, that if you excite the
> > > test circuit with a 1 Volt sinusoid at a frequency that
> > > makes the impedances j200 and -j200, that you will measure
> > > 4 Volts across the capacitor, not 0. This aligns with the
> > > result expected from 'classic' rho.
> > >
> > Go ahead and bench test it, and let us know what you find.
>
> Rummage. Rummage. Rummage.
> 2.2 uH +/- 10%, 100 pf tolerance unknown, 33 ohms +/- 5%
>
> R = 34 measured
> L = 2.2 uH
> C = 100 pF
> But wait, there will be a scope probe across C, vendor says
> 15 pF nominal when compenstaed for a 15 pF scope input, but
> the scope input is 20 pF. Oh well, use 15 pF anyway. So:
> C = 115 pF
>
> f = 10.006 MHz
> Zres = 34 + j0

> Zind = 0 + j138.3
> Zcap = 0 - j138.3
>
> But it is always wise to predict the outcome before the measurements...
>
> So let's use a 1 Volt sinusoid at 10.006 MHz.
>

That's 1 volt RMS, right?

> From circuit theory:
> Ires = 0.02941 + j0 A
> Vcap = 4.067 /_ -90 V
>
> From 'classic' rho:
> Vi = 0.5 V
> rho = (Zl-Z0)/(Zl+Z0)
> = ((0 -j138.3)-(34+j138.3))/((0 -j138.3)+(34+j138.3))
> = 8.1965/_ -97.0
> Vr = Vi * rho
> = 0.5 * 8.1965/_ -97.0
> = 4.09826/_ -97.0 V
> Vcap = Vload = Vi + Vr
> = 0.5 + 4.09826/_ -97.0
> = 4.067/_ 90.0 V
>
> So I expect the magnitude of the voltage to be 4.067 volts.
>

so why did you use Vi=0.5V?

> But wait, there are a whole bunch of tolerances so that is
> unlikely to be the voltage, so what is the expected range?
>
> We are not sure of the capacitor tolerance but it is unlikely
> to be better than 10% and the scope probe is unknown, so let's
> call it 10%.
> The resistor was measured at 34 +/- 1 digit + meter error, so
> 5% is probably good.
>
> So if the capacitor is 10% high and resistor is 5% low the
> error would be 1.1/.95 = 1.16 or about 16%. So if the
> result is within 16% of 4.067 it will be consistent with
> expectations.
>
> First adjust frequency for resonance
> f = 10.14 MHz, tolerably close to the predicted 10.006 MHz.
>
> And the measured voltage across the capacitor is...
>
> Hold on, before revealing the answer....

>
> In the interests of minimizing the wiggle room, perhaps you
> would be so kind as to provide your prediction for the voltage
> across the capacitor. Using 'revised' rho, in a previous post
> I recall you predicted 0 volts. Is this still your expectation?
>
> ...Keith

Zero should be the voltage across the inductor and capacitor in
series,
definitely. Measure this too.

But you bring up a good point. It probably won't be zero volts
across the capacitor.

But you won't be measuring the forward and reflected voltage
waves, which is what you need for rho. In other words, you will need
a directional coupler that has a characteristic impedance of Zo=34 +
j138.3

And the reflected power can never be greater than the incident.

Slick

785. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 20:56:01 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309121256.15c08db3@posting.google.com>
Source record: 108349

kd1@sympatico.ca wrote in message news:<3F619D28.ACCBF0B2@sympatico.ca>...
> Reg Edwards wrote:
> >
> > > I suggest considering a slotted line where the measured RMS
> > > voltage is a function of position along the slot (when a
> > > standing wave is present).
> > >
> > ==========
> >
> > Voltage is a function of position along the slot even when a standing wave
> > is NOT present.
>
> I think there is one case where it doesn't vary and three where
> it does:
>
> Matched lossless line: RMS voltage will be the same everywhere
> Mismatched lossless: RMS voltage varies - the standing wave
> Matched lossy line: RMS voltage declines towards the load
> Mismatched lossy line: RMS voltage varies and declines towards the load
>
> ...Keith

I'd agree with Keith on this, but you guys are talking about a NET
voltage at one point! That will not be the same as the forward and reflected
Vrms! I have to agree with Cecil on this one.

Slick

786. Re: A Subtle Detail of Reflection Coefficients (but important toknow)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-12 21:06:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0sc4mv0faup0t7jo09h9plbrl7rvg9h7jr@4ax.com>
Source record: 108351

On Fri, 12 Sep 2003 22:11:59 +0300, "pez" <pez7sv@hotmail.com> wrote:

>Dear Mr. Richard Clark,
>
>Do you realize that,
>this site is unguarded and open to anyone
>who would like to modify your personal data,
>even if it is "only" for 48 hours at most,
>as it claims?
>That is the point.
>All of the rest are redundant.
>
>Sincerely yours,
>
>pez
>SV7BAX
>

Hello,

Well that is news, yes.

Perhaps you should write them (Buckmaster) to suggest that they track the IP of the persons responsible for making those changes. This is a trivial, technical modification to their server software (I've written such software for Web servers - probably no more than 5 lines of code and a database call). Then ask them for that IP number so that you can register formal complaints against that individual. There are any number of simple and effective methods to prevent what you describe, nothing is technically difficult nor impossible. 48 Hours is not defensible with today's attention growing against identity theft.

73's
Richard Clark, KB7QHC

787. Re: Complex line Z0: A numerical example

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 00:04:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm4nob6m8tq0c9@corp.supernews.com>
Source record: 108352

I've mentioned a couple of times that I did an analysis of a fictitious lossless line with complex Z0, noting that such a line couldn't be constructed. This academic exercise was done by duplicating the lossy-line analysis, but with loss constant alpha set to zero. With a one wavelength line, all the results were consistent. However, after looking more carefully at the lossless line analysis, I've found that the law of conservation of energy is violated except for certain line lengths. That is, the total average power into the "lossless" line isn't always equal to the average power out. (The one wavelength I chose for the analysis turned out to be one of the special cases where the average power in does equal the average power out.) Of course, loss constant alpha and line impedance Z0 aren't actually independent; both are derived from the same R, C, L, and G parameters. Although I knew this, I didn't realize what the consequence would be of assigning an impossible combination of values to Z0 and alpha. The consequence turns out to be that voltages, currents, and impedances are all consistent, but total average power is not. I haven't posted the lossless line analysis, and won't, since the results are invalid because of the invalid premises. I believe that any valid analysis must use loss constant alpha, propagation constant beta, and characteristic impedance Z0 which are all derived from the same R, C, L, and G parameters -- as was the case for the lossy-line analysis I posted.

I continue to believe and assert that the lossy-line analysis I did post is valid for any line length, and haven't seen any evidence to the contrary.

Roy Lewallen, W7EL

788. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 00:09:05 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <Hc6dnVd81riC_f-iXTWJhQ@comcast.com>
Source record: 108353
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Amazon.com is a source for used books, including several editions of this one. So is addall.com. I have used both several times with no difficulty. YMMV.

Tom, N3IJ

"Norm VE3CZI" <ve3czi@arrl.net> wrote in message news:Abp8b.3276$Gr.195672@read1.cgocable.net...
> Looking for a copy of:
> PRACTICAL ANTENNA HANDBOOK BY JOSEPH J. CARR BY MCGRAW-HILL,NY,1998,THIRD
> EDITION,
> If anyone has one they wish to part with, please advise with price &
> shipping to Canada.
> 73...Norm VE3CZI
>
>
>
>
>
>

789. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 01:25:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm4sgj2sortqaf@corp.supernews.com>
Source record: 108354
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

And I highly recommend our local super-bookstore, which has a very good selection of used books -- Powell's, http://www.powells.com.

Roy Lewallen, W7EL

Tom Coates wrote:
> Amazon.com is a source for used books, including several editions of this
> one. So is addall.com. I have used both several times with no difficulty.
> YMMV.
>
> Tom, N3IJ
>
>
> "Norm VE3CZI" <ve3czi@arrl.net> wrote in message
> news:Abp8b.3276$Gr.195672@read1.cgocable.net...
>
>>Looking for a copy of:
>>PRACTICAL ANTENNA HANDBOOK BY JOSEPH J. CARR BY MCGRAW-HILL,NY,1998,THIRD
>>EDITION,
>>If anyone has one they wish to part with, please advise with price &
>>shipping to Canada.
>>73...Norm VE3CZI

790. Re: Info on Daiwa CN 101 SWR/Power Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 01:27:00 UTC
From: "Dick, AA5VU" <aa5vu@arrl.net>
Message-ID: <aa5vu-BD4188.20270012092003@central.isp.giganews.com>
Source record: 108355

Thanks to one of the readers I have the a scannned copy of the manual.

Dick, AA5VU

In article <kriss-3E88D6.12100611092003@central.isp.giganews.com>,
Richard Kriss <kriss@gbronline.com> wrote:

> I am about to do some trading and may wind up with a Daiwa CN-100 cross
> needle SWR/Power meter with no documentation. I could not find an
> online source of manual for any Daiwa products so would like to talk to
> someone that has one.
>
> Anybody use or have experince with the Daiwa CN 101? The QST review by
> Steve Ford was not that great on the peak power reading.
>
> If you will send me your address, I will send an SASE for a copy. The
> manual can't be very big.
>
> Dick, AA5VU

791. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 03:32:00 UTC
From: spencer313@yahoo.com
Message-ID: <ed5d175e.0309121932.5c2e7590@posting.google.com>
Source record: 108356

Um, if Kraus (and Marhefka) was not dismissive of Fractals, why name the chapter "Artistic Antennas"? In my opinion, it was a polite dismissal.

Please read Steve Best's excellent paper in the IEEE Antennas and Propagation magazine. It shows that Fractals have no particular advantage over non-fractal shapes of similar parameters.

-Spencer Webb
KW2S
www.antennasys.com
(and contributor to Kraus' Antennas 3rd. ed.)

richardharrison@webtv.net (Richard Harrison) wrote in message news:<20161-3F5E02CB-477@storefull-2316.public.lawson.webtv.net>...
> Richard Clark wrote:
> "These six designs have yet to be surpassed by any product from FAS."
>
> Maybe that`s right. John Kraus and associates are not so dismissive of
> "Artistic Antennas" (Fractals) on page 772 of "Antennas For All
> Applications".
>
> The Kraus book does illustrate the more complicated impedance variations
> of Fractals as compared with a loop or a flat plate used as an antenna.
>
> Best regards, Richard Harrison, KB5WZI

792. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:05:14 UTC
From: fractenna@aol.com
Message-ID: <20030913000514.06150.00001129@mb-m10.aol.com>
Source record: 108357

>Um, if Kraus (and Marhefka) was not dismissive of Fractals, why name
>the chapter "Artistic Antennas"? In my opinion, it was a polite
>dismissal.
>
>Please read Steve Best's excellent paper in the IEEE Antennas and
>Propagation magazine. It shows that Fractals have no particular
>advantage over non-fractal shapes of similar parameters.
>
>-Spencer Webb
>KW2S
>www.antennasys.com
>(and contributor to Kraus' Antennas 3rd. ed.)
>

Hi Spence--

Always happy to hear from someone at another antenna company:-)

May I thus quote you as saying that the intent of the authors and contributors was to dismiss fractal antennas?

Steve Best's article :

"A Discussion on the Significance of Geometry in Determining the Resonant Behavior of Fractal and other non-Euclidean Wire Antennas"; AP Magazine;45,3 (June 2003)

does not show what you said. The statement is made in the magazine, but it is not shown to be so nor supported by the data.

May I suggest that you monitor the web site:

http://www.fractenna.com

which will host a critique of the article. Indeed, I invite you to also host the critique on your web site if you wish. The editor of AP Magazine was also invited to publish the critique(when it comes out) and, indeed, it would make sense to publish any relevant reviewer reports with it.

The timing of this availability will be decided by Steve's next publication, which is expected to be in the next few weeks.

Thank you for the opportunity to correct information and post a relevant source for info on this public forum.

73,
Chip N1IR

793. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:06:45 UTC
From: kd1@sympatico.ca
Message-ID: <3F6297D5.9E3225C@sympatico.ca>
Source record: 108359

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F61B127.D89E4DA2@sympatico.ca>...
> > "Dr. Slick" wrote:
> > >
> > > kd1@sympatico.ca wrote in message news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > > > >
> > > > > The tricky part is measuring this correctly, because you
> > > > > would need an SWR meter that is calibrated for the same Z as
> > > > > Zo.
> > > >
> > > > It is not nearly that tricky. 'Revised' rho, as you state,
> > > > predicts 0 Volts across the capacitor. This will be easy to
> > > > measure with any AC voltmeter that can handle your test frequency.
> > >
> > > Perhaps, but i'm interested in the forward and reflected
> > > waves, which you can only get with directional couplers on a line of
> > > the same Z as the Zo, i suspect. So even if you get 0 volts, there
> > > are still fwd and rev waves.
> >
> > But what if you do not get zero volts. Sort of messes up the
> > 'revised' rho theory a bit, does it not?
>
> Perhaps.
>
> > > > I predict, using circuit theory, that if you excite the
> > > > test circuit with a 1 Volt sinusoid at a frequency that
> > > > makes the impedances j200 and -j200, that you will measure
> > > > 4 Volts across the capacitor, not 0. This aligns with the
> > > > result expected from 'classic' rho.
> > >
> > > Go ahead and bench test it, and let us know what you find.
> >
> > Rummage. Rummage. Rummage.
> > 2.2 uH +/- 10%, 100 pf tolerance unknown, 33 ohms +/- 5%
> >
> > R = 34 measured
> > L = 2.2 uH
> > C = 100 pF
> > But wait, there will be a scope probe across C, vendor says
> > 15 pF nominal when compenstaed for a 15 pF scope input, but
> > the scope input is 20 pF. Oh well, use 15 pF anyway. So:
> > C = 115 pF
> >

> > f = 10.006 MHz
> > Zres = 34 + j0
> > Zind = 0 + j138.3
> > Zcap = 0 - j138.3
> >
> > But it is always wise to predict the outcome before the measurements...
> >
> > So let's use a 1 Volt sinusoid at 10.006 MHz.
>
> That's 1 volt RMS, right?

Peak actually. But its peak everywhere so it all cancels out.

> > From circuit theory:
> > Ires = 0.02941 + j0 A
> > Vcap = 4.067 /_ -90 V
> >
> > From 'classic' rho:
> > Vi = 0.5 V
> > rho = (Zl-Z0)/(Zl+Z0)
> > = ((0 -j138.3)-(34+j138.3))/((0 -j138.3)+(34+j138.3))
> > = 8.1965/_ -97.0
> > Vr = Vi * rho
> > = 0.5 * 8.1965/_ -97.0
> > = 4.09826/_ -97.0 V
> > Vcap = Vload = Vi + Vr
> > = 0.5 + 4.09826/_ -97.0
> > = 4.067/_ 90.0 V

Correction: 4.067/_ -90 V

> >
> > So I expect the magnitude of the voltage to be 4.067 volts.

This is the voltage at the load. Not the incident voltage.
The voltage at any point on the line is Vi + Vr at that point.
So Vload has been computed two ways. Once with circuit theory
and once with classic rho: both yield 4.067/_ 90.0 V.

> so why did you use Vi=0.5V?

With a Thevenin image matched generator, the incident voltage is
always one-half of the voltage generated by the ideal source.

In any case, as will be shown below, one can compute Vi from
the load voltage and current using the same equations implemented
in a directional voltmeter. Vi does turn out to be 0.5 volt.

> > But wait, there are a whole bunch of tolerances so that is
> > unlikely to be the voltage, so what is the expected range?
> >
> > We are not sure of the capacitor tolerance but it is unlikely
> > to be better than 10% and the scope probe is unknown, so let's

> > call it 10%.
> > The resistor was measured at 34 +/- 1 digit + meter error, so
> > 5% is probably good.
> >
> > So if the capacitor is 10% high and resistor is 5% low the
> > error would be 1.1/.95 = 1.16 or about 16%. So if the
> > result is within 16% of 4.067 it will be consistent with
> > expectations.
> >
> > First adjust frequency for resonance
> > f = 10.14 MHz, tolerably close to the predicted 10.006 MHz.
> >
> > And the measured voltage across the capacitor is...
> >
> > Hold on, before revealing the answer....
> >
> > In the interests of minimizing the wiggle room, perhaps you
> > would be so kind as to provide your prediction for the voltage
> > across the capacitor. Using 'revised' rho, in a previous post
> > I recall you predicted 0 volts. Is this still your expectation?
> >
> > ...Keith
>
> Zero should be the voltage across the inductor and capacitor in
> series, definitely. Measure this too.

This was how I checked resonance; adjusted the frequency for
minimum voltage here.

> But you bring up a good point. It probably won't be zero volts
> across the capacitor.

Its not. Its 3.8 volts, which is entirely consistent with circuit
theory and 'classic' rho. Not only is it higher than the incident
voltage, it is higher than the source voltage.

> But you won't be measuring the forward and reflected voltage
> waves, which is what you need for rho.

My understanding was that using 'revised' rho, rho could be computed
using:
rho = (Zl-Z0conjugate)/(Zl+Z0)
In this example, this would lead to
rho = -1
By definition
Vr = Vi * rho
So
Vr = -Vi (in this example)
Since
Vnet = Vi + Vr
Vnet = Vi - Vi (in this example)
Vnet will be equal to 0 regardless of the value of Vi.

So using the 'revised' rho equation, the voltage across
the capacitor (the load) should be 0. Since it is not,
I conclude that
rho != (Zl-Z0conjugate)/(Zl+Z0)
Or at least, that this revised definition of rho is not
useful for computing the reflected voltage.

It is unnecessary to measure the forward and reflected voltage
to determine this.

> In other words, you will need a directional coupler that has
> a characteristic impedance of Zo=34 + j138.3

Not quite true. From the information already known about the
circuit we can compute what such a directional voltmeter would
indicate.

Vfwd = 0.5*(Vnet + Inet*Z0)
Vrev = 0.5*(Vnet - Inet*Z0)

Vnet = 4.067/_ -90.0 V
Inet = 0.02941 + j0 = 0.02941/_ 0.0 A
Z0 = 34 + j138.3 = 142.4 /_ 76.19 ohm

Vfwd = 0.5*(4.067/_ -90.0 + 0.02941/_ 0.0 * 142.4 /_ 76.19)
= 0.5*(0.9997/_ -0.004462)
= 0.5 V
Vrev = 0.5*(4.067/_ -90.0 - 0.02941/_ 0.0 * 142.4 /_ 76.19)
= 0.5*(8.195/_ -97)
= 4.098/_ -97

as expected using 'classic' rho. Checking again...
rho = 8.1965/_ -97.0
Vr = Vi * rho
4.098/_ -97 = 0.5 * 8.1965/_ -97.0
is indeed satisfied.

> And the reflected power can never be greater than the incident.

Classic rho does seem to produce all the proper voltages.
And using the equations implemented in a directional voltmeter,
we get back the expected Vfwd and Vrev.

Using revised rho does not produce the voltages computed with
circuit theory, nor those measured on the bench.
So revised rho does not seem to be the answer to the power
dilemma.

...Keith

794. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:14:53 UTC
From: kd1@sympatico.ca
Message-ID: <3F6299BD.5E3B8246@sympatico.ca>
Source record: 108360

David Robbins wrote:
>
> <kd1@sympatico.ca> wrote in message news:3F61B127.D89E4DA2@sympatico.ca...
> > "Dr. Slick" wrote:
> > >
> > > kd1@sympatico.ca wrote in message
> news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > > > > The tricky part is measuring this correctly, because you
> > > > > would need an SWR meter that is calibrated for the same Z as
> > > > > Zo.
> > > >
> > > > It is not nearly that tricky. 'Revised' rho, as you state,
> > > > predicts 0 Volts across the capacitor. This will be easy to
> > > > measure with any AC voltmeter that can handle your test frequency.
> > >
> > > Perhaps, but i'm interested in the forward and reflected
> > > waves, which you can only get with directional couplers on a line of
> > > the same Z as the Zo, i suspect. So even if you get 0 volts, there
> > > are still fwd and rev waves.
> >
> > But what if you do not get zero volts. Sort of messes up the
> > 'revised' rho theory a bit, does it not?
>
> the 'revised' rho predicts zero reflect 'power waves' as defined by
> kurokawa... it says nothing about voltage or current waves.

So is kurokawa proposing two completely different rhos?
One for computing voltages and currents and the other for power?

This could work, I supposed, but this discussion started with an
assertion that 'classic' rho was WRONG because it resulted in
more reflected power than incident. My contention is that
'classic' rho is correct and yields the correct voltages regardless
of the results obtained when |rho|^2 is used to predict powers.

If kurokawa wishes to introduce a new rho to solve these problems
in a different manner, that is fine, but he would have reduced
confusion significantly if he had not called it rho.

...Keith

795. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:38:02 UTC
From: Bill Higdon <w.higdon@attbi.com>
Message-ID: <3F629F15.80709@attbi.com>
Source record: 108361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

You mean there's any other bookstore besides Powell's
Bill Higdon
Roy Lewallen wrote:
> And I highly recommend our local super-bookstore, which has a very good
> selection of used books -- Powell's, http://www.powells.com.
>
> Roy Lewallen, W7EL
>
> Tom Coates wrote:
>
>> Amazon.com is a source for used books, including several editions of this
>> one. So is addall.com. I have used both several times with no difficulty.
>> YMMV.
>>
>> Tom, N3IJ
>>
>>
>> "Norm VE3CZI" <ve3czi@arrl.net> wrote in message
>> news:Abp8b.3276$Gr.195672@read1.cgocable.net...
>>
>>> Looking for a copy of:
>>> PRACTICAL ANTENNA HANDBOOK BY JOSEPH J. CARR BY
>>> MCGRAW-HILL,NY,1998,THIRD
>>> EDITION,
>>> If anyone has one they wish to part with, please advise with price &
>>> shipping to Canada.
>>> 73...Norm VE3CZI
>>
>

796. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:50:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm58gke7io3l0c@corp.supernews.com>
Source record: 108362

And that's the whole crux of the problem -- the mistaken assumption that the "reflected power" can never exceed the "forward power". Once you accept that erroneous idea as a fact, you're stuck with some very problematic dilemmas that no amount of fancy pseudo-math and alternate reflection coefficient equations can extract you from. A very simple derivation, posted here and never rationally disputed, clearly shows that the total average power consists of "forward power" (computed from Vf and If), "reflected power" (computed from Vr and Ir), and another average power term (from Vf * Ir and Vr * If) whenever Z0 is complex. The only solid and inflexible rule is that these three always have to add up to the total average power. Not that the "forward power" always has to equal or exceed the "reflected power". It's in that false assumption that the problem lies.

Roy Lewallen, W7EL

kd1@sympatico.ca wrote:
>
> So is kurokawa proposing two completely different rhos?
> One for computing voltages and currents and the other for power?
>
> This could work, I supposed, but this discussion started with an
> assertion that 'classic' rho was WRONG because it resulted in
> more reflected power than incident. My contention is that
> 'classic' rho is correct and yields the correct voltages regardless
> of the results obtained when |rho|^2 is used to predict powers.
>
> If kurokawa wishes to introduce a new rho to solve these problems
> in a different manner, that is fine, but he would have reduced
> confusion significantly if he had not called it rho.
>
> ...Keith

797. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 04:53:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm58ndm871fd8c@corp.supernews.com>
Source record: 108363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Bill Higdon wrote:
> You mean there's any other bookstore besides Powell's
> Bill Higdon

I hope not! It's a short trip downtown by light rail to Powell's main store and their nearby Technical Bookstore. Considering how much money I drop there, I'd go bankrupt if there was another one.

Roy Lewallen, W7EL

798. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 05:05:56 UTC
From: Bill Higdon <w.higdon@attbi.com>
Message-ID: <3F62A59F.8080606@attbi.com>
Source record: 108364
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

It's truly amazing what you can find while wandering through Powells.
Bill
Roy Lewallen wrote:
> Bill Higdon wrote:
>
>> You mean there's any other bookstore besides Powell's
>> Bill Higdon
>
>
> I hope not! It's a short trip downtown by light rail to Powell's main
> store and their nearby Technical Bookstore. Considering how much money I
> drop there, I'd go bankrupt if there was another one.
>
> Roy Lewallen, W7EL
>

799. Re: Diamond CP-6 with rainwater problem ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 07:47:10 UTC
From: Ed Cregger <ecregger@hotmail.com>
Message-ID: <bjui32017hp@enews3.newsguy.com>
Source record: 108365

It is possible that the drain holes are plugged. Running a small piece of wire into the drain holes to ensure that they are unblocked might be a good idea. Good luck.

Ed Cregger, NM2K

"Fam. Mugge" <mugge@castel.nl> wrote in message news:bjsv95$iu8$1@hermes.castel.nl...
> Hi All,
>
> Recently I bought a CP-6 groundplane by Diamond. It worked really well till
> we had one day with rain. That evening I couldn't use the antenna due to
> very high SWR readings. The day after it was a clear day without any rain
> and that evening SWR was back to normal. Water in a coax won't go away that
> quickly and the antennasocket was made waterproof with special tape.
> Would it be possible that that dainholes in the coilcompartments are causing
> trouble?
> If so, is there something I can do about it, like clueing small tubes on the
> coilcompartment, so that condenswater can get out, but rainwater can't come
> in?
> Or is the problem caused by something else?
>
> Best regards,
>
> Willem
>
> PH0WAW
>
>

800. Re: Armageddon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 09:55:21 UTC
From: Bill <lbj@congress.com>
Message-ID: <bjuphi$nfgo1$1@ID-175813.news.uni-berlin.de>
Source record: 108366

I do believe Velikovski (sp) speculated that Mars has/had oil.
It has been 40+ years since I read his books.

73 Bill N4WC

Reg Edwards wrote:
> God said let there be a Big Bang - and there was one.
>
>
> He then unkindly left the many Quarks contained in the Universe to sort
> things out for themselves.
>
>
> As Hardy relatively recently said to Laurel, both with their legs removed
> and wrapped around their necks, "Here's another fine mess you've got us
> into."
>
>
> Is there oil on Mars ?
>
> ----
> ========================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com
> ========================
>
>

801. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 12:17:22 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0309130417.fc2a2d4@posting.google.com>
Source record: 108367

fractenna@aol.com (Fractenna) wrote in message
> ...Indeed, I invite you to also host the
> critique on your web site if you wish.
> Chip N1IR

Just don't even think about hosting a critique of the critique on your website. If you do, you'll receive nasty e-mails spouting meaningless legal jargon mixed with nonsensical threats.

802. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 12:31:22 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <eZSdnRy-kpeqk_6iU-KYuA@crocker.com>
Source record: 108368

<kd1@sympatico.ca> wrote in message news:3F6299BD.5E3B8246@sympatico.ca...
> David Robbins wrote:
> >
> > <kd1@sympatico.ca> wrote in message
news:3F61B127.D89E4DA2@sympatico.ca...
> > > "Dr. Slick" wrote:
> > > >
> > > > kd1@sympatico.ca wrote in message
> > news:<3F5E88D9.CC22DA32@sympatico.ca>...
> > > > > > >
> > > > > > The tricky part is measuring this correctly, because you
> > > > > > would need an SWR meter that is calibrated for the same Z as
> > > > > > Zo.
> > > > > >
> > > > > It is not nearly that tricky. 'Revised' rho, as you state,
> > > > > predicts 0 Volts across the capacitor. This will be easy to
> > > > > measure with any AC voltmeter that can handle your test frequency.
> > > > >
> > > > Perhaps, but i'm interested in the forward and reflected
> > > > waves, which you can only get with directional couplers on a line of
> > > > the same Z as the Zo, i suspect. So even if you get 0 volts, there
> > > > are still fwd and rev waves.
> > > >
> > > But what if you do not get zero volts. Sort of messes up the
> > > 'revised' rho theory a bit, does it not?
> > >
> > the 'revised' rho predicts zero reflect 'power waves' as defined by
> > kurokawa... it says nothing about voltage or current waves.
> >
> So is kurokawa proposing two completely different rhos?
> One for computing voltages and currents and the other for power?

even worse... the 'new' one is based on kurokawa's specific definition of a
'power wave'. this 'power wave' is obviously defined to avoid some of the
discussion we have been having when talking about forward and reflected
powers, but it is not 'power' as discussed in most other places. it is
instead a contrived wave formula specifically chosen to make power
calculations easier as kurokawa states just before defining the forward and
reflected 'power waves' as:

a=(V+ZI)/2sqrt(|ReZ|) and
b=(V+Z*I)/2sqrt(|ReZ|)
(subscripts 'i' left off all terms for readability)

these definitions of course make it harder to calculate the underlying volta
ges and currents, but make it easy to calculate power and power reflections
from a multi port network as you simply define the 'power wave reflection
coeficient' as s=b/a and the 'power reflection coefficient' as |s|^2. note,
at no point does kurokawa use rho. In one point just after defining s (eqn
11) and expanding it by substitution to s=(Zl-Zo*)/(Zl+Zo) (eqn 12) and
further into R,X terms (eqn 13) it is compared to the significance of the
'conventional voltage reflection coefficient', there is no mention that this
should replace the 'conventional' rho, nor that it should give the same
results.

i think the more important thing now is to point out to the arrl the error
of using that form of the reflection coefficient in place of the
'conventional' one in the latest antenna book so it doesn't become gospel in
the future.

803. Re: Ligntning protection question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 13:23:02 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0309130523.73fb2fae@posting.google.com>
Source record: 108269

Tam, WB2TT wrote:
> "...both hits were near the
> base of the tower, not the top."

Richard Harrison asked:
> Why was the voltage gradient highest
> near the base of the tower?

One only needs to watch the science, or reality, TV shows about lightning to see many clear (!!!) violations of the 'Simplified Rules of Lightning'. Such reports, as Tam's, no longer require signed affidavits and a complete mathematical analysis to be considered reliable. A video would certainly be considered helpful for those that doubt ;-).

It is interesting that lightning has become a MUCH more complex phenomena since the camcorder became a common household item. That is a reflection on human behavior and the not-quite-perfect process of science.

Regards,

J. Harvey, VE1BLL

804. Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 15:05:22 UTC
From: Dealmeister <chrisday@paratroopers.org>
Message-ID: <SmG8b.6327$ZG5.1481@newssvr16.news.prodigy.com>
Source record: 108271

Two questions:

1. I like to surf the web while Dxing; my computer creates a lot of noise. Too DX and surf, obviously the radio and PC need to be in relatively close proximity. Anythoughts on how I can cut down the noise?

2. Can anyone recommend a good decoder? Years ago I used the AEA PK-232. These days I'd like to buy a decoder that covers as much of the used formats as possible. Key for me will be simplicity though. I don't want something with a manual or operation that's so technical it won't be fun. I want something that is as "plug and play" as possible.

Any thoughts would be appreciated! Thanks

805. FS: Receiver US Army BC-342-M

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 15:17:23 UTC
From: AL KA5JGV <ABurzynski@nojunk.satx.rr.com>
Message-ID: <7yG8b.5616$z32.5114@twister.austin.rr.com>
Source record: 108270

For Sale: $150.00 for all items below.
I will not ship, you pick up in San Antonio, Tx.
Receiver weighs about 70 pounds.

1.Signal Corps US Army
Radio Receiver BC-342-M, SN 397
RCA Manufacturing Co.
Camden, N.J.

2. Original, not a photocopy:
War Department Technical Manual TM 11-4001
Repair Instructions for BC-312 and BC-342 Receivers
War Department, February 1945

3. Photocopy of Operation Manual and additional
notes with schematic diagrams.

The receiver is the 120v (not dc dynamotor) type
and works properly. Some modifications were made
but they are of the gain improvement variety (replacing
cathode resistors and such). Modifications are documented.
Includes control cable CD-566, 2 mounting brackets, and
original schematic on metal plate that was originally
mounted inside the receiver.

Receive frequency is 1.5 to 18mc (MHz for you young troops),
and includes a crystal filter. The unit requires an external
speaker and 2-prong power cord. Use of a 2-prong power cord
causes 30-volts to appear between chassis and 3rd wire neutral.
I suspect there are leaky power supply capacitors.

If you're interested contact me at
ABurzynski at satx dot rr dot com

Al
KA5JGV

806. Re: Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:08:05 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <J56cnQIE94Sf3P6iU-KYgg@crocker.com>
Source record: 108272

"Dealmeister" <chrisday@paratroopers.org> wrote in message
news:SmG8b.6327$ZG5.1481@newssvr16.news.prodigy.com...
> Two questions:
>
> 1. I like to surf the web while Dxing; my computer creates a lot of
noise.
> Too DX and surf, obviously the radio and PC need to be in relatively close
> proximity. Anythoughts on how I can cut down the noise?

follow the following steps, stop when noise is down to a tolerable level:
1. make sure the computer case is metal and well connected to itself. you
may need to scrape some paint off to make good metal to metal connections
all the way around the edges of the case.
2. add a ground wire to the case.
3. put ferrite chokes on all cables, power, video, keyboard, rs-232, etc.
4. if it is your monitor that is the worst problem get a newer one or wrap
it in aluminum foil (cut slits or add a fan for ventilation).
5. wrap all cords in aluminum foil and ground all the foil.

>
> 2. Can anyone recommend a good decoder? Years ago I used the AEA PK-232.
> These days I'd like to buy a decoder that covers as much of the used
formats
> as possible. Key for me will be simplicity though. I don't want something
> with a manual or operation that's so technical it won't be fun. I want
> something that is as "plug and play" as possible.

assuming your computer has a sound card, get one of the free digital
programs off the web. those programs are the only way to use the latest
modes as it takes a long time for hardware makers to update their code and
hardware. an interface like a RigBlaster goes between the computer and
radio to match audio levels and provide ptt for transmitting.

807. Re: Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:09:52 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <kjH8b.127937$kP.114152@fed1read03>
Source record: 108273

"Dealmeister" <chrisday@paratroopers.org> wrote in message
news:SmG8b.6327$ZG5.1481@newssvr16.news.prodigy.com...
> Two questions:
>
> 1. I like to surf the web while Dxing; my computer creates a lot of
noise.
> Too DX and surf, obviously the radio and PC need to be in relatively close
> proximity. Anythoughts on how I can cut down the noise?

I solved the problem by using a Toshiba Laptop.
Laptops by design can be well shielded and some like the Toshiba are.
And laptops have an LCD screen eliminating the CRT noise problem, otherwise
see

Computer noise abatement at URL;
http://ac6v.com/comprfi.htm

> 2. Can anyone recommend a good decoder? Years ago I used the AEA PK-232.
> These days I'd like to buy a decoder that covers as much of the used
formats
> as possible. Key for me will be simplicity though. I don't want something
> with a manual or operation that's so technical it won't be fun. I want
> something that is as "plug and play" as possible.

Your computer can decode digital signals -- for software see URL:
MixW Software
http://www.nvbb.net/~jaffejim/mixwpage.htm
Does:
SSB
CW
AM
BPSK/BPSK63
QPSK
FSK31
RTTY any speed any shift
Packet (VHF) & (UHF)
Pactor RX
AMTOR RX & FEC TX
MFSK/Graphics Color/BW
Throb
MT63
Hellschreiber
FAX
SSTV

Others at URL:
http://ac6v.com/software.htm#DIGITAL

808. Re: Hy-Gain 203BA-S, 3 Element 20 Meter Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:20:22 UTC
From: a6au6 <xxxa6au6z@hotmail.com>
Message-ID: <atH8b.6838$NM1.1708@newsread2.news.atl.earthlink.net>
Source record: 108274
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

The beam was sold.

Thanks for all the interest.

==========
"a6au6" <xxxa6au6z@hotmail.com> wrote in message
news:KrM6b.4948$BG6.3218@newsread1.news.atl.earthlink.net...

> This is a USED 20 meter three element full size monoband 20 meter beam:
>
> Boom Length - 16.5 feet
> Longest Element - 37 feet
> Weight - 35 pounds
> Wind Surface - 5.4 square feet
> Turning Radius - 20 feet
> Gain - 8.5 dB
> FTB - 29-25 dB
>
> The bean was installed on a tower for several years. I took it down to
> install a tri-bander.
>
> It was carefully taken down with a bucket truck, disassembled and packaged
> in the original box; with all the hardware necessary to reassemble the
beam.
> It is in excellent physical and electrical condition. The original
assembly
> manual is included. However, the elements are tarnished (i.e. not shiny)
due
> to exposure to the weather.
>
> The box is 7 feet long by 6 inches by 5 inches and weighs about 45 pounds.
>
> $175.00 plus shipping from 08809.
>
> Please contact me at .
>
> Thanks,
>
>

809. MFJ259/269 Math

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:24:33 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <5xH8b.631$Kt4.562@nwrdny02.gnilink.net>
Source record: 108275

From what I can determine from the MFJ schematics, the MFJ259/269 seem to make complex impedance measurements by performing mathematical calculations on 4 AC voltages in a Wheatstone bridge circuit. I remember seeing an article once describing how this works. Can anyone point me to a description of the math involved?

Joe
W3JDR

810. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:26:35 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309130826.9691119@posting.google.com>
Source record: 108276

radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309111541.10a5d812@posting.google.com>...

...
> But i'd rather use what is called a directional coupler, and get the
> rho from that.

And of course you understand how directional couplers work, right?
Like I told you a while back, be sure it's calibrated to the line
you're measuring.
>
> You need to hit the basic RF books a bit more, my friend.

So, Garvin, please understand this: the model I use for TEM
lines leads to results which are self-consistent and which
match experimental results with respect to all voltages,
currents and powers. It works with both steady-state and
transient conditions. It does all that independent of you
disagreeing, and independent of you calling people liars.
And you would have me forsake it for a model which is
inconsistent, which leads to voltages and/or currents at
the load end of the line which do not match the voltage and
current in the load? You would have me forsake it for a
model which leads to confusion about what's happening with
power, and which does not match what we measure
experimentally? Noooo, I don't think so. Have fun trying
to sort it all out, mon.

Cheers,
Tom

811. 4NEC2 Antenna Modeling Program

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 16:33:17 UTC
From: danw8kmx@aol.com
Message-ID: <20030913123317.08106.00000791@mb-m14.aol.com>
Source record: 108277

Are there any members using this software where I can discuss details on how to use the fine points?
Dan Coleman
DanW8KMX@aol.com

812. Re: Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 17:20:29 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <xII8b.437608$uu5.78274@sccrnsc04>
Source record: 108278

External antenna with coax feed. My radios are within three fee of the
computer with no problem.
"Dealmeister" <chrisday@paratroopers.org> wrote in message
news:SmG8b.6327$ZG5.1481@newssvr16.news.prodigy.com...
> Two questions:
>
> 1. I like to surf the web while Dxing; my computer creates a lot of
noise.
> Too DX and surf, obviously the radio and PC need to be in relatively close
> proximity. Anythoughts on how I can cut down the noise?
>
> 2. Can anyone recommend a good decoder? Years ago I used the AEA PK-232.
> These days I'd like to buy a decoder that covers as much of the used
formats
> as possible. Key for me will be simplicity though. I don't want something
> with a manual or operation that's so technical it won't be fun. I want
> something that is as "plug and play" as possible.
>
> Any thoughts would be appreciated! Thanks
>
>
>
>

813. Re: MFJ259/269 Math

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 17:22:50 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <md3jIKKqJ1Y$EAAP@ifwtech.co.uk>
Source record: 108284

W3JDR wrote:
>From what I can determine from the MFJ schematics, the MFJ259/269 seem to
>make complex impedance measurements by performing mathematical calculations
>on 4 AC voltages in a Wheatstone bridge circuit. I remember seeing an
>article once describing how this works. Can anyone point me to a description
>of the math involved?

I described it in RadCom a year or three ago - at least as far as the
vector diagrams, but not the detailed math.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

814. Re: Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 18:04:54 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <LoWdnUoEx_iFwP6iU-KYgg@ctc.net>
Source record: 108279

>
> 2. Can anyone recommend a good decoder? Years ago I used the AEA PK-232.
> These days I'd like to buy a decoder that covers as much of the used
formats
> as possible. Key for me will be simplicity though. I don't want something
> with a manual or operation that's so technical it won't be fun. I want
> something that is as "plug and play" as possible.

You can find the free sound card programs here.

http://www.muenster.de/~welp/sb.htm

815. Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 18:47:42 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <iDJ8b.1052$ft.230@twister.southeast.rr.com>
Source record: 108280

Loading coils are used to extend the effective length of a horizontal dipole and
the "above ground" side of a vertical. Why not add a coil in series with
the common radial node to extend the effective length of the radials?

Ron, W4TQT

816. Re: HF Beam help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 19:08:16 UTC
From: white rover <danda95@ntlworld.com>
Message-ID: <WfK8b.942$Pp2.38@newsfep1-gui.server.ntli.net>
Source record: 108281

Thnks just had a look at the Mosley website and that is what it seems to be
it will do me until I can get a new one

Derek G1NRE

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:9pCdnWkiGvvQvf-iU-KYuA@comcast.com...
> Sounds like a Mosley. They put the 10 and 15 m traps in the same housing.
> Never took one apart, but I suspect the juncture of the two traps is
> connected to the metal sleeve that covers the traps. Check out their web
> site at
> http://www.mosley-electronics.com/amateur.htm
> They will give some dimensions there.
>
> Tam/WB2TT
> "Derek" <danda95@hotmail.com> wrote in message
> news:o9N7b.594$Cg3.290@newsfep3-gui.server.ntli.net...
> > HF beam Update
> > The beam is not a TB3 as I was told. a friend of mine has a TB3 and
I
> > have been to check it
> > today. The one I have got has only two traps on the driven ele one
either
> > side and so has the driven ele and the reflector the reflector is about
> > 8.100 mtrs long the director is 6.200 mtrs long and the driven ele is up
> in
> > the air as a dipole so can not measure that also the traps on the driven
> ele
> > are larger. His is a Jaybeam TB3 as I have the leaflet on his and that
has
> 4
> > traps on each element 2 either side
> > Any ideas????
> > Derek
> >
> >
> >
> >
> >
> >
> >
> > "David L Thompson" <thompson@mindspring.com> wrote in message
> > news:9QJ7b.929$zx2.557@newsread1.news.atl.earthlink.net...
> > > Derek,
> > >

> > > The TB3 was the number for a Swan/Hornet 3 el beam. Mosley would be
> > TA-33
> > > and Hy-Gain is TH3 (I have a TH3 MK III). If its a Swan/Hornet the
> boom
> > to
> > > mast and element to boom are all cast magnesium and one solid piece
with
> > > holes for the boom and element. The TB series used
> > > equal 8 foot spacing. The TB2 had an 8 foot boom the TB3 a 16 foot
> boom
> > > and the TB4 (TB4H)
> > > and earlier TB-1000-4 had a 24 foot boom.
> > > 73 Dave K4JRB
> > >
> > > >
> > >
> > >
> >
> >
> >
>
>

817. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 19:48:14 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <Y52cnVwttewB6f6iXTWJjA@crocker.com>
Source record: 108282

"Ron" <rmrippy@hotmail.com> wrote in message
news:iDJ8b.1052$ft.230@twister.southeast.rr.com...
> Loading coils are used to extend the effective length of a horizontal
dipole and
> the "above ground" side of a vertical. Why not add a coil in series
with
> the common radial node to extend the effective length of the radials?
>
> Ron, W4TQT
>
because.

if you have only 1 radial you effectively have a bent dipole close to the ground, then the length of the radial will have the most effect on the feedpoint impedance. the more radials you add the less it looks like a bent dipole and the more it looks like a vertical over a conductive ground plane. the exact size of a conducting plane is not all that critical once the radius is a reasonable fraction of a wavelength(maybe .1-.15 wavelengths). by winding coils in radials all you are doing is wasting wire and adding resistive losses.

Examine your statement: "Loading coils are used to extend the effective length". they really aren't used to extend the effective length, they are used to cancel out capacitive reactance that a short wire would present at the feedpoint. while this makes the impedance look like the wire is longer it is still a short wire and its radiation characteristics aren't changed.

818. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 19:49:59 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <HxK8b.105$Gh7.119068@news2.news.adelphia.net>
Source record: 108283

I have a 26' vertical, with coils for 80, 40, and 15 meters mounted on top of a pole that is 14' for a total height of 40'. The feed point is just above the 14' (antenna is mounted to the lower pole via a fiberglass rod, allowing a clearance between the two of 1"). The lower pole is connected to earth ground. I have three radials connected to the lower pole attached about 1' down from the top of the lower pole. One radial has a 80 meter coil, one has a 40 meter coil, and the last is just some 48~50' long. The radials are mechanically attached to the lower end of the tripod I have the antenna mounted on/in, the rest of the radial is buried down about 2". I wound the radial coils myself!
What, did I miss or did not understand.? It works great.

Jim, kf4tun

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.518 / Virus Database: 316 - Release Date: 9/11/03

819. Re: 4NEC2 Antenna Modeling Program

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 20:04:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bjvt9a$6ur$1@hercules.btinternet.com>
Source record: 108285

"DanW8KMX" wrote -
> Are there any members using this software where I can discuss details on
how to

==========

Dan, you MUST be more precise in your requirements.

Exactly what is it you wish software to predict?

Do not allow yourself to suffer from delusions of accuracy.

Uncertainty of + or - 1 dB in 10 items of software input data will result in
+ or - 10 dB in output data.

For starters, with antennas, forget all about back-to-front-ratios
supposedly better than a couple of S-units, whatever it is you may consider
an S-unit to mean.

That is unless your back yard consists of a 1-mile square of copper sheet,
your nearest phone wires, power distribution wires and neighbor's house, or
tower-block is 1 mile away, and your shack is sufficiently deep underground
to withstand an Iraqi hydrogen bomb, with nothing showing above the copper
ground level except your hopeful, contest-winning, simple vertical or
3-element rotating beam.

Please excuse my little but not very much exaggeration.

But there's no need for pessimism. Just keep things in proportion. You can
have great fun using ball-park and county-wise software predictions. Enjoy
yourself with whatever software you may be recommended by fellow amateurs
who must have previously found it to give satisfaction of one sort or
another, even by argumentative loosers!

The real problem is finding the stuff.

Reg, G4FGQ

820. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 21:01:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm71dhnftgbvfe@corp.supernews.com>
Source record: 108286

I strongly endorse that caution. A couple of years ago, Chip (Dr. Nathan Cothen) of Fractenna posted a "$1000 Challenge", offering $1000 for a design that could better his fractal design in specific properties he specified. Steve Best produced several, along with EZNEC models, which I posted on my web site. (They're still there -- you can download them from ftp://eznec.com/pub/MI2/.) The result was a long series of threats by Chip/Cohen, and postings on numerous newsgroups and private groups accusing me of piracy and theft of intellectual property. I wouldn't take Chip up on any offer without great caution. At least go to groups.google.com and see how this now-calm and rational sounding individual has reacted in the past to anyone who dares to publicly suggest that fractal antennas just might not be the best thing since canned beer.

Roy Lewallen, W7EL

J. Harvey wrote:
> fractenna@aol.com (Fractenna) wrote in message
>
>>...Indeed, I invite you to also host the
>>critique on your web site if you wish.
>>Chip N1IR
>
>
> Just don't even think about hosting a critique of the critique on your
> website. If you do, you'll receive nasty e-mails spouting meaningless
> legal jargon mixed with nonsensical threats.

821. Modifying Lafayette SWR & Field Strength meter?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 21:03:14 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <5917mv030flh45bjc3v3akp6091vtiersq@4ax.com>
Source record: 108287

I have been told that there is a well-known, simple mod for converting
an old Lafayette SWR & Field Strength Meter (#99-25835) and similar
meters into 2m/70cm SWR/power meters.

Can someone please point me to some documentation for the mod?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

822. Re: Noise and UTE Dxing question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 21:32:06 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <M4-dnTxiwMyZEP6iU-KYgw@comcast.com>
Source record: 108288

On 13-Sep-2003, "Dealmeister" <chrisday@paratroopers.org> wrote:

> 1. I like to surf the web while Dxing; my computer creates a lot of noise.
> Too DX and surf, obviously the radio and PC need to be in relatively close
> proximity. Anythoughts on how I can cut down the noise?

One cause of computer noise is that PC case manufacturers economize by using swithcing power
supplies which have the RFI filtering components intentionally left out. Usually there is a place
on the power supply circuit board for a power line choke and bypass capacitors. They leave the
capacitors out and jumper the choke connections. I would try to find a better case with a quiet
power supply and good bonding of the metal to metal surfaces of the case. These usually cost more.
In my case, when I installed a choke and capacitors inside the PS, the RFI noise dropped about 30 db
on the broadcast band and about 7 S-units on 40 meters.
KO6NO

823. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 21:50:14 UTC
From: "Peter O. Brackett" <ab4bc@ix.netcom.com>
Message-ID: <qiM8b.2447$Aq2.2341@newsread1.news.atl.earthlink.net>
Source record: 108289

Reg:

[snip]
> The fixed standard arm of the rho bridge (instead of a 50-ohms resistor)
can
> be just a very long length of transmission line of input impedance Zo =
> Ro+jXo which, of course, varies with frequency in exactly the required
> manner.
>
> Or, as I often did 50 years back, make an artificial lumped-LCR line
> simulating network to any required degree of accuracy.
> ----
> Reg
[snip]

Caution... take care, the "reflection police" may get ya!

Roy and Dave took me to task on another thread for even suggesting just such
an
approach. A semi-infinite line!!! Hmph... no way they were gonna let me
get away
with that. Roy wanted to know what "semi-infinite" was!!!

Dave even told me that my idea of having a lumped approximation to Zo was
impossible!
This was a completd surprise to me since over 300,000 units of an xDSL
transceiver I
recently designed for the commercial marketplace and which have all been
shipped
and installed by BellSouth, Verizon, SBC and other such unknowing folks
incorporates
just exactly that kind of circuitre!

Hmmmm... I guess I lucked out and none of those customers noticed I was
balancing \
a lumped approximation of Zo against a real distributed complex Zo!

:-)

--
Peter K1PO
Indialantic By-the-Sea, FL.

824. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 21:54:24 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk03mg$i6n$1@titan.btinternet.com>
Source record: 108290

Hi Ron, W4TQT,

Loading coils in surface-laid or buried radials serve no useful purpose unless the soil has a very high resistivitity as with solid rock and dry sand.

There are no significant resonant effects which can be tuned out in ground radials in ordinary soils.

If the soil loss resistance is not low enough in ordinary soils nothing can be done except to lay down more radials. Increase number of radials rather than increase length. Make optimum use of copper and aluminium.

Even then, doubling the number of radials might make a noticeable difference but not a great improvement in overall radiating efficiency.

In summary, forget about coil-loading of ground radials whatever your favourite band may be.

And forget Marzipan-the-Magician's magic number of 118.5 radials in any sort of ground. Stop at 32 or thereabouts if you think you may need more than 8 or 16. Or who cares - it may be 6 or 12? But don't forget your best adial - the domestic incoming cold water pipe.

Check the received signal strength on a standard transmission. If there was no increase in received signal strength the last time you increased the number of radials by 50 percent, then stop laying more radials. You are wasting both time and copper.

Also, in good agricultural or fertile garden soil there's little to be gained by laying shallow-buried radials longer than 1/10 or 1/12 of the free-space wavelength.

It's uneconomic to mine copper ore in the outposts of Empire, spend a fortune in electrolytically refining the stuff, shipping it 1000's of miles, hot-rolling it into bars, drawing it through progressively smaller graded diamond dies, and then with back-breaking labor burying it back in the ground again.

We Hams should profitably pay more responsible consideration to wasteful use of this small Earth's rapidly diminishing mineral and energy resources, Earth warming, and waste less time waffling about "power-wave reflections" on antenna feedlines.

Good luck in the Contest! ;o)

Reg, G4FGQ

825. Re: MFJ259/269 Math

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-13 22:25:28 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <sPM8b.1158$Kt4.582@nwrdny02.gnilink.net>
Source record: 108291

Ian,
Thanks. Do you know if the article is available for download somewhere?

Joe
W3JDR

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:md3jIKKqJ1Y$EAAP@ifwtech.co.uk...
> W3JDR wrote:
> >From what I can determine from the MFJ schematics, the MFJ259/269 seem to
> >make complex impedance measurements by performing mathematical
calculations
> >on 4 AC voltages in a Wheatstone bridge circuit. I remember seeing an
> >article once describing how this works. Can anyone point me to a
description
> >of the math involved?
>
> I described it in RadCom a year or three ago - at least as far as the
> vector diagrams, but not the detailed math.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> Editor, 'The VHF/UHF DX Book'
> http://www.ifwtech.co.uk/g3sek

826. Re: UHF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 00:53:22 UTC
From: Geoff <vision105**@hotmail.com>
Message-ID: <6_O8b.1709$WI3.23427@newsfep4-glfd.server.ntli.net>
Source record: 108292

Hello,

If that's the case, why do all TV antenna installations use 75ohm coax? No one uses 300ohm feeder at UHF!

Geoff

"Mark Keith" <nm5k@wt.net> wrote in message news:25eb70d7.0308280941.6e1020e8@posting.google.com...
> brian1509@yahoo.com (brian) wrote in message news:<6762ff06.0308271629.447eec1b@posting.google.com>...
> > What's the best feedline for UHF antenna, 75 ohm cable or 300 ohm
> > strap? The antenna is to be used for recieving 674 MHz (TV channel 48)
>
> Unless the coax is very low loss, I'd have to put my money on the 300
> ohm twinlead setup having the least overall loss, even counting the
> little balun you will need. At least when dry... Or at least thats
> what I found when I ran a large UHF TV antenna for 420 mhz ATV. I had
> the least loss with the twinlead. MK

827. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 00:55:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vm7f3sfqk5omef@corp.supernews.com>
Source record: 108294

Roy Lewallen wrote:
> I strongly endorse that caution. A couple of years ago, Chip (Dr. Nathan
> Cothen) of Fractenna . . .

That's Cohen, not Cothen. I apologize for the typo. And while his posting address is Fractenna@aol.com, he's an officer of Fractal Antenna Systems, Inc., and often acts on their behalf.

Roy Lewallen, W7EL

828. Re: Someone else using my antenna ((M321I58DNU 09/06/2003)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 00:55:25 UTC
From: Geoff <vision105**@hotmail.com>
Message-ID: <00P8b.1711$WI3.23408@newsfep4-glfd.server.ntli.net>
Source record: 108293

Hello,

Put loads of power up the aerial and see if it fries!

"Dave Bushong" <dbushong@adelphia.net> wrote in message
news:Mwa3b.9376$Nc.5564588@news1.news.adelphia.net...
> Gang,
>
> My surveillance camera happened to snag a picture of someone using my
> antenna (obviously without my permission). He is probably not licensed,
> not transmitting, he is still using MY STUFF!
>
> Should I let him go on doing so, or just let it happen? I don't know
> who to bitch to.
>
> What pisses me off is that you can clearly see him smiling while he is
> using it.
>
> http://users.adelphia.net/~dbushong/dragonfiles/100_0020.htm
>
> Comments?
>
> 73,
> Dave KZ1O
>

829. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 02:00:38 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <aZP8b.1322$ft.1116@twister.southeast.rr.com>
Source record: 108295

Thanks to everyone for their responses. I'm installing a screwdriver antenna in a Rubbermaid shed at the back corner of my condo. Only about 5 feet of the whip sticks up above the top of the shed and I'm hoping the home owners assn. won't pay any attention to it.

I was trying to think of ways to raise the radiation resistance. It is about 40 ohms on 75 meters but only 22 ohms on 40 meters. In fact, the VSWR is around 1.5:1 or less on all bands except 40 meters. I thought 75 would have the worst match but for some reason it's 40.

So far I have nine 10 ft. radials, one of which is connected to a power distribution box near my antenna. It has underground power lines going to my neighbor's houses. I will try adding another radial to a near by water pipe next, although it sounds like any one radial is not that important. Fortunately I have an Autek VA1 impedance bridge so I can see what's happening. Of coarse, understanding it is another matter :').

Ron

830. Re: UHF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 02:31:39 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <iSedndnVs9pvT_6iXTWJiA@comcast.com>
Source record: 108296

"Geoff" <vision105**@hotmail.com> wrote in message
news:6_O8b.1709$WI3.23427@newsfep4-glfd.server.ntli.net...
> Hello,
>
> If that's the case, why do all TV antenna installations use 75ohm coax?
No
> one uses 300ohm feeder at UHF!

sure they do.
in fact, belden made shielded twinlead, because it's such low loss.
the shielded stuff could be wrapped around the mast, or whatever else you'd
like, unlike the regular, which gets lossy as soon as it's damp.

831. Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 05:18:50 UTC
From: Peter Gottlieb <178048316@icq.net>
Message-ID: <_SS8b.187802$Ay2.47466932@news4.srv.hcvlny.cv.net>
Source record: 108297

Not sure this is the right ng for this.

I am trying to track down a very strange interference signal. This signal has a carrier which sweeps from about 4410 to 4470 KHz at about 1 sweep per second and seems to have what appears (from FFT) to look like a 512 Hz modulation (further modulated by other frequencies).

I made a tuned 2 foot diameter loop antenna and drove around plotting the null headings. All pointed to a place somewhere in central New Jersey. So I drove over there to make more readings. As I got closer I had to attenuate the antenna signal, but when I got right to the area, there were no more antenna nulls.

So. Here are my questions:

1) Do I need a better antenna for this?

2) Is the source spread out, like coming from power lines, and not something I can find using that method?

3) Has anyone ever heard interference like this? (I haven't in over 35 years of SWLing and hamming).

TIA,
Peter

832. Re: MFJ259/269 Math

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 07:10:54 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <erzNFLA+RBZ$EAMC@ifwtech.co.uk>
Source record: 108302

W3JDR wrote:
>Ian,
>Thanks. Do you know if the article is available for download somewhere?
>
It was May 2000, but I'm afraid that one is not on the web.

>"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
>news:md3jIKKqJ1Y$EAAP@ifwtech.co.uk...
>> W3JDR wrote:
>> >From what I can determine from the MFJ schematics, the MFJ259/269 seem to
>> >make complex impedance measurements by performing mathematical
>calculations
>> >on 4 AC voltages in a Wheatstone bridge circuit. I remember seeing an
>> >article once describing how this works. Can anyone point me to a
>description
>> >of the math involved?
>>
>> I described it in RadCom a year or three ago - at least as far as the
>> vector diagrams, but not the detailed math.
>>
>>
>> --
>> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
>> Editor, 'The VHF/UHF DX Book'
>> http://www.ifwtech.co.uk/g3sek
>
>

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

833. Re: UHF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 07:16:24 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309132316.2b2cee17@posting.google.com>
Source record: 108298

"Geoff" <vision105**@hotmail.com> wrote in message
news:<6_O8b.1709$WI3.23427@newsfep4-glfd.server.ntli.net>...
> Hello,
>
> If that's the case, why do all TV antenna installations use 75ohm coax?

They don't. It is more common these days due to practical installation reasons, but people ran 300 ohm line to TV antennas for years. Some still do. It's the best choice usually for feeding a TV antenna, unless the extra loss of coax is not enough to get you a snowy picture. In the city, many times coax will be good enough. Out in the country, I would always use low loss ladder line or twin lead. I prefer that over using coax and a mast mounted preamp to make up for the extra losses. In bad cases, you might even need a preamp with twin lead..:/ But in that case, I prefer a bigger better antenna. :)

>No one uses 300ohm feeder at UHF!

Sure they do. I did. It blew 75 ohm coax out of the water as far as loss on that freq. I compared them on the local ATV repeater. And I used beldon dual shield coax, which was fairly decent.
Look up the specs for each. What is lowest loss at UHF be be fairly obvious. My 25 element corner reflector yagi/log thingy is set up for direct connection to twin lead. You would have to use a transformer/balun to run coax. And that adds a bit more loss...:(Yes, the twin lead does get lossy when it gets wet, but dry it's quite good. Also some 300 ohm twinleads are better than others. The ones with the thickest wire size are usually best. MK

834. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 07:42:11 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <nZU8b.141173$3o3.10100355@bgtnsc05-news.ops.worldnet.att.net>
Source record: 108299

Chipman, page 138, presents an equation for the power at any point 'z' on a line that involves Zo and considers the case where Zo = Ro+jXo. He then derives two equations: one for the real component of the power Pr measured at any point 'z' on a line and another for the imaginary component of power Pi at that point. Watts and VARs . . .

Each equation contains three terms. The second equation for Pi and the third term in both equations vanish when the value of Xo is zero. The condition that the real part never be negative is shown to be that Xo/R0 is equal to or less than unity.

He first, however, derives the reflection coefficient for the point 'z' which is stated as p(z) = (Z(z) - Zo)/(Z(z) + Zo) and Zo is defined to be a complex number. Some authors have referred to this as "Classical Rho."

Chipman's interpretation of this equation for Pr of three terms is that the first term represents the real power for the incident wave alone at a point 'z'; the second term relates to the real power in the reflected wave at that same point; and the third term (which vanishes for real Zo) represents "an interaction between the reflected and incident waves." This is in effect the third term that Roy obtained using Vf * Ir and Vr * If.

Thus on a line with real Zo, the net average power in the load is always given by Pf - Pr. However, with lossy lines having Xo not equal to zero, all three terms of the equation must be taken into account in determining the net power at any point along the line. And thus, Pr and Pf alone do not describe the load power.

He further states that passive terminations exist which can result in classical rho achieving a value of 2.41 "without there being any implication that the power level of the reflected wave is greater than that of the incident wave." The physical example is that of the resonance obtained by conjugate matching of the Xo-component of the line with the load and the attendant "resonant rise in voltage.".

The existence of this third term is, I believe, what much of the discussion has talked around and attempted to avoid confronting by involving all manner of arcane definitions and interpretations to "prove" that the net power delivered to a load cannot be other than Pf-Pr and that Pf is always larger than Pr.

Note that this work is not mine - I am merely reporting the gist of Chipman's derivations and interpretations due to the scarcity of his book.

This plus Roy's presentation is enough for me . . .

--
73/72, George
Amateur Radio W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13QE
"Starting the 58th year and it just keeps getting better!"
w5yr@att.net

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vm58gke7io3l0c@corp.supernews.com...
> And that's the whole crux of the problem -- the mistaken assumption that
> the "reflected power" can never exceed the "forward power". Once you
> accept that erroneous idea as a fact, you're stuck with some very
> problematic dilemmas that no amount of fancy pseudo-math and alternate
> reflection coefficient equations can extract you from. A very simple
> derivation, posted here and never rationally disputed, clearly shows
> that the total average power consists of "forward power" (computed from
> Vf and If), "reflected power" (computed from Vr and Ir), and another
> average power term (from Vf * Ir and Vr * If) whenever Z0 is complex.
> The only solid and inflexible rule is that these three always have to
> add up to the total average power. Not that the "forward power" always
> has to equal or exceed the "reflected power". It's in that false
> assumption that the problem lies.
>
> Roy Lewallen, W7EL
>
> kd1@sympatico.ca wrote:
> >
> > So is kurokawa proposing two completely different rhos?
> > One for computing voltages and currents and the other for power?
> >
> > This could work, I supposed, but this discussion started with an
> > assertion that 'classic' rho was WRONG because it resulted in
> > more reflected power than incident. My contention is that
> > 'classic' rho is correct and yields the correct voltages regardless
> > of the results obtained when |rho|^2 is used to predict powers.
> >
> > If kurokawa wishes to introduce a new rho to solve these problems
> > in a different manner, that is fine, but he would have reduced
> > confusion significantly if he had not called it rho.
> >
> > ...Keith
>

835. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 07:45:33 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <x0V8b.138482$0v4.10159629@bgtnsc04-news.ops.worldnet.att.net>
Source record: 108300

This is like telling Moses to read those tablets again . . .

--
73/72, George
Amateur Radio W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13QE
"Starting the 58th year and it just keeps getting better!"
w5yr@att.net

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0309130826.9691119@posting.google.com...
> radio913@aol.com (Garvin) wrote in message
news:<1d15af91.0309111541.10a5d812@posting.google.com>...
>
> ...
> > But i'd rather use what is called a directional coupler, and get
the
> > rho from that.
>
> And of course you understand how directional couplers work, right?
> Like I told you a while back, be sure it's calibrated to the line
> you're measuring.
> >
> > You need to hit the basic RF books a bit more, my friend.
>
> So, Garvin, please understand this: the model I use for TEM
> lines leads to results which are self-consistent and which
> match experimental results with respect to all voltages,
> currents and powers. It works with both steady-state and
> transient conditions. It does all that independent of you
> disagreeing, and independent of you calling people liars.
> And you would have me forsake it for a model which is
> inconsistent, which leads to voltages and/or currents at
> the load end of the line which do not match the voltage and
> current in the load? You would have me forsake it for a
> model which leads to confusion about what's happening with
> power, and which does not match what we measure
> experimentally? Noooo, I don't think so. Have fun trying
> to sort it all out, mon.
>
> Cheers,
> Tom

836. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 08:23:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk18ia$1cg$1@sparta.btinternet.com>
Source record: 108301

> I was trying to think of ways to raise the radiation resistance. It is
about 40
> ohms on 75 meters but only 22 ohms on 40 meters. In fact, the VSWR is
around
> 1.5:1 or less on all bands except 40 meters. I thought 75 would have the
worst
> match but for some reason it's 40.
>
> So far I have nine 10 ft. radials, one of which is connected to a power
> distribution box near my antenna. It has underground power lines going to
my
> neighbor's houses. I will try adding another radial to a near by water
pipe
> next, although it sounds like any one radial is not that important.
Fortunately
> I have an Autek VA1 impedance bridge so I can see what's happening. Of
coarse,
> understanding it is another matter :').

Ron, I came back to make sure you have the right idea of what your Autek measurements mean. Except for the SWR range it is a very useful instrument. I have one.

I assume you are measuring directly between the base of the 'screwdriver' and the radial system.

At that point the resistance measured is the sum of the radiation resistance, plus screwdriver coil loss resistance, plus ground-loss resistance. On 75m and 40m radiation resistance is so small, less than one ohm, it is completely swamped by the sum of the other two. The coil loss resistance is what came with antenna and nothing can be done about it. But a screwdriver is about the best of the bunch.

And ground loss ohms is much greater than coil loss ohms. So for practical purposes the Autek on the Z range is reading just the ground loss, which of course is what you are primarily interested in. REGARDLESS OF SWR the objective is to reduce the Z-range resistance at resonance to the lowest possible value.

The lower the Z-range resistance, the further it gets away from 50 ohms and the higher the SWR. Don't look at the SWR. The only reason the SWR range is on the meter is because some people would feel unhappy if there wasn't one and sales volume would be affected.

So maximum radiating efficiency coincides with lowest Z-range meter readings. And to reduce Z-range readings increase the number of radials. A damp, salty soil helps. Bury the radial wires 8 or 10 inches deep if you can and stamp well in. And they need not be straight to get into awkward corners of your back yard.

To transform a low feedpoint resistance up to the 30 - 50 ohms required by the transmitter is another matter.

Reg, G4FGQ

837. Re: UHF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 09:00:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk1amj$6i0$1@titan.btinternet.com>
Source record: 108303

> If that's the case, why do all TV antenna installations use 75ohm coax?
>
==========

Because it is much more convenient to install and easier to keep dry. And
TV receivers don't have 300-ohm antenna sockets.

==========
>
> No-one uses 300ohm feeder at UHF!
>
==========

Except when engineering economics and the appreciably lower loss of 300-ohm
line is less expensive than providing and running a higher power
transmitting station.

" Bank Managers wielding the Almighty Dollar Rule ! ". Terman and radio
hams have to take backseats.

Reg, G4FGQ

838. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 10:22:21 UTC
From: Martin <admin@127.0.0.1>
Message-ID: <bk1gdd$ir7$1$8300dec7@news.demon.co.uk>
Source record: 108304

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bk18ia$1cg$1@sparta.btinternet.com...
snip
>
> ----------
>
> Ron, I came back to make sure you have the right idea of what your Autek
> measurements mean. Except for the SWR range it is a very useful
instrument.
> I have one.
>
> I assume you are measuring directly between the base of the 'screwdriver'
> and the radial system.
>
> At that point the resistance measured is the sum of the radiation
> resistance, plus screwdriver coil loss resistance, plus ground-loss
> resistance. On 75m and 40m radiation resistance is so small, less than
one
> ohm, it is completely swamped by the sum of the other two. The coil loss
> resistance is what came with antenna and nothing can be done about it. But
a
> screwdriver is about the best of the bunch.
>
> And ground loss ohms is much greater than coil loss ohms. So for
practical
> purposes the Autek on the Z range is reading just the ground loss, which
of
> course is what you are primarily interested in. REGARDLESS OF SWR the
> objective is to reduce the Z-range resistance at resonance to the lowest
> possible value.
>
Reg ,
would that be the the same for the MFJ 249 / 259 / 269 units also ?
I assume so but to assume any thing makes an ASS of U and ME
so it is better to ask.

I am following the thread with interest as we have a Jaybeam 3 band verticle
that we are looking to pole mount at 15m (47') or there aboust and need
to provide a tuned radial system. The thought of using mobile whips
ie the helical wound type came up but now I need to think again !!

Ta Martin G1GYC
still learning

839. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 11:35:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk1jpg$m41$1@sparta.btinternet.com>
Source record: 108305

> I'm installing a screwdriver antenna in a
> Rubbermaid shed at the back corner of my condo. Only about 5 feet of the whip sticks
> up above the top of the shed and I'm hoping the home owners assn. won't pay any
> attention to it.
>
> I was trying to think of ways to raise the radiation resistance.

==========

Ron, the only possible way to increase radiation resistance (which you cannot measure and can gauge only by improved performance) is to increase the length or height of the whip above the screwdriver-driven loading coil.

There's an added advantage - fewer turns needed on the loading coil and so a smaller coil loss resistance.

Ideally you could attach a 40 feet length of thin wire to the top of the whip and extend it to some high point in the vicinity such as your house chimney or a tree top. You would then have an antenna useable on all bands from 160m upwards. But for 'cosmetic' reasons you are unable to do this.

If possible, I suggest you extend the top of the whip sideways, even sloping downwards at a 45 degrees angle down to near ground level, with very thin enamelled copper wire. Even an increase in length of only 10 or 12 feet should make a noticeable improvement and require a lot fewer turns on the coil on the 80 and 40m bands.

Do a temporary, 10-minute, semi-secret job, in dark clothes, at dusk or dawn. Check, before and after installation, using the receiver. Listen to a not very strong but stable broadcast/commercial transmitter.

Even sparrows will have a problem detecting 24 awg enamelled wire.

Reg, G4FGQ

840. NEC Evaluation of FM Broadcast Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 12:01:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bk1l9n$o2tjf$1@ID-175933.news.uni-berlin.de>
Source record: 108306

A set of slides (PDF format) has been added to http://rfry.org showing the basic radiation patterns of four common configurations of FM transmit elements. Also shown are the effects of the supporting tower on the patterns of a four bay FM array at several bay spacings, and a development of how antenna gain is determined in the broadcast world.

The spoken part of this presentation adds continuity and detail, but viewing the slides alone may be useful.

R. Fry

841. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 12:57:28 UTC
From: fractenna@aol.com
Message-ID: <20030914085728.17961.00001402@mb-m01.aol.com>
Source record: 108307

>I strongly endorse that caution. A couple of years ago, Chip (Dr. Nathan
>Cothen) of Fractenna posted a "$1000 Challenge", offering $1000 for a
>design that could better his fractal design in specific properties he
>specified. Steve Best produced several, along with EZNEC models, which I
>posted on my web site. (They're still there -- you can download them
>from ftp://eznec.com/pub/MI2/.) The result was a long series of threats
>by Chip/Cohen, and postings on numerous newsgroups and private groups
>accusing me of piracy and theft of intellectual property. I wouldn't
>take Chip up on any offer without great caution. At least go to
>groups.google.com and see how this now-calm and rational sounding
>individual has reacted in the past to anyone who dares to publicly
>suggest that fractal antennas just might not be the best thing since
>canned beer.
>
>Roy Lewallen, W7EL
>

Robert Hohlfeld won that challenge, Mr. Lewallen. It was not a "couple of years ago". This and other information is available on google as you state. It is also apparent from such postings that Steve Best did not enter the challenge. Indeed, Steve's loop(s) weren't anywhere near the best, even if they had been submitted.

Best did not enter and did not win.

For the FOM chosen, there are certainly better loops--fractal loops--than MI2, which was the entire point of the challenge. That is also a matter which is archived. The challenge has obviously succeeded in firing such investigations, which means that 'I had impact' as they say. Nothing pleases me more.

The MI2 antenna is a very useful one in some applications. It has helped inspire a breakthrough approach to antenna optimization, which Bob Hohlfeld has championed, based upon some earlier (published) work by me in 1996/1997. The system incorporates genetic algorithms; fractal coding; and a supercomputer (grid) cluster made of off the shelf PC's. You and othersmay find a description of the system at:

http://www.fractenna.com

under the FRAGO system.

The FRAGO system is working on a daily basis on antenna optimization, successfully I might add. It has assessed over 2 million antennas a month. It has also been described in several publications and conferences; indeed it will be described at one this coming week.

With regards to the statements you have made above: In October, 2001 you had an attorney send me a letter of complaint for defamation and issued a demand of $50,000--based upon an alleged loss. You had counsel claim that such damages were suffered from my statements regarding ownership of copyright.

You threatened to sue myself; Fractal Antenna Systems,Inc.; Boston University; and others.

Certain matters regarding a potential counterclaim(s) were tendered to your counsel, and compelling evidence regarding ownership of copyright files was also provided. Incidentally, you did not provide any evidence of damages.

Regarding MI2: Steve Best has recently published an interesting paper--as you know--and I am quite certain there are many here who will benefit from my corrections of factual error; omissions of citation; and so on; which will be presented in due time.

A very brief summary: Steve's paper confirms my statement that the Small Loop Approximation is incorrect (at least for the regimes of antennas being considered); Steve has shown other fractal loops that share the very high (over 90%) efficiency and dipole gain; and so on, thereby corroborating the advantage of fractal in loops of that size and need.

Clearly I see no issue, Mr. Lewallen, with you or anyone else discussing fractal antennas or any other sort of antenna. In fact, I never have. I presume, however, that accuracy and fact are also of some merit in the enterprise, and I invite you to strive for that; along with me and everyone else, in future discussions.

With Best wishes to all,

Chip N1IR

842. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 14:10:46 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <GF_8b.4951$x2.3701@twister.southeast.rr.com>
Source record: 108308

Reg Edwards wrote:
>>I was trying to think of ways to raise the radiation resistance. It is
>
> about 40
>
>>ohms on 75 meters but only 22 ohms on 40 meters. In fact, the VSWR is
>
> around
>
>>1.5:1 or less on all bands except 40 meters. I thought 75 would have the
>
> worst
>
>>match but for some reason it's 40.
>>
>>So far I have nine 10 ft. radials, one of which is connected to a power
>>distribution box near my antenna. It has underground power lines going to
>
> my
>
>>neighbor's houses. I will try adding another radial to a near by water
>
> pipe
>
>>next, although it sounds like any one radial is not that important.
>
> Fortunately
>
>>I have an Autek VA1 impedance bridge so I can see what's happening. Of
>
> coarse,
>
>>understanding it is another matter :').
>
>
> ----------
>
> Ron, I came back to make sure you have the right idea of what your Autek
> measurements mean. Except for the SWR range it is a very useful instrument.
> I have one.
>
> I assume you are measuring directly between the base of the 'screwdriver'
> and the radial system.

Yes, through a 6 ft. piece of RG 8 cable. I am measuring VSWR as well as R +jXs.

> At that point the resistance measured is the sum of the radiation
> resistance, plus screwdriver coil loss resistance, plus ground-loss
> resistance. On 75m and 40m radiation resistance is so small, less than one
> ohm, it is completely swamped by the sum of the other two. The coil loss
> resistance is what came with antenna and nothing can be done about it. But a
> screwdriver is about the best of the bunch.
>
> And ground loss ohms is much greater than coil loss ohms. So for practical
> purposes the Autek on the Z range is reading just the ground loss, which of
> course is what you are primarily interested in. REGARDLESS OF SWR the
> objective is to reduce the Z-range resistance at resonance to the lowest
> possible value.
>
> The lower the Z-range resistance, the further it gets away from 50 ohms and
> the higher the SWR. Don't look at the SWR. The only reason the SWR range
> is on the meter is because some people would feel unhappy if there wasn't
> one and sales volume would be affected.
>
> So maximum radiating efficiency coincides with lowest Z-range meter
> readings. And to reduce Z-range readings increase the number of radials. A
> damp, salty soil helps. Bury the radial wires 8 or 10 inches deep if you
> can and stamp well in. And they need not be straight to get into awkward
> corners of your back yard.
>
> To transform a low feedpoint resistance up to the 30 - 50 ohms required by
> the transmitter is another matter.
> ----
> Reg, G4FGQ

Reg,

I have been thinking the radiation resistance should be about 36 ohms without realizing that applies only to a full length quarter wave vertical. In effect, when the screwdriver antenna manufacturer brags about having a low VSWR, he is bragging about how lossy the antenna it is! This brings up another question. I substituted a fat whip for the thin one that came with my antenna and discovered the fat one would resonate at the same frequency with the total antenna length about 10 inches shorter. I assumed this was because of the increased capacity of the fat whip. If the fat whip resonates at a shorter length, does this mean it will have less radiation resistance? Also, if I use a "capacity hat" to achieve resonance at a shorter length, does this mean I will have a lower radiation resistance, and probably a less efficient antenna?

Thanks for your help.

Ron, W4TQT

843. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 14:48:29 UTC
From: Drink <drink@gnt.net>
Message-ID: <vm934qnvvf2p07@corp.supernews.com>
Source record: 108311

Most any system you use will lead you to a general area. When you get to that general area, you're just hoofing it from there. The nature of HFDF is gonna be like that and it gets worse when you add the city clutter of New Jersey (no pun intended).
o_o_o_o
Best Regards, /| ,[_____],
Jim, WP3JQ |���L --O|||||||O-
()_)�()_) ������)_)
EM60qk 30.447439N 086.628959W

844. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 15:07:17 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bk2076qnn1@nic.grnet.gr>
Source record: 108309

| George, W5YR <w5yr@att.net> wrote:
| ...
| The condition
| that the real part never be negative
| is shown to be
| that Xo/R0 is equal to
| or less than unity.
| ...

Unfortunately,
I am afraid this is
not
the case at all.

Exactly, the related lines have as follows:

"The condition that Pr should never become negative is that
|p(z)|^2 + 2(Xo/Ro) Im p(z) =< 1
Expanding p(z) from (7.33) with Zo = Ro + jXo and Z(z) = R(z) + jX(z),
it is easily found that this reduces to the condition |Xo/Ro| =<1,
which has already been seen to be true."

Mrs. yin,SV7DMC, who has repeated, checked and solved
all of this book materials, except perhaps a few,
forewarns of that:
Every time Chipman says "easily", probably implies
"as I heard or read or something like that".
How else can someone explains,
why the proof of every such claim by him,
it happens to be a so cumbersome one?

This is true especially this time.

If someone follows the Chipman's hint,
the equivalent condition at which "easily" arrives
is only Z(z) >= 0.
[e.g. in the thread
'Complex Z0 - Power : A Proof' - The Missing Step]

After that,
this last condition is unquestionably valid at the terminal load,
when we impose Z(1) = Zt = Rt +jXt, with Rt >= 0.

At every other point it is still an unproven, open, problem,
at least to me.

But there is a chance to finish with this matter...

According to Mr. Tarmo Tammaru/WB2TT <t-tammaru@home.com>
in the thread 'Complex line Z0: A numerical example':

"I did a search, and came up with a Robert A Chipman, age 91, in Toledo OH.
From my recollection, the age is about right, and Toledo is where I saw him"

Therefore,
I think it is the most appropriate time,
someone curious enough of you,
who leaves somewhere near by him,
to go and ask him about it.

Is there any volunteer?

Sincerely,

pez
SV7BAX

845. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 15:38:49 UTC
From: RB <rbigg@seii.net>
Message-ID: <bk222b$a41$1@news.utelfla.com>
Source record: 108310

Woof! You're now into uncharted territory. A few years back I needed HF DF capability for a different reason. Got a lot of input on this topic, and found out there is nothing available to us that will really do the job, short of laying out lots of wampum.

I thought such eqpt might be scarce. But, I figured there was SOMETHING around that would work. Turns out no one could put me onto anything, without encountering exhorbitant cost. And,
some pretty knowledgeable and intelligent people answered up and explained why there isn't anything available, without spending big bucks.

You know those old WWII movies where you see German vans with DF eqpt driving around trying to locate spies? Turns out they were HF units. But, it took three of them, in widely separated locations acting in unison to get the job done. And, the triangulation wasn't precise. It took lots of time and effort to narrow in on the general location of a spy sending.

Anyway, if you do find a way, please let me know. I no longer need the capability, but am still curious if it can be done, and how.

846. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 16:18:56 UTC
From: Mark <blockspam@spamblock.com>
Message-ID: <ca49mvcrea6bjbdl9j08ab4vau6ovs5pu9@4ax.com>
Source record: 108312

On Sun, 14 Sep 2003 05:18:50 GMT, "Peter Gottlieb" <178048316@icq.net>
wrote:

>Not sure this is the right ng for this.
>
>I am trying to track down a very strange interference signal. This signal
>has a carrier which sweeps from about 4410 to 4470 KHz at about 1 sweep per
>second and seems to have what appears (from FFT) to look like a 512 Hz
>modulation (further modulated by other frequencies).
>
>I made a tuned 2 foot diameter loop antenna and drove around plotting the
>null headings. All pointed to a place somewhere in central New Jersey. So
>I drove over there to make more readings. As I got closer I had to
>attenuate the antenna signal, but when I got right to the area, there were
>no more antenna nulls.
>
>So. Here are my questions:
>
>1) Do I need a better antenna for this?
>
>2) Is the source spread out, like coming from power lines, and not
>something I can find using that method?
>
>3) Has anyone ever heard interference like this? (I haven't in over 35
>years of SWLing and hamming).
>
>TIA,
>Peter
>

A DF loop, with null seeking arrangements, only provides a line of
bearing to the transmitter. Triangulation is required to localize the
signal, subject to the limitations of multipath in an urban
environment.

If you can triangulate the source of interference to within a defined
area (by taking multiple readings at various locations to help average
out some of the effects of multipath) this would serve as a good
starting point for your search.

Within the search area, you're probably better off trying to use a
receiver with a signal strength indicator, or a field strength
indicator, to look for "hot spots" as you drive around. As you get
closer to the source, keep attenuating the signal and repeat the
search process. With this process, you may be able to localize the

source to within a building or group of buildings.

Mark

847. Re: Practical Antenna Handbook by Joseph Carr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 17:57:14 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <l729b.4802$Gr.285419@read1.cgocable.net>
Source record: 108313
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

Must be a real interest in Antennas ! ! Searched around to Web and finally
bought a copy at Amazon.com which had the "best" price.
Tnx for all the comments..
73..Norm

"Norm VE3CZI" <ve3czi@arrl.net> wrote in message
news:Abp8b.3276$Gr.195672@read1.cgocable.net...
> Looking for a copy of:
> PRACTICAL ANTENNA HANDBOOK BY JOSEPH J. CARR BY MCGRAW-HILL,NY,1998,THIRD
> EDITION,
> If anyone has one they wish to part with, please advise with price &
> shipping to Canada.
> 73...Norm VE3CZI
>
>
>
>
>
>

848. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 18:57:32 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <K4mdnTbQCcyDJ_miU-KYuQ@comcast.com>
Source record: 108314

> You know those old WWII movies where you see German vans with DF eqpt
> driving around trying to locate spies? Turns out they were HF units.
But,
> it took three of them, in widely separated locations acting in unison to
get
> the job done. And, the triangulation wasn't precise. It took lots of
time
> and effort to narrow in on the general location of a spy sending.

combine an hf loop, with aprs, and you'll be amazed how effective it is.
aprs will allow your hounds to share their info easily.
you get the location of the other stations, on a map, plus your own, and all
the bearing data.

849. Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 19:35:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309141135.5ea034a2@posting.google.com>
Source record: 108315

I have never seen a reason to spend big money on
a Bird wattmeter but I do have a question.
What exactly is inside the various slugs
that one must use with this meter ?
Art

850. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 19:58:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dvh9mv07qtdhrvggf5rc2g1ajtia6hg27b@4ax.com>
Source record: 108316

On 14 Sep 2003 12:35:05 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>I have never seen a reason to spend big money on
>a Bird wattmeter but I do have a question.
>What exactly is inside the various slugs
>that one must use with this meter ?
>Art

Hi Art,

A loop, at least one cap, a diode, at least one resistor.

73's
Richard Clark, KB7QHC

851. Re: Armageddon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 20:09:33 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <1W39b.444366$o%2.201759@sccrnsc02>
Source record: 108317

Velikovski(sp?) wrote nice fiction. I believe the title I read was
'Worlds in Collision' and 'Earth in Upheaval' or similar such title[s].
If I recall his hypothesis was/is that Venus is an earth cousin.

Anyway, my recollection, also from 40+ years, is that he ia not
seriously considered by the science community.

Deacon Dave, W1MCE
+ + +

Bill wrote:
> I do believe Velikovski (sp) speculated that Mars has/had oil.
> It has been 40+ years since I read his books.

852. Buy Quadrifilar Helix Antenne

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 20:16:31 UTC
From: Plurkestein <Plurk@estein>
Message-ID: <3f64cca1$0$34885$1b62eedf@news.wanadoo.nl>
Source record: 108318

For reception of satellites on 137.5 Mhz there's an antenna called the
Quadrifilar Helix Antenna.
On Google I found lots of sites for building this antenna.
Because I'm a total nerd on building things, I want to buy it instead.

Anyone has suggestions?

I live in the Netherlands. Thnx...
--

(`'�.�(`'�.�(`'�.� �.�'�)�.�'�)�.�'�)
���`�.�� . Plurkestein ��.��� `�
(�.�'�(�.�'�(�.�'� `'�.�)`'�.�)`'�.�)

853. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 20:24:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d4i9mvgbfuibgl5j4sdj3etm1kcdm8klud@4ax.com>
Source record: 108219

On 14 Sep 2003 12:57:28 GMT, fractenna@aol.com (Fractenna) wrote:

> there are certainly better loops--fractal loops--than MI2

Hi All,

Steve Best offered six (6) that have yet to be outperformed - except in a commercial vendor's marketing terms as suspicious as those claims offered with CFA's. Those examples of better loops (Steve's) are available through Roy's already published site, and have been there for some years to no upset nor equal.

None of this has any real correspondence to the topic, except in the sense that aluminum foil pasted next to the battery offers equal performance to the one sold on TV, 2 for $19.95. Again, the only difference is that the aluminum foil industry makes no investment in Marketing claims and can thus bring you this better performance for less cost. Of course, neither do they incur costs for 1-800 numbers to call and register a complaint lest the product fail to work; but on the other hand, neither do they gain the boon of the additional $5 shipping and handling tariff.

Still, and all, the hucksters with a slimy Marketing pitch equal to the snake oil vendor have found they can make money selling dreams to those who, through genetic selection, have inbred to the tip of the DNA chain through pressing TV Remote and Telephone buttons. There will always be antenna vendors that attract this shallow end of the pool. Those who act kindred to the class of royalty - and the Hapsburg lip.

73's
Richard Clark, KB7QHC

854. Painting a Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 20:30:53 UTC
From: pmolsen@one.net.au
Message-ID: <6ba442b.0309141230.163ba825@posting.google.com>
Source record: 108220

Does it affect the performance of a Yagi antenna (433 MHz) to paint the elements?

855. Off Center Fed Dipole: the "Windom" experience.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 21:06:14 UTC
From: Charles Wittnam <wittnam@bresnan.net>
Message-ID: <aL49b.59970$mp.27959@rwcrnsc51.ops.asp.att.net>
Source record: 108221

I recently hung my commercially produced OCF dipole at a "test" height of 20 feet. I just wanted to see how many of the problems I have been warned about actually manifested themselves. There is NO question that the coax feedline will radiate enough RF to cause problems with rig upon occassion. I am jusing a Ten Tec Jupiter. My in rig keyer had a seizure on one band. A 1:1 balun or beads for RF suppression is a necessity. Does the antenna work? Yes. Better than a dipole, no. The OCF aspect of it enables me to hide the balun, and the black insulated antenna wire is virtually invisible. So for "stealth", it gets five stars. If you order from Antennas and More you will NEVER hear from them despite leaving numerous messages. I would not recommend this group under any circumstances. They have nice antenna wire, but that is it. BUILD YOUR OWN! I will do a head to head comparison with a loop ant in the future. I highly recommend an OCF being fed with ladder line, not coax.

Charlie KD7HU

856. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 21:31:08 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <w659b.3837$v%5.2146@fed1read02>
Source record: 108222

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:dvh9mv07qtdhrvggf5rc2g1ajtia6hg27b@4ax.com...
> On 14 Sep 2003 12:35:05 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >I have never seen a reason to spend big money on
> >a Bird wattmeter but I do have a question.
> >What exactly is inside the various slugs
> >that one must use with this meter ?
> >Art
>
> Hi Art,
>
> A loop, at least one cap, a diode, at least one resistor.
>
> 73's
> Richard Clark, KB7QHC

The little network, along with the section of coax line inside the main housing, forms a directional coupler. A Bird 43 (or similar, but the 43's are readily available, used, on eBay) is about the cheapest way to get answers about the design and performance of your antenna and transmitter system.

And if you think a Bird 43 is big money, you ain't seen nothing yet!

Ed
WB6WSN

857. Re: 4NEC2 Antenna Modeling Program

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 22:24:29 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <vm9ql2pasm7ka9@corp.supernews.com>
Source record: 108223

Hi,

You didn't address his question. <VBG> Unfortunately neither can I. :)

This is perhaps as close as you came:
> Uncertainty of + or - 1 dB in 10 items of software input data will result
in
> + or - 10 dB in output data.

Regards,
Jim
--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.

858. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 22:37:19 UTC
From: artie <silli_artie@hotmail.com>
Message-ID: <1409200031537205239%silli_artie@hotmail.com>
Source record: 108224

In article <85ed38d.0309141135.5ea034a2@posting.google.com>, Art Unwin KB9MZ <aunwin@insightbb.com> wrote:

> I have never seen a reason to spend big money on
> a Bird wattmeter but I do have a question.
> What exactly is inside the various slugs
> that one must use with this meter ?
> Art

A coupling network and a diode are inside the slug. Slugs are calibrated by twiddling (literally) components inside the slug, and then putting the label on the front of the slug.

You can find the meters on eBay, but you need to be careful buying the slugs sight unseen -- some of the lower-power slugs can be thrown out of cal by being dropped (on a hard surface).

An easy way to check a slug is to put two high quality 50 ohm loads in parallel (use a "T") on the output of the meter. Bird loads are also easy to find on eBay and swap meets -- I have one that's probably 40 years old, and a newer one, only 20 years old.

Try and keep your readings midscale for best accuracy. Put the shorting slug in the meter when the meter isn't in use, or turn the slug so the arrow points up at the meter to protect the movement.

The Bird is a wonderful, stable design that's simple and well understood. You can get fancier (from Bird, among others), you can get more accurate (my old HP), but it's hard to get simpler.

859. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 23:11:25 UTC
From: James <jimbo@nospam.com>
Message-ID: <3F64F59B.BEE4F2BB@nospam.com>
Source record: 108225

Hi,

Save the paint, swipe some of my teen daughters nail polish with glitter !

worked great !

btw, some lawyer helped his kid file a patent for swinging sidweays on a
conventional
swingset !
he wanted to teach his kid how the process works.

73 jimbo

Lloyd wrote:

> Walmart:
>
> One (1) 5.95 Slingshot
> One (1) 3.95 or less if on sale, Cheap fishing reel with line
> Two (2) (.39) Tiny radiator hose clamps
> One Pack (1.99) 1oz. teardrop lead fishing weight
> One (1) can Spray Orange Paint (to color lead weight)
> One (1) Screwdriver (no cost...from my toolbox)
>
> TADA !!! My version of EZ Hand....works just as good..
>
> Mitch KD4HTW
>
> "H. Adam Stevens" <solo@totalaccess.net> wrote in message
> news:vm0jmnsa194ibe@corp.supernews.com...
> > a patent?
> > I'm gonna puke!
> > how ludicrous, next they'll patent throwing a rock.....
> > "Martin" <marty123@optonline.net> wrote in message
> > news:e8P7b.141731$Ay2.31921371@news4.srv.hcvlny.cv.net...
> > >
> > > "Walter" <junkmail@altonillinois.com> wrote in message
> > > news:70729ae5.0309092218.2c535362@posting.google.com...
> > > > Here is an article on how to cheaply and easily run a wire antenna
> > > > using a slingshot, and a fishing pole.
> > > >
> > > > http://groups.yahoo.com/group/SkyWires/message/37
> > >
> > > Amazing! Amazing, that is, that there has actually been a recent patent
> > > issued
> > > on the slingshot-spinning reel combination: U.S. 6,286,495; filed on

> > > 8/2/02!
> > >
> > > I used this idea as far back as 1966, copied from other hams who used it
> > > before I did. And in 1990 I built one identical to the one they're
> > selling.
> > > See the ad for EZ Hang on the www.qrz.com site.
> > >
> > > Marty K1FHR
> > >
> > >
> > >
> > >
> > >
> >
> >

860. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 23:13:07 UTC
From: James <jimbo@nospam.com>
Message-ID: <3F64F602.637BC961@nospam.com>
Source record: 108226

Nice, used this method for field day, easier to do once someone else shows you the way to do it ! I will not file a patent app !

Jim wrote:

> I've been using an old bow and arrow. The arrow has a rubber tip (used
> for small game hunting). Tie some 20 lb. fishing line on the arrow and
> fire away. If the arrow goes over too many unwanted branches on it's
> way down, and it always does, I remove the arrow, tie on a fairly
> large finger shaped fishing sinker and pull the sinker up and let it
> drop back over the unwanted branches until I get it where I want it,
> then let it drop. The rest is easy.

861. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 23:17:52 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030914191752.10815.00000989@mb-m29.aol.com>
Source record: 108227

Aw, not this SH1T again?

Bada BUm

862. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-14 23:46:34 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309141546.6f297162@posting.google.com>
Source record: 108228

Never had to do this but if it ever came about
I would put a radiation pattern program on a lap top
and connect it to a small directive antenna on the
automobile.Circle the area in question and do a
rotation of the antenna starting of at north
each time. Do this for a close in radius (a mile)
and then for a larger radius, An overlay of all
patterns shgould be able to triangulate it
pretty close.
See antenna commpedium article (book #1,2 or 3)
by Peter Dodds of the U.K.

Art

Mark <blockspam@spamblock.com> wrote in message
news:<ca49mvcrea6bjbdl9j08ab4vau6ovs5pu9@4ax.com>...
> On Sun, 14 Sep 2003 05:18:50 GMT, "Peter Gottlieb" <178048316@icq.net>
> wrote:
>
> >Not sure this is the right ng for this.
> >
> >I am trying to track down a very strange interference signal. This signal
> >has a carrier which sweeps from about 4410 to 4470 KHz at about 1 sweep per
> >second and seems to have what appears (from FFT) to look like a 512 Hz
> >modulation (further modulated by other frequencies).
> >
> >I made a tuned 2 foot diameter loop antenna and drove around plotting the
> >null headings. All pointed to a place somewhere in central New Jersey. So
> >I drove over there to make more readings. As I got closer I had to
> >attenuate the antenna signal, but when I got right to the area, there were
> >no more antenna nulls.
> >
> >So. Here are my questions:
> >
> >1) Do I need a better antenna for this?
> >
> >2) Is the source spread out, like coming from power lines, and not
> >something I can find using that method?
> >
> >3) Has anyone ever heard interference like this? (I haven't in over 35
> >years of SWLing and hamming).
> >
> >TIA,
> >Peter
> >

>
> A DF loop, with null seeking arrangements, only provides a line of
> bearing to the transmitter. Triangulation is required to localize the
> signal, subject to the limitations of multipath in an urban
> environment.
>
> If you can triangulate the source of interference to within a defined
> area (by taking multiple readings at various locations to help average
> out some of the effects of multipath) this would serve as a good
> starting point for your search.
>
> Within the search area, you're probably better off trying to use a
> receiver with a signal strength indicator, or a field strength
> indicator, to look for "hot spots" as you drive around. As you get
> closer to the source, keep attenuating the signal and repeat the
> search process. With this process, you may be able to localize the
> source to within a building or group of buildings.
>
> Mark

863. Re: 4NEC2 Antenna Modeling Program

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:07:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk2vsf$8ug$1@titan.btinternet.com>
Source record: 108229

> You didn't address his question. <VBG> Unfortunately neither can I. :)
>
> This is perhaps as close as you came:
> > Uncertainty of + or - 1 dB in 10 items of software input data will
result
> in
> > + or - 10 dB in output data.

==========

Jim, I see you are not a computer program worshipper.

Neither am I.

People are migrating in droves from Terman and the ARRL handbook as the true
gospels.

Help yourself to a tract from website below before the price goes up.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

864. PAR MON-3 Antenna VS Diamond D-130J

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:09:16 UTC
From: Bob <anyisp@anyisp.com>
Message-ID: <VwGdnfDj7LSKnviiU-KYuQ@comcast.com>
Source record: 108230
Cross-posted to: alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.scanner

Has anyone had any experiences with this antenna good or bad.

PAR MON-3
Design frequencies: 144-174, 440-470 and 800-900 MHz. Gain: 1.7 dBi.
Impedance: 50 ohms. Pattern: Omni.

How does it stack up against the Diamond D-130J?

Thanks
Bob

865. Re: LQQKing for Construction Article

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:09:36 UTC
From: dx528@yahoo.com
Message-ID: <31b11dfa.0309141609.7a3dc570@posting.google.com>
Source record: 108231

nedrog@aol.comNOSPAM (NEDROG) wrote in message
news:<20030911100145.25815.00002955@mb-m07.aol.com>...

Hi Howard,

Here is a more practical design of a directive high performance 10
meter full wave antenna--

http://www.gopherlink.com/DeltaXray/hfantenn.htm

73,

Rich

W9JUC (since 1954)

**********NN

> Somewhere back in either 1998 or 1999 os I believe 73 magazine, there was a
> construction article of a FRACTAL 10m - 2 ele quad.
>
> Yeah, I know that there has been a lot of discussions on this and other
> newsgroups about FRACTAL Antennas, but I am not looking for that. I am looking
> for the article.
>
> If you have a copy of the article, and could scan it, I can deal with the
> following formats: RTS, JPEG, PIF, PDF, etc.
>
> If you have a copy of the article, but cannot scan it, I would be willing to
> purchase that issue from you.
>
> 73's,
>
> Howard W3CQH

866. Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:31:09 UTC
From: PC <cjyjtj@comcast.net>
Message-ID: <hL79b.449290$uu5.79598@sccrnsc04>
Source record: 108232

I purchased a home and an antenna came with it. I don't know what the original owner used it for and I'd like to find out what kind it is. It's a verticle antenna mounted on a pole, the mast extends about 18 ft. up. At the base it has three rods about 9 ft. long stretched horizontaly and at the very top it has three 12" rods horizontal. The coax attaches to the bottom and runs into the house, Is this Ham, CB or something for a scanner? Is there any way of finding out?

Thanks

867. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:34:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3q1amv4fuhrc1k9hni4qtvkriiq70ekk8q@4ax.com>
Source record: 108233

On Sun, 14 Sep 2003 14:31:08 -0700, "Ed Price" <edprice@cox.net>
wrote:
>The little network, along with the section of coax line inside the main
>housing, forms a directional coupler. A Bird 43 (or similar, but the 43's
>are readily available, used, on eBay) is about the cheapest way to get
>answers about the design and performance of your antenna and transmitter
>system.
>
>And if you think a Bird 43 is big money, you ain't seen nothing yet!
>
>Ed
>WB6WSN

Hi Ed,

I am quite familiar with the Bird 43. A useful instrument on the bench, more appropriate in the field. The URM-120 by Sierra is far more robust and always keeps its calibration. I have used instrumentation that is far more expensive and I have used instrumentation that was far cheaper. I have calibrated them all.

For the amateur, a cheap Radio Shack CB SWR meter is more than adequate, and if it is not perceived to be, is easily tailored to fill that shortfall of perception. It shouldn't cost anyone more than $20 (mostly for the meter) to build a very good one. There are scads of designs available, and all revolve around the same assembly of simple components I described for Art. If any trick is involved, it is close attention to dimension and wavelength.

Choice in SWR meters is almost akin to preference in tie color, a personal matter.

73's
Richard Clark, KB7QHC

868. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:36:11 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <%P79b.11281$Aq2.7841@newsread1.news.atl.earthlink.net>
Source record: 108234

Sounds like a CB to me.

To answer the question of how to find out;

Yes you can. Either put a Analizer on it, or a source of RF and a SWR
meter.

Dan/W4NTI

"PC" <cjyjtj@comcast.net> wrote in message
news:hL79b.449290$uu5.79598@sccrnsc04...
> I purchased a home and an antenna came with it. I don't know what the
> original owner used it for and I'd like to find out what kind it is. It's
a
> verticle antenna mounted on a pole, the mast extends about 18 ft. up. At
> the base it has three rods about 9 ft. long stretched horizontaly and at
the
> very top it has three 12" rods horizontal. The coax attaches to the
bottom
> and runs into the house, Is this Ham, CB or something for a scanner? Is
> there any way of finding out?
>
> Thanks
>
>

869. Re: LQQKing for Construction Article

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:49:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9i2amv8bibpo2ss1vdsst5qa0ssq04rveq@4ax.com>
Source record: 108235

On 14 Sep 2003 17:09:36 -0700, dx528@yahoo.com (Richard Earl) wrote:

>nedrog@aol.comNOSPAM (NEDROG) wrote in message
news:<20030911100145.25815.00002955@mb-m07.aol.com>...
>
>Hi Howard,
>
>Here is a more practical design of a directive high performance 10
>meter full wave antenna--
>
>http://www.gopherlink.com/DeltaXray/hfantenn.htm
>
>73,
>
>Rich

Hi Rich,

The issue of practicality is perceptive in light of the query's focus.

>
>W9JUC (since 1954)
>
>**NN
>
>
>> Somewhere back in either 1998 or 1999 os I believe 73 magazine, there was a
>> construction article of a FRACTAL 10m - 2 ele quad.
>>
>> Yeah, I know that there has been a lot of discussions on this and other
>> newsgroups about FRACTAL Antennas, but I am not looking for that. I am looking
>> for the article.
>>
Hi Howard,

Your source (the author) posted here this weekend, but he has no
interest in supplying such information. The last time it was
reviewed, that same author threatened the several of us with suits for
misappropriation (stealing) of his design. The reflector/director
design can be inferred by the drawings provided at:
http://www.qsl.net/kb7qhc/antenna/fractal/Square%20Gasket/index.htm
and you simply use heavy gauge wire (#12) shaped to the pattern
observed there, but as a construction reference, it requires more
effort on your part - and as observed by Rich, is not particularly the
simplest project.

Good luck anyway. Write for details if you cannot rummage up the article.

73's
Richard Clark, KB7QHC

870. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 00:58:30 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <W889b.343705$Oz4.127897@rwcrnsc54>
Source record: 108236

If he really wanted to teach the kid the process, he should have charged him
the usual fee.
"James" <jimbo@nospam.com> wrote in message
news:3F64F59B.BEE4F2BB@nospam.com...
> Hi,
>
> Save the paint, swipe some of my teen daughters nail polish with glitter !
>
> worked great !
>
> btw, some lawyer helped his kid file a patent for swinging sidweays on a
> conventional
> swingset !
> he wanted to teach his kid how the process works.
>
> 73 jimbo
>
> Lloyd wrote:
>
> > Walmart:
> >
> > One (1) 5.95 Slingshot
> > One (1) 3.95 or less if on sale, Cheap fishing reel with line
> > Two (2) (.39) Tiny radiator hose clamps
> > One Pack (1.99) 1oz. teardrop lead fishing weight
> > One (1) can Spray Orange Paint (to color lead weight)
> > One (1) Screwdriver (no cost...from my toolbox)
> >
> > TADA !!! My version of EZ Hand....works just as good..
> >
> > Mitch KD4HTW
> >
> > "H. Adam Stevens" <solo@totalaccess.net> wrote in message
> > news:vm0jmnsa194ibe@corp.supernews.com...
> > > a patent?
> > > I'm gonna puke!
> > > how ludicrous, next they'll patent throwing a rock........
> > > "Martin" <marty123@optonline.net> wrote in message
> > > news:e8P7b.141731$Ay2.31921371@news4.srv.hcvlny.cv.net...
> > > >
> > > > "Walter" <junkmail@altonillinois.com> wrote in message
> > > > news:70729ae5.0309092218.2c535362@posting.google.com...
> > > > > Here is an article on how to cheaply and easily run a wire antenna
> > > > > using a slingshot, and a fishing pole.

> > > > >
> > > > > http://groups.yahoo.com/group/SkyWires/message/37
> > > > >
> > > > Amazing! Amazing, that is, that there has actually been a recent
patent
> > > > issued
> > > > on the slingshot-spinning reel combination: U.S. 6,286,495; filed
on
> > > > 8/2/02!
> > > > >
> > > > I used this idea as far back as 1966, copied from other hams who
used it
> > > > before I did. And in 1990 I built one identical to the one they're
> > > selling.
> > > > See the ad for EZ Hang on the www.qrz.com site.
> > > > >
> > > > Marty K1FHR
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > > >
> > > >
>

871. Re: PAR MON-3 Antenna VS Diamond D-130J

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 01:19:41 UTC
From: GeorgeF <av8tor@licensed4funREMOVEBEFOREFLIGHT.com>
Message-ID: <3F6513AD.3030907@licensed4funREMOVEBEFOREFLIGHT.com>
Source record: 108238
Cross-posted to: alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.scanner

Bob wrote:
> Has anyone had any experiences with this antenna good or bad.
>
> PAR MON-3
> Design frequencies: 144-174, 440-470 and 800-900 MHz. Gain: 1.7 dBi.
> Impedance: 50 ohms. Pattern: Omni.
>
> How does it stack up against the Diamond D-130J?
>
> Thanks
> Bob

I had the Diamond and gave it to the garbage man. After using the AntennaWarehouse ScanTenna (http://users.cis.net/kingpop/Scanner/Scantenna.htm) I won't ever buy a Discone again.

First you need to remember that a Discone has no gain.

Since you only have two choices I would pick the MON-3 simply because they at least advertise some gain where as a discone is a unity gain antenna.

George
http://www.MilAirComms.com

872. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 01:20:46 UTC
From: Leland Cox <lcox107@comcast.net>
Message-ID: <-l-dnXpb8-h0kviiXTWJgA@comcast.com>
Source record: 108237

It is probably a CB antenna. Have someone with something like an MFJ
ANTENNA ANALIZER check the antenna and find resonant frequency.
If you can find a make or model number on the antenna you may find it on
the internet!

Les, AA4F

PC wrote:
> I purchased a home and an antenna came with it. I don't know what the
> original owner used it for and I'd like to find out what kind it is. It's a
> verticle antenna mounted on a pole, the mast extends about 18 ft. up. At
> the base it has three rods about 9 ft. long stretched horizontaly and at the
> very top it has three 12" rods horizontal. The coax attaches to the bottom
> and runs into the house, Is this Ham, CB or something for a scanner? Is
> there any way of finding out?
>
> Thanks
>
>

873. MOXON wire beam website

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 01:48:14 UTC
From: Don Snodgrass <donsno@charter.net>
Message-ID: <vma740k2cbrl28@corp.supernews.com>
Source record: 108239

Hello all...

Please visit the Moxon Antenna Project website at
http://campus.murraystate.edu/org/msuarc/moxon showcasing the collective
efforts of several hams who are home brewing Moxon
rectangles. The site includes design information, construction techniques
and performance data."

73

Don

K4QKY
Moxon Antenna Project Website Author
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Don Snodgrass
1624 Tabard Drive
Murray, KY 42071
270-767-9944

http://webpages.charter.net/donsno
k4qky@charter.net

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

874. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 01:59:08 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <M199b.131875$kP.127738@fed1read03>
Source record: 108240

The 18 feet indicates it could be a half wave CB Antenna, but to be sure:

Borrow an Antenna Analyzer such as MFJ-269 and find the resonant frequency
of the antenna.
Most Hams will be happy to help and make the measurements for you.
An Antenna Analyzer is a better way of testing as you don't have to
transmit.

Once you know the resonant frequency of the antenna.

See Ham Band plans at URL:
http://www.icomamerica.com/downloads/bandchar.pdf

See CB Frequencies at URL:
http://listen.to/welfarewally

For any others, see FCC Spectrum Chart - URL:
http://www.ntia.doc.gov/osmhome/chp04chart.pdf

--
73 From The Signal In The Noise
Caveat Lector Ya All

"PC" <cjyjtj@comcast.net> wrote in message
news:hL79b.449290$uu5.79598@sccrnsc04...
> I purchased a home and an antenna came with it. I don't know what the
> original owner used it for and I'd like to find out what kind it is. It's
a
> verticle antenna mounted on a pole, the mast extends about 18 ft. up. At
> the base it has three rods about 9 ft. long stretched horizontaly and at
the
> very top it has three 12" rods horizontal. The coax attaches to the
bottom
> and runs into the house, Is this Ham, CB or something for a scanner? Is
> there any way of finding out?
>
> Thanks
>
>

875. Predator Mobile Screwdriver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 03:08:03 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <vmab8oqi3dob4c@corp.supernews.com>
Source record: 108242

Could someone give me a site for this antenna please.

Thanks,

Butch KF5DE

876. Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 05:28:38 UTC
From: Sean <Xaw_dee_o@hotmail.comX>
Message-ID: <cLCdnTv0zueW0_iiU-KYvg@comcast.com>
Source record: 108243

Anybody know of an easy to apply, low cost conductive paint ? I've been able to find quite a few products that will work, but the costs involved are VERY high for anything above a very small quantity. I've got a project i'm working on that may require the use of a few gallons of this type of product. Any and all help appreciated. Sean
>

877. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 05:43:06 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309142143.4630d33@posting.google.com>
Source record: 108244

"PC" <cjyjtj@comcast.net> wrote in message news:<hL79b.449290$uu5.79598@sccrnsc04>...
> I purchased a home and an antenna came with it. I don't know what the
> original owner used it for and I'd like to find out what kind it is. It's a
> verticle antenna mounted on a pole, the mast extends about 18 ft. up. At
> the base it has three rods about 9 ft. long stretched horizontaly and at the
> very top it has three 12" rods horizontal. The coax attaches to the bottom
> and runs into the house, Is this Ham, CB or something for a scanner? Is
> there any way of finding out?
>
> Thanks

An appx 5/8 wave CB antenna. The top rods are a static hat. Radio
shack used to sell those. Other too I imagine. MK

878. Re: Radial loading coil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 06:07:56 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309142207.6ba4fb0a@posting.google.com>
Source record: 108245

Ron <rmrippy@hotmail.com> wrote in message
news:<iDJ8b.1052$ft.230@twister.southeast.rr.com>...
> Loading coils are used to extend the effective length of a horizontal dipole and
> the "above ground" side of a vertical. Why not add a coil in series with
> the common radial node to extend the effective length of the radials?
>
> Ron, W4TQT

You would only want to do that with an elevated ground plane if you didn't have enough room for full sized radials. A coil would be a waste of time for radials on the ground. But not so for an elevated antenna. If elevated, the radials need to show a low Z resonance to work. IE: 1/4, 3/4, wave, etc. If you had untuned short radials, they would not work well at all. But by adding a coil to tune out reactance, the radial will function. If all radials are identical and symmetrical with the same coils in each, most of the radiation should cancel same as any other set of equal radials. These loaded radials, like loaded dipoles, are not as good as the full size version. But they should turn a piece of wire with an unusable length into one doing a fairly decent job. I've never tried any loaded elevated radials, but I suspect all the normal rules apply. IE: current distribution will improve as you move the coil towards the end, yada, yada, same as loaded dipoles and verticals. MK

879. Re: HyGain Patriot 40 - 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 06:39:43 UTC
From: "Wolfgang K. Meister" <no.mail@please.com>
Message-ID: <k6namvs1umtddo7ji6t8mmc5cg12qrkntp@4ax.com>
Source record: 108246

On Fri, 12 Sep 2003 09:12:31 GMT, Roger Halstead
<newsgroups@rogerhalstead.com> wrote:

>Any one have any experience with the Patriot 40 through 10 meter
>antenna?
Roger,

I have one on the roof since a few month. The antenna performs well,
the assambly, as usual, is not exactly as described in the manual.

The only thing I have replaced are the tube clamps (hope that is the
right english word for it). Those are the things that wrap around the
sloted end of the tubes to fasten the next section. They are
ridicolous compared to proffessional ones available in some hardware
stores. The ones I found are around 1 icnch wide, the original are
around 1/4 to 1/2 inch wide. The ones I used have two bolts on each
side and a strong inbus screw between the bolts. If you need more
info, drop me a line at oe1mww(at)qsl.net. Replace the (at) with a '@'
I will send you some pictures.

Mount the antenna end at least 4 to 6 feet above ground or obstacles.
The radials are VERY floppy and hang down. But this apparently how
they are designed.

You NEED guy ropes!! Otherwise the next strong wind will do the rest!

73s de OE1MWW
Wolfgang

880. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 13:21:06 UTC
From: richardharrison@webtv.net
Message-ID: <8484-3F65BCC2-344@storefull-2312.public.lawson.webtv.net>
Source record: 108248

(PC) wrote:
"At the base it has three rods about 9 ft. long stretched horizontally
and at te top it has three 12" rods horizontal."

From the length of the 9-ft rods, which are about 1/4-wave at 11 mtrs
wavelength, my guess s that the antenna was intended for C.B.
This type of antenna is called a ground-plane.

The 12-inch rods are capacitance loading used to improve current
distribution in the vertical radiator and to reduce its required length
at resonance.

Radial rods used with vertical antennas are intended to balance out
radiation in any azimuth from themselves when connected together and fed
from the same point. Neither the ground-plane rods nor the capacitance
loading rods are intended to radiate themselves. Both sets of rods
significantly affect the radiation from the vertical radiator section of
the antenna.

Best regards, Richard Harrison, KB5WZI

881. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 13:36:04 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmbg0dposnvnb8@corp.supernews.com>
Source record: 108247

artie wrote:
>
> The Bird is a wonderful, stable design that's simple and well
> understood. You can get fancier (from Bird, among others), you can get
> more accurate (my old HP), but it's hard to get simpler.

I use a homebrew directional coupler (see QEX for
March 1995) for everyday use, and a brand new,
well preserved (in a closet) Bird 43 as a
reference instrument. At full scale it is specifed
as accurate within +/- 0.5 db, which is plenty
good enough for me.

Bill W0IYH

882. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 14:10:42 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <bthbmvsecio51m570j04gi0eefeibrbu0s@4ax.com>
Source record: 108241

On Sun, 14 Sep 2003 20:20:46 -0500, Leland Cox <lcox107@comcast.net>
wrote:

>It is probably a CB antenna. Have someone with something like an MFJ
>ANTENNA ANALIZER check the antenna and find resonant frequency.
>If you can find a make or model number on the antenna you may find it on
>the internet!
>
>Les, AA4F
>
>PC wrote:
>> I purchased a home and an antenna came with it. I don't know what the
>> original owner used it for and I'd like to find out what kind it is. It's a
>> verticle antenna mounted on a pole, the mast extends about 18 ft. up. At
>> the base it has three rods about 9 ft. long stretched horizontaly

A quarter wave on 10 meters is about 8 feet, so the 9 foot radials
sound about right for the CB band right around 26 or 27 mhz.

Bob
k5qwg

> and at the
>> very top it has three 12" rods horizontal. The coax attaches to the bottom
>> and runs into the house, Is this Ham, CB or something for a scanner? Is
>> there any way of finding out?
>>
>> Thanks
>>
>>

883. Re: Predator Mobile Screwdriver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 14:44:11 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <_ek9b.134320$kP.87365@fed1read03>
Source record: 108249

Google Finds All
http://kj9t.150m.com/N9JMX_PREDATOR_DETAIL/summary.html

--
73 From The Signal In The Noise
Caveat Lector Ya All

"Butch" <lynyrd@cableone.net> wrote in message
news:vmab8oqi3dob4c@corp.supernews.com...
>
> Could someone give me a site for this antenna please.
>
> Thanks,
>
> Butch KF5DE
>

884. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 14:50:56 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <u-ScnRJLwN9sTPiiU-KYvA@crocker.com>
Source record: 108250

"David Robbins" <k1ttt@arrl.net> wrote in message
news:eZSdnRy-kpeqk_6iU-KYuA@crocker.com...

> i think the more important thing now is to point out to the arrl the error
> of using that form of the reflection coefficient in place of the
> 'conventional' one in the latest antenna book so it doesn't become gospel
in
> the future.
>

I have contacted n6bv and he reports they have already changed the 20th
edition of the Antenna Book back to the 'conventional' rho and changed the
power analysis to use the full hyperbolic formlations for voltage or current
to calculate the line loss.

885. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 15:14:23 UTC
From: richardharrison@webtv.net
Message-ID: <25045-3F65D74F-318@storefull-2318.public.lawson.webtv.net>
Source record: 108252

Art Unwin wrote:
"What exactly is inside the various slugs that one must use with this meter?"

73 Amateur Radio had an article, "Calibration and Repair for Bird Wattmeter Elements" in its April 1989 issue by Francis Kelson, K2KSY.

K2KSY`s plug-in element diagram is more complete than that given by Bird under the topic, "Thruline Principle" in my Bird catalog. Bird may have been guarding proprietary information in 1989 when my catalog was issued.

The Bird Model 43 accuracy is specified as + or - 5% of full scale in the catalog. So, a "slug" which would cause nearly full scale deflection should probably be used for accuracy.

Accuracy results from the careful, rugged construction and calibration of the Bird.

Bird says: "Broadcasters may want to order two identical Elements at the same time and keep one in a safe place after recording the meter readings obtained by each. If a question arises about recalibration (e.g. in case an Element has been dropped on a cement floor), a quick comparison with the original twin could save time, effort and inconvenience of shipping the whole wattmeter back for a checkup. For better resolution of low reflected power levels, we recommend a second Element 1/10 the power of the forward Element."

From the above, Bird seems to advise broadcasters initially buy 4 Elements.

Richard Clark, a metrologist, occasionally disparages Bird`s accuracy on this newsgroup. I`m no metrologist, but have experience with many Bird 43`s and have seen them to be highly repeatable and exchangeable. They usually read what you would expect and they read what you determine the power to be by other means. I doubt that cheap meters come close to the Bird`s reliability. I think the Bird Model 43 is a good value.

Best regards, Richard Harrison, KB5WZI

886. Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 15:33:10 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk4m3m$i8i$1@titan.btinternet.com>
Source record: 108251

Reflection-cooefficient bridges have been around for the last ONE HUNDRED & FIFTY YEARS.

They have always incorporated artificial lines, or line simulators, or real lines in the standard or reference arm of the bridge.

The reflection-coefficient bridge was used to locate faults on the first oceanic telegraph cables by comparing the faulty cable with an artificial version maintained at the terminal station specially for the purpose. An artificial fault was moved along the artificial cable until the bridge was balanced. The wideband signal generator was a 100-volt wet battery and a telegraph key. The bridge unbalance indicator was a mirror galvanometer using a light beam 5 or 6 feet in length and a sensitivity measured in nano-amps.

The equipment was mounted on a mahogany bench, housed in beautifully polished mahogany cases. Electrical connections were made by copper bars between brass screw terminals, all changes in direction of bars were at 90-degrees. All brass and copper surfaces not needed for electrical connections were brightly polished and coated with a clear laquer. The overall appearance of the test room was a work of art, produced by a master of his electrical and mechanical skills, with a quiet pride in the knowledge that no-one else could possibly better improve operating efficiency of the station and the cables which radiated from it in various directions under the
ever-restless waves.

The same arrangement was used to locate oceanic cable faults in the 1970's. I designed a fault locating test equipment with 10:1 bridge ratio arms which saved space in the artificial line rack. The artificial line matched the real
line from 1/10th Hz to 50 Hz. Cables had amplifiers every 20 or 30 miles which also had to be simulated in the articial line.

For a 100 years or more, new multipair phone and other cable types have been acceptance tested with reflection-coefficient bridges. One pair in the cable is exhaustively tested for everything the test engineer can think of to make sure there's nothing wrong with it. The known good pair is then used as the standard arm of the bridge and each of the other 1023 pairs in the cable is compared with it in the other arm of the bridge. It is a very sensitive method of detecting cable faults. Care must be taken to terminate each pair with its Zo. If standing waves are present then a dry high-resistance faulty soldered joint might not be detected if it is located at a current minimum.

Pulse-echo cable-fault locating test sets use a network to simulate the very wideband line input impedance Ro + jXo. It is essential to balance-out in a bridge the high amplitude transmitted pulse which would otherwise paralyse the echo receiver

And for many years amateurs have unknowingly used reflection-coefficient bridges immediately at the output of their transmitters. They have been incorrectly named by get-rich-quick salesmen as SWR, forward and reflected power meters. These quantities exist only in the users' imaginations and the meter doesn't actually measure any of them.

A more appropriate name for the instrument is a TLI. (Transmitter Loading Indicator). A pair of red and green LEDs would suffice to answer the question " Is the load on the transmitter near enough to 50 ohms resistive or is it not near to 50 ohms resistive ? "

Reg, G4FGQ

==========

"Peter O. Brackett" wrote
> Reg:
> [snip]
> > The fixed standard arm of the rho bridge (instead of a 50-ohms resistor)
> can
> > be just a very long length of transmission line of input impedance Zo =
> > Ro+jXo which, of course, varies with frequency in exactly the required
> > manner.
> >
> > Or, as I often did 50 years back, make an artificial lumped-LCR line
> > simulating network to any required degree of accuracy.
> > ----
> > Reg
> [snip]
>
> Caution... take care, the "reflection police" may get ya!
>
> Roy and Dave took me to task on another thread for even suggesting just
such
> an
> approach. A semi-infinite line!!! Hmph... no way they were gonna let me
> get away
> with that. Roy wanted to know what "semi-infinite" was!!!
>
> Dave even told me that my idea of having a lumped approximation to Zo was
> impossible!
> This was a completd surprise to me since over 300,000 units of an xDSL
> transceiver I
> recently designed for the commercial marketplace and which have all been
> shipped
> and installed by BellSouth, Verizon, SBC and other such unknowing folks
> incorporates

> just exactly that kind of circuitre!
>
> Hmmmm... I guess I lucked out and none of those customers noticed I was
> balancing \
> a lumped approximation of Zo against a real distributed complex Zo!
>
> :-)
>
> --
> Peter K1PO
> Indialantic By-the-Sea, FL.
>
>
>

887. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 16:49:16 UTC
From: Peter Gottlieb <none@bestweb.net>
Message-ID: <vmbrcae30g3p2a@corp.supernews.com>
Source record: 108253

Thanks for everyone's input. After two months of this interference, it has just moved and is no longer a problem for the channels I need to use. So, although it is still present, I no longer need to locate its source.

Peter

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message news:K4mdnTbQCcyDJ_miU-KYuQ@comcast.com...
>
> > You know those old WWII movies where you see German vans with DF eqpt
> > driving around trying to locate spies? Turns out they were HF units.
> But,
> > it took three of them, in widely separated locations acting in unison to
> get
> > the job done. And, the triangulation wasn't precise. It took lots of
> time
> > and effort to narrow in on the general location of a spy sending.
>
> combine an hf loop, with aprs, and you'll be amazed how effective it is.
> aprs will allow your hounds to share their info easily.
> you get the location of the other stations, on a map, plus your own, and
all
> the bearing data.
>
>

888. beams

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 16:59:49 UTC
From: none <moll_carter@centurytel.net>
Message-ID: <72m9b.1421$v22.1306831@feed2.centurytel.net>
Source record: 108254

has anyone ever built a set of beams? if you cam send me info in building beams would be great. you can email me at moll_carter@centurytel.net

889. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 17:28:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <egrbmvom84n2hr9fs6d9cdj76o6rvud65l@4ax.com>
Source record: 108255

On 15 Sep 2003 09:29:26 -0700, k4wge@arrl.net (k4wge) wrote:

>Just to add something new, you might want to have a look at U.S.
>Patent 6,552,690 (April 22, 2003): Vehicle windshield with fractal
>antenna(s)

Hi All,

Sheet 6 with unsubstantiated claims of Z (graphs, charts, illustrations, and such have no legal basis except to "inform" how a practitioner in achieving a working design, clearly unreliable here) is off the chart of reality from the beginning.

Sheet 5 purports to compare two loops. One is a simple, standard loop, the other is a fractal Koch Triadic (not the best of class to use, another give-away of faked data).

Returning to Sheet 6, we see that the inventor "claims" the standard loop contains absolutely NO Rradiation over the range of 150 to 220 MHz. The scale clearly resolves 1 Ohm, and the inventor clearly portrays 0 Ohms over the entire interval.

This 0 Ohm Rradiation loop circumscribes the fractal loop and by simple physics, dominates any Rradiation characteristic by virtue of encompassing more area. However, the inventor "claims" that this fractal eventually exhibits a Rradiation of 35 Ohms at a frequency of 220 MHz. The give-away to this fantasy is that the inventor has the chutzpa to further "claim" the standard loop never obtains any Rradiation.

Moving on to the fantasy of Sheet 7, we find more strained "claims" that progressive iterations bring vast shifts of resonance. This is perform through employing Marketing techniques of forcing an illusion through crafted scales of display. What appears to be dramatic shifts of resonance, are in fact rather mundane results. Further, we are now presented with an application that has been pushed 30 fold in frequency over the magic fractal loop of Sheet 6. This is tacit agreement with my observation that only through economy of scale can a fractal have any manufacturable return in the cost of complexity to build.

By the time we get to Sheet 8, it is clear the inventor may sue you for not paying him royalties for your cracked windshield, with triple damages for concurrent bug splatters. (Or so his lawyers' threatening letters may proclaim - in actuality of law, this design does not survive in the true claims.)

Sheet 9 cleverly omits the first iteration, a simple dipole. This is so as to not reveal that this form ALSO exhibits nearly identical "multiband" operation.

Sheet 10 is clearly in contravention of patents pending for FAS. ;-)

One last point. NONE of the illustrations of "fractals" barring those portrayed in Sheet 9, are described in the true claims.

Such is the "science" of fractal electromagnetics.

Such is the "legitimacy" of patents published.

73's
Richard Clark, KB7QHC

890. FS 6 mono band beams

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 17:42:29 UTC
From: wb4una@aol.com
Message-ID: <20030915134229.18098.00000798@mb-m24.aol.com>
Source record: 108256

I have the following beans for sale. they are made by Hygain:
10 meter beams...2-3 element
4 element
15 meter beam.. 2-5 element
20 meter beam... 5 element

also there is a Mosley 3 element SR triband beam.
I will sell all these for 1000.00
no shipping but could meet someone within 100 miles of Columbia,SC.

Thanks for reading
Randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

891. Re: beams

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 19:31:14 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <oNKdnd0mFenjjvuiU-KYgg@comcast.com>
Source record: 108257

"none" <moll_carter@centurytel.net> wrote in message
news:72m9b.1421$v22.1306831@feed2.centurytel.net...
> has anyone ever built a set of beams? if you cam send me info in building
> beams would be great. you can email me at moll_carter@centurytel.net

this is a way overly general question.

lots of beams have been done, and done to death...

what band were you interested in, what charachteristics did you want to
emphasize.

there are a bunch of freeware yagi calculators out there, google will point
the way.

892. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 19:35:30 UTC
From: richardharrison@webtv.net
Message-ID: <25045-3F661482-341@storefull-2318.public.lawson.webtv.net>
Source record: 108258

Reg wrote:
"For 100 years or more, new multipair phone and other cable types have been acceptance tested with reflection coefficient bridges. One pair in the cable is exhaustively tested for everything the test engineer can think of to make sure there`s nothing wrong with it.."

Why bridge test a cable pair that has continuity and accessible terminals?

I would rather measure the transmission characteristics that I might use.

The impedance of a 2-wire circuit may be of interest for balancing a term-set, but that is usually accomplished by adjusting the balance network by trial and error for the best balance or for most transhybrid loss. Another option is to accept a compromise fallback network which gives whatever hybrid balance results, good or bad.

One can locate a line fault by using:
wavelength = V / f

Where multiple repeaters are in a chain, as in Reg`s undersea cables, each repeater can generate its own unique pilot tone. One can check the tones to determine where the chain is broken. I`ve done that with terrestrial microwave systems and recorded the tone interruptions on a multichannel event recorder with synchronized timing marks. Whenever an outage occurs, time, location, and duration are charted.

For a rough check on local telephone loops in the swirtched telephone system here, the phone company had a dial-up tone oscillator in its central offices. More significantly, other subscribers can be dialed up to determine the quality of the connections that can be made.

Data circuits often have a loop-back capability in data modems, used to determine error rate. This is another way to evaluate circuits.

For broadcast program lines, and other leased circuits, the phone company will treat the line to meet specifications. The customer then tests his own circuits to make sure he is getting what he pays for.

There are "silent" test systems for multipair cables which test with tones outside the audible range. These can evaluate attenuation and cross-talk and these can be related to the similar values in the audible range.

SWR is a function of reflection strength. I see no problem in labeling a reflection strength as SWR, even though there may not be enough cable

for a standing wave pattern. I think TLI would be a fine meter name too.

Best regards, Richard Harrison, KB5WZI

893. Re: beams

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 19:58:30 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <GRo9b.134593$kP.84934@fed1read03>
Source record: 108259

Try URL:
http://ac6v.com/antprojects.htm#Y

Several to choose from

--
73 From The Signal In The Noise
Caveat Lector Ya All

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:oNKdnd0mFenjjvuiU-KYgg@comcast.com...
>
> "none" <moll_carter@centurytel.net> wrote in message
> news:72m9b.1421$v22.1306831@feed2.centurytel.net...
> > has anyone ever built a set of beams? if you cam send me info in
building
> > beams would be great. you can email me at moll_carter@centurytel.net
>
> this is a way overly general question.
>
> lots of beams have been done, and done to death...
>
> what band were you interested in, what charachteristics did you want to
> emphasize.
>
> there are a bunch of freeware yagi calculators out there, google will
point
> the way.
>
>

894. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 19:58:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309151158.790c5a7a@posting.google.com>
Source record: 108260

"William E. Sabin" <sabinw@mwci-news> wrote in message
news:<vmbg0dposnvnb8@corp.supernews.com>...
> artie wrote:
> >
> > The Bird is a wonderful, stable design that's simple and well
> > understood. You can get fancier (from Bird, among others), you can get
> > more accurate (my old HP), but it's hard to get simpler.
>
> I use a homebrew directional coupler (see QEX for
> March 1995) for everyday use, and a brand new,
> well preserved (in a closet) Bird 43 as a
> reference instrument. At full scale it is specifed
> as accurate within +/- 0.5 db, which is plenty
> good enough for me.
>
> Bill W0IYH

Why would a ham operator have a need for such accuracy ?
Isn't consistency enough ? For ensurance of not exceeding
the power output for those who want to equal the max then
a scope would be the way to go. For those that build then
there is a need for accuracy and bragging rights are fully
earned. Seems like this falls into the same catagory of
'I have six elements where you have only five'
Art

895. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 20:14:38 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <7pKdnWVrndo0gPuiU-KYuA@comcast.com>
Source record: 108261

> Why would a ham operator have a need for such accuracy ?
> Isn't consistency enough ? For ensurance of not exceeding
> the power output for those who want to equal the max then
> a scope would be the way to go. For those that build then
> there is a need for accuracy and bragging rights are fully
> earned. Seems like this falls into the same catagory of
> 'I have six elements where you have only five'
> Art

'need' is maybe too strong a word, but in general, i'll buy a more precise meter if i can afford it, rather than a less precise one. your tools are your eyes. if you can't measure it, you can't improve it.

bird owner

896. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 20:47:04 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030915164704.26616.00000602@mb-m26.aol.com>
Source record: 108262

>
>Such is the "science" of fractal electromagnetics.
>
>Such is the "legitimacy" of patents published.
>
>73's
>Richard Clark, KB7QHC

Paint it brown, add the claim that it is faster than light, and you got another "winner" or sucker?

Wonder if somebody would repay the treatment and actually sue the clowns for misleading claims or advertising.

If Art got patent for reflecting directors, then looks like anyone can get patent for anything and then rattle it in the face of ignoramuses.

BYm BUm

897. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 21:05:08 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmcaadpgv2g9bd@corp.supernews.com>
Source record: 108263

Art Unwin KB9MZ wrote:
> "William E. Sabin" <sabinw@mwci-news> wrote in message
news:<vmbg0dposnvnb8@corp.supernews.com>...
>
>>artie wrote:
>>
>>>
>>>The Bird is a wonderful, stable design that's simple and well
>>>understood. You can get fancier (from Bird, among others), you can get
>>>more accurate (my old HP), but it's hard to get simpler.
>>
>>I use a homebrew directional coupler (see QEX for
>>March 1995) for everyday use, and a brand new,
>>well preserved (in a closet) Bird 43 as a
>>reference instrument. At full scale it is specifed
>>as accurate within +/- 0.5 db, which is plenty
>>good enough for me.
>>
>>Bill W0IYH
>
>
> Why would a ham operator have a need for such accuracy ?
> Isn't consistency enough ? For ensurance of not exceeding
> the power output for those who want to equal the max then
> a scope would be the way to go. For those that build then
> there is a need for accuracy and bragging rights are fully
> earned. Seems like this falls into the same catagory of
> 'I have six elements where you have only five'
> Art

I have two good reasons. My homebrew 100 watt
solid state MOSFET PA, 160 M to 10 M, provides the
signal cleanliness that I designed it for when the
power output on SSB is 100 W PEP. To assure this
performance I need a "fairly" accurate meter.

Also, my 30L-1 PA runs quite clean at 600 W PEP,
and I keep it at that level.

I use a tight ALC control to get these results.

Bill W0IYH

898. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 21:06:25 UTC
From: sammmm <zammy@pghmail.com>
Message-ID: <3f666b85@news.pghmail.com>
Source record: 108176

isn't the power rule about input?
sam

--
toys:
diesel BMW motorcycle, homebuilt electric motorcycle, gold wing trike, honda
gyros, dodge diesel dualie, fiat osca 1500 cabriolet,
W3CYO/R, 145.49, 224.40, 443.300 mhz. repeaters.

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0309151158.790c5a7a@posting.google.com...
> "William E. Sabin" <sabinw@mwci-news> wrote in message
news:<vmbg0dposnvnb8@corp.supernews.com>...
> > artie wrote:
> > >
> > > The Bird is a wonderful, stable design that's simple and well
> > > understood. You can get fancier (from Bird, among others), you can
get
> > > more accurate (my old HP), but it's hard to get simpler.
> > >
> > I use a homebrew directional coupler (see QEX for
> > March 1995) for everyday use, and a brand new,
> > well preserved (in a closet) Bird 43 as a
> > reference instrument. At full scale it is specifed
> > as accurate within +/- 0.5 db, which is plenty
> > good enough for me.
> > >
> > Bill W0IYH
> >
> Why would a ham operator have a need for such accuracy ?
> Isn't consistency enough ? For ensurance of not exceeding
> the power output for those who want to equal the max then
> a scope would be the way to go. For those that build then
> there is a need for accuracy and bragging rights are fully
> earned. Seems like this falls into the same catagory of
> 'I have six elements where you have only five'
> Art

899. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 21:12:58 UTC
From: Jack Smith <jsmith@mnsinc.com>
Message-ID: <placmvoc3qsm6dh5evi9i7olft43osnjl5@4ax.com>
Source record: 108264

Bill:

Your March 1995 QEX article says that you prepared an accompanying construction article for QST. I haven't been able to find it in '95, 96 or '97 QST editions. Was it published? If so, when?

Jack K8ZOA

900. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 21:36:03 UTC
From: derswede@aol.comspam.com
Message-ID: <20030915173603.06038.00001044@mb-m07.aol.com>
Source record: 108265

>I have two good reasons. My homebrew 100 watt
>solid state MOSFET PA, 160 M to 10 M, provides the
>signal cleanliness that I designed it for when the
>power output on SSB is 100 W PEP

Hmmmm...plans available for this? QUITE interested!

Tnx de kilo golf 4 golf sierra charlie!!

mycall@arrl dot net

901. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 22:50:26 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <Rmr9b.134685$kP.74486@fed1read03>
Source record: 108266

Main reason is that the diode detector types of VSWR Meters are very
inaccurate when any VSWR is present

Also I have found that running PA's at 90% gives a much cleaner output
(Usually) so I need a meter that will give reasonable accuracy when making
these adjustments.

Some cheapo VHF VSWR meters are so inaccurate as to be useless.
For Bird -- buy the appropriate slug -- slugs are very inexpensive on the
used market.
Not E-BAy -- hi hi

And Mil Surplus thru line meters are very cheap on the surplus market, Less
than new diode detector types.

--
73 From The Signal In The Noise
Caveat Lector Ya All
> >>
>> >
> >
> > Why would a ham operator have a need for such accuracy ?
> > Isn't consistency enough ? For ensurance of not exceeding
> > the power output for those who want to equal the max then
> > a scope would be the way to go. For those that build then
> > there is a need for accuracy and bragging rights are fully
> > earned. Seems like this falls into the same catagory of
> > 'I have six elements where you have only five'
> > Art
>

902. Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-15 23:27:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk5hsg$5so$1@hercules.btinternet.com>
Source record: 108267

Q1

How is large-scale ground conductivity determined ?

A1

You set up a 1 Kw transmitter using a vertical antenna above 120 ground
radials and measure the ground-wave field strength at a number of
geographical locations at various distances up to 100 miles in daylight.
You then use Sommerfeld's (corrected) formulae to estimate average ground
conductivity for the region.

Q2

What is this knowledge of ground conductivity used for ?

A2

With Sommerfeld's (corrected) formula it is used to estimate the ground-wave
field strength received at various distances up to 100 miles from a 1 KW
transmitter in daylight. Refer to program GRNDWAV3.

Q3

How is a reflection-coefficient determined ?

A3

Its modulus and angle is calculated from complex impedance measurements.

Q4

What is knowledge of the reflection-coefficient used for ?

A4

After discarding half of the information it contains, then tossing a coin to
select one of two possible formulae, it is used to calculate the imaginary
SWR on a non-existent transmission line.

Q5

What is the value of the SWR used for ?

A5

It has no use except as the subject of magazine articles to fill in gaps

between the adverts.

Q6

What is a TLI ?

A6

It is a useful little instrument which indicates whether or not the load on the transmitter is sufficiently near to a resistive 50 ohms. That is, of course, if your particular transmitter happens to work best with such an arbitrary value. (TLI = Transmitter Loading Indicator formally incorrectly recognised as a swaaarrr meter.)

Q7

What plonk is being imbibed tonight ?

A7

Vintage 2002, Medium White, from a vinyard located in the beautiful Central Valley at the foot of the Sierra Mountain Range in the State of California, one of the United States of North America. Good stuff ! I should have grabbed another bottle at my local supermarket.

Yours, Grandad Reg, G4FGQ.

PS: Station is located on the outskirts of the original Great Manufacturing City of Birmingham, where Boulton and Watt built their immense condensing steam engines, and where the microwave-oven cavity-magnetron was invented and constructed, 1940-41, during the air-raids, and generously given to the World.

Present all-band antenna is a 40-feet sloping 18-gauge wire extending from the kitchen window, near the extractor fan, to a TV antenna mast, without the TV antenna, mounted on the house chimney. An automatic tuner is located under the kitchen sink very conveniently near to the one and only ground radial - the incoming domestic water supply lead pipe. It does however extend 5 miles to the area's water reservoir and pumping station.

903. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 00:07:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <10kcmvo8p7hk7nmnqfoq55rhg1iosq4t3f@4ax.com>
Source record: 108268

On Mon, 15 Sep 2003 15:50:26 -0700, "Caveat Lector" <CL@latin.com>
wrote:

>Main reason is that the diode detector types of VSWR Meters are very
>inaccurate when any VSWR is present
>
>Also I have found that running PA's at 90% gives a much cleaner output
>(Usually) so I need a meter that will give reasonable accuracy when making
>these adjustments.
>
>Some cheapo VHF VSWR meters are so inaccurate as to be useless.
>For Bird -- buy the appropriate slug -- slugs are very inexpensive on the
>used market.
>Not E-BAy -- hi hi
>
>And Mil Surplus thru line meters are very cheap on the surplus market, Less
>than new diode detector types.

Hi OM,

Art says why buy expensive equipment, and then extols a scope (easily three to ten times expensive as a new Bird 43). He probably intends to only measure flat power with perfect sine shape applied to perfect designs. A CB SWR meter works better with even the slightest hint of imperfection and just as well when every thing is hunky-dory. If you want to watch a phosphor glow, get TV or build your meter with a Magic Eye tube (more range than LEDs suggested elsewhere).

You say
>diode detector types of VSWR Meters are very
>inaccurate when any VSWR is present
and then extol the Bird or Mil Surplus - which are diode detector types (what aren't - scopes? WHOOPZ back into that yarn).

Has anyone here actually measured SWR without using a diode? Form a que here and tell your story. I want to hear the one about your single device non-linear detector (a way of not saying diode while still being a diode).

Caveat Reader,
Richard Clark, KB7QHC

904. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 00:13:45 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk5kjp$e5q$1@sparta.btinternet.com>
Source record: 108169

> I would rather measure the transmission characteristics that I might
> use.

==========

You've never acceptance tested a 20-mile long phone cable, 542-pairs,
88mH-loaded every 2000 yards.

There are so many things which can go wrong with it you can't believe it.

For example, it is a waste of time measuring line attenuation (loss) on all
542 pairs as a means of detecting a possible imperfection in any one pair.

Very serious defects, sufficient to disrupt normal service, can be entirely
overlooked if attenuation is measured just at one or two frequencies as a
check to see if loss is between specified performance limits. Loss is so
small on transmission lines it is very difficult to measure accurately. It
can get lost in temperature changes especially on overhead lines.

I know - I've done it !

It is obvious the most sensitive of ALL measuring instruments is a bridge
used to compare one value with another, good with bad. The bad sticks out
like a sore thumb even if it is only a teeny bit bad.

Reg.

905. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 00:45:52 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <33t9b.134831$kP.127157@fed1read03>
Source record: 108170

Perhaps poor choice of words

Bird meters and monimatch type meters use the capacitive coupling of the coupled line to couple voltage and magnetic coupling to the coupled line to couple current. THEN the diode sees the vector sum of the two couplings.

The cheaper ones - like Radio Shack had just diodes to detect peak V or I and -- I always called em diode detector types -- what wud u call em

Any way I am sure you know the difference

--
73 From The Signal In The Noise
Caveat Lector Ya All
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:10kcmvo8p7hk7nmnqfoq55rhg1iosq4t3f@4ax.com...
> On Mon, 15 Sep 2003 15:50:26 -0700, "Caveat Lector" <CL@latin.com>
> wrote:
>
> >Main reason is that the diode detector types of VSWR Meters are very
> >inaccurate when any VSWR is present
> >
> >Also I have found that running PA's at 90% gives a much cleaner output
> >(Usually) so I need a meter that will give reasonable accuracy when
making
> >these adjustments.
> >
> >Some cheapo VHF VSWR meters are so inaccurate as to be useless.
> >For Bird -- buy the appropriate slug -- slugs are very inexpensive on the
> >used market.
> >Not E-BAy -- hi hi
> >
> >And Mil Surplus thru line meters are very cheap on the surplus market,
Less
> >than new diode detector types.
>
> Hi OM,
>
> Art says why buy expensive equipment, and then extols a scope (easily
> three to ten times expensive as a new Bird 43). He probably intends
> to only measure flat power with perfect sine shape applied to perfect
> designs. A CB SWR meter works better with even the slightest hint of
> imperfection and just as well when every thing is hunky-dory. If you
> want to watch a phosphor glow, get TV or build your meter with a Magic

> Eye tube (more range than LEDs suggested elsewhere).
>
> You say
> >diode detector types of VSWR Meters are very
> >inaccurate when any VSWR is present
> and then extol the Bird or Mil Surplus - which are diode detector
> types (what aren't - scopes? WHOOPZ back into that yarn).
>
> Has anyone here actually measured SWR without using a diode? Form a
> que here and tell your story. I want to hear the one about your
> single device non-linear detector (a way of not saying diode while
> still being a diode).
>
> Caveat Reader,
> Richard Clark, KB7QHC

906. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 00:58:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk5n6r$d20$1@hercules.btinternet.com>
Source record: 108172

> Where multiple repeaters are in a chain, as in Reg`s undersea cables,
> each repeater can generate its own unique pilot tone. One can check the
> tones to determine where the chain is broken.

==========

How does each repeater generate its unique pilot tone when a trawler or
earthquake breaks the inner conductor. Or do you have another way of
powering repeaters at the bottom of mid-atlantic?

Reg, G4FGQ

907. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 00:58:06 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <xet9b.134867$kP.116709@fed1read03>
Source record: 108171

Ah at URL:
http://www.hamradiomarket.com/articles/Wattmeters.htm

The cheapos are called "inexpensive cross needle, putt-putt SWR/wattmeters"
Interesting article

--
73 From The Signal In The Noise
Caveat Lector Ya All
"Caveat Lector" <CL@latin.com> wrote in message
news:33t9b.134831$kP.127157@fed1read03...
> Perhaps poor choice of words
>
> Bird meters and monimatch type meters use the capacitive coupling of the
> coupled line to couple voltage and magnetic coupling to the coupled line
> to couple current. THEN the diode sees the vector sum of the two
> couplings.
>
>
> The cheaper ones - like Radio Shack had just diodes to detect peak V or I
> and -- I always called em diode detector types -- what wud u call em
>
> Any way I am sure you know the difference
>
>
>
> --
> 73 From The Signal In The Noise
> Caveat Lector Ya All
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:10kcmvo8p7hk7nmnqfoq55rhg1iosq4t3f@4ax.com...
> > On Mon, 15 Sep 2003 15:50:26 -0700, "Caveat Lector" <CL@latin.com>
> > wrote:
> >
> > >Main reason is that the diode detector types of VSWR Meters are very
> > >inaccurate when any VSWR is present
> > >
> > >Also I have found that running PA's at 90% gives a much cleaner output
> > >(Usually) so I need a meter that will give reasonable accuracy when
> making
> > >these adjustments.
> > >
> > >Some cheapo VHF VSWR meters are so inaccurate as to be useless.
> > >For Bird -- buy the appropriate slug -- slugs are very inexpensive on
the

> > >used market.
> > >Not E-BAy -- hi hi
> > >
> > >And Mil Surplus thru line meters are very cheap on the surplus market,
> Less
> > >than new diode detector types.
> >
> > Hi OM,
> >
> > Art says why buy expensive equipment, and then extols a scope (easily
> > three to ten times expensive as a new Bird 43). He probably intends
> > to only measure flat power with perfect sine shape applied to perfect
> > designs. A CB SWR meter works better with even the slightest hint of
> > imperfection and just as well when every thing is hunky-dory. If you
> > want to watch a phosphor glow, get TV or build your meter with a Magic
> > Eye tube (more range than LEDs suggested elsewhere).
> >
> > You say
> > >diode detector types of VSWR Meters are very
> > >inaccurate when any VSWR is present
> > and then extol the Bird or Mil Surplus - which are diode detector
> > types (what aren't - scopes? WHOOPZ back into that yarn).
> >
> > Has anyone here actually measured SWR without using a diode? Form a
> > que here and tell your story. I want to hear the one about your
> > single device non-linear detector (a way of not saying diode while
> > still being a diode).
> >
> > Caveat Reader,
> > Richard Clark, KB7QHC
>
>

908. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 01:02:49 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk5nfphtc1@sparta.btinternet.com>
Source record: 108173

> One can locate a line fault by using:
> wavelength = V / f

==========

How do you manage at the lower frequencies when velocity is a function of
frequency ?

Reg

909. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 01:11:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8cocmvk8ei6svu4b9pma6dk2jej6b7951u@4ax.com>
Source record: 108174

On Mon, 15 Sep 2003 17:45:52 -0700, "Caveat Lector" <CL@latin.com>
wrote:

>Perhaps poor choice of words
>
>Bird meters and monimatch type meters use the capacitive coupling of the
>coupled line to couple voltage and magnetic coupling to the coupled line
>to couple current. THEN the diode sees the vector sum of the two
>couplings.
>
>
>The cheaper ones - like Radio Shack had just diodes to detect peak V or I
>and -- I always called em diode detector types -- what wud u call em
>
>Any way I am sure you know the difference
>

Hi OM,

Not when you incorrectly describe them. They all use two diodes, or
in the case of the Bird, the single diode is used twice, once in each
direction. There is every chance someone tried to reduce the bottom
line (boost profits) by using one diode to read both - give us an
example.

Peak, Average, PEP, call it what you will is only a matter of meter
scaling (and in the case of SWR no different at all) and what the Time
Constant is with any particular resistor-capacitor pair used as the
meter load.

What is really sadistic, are digital numeric displays when SWR/Power
is swinging. Reading 8.88 because the numbers' segments blur is
pitiful in the extreme.

73's
Richard Clark, KB7QHC

910. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 01:38:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmcqdmiudfu511@corp.supernews.com>
Source record: 108175

Sorry I can't help with a specific recommendation. There are numerous coatings available for EMI suppression, in spray form to be applied to the insides of plastic enclosures. Various conductive materials are offered at, I'm sure, a variety of prices. Unfortunately, I've let my subscriptions to EMC trade publications lapse, so I don't have any up to date ads to check. But you might try a web search for "conductive coating", maybe with "EMI" or "EMC". It should turn up some possibilities.

I don't think most of these coatings are intended to be exposed to weather, and they might not stick well to materials other than thermoplastics. So without knowing your application, I don't know if they'd be suitable. It's a place to start, though.

Roy Lewallen, W7EL

Sean wrote:
> Anybody know of an easy to apply, low cost conductive paint ? I've been
> able to find quite a few products that will work, but the costs involved are
> VERY high for anything above a very small quantity. I've got a project i'm
> working on that may require the use of a few gallons of this type of
> product. Any and all help appreciated. Sean
>
>
>

911. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 01:55:37 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <s4u9b.135022$kP.74640@fed1read03>
Source record: 108177

Ok you win -- I retract all
Now where did I put the Bird

--
73 From The Signal In The Noise
Caveat Lector Ya All
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:8cocmvk8ei6svu4b9pma6dk2jej6b7951u@4ax.com...
> On Mon, 15 Sep 2003 17:45:52 -0700, "Caveat Lector" <CL@latin.com>
> wrote:
>
> >Perhaps poor choice of words
> >
> >Bird meters and monimatch type meters use the capacitive coupling of the
> >coupled line to couple voltage and magnetic coupling to the coupled line
> >to couple current. THEN the diode sees the vector sum of the two
> >couplings.
> >
> >
> >The cheaper ones - like Radio Shack had just diodes to detect peak V or I
> >and -- I always called em diode detector types -- what wud u call em
> >
> >Any way I am sure you know the difference
> >
>
> Hi OM,
>
> Not when you incorrectly describe them. They all use two diodes, or
> in the case of the Bird, the single diode is used twice, once in each
> direction. There is every chance someone tried to reduce the bottom
> line (boost profits) by using one diode to read both - give us an
> example.
>
> Peak, Average, PEP, call it what you will is only a matter of meter
> scaling (and in the case of SWR no different at all) and what the Time
> Constant is with any particular resistor-capacitor pair used as the
> meter load.
>
> What is really sadistic, are digital numeric displays when SWR/Power
> is swinging. Reading 8.88 because the numbers' segments blur is
> pitiful in the extreme.
>
> 73's
> Richard Clark, KB7QHC

912. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 02:07:53 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <Mc6dnV6lgrzP7PuiU-KYuA@ctc.net>
Source record: 108178

> isn't the power rule about input?
> sam

Not for a good many years. The ham power limits are all output power now.
Comercial radio has always been about power output as far as I know.

913. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 02:18:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t8scmvsu9bgensvadn881oap94u47rvjbl@4ax.com>
Source record: 108179

On Tue, 16 Sep 2003 01:02:49 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>> One can locate a line fault by using:
>> wavelength = V / f
>
>=====================
>
>How do you manage at the lower frequencies when velocity is a function of
>frequency ?
>---
>Reg
>

Inventing new problems? Old wine in new bottles more like it ;-)

The velocity to the nearest geo-synchronous satellite is close enough
to constant that it doesn't matter. One repeating station and it is
quite obvious when it is dead (solves the parking problem for the next
one to replace it too).

GEOS too far away? Use LEOS instead and talk around the dead one
(it's going to fall into the sea/Australia/China/Canada anyway).

And for those still in love with wire are promises from nanotechnology
to tether satellites to earth in the future (power generation for
cheap - life expectancy for the guy that throws the switch is nil
however).

73's
Richard Clark, KB7QHC

914. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 02:27:25 UTC
From: richardharrison@webtv.net
Message-ID: <19654-3F66750D-436@storefull-2317.public.lawson.webtv.net>
Source record: 108181

Sean wrote:
"Any and all help appreciated."

Search on "spray-on zinc."

Zinc so applied can attain a thicknes of 10 thousandths of an inch. This thicknness should be plenty at h-f, due to skin effect, for conductivity. The zinc spray should be economical as it is used for corrosion protection on large structures like bridges.

Best regards, Richard Harrison, KB5WZI

915. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 02:32:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jqscmvo423mlg58pqdn0on6ukdumncu0fq@4ax.com>
Source record: 108180

On Mon, 15 Sep 2003 17:58:06 -0700, "Caveat Lector" <CL@latin.com>
wrote:

>Ah at URL:
>http://www.hamradiomarket.com/articles/Wattmeters.htm
>
>The cheapos are called "inexpensive cross needle, putt-putt SWR/wattmeters"
>Interesting article
>

Hi OM,

What makes it interesting? Amusing certainly, and self conscious
about it in every paragraph (which translates to a poor writing
style).

The guy is one of those types that would rather shrug, and pass a
credit card across the display case; than pick up a soldering iron.
>It appears that it is not economically feasible to produce a
>wattmeter that satisfies all and sell it at the prices demanded
>by the market today, $80 to $125. Consequently,
>because it can't really be done, some quality compromises
>and frustrations occur.

The frustration is evident, such that the pitiable plea is offered:
>If you want a real power meter for your linear amplifier get a
>Coaxial Dynamics or Bird. Post an ad or message here at
>hamradiomarket.com and possibly win a Coaxial Dynamics
>measuring instrument.
But is it frustration, or a commercial come-on? This is suggestive of
cultivating a breed of customer that stands with sign in hand at
highway off ramps.

73's
Richard Clark, KB7QHC

916. Re: LQQKing for Construction Article

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 03:02:28 UTC
From: nedrog@aol.comNOSPAM
Message-ID: <20030915230228.23307.00003033@mb-m29.aol.com>
Source record: 108182

Thanks for the information.

I am still looking for the original article, and since it is not going to be commercialized, maybe the author would like to send me a copy.

Howard W3CQH

917. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 03:22:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6683b7$1_7@corp.newsgroups.com>
Source record: 108183

Caveat Lector wrote:
> Main reason is that the diode detector types of VSWR Meters are very
> inaccurate when any VSWR is present

Why can't the diode be biased to improve the accuracy? Or a class-B
amp be used?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

918. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 03:42:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f668844_7@corp.newsgroups.com>
Source record: 108184

George, W5YR wrote:
> Chipman's interpretation of this equation for Pr of three terms is that the
> first term represents the real power for the incident wave alone at a point
> 'z'; the second term relates to the real power in the reflected wave at that
> same point; and the third term (which vanishes for real Zo) represents "an
> interaction between the reflected and incident waves." This is in effect the
> third term that Roy obtained using Vf * Ir and Vr * If.

I made it over to the Texas A&M library today and read Chipman. What seems to
have been left out of the discussion are the following quotes from Chipman:

"The conclusion is somewhat surprising, though inescapable, that a transmission
line can be terminated with a reflection coefficient whose magnitude is as great
as 2.41 without there being any implication that the power level of the reflected
wave is greater than that of the incident wave."

Chipman never said the reflected power can be greater than the forward power
into a passive load. In fact, he says if X0/R0 is less than or equal to one,
it is impossible for the reflected power to exceed the forward power.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

919. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 03:52:18 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <xMv9b.10638$KN1.9694@bignews2.bellsouth.net>
Source record: 108185

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:3q1amv4fuhrc1k9hni4qtvkriiq70ekk8q@4ax.com...
> On Sun, 14 Sep 2003 14:31:08 -0700, "Ed Price" <edprice@cox.net>
> wrote:
> >The little network, along with the section of coax line inside the main
> >housing, forms a directional coupler. A Bird 43 (or similar, but the 43's
> >are readily available, used, on eBay) is about the cheapest way to get
> >answers about the design and performance of your antenna and transmitter
> >system.
> >
> >And if you think a Bird 43 is big money, you ain't seen nothing yet!
> >
> >Ed
> >WB6WSN
>

>
.
>
> 73's
> Richard Clark, KB7QHC

Bu, bu, bu, Richard it has to be expensive for a CBer. How else is he to get
them "bird" watts thar? (snicker) :)

Jerry

920. Re: Antenna type

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 04:02:27 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309152002.5fe6ae01@posting.google.com>
Source record: 108186

richardharrison@webtv.net (Richard Harrison) wrote in message
>
> The 12-inch rods are capacitance loading used to improve current
> distribution in the vertical radiator and to reduce its required length
> at resonance.

They do operate that way I suppose, but the makers always used to advertise them as "static hats". Supposably reduces static buildup and noise. About the same principal as a round ball. Dunno how well they actually work, but I think they are a little quieter than one with a sharp tip. Being the antenna is an appx 5/8 wave in total length, the difference in current distribution should be pretty small. Max current is already higher than the halfway point even with a straight radiator. Seems that max current point would still be the same appx height from the base, hat or not.
Does make the antenna a foot shorter, probably with very little reduction in performance. But, I don't think the original designers had capacitive loading in mind when they stuck those on there. :/ A full size "all vertical" 5/8 should be better than any loaded one. Most CB 5/8's are on the shorter end of being a 5/8. This actually makes sense for an antenna used for mainly ground/space wave. You usually get a cleaner pattern with less high angle radiation with a shorter 5/8 rather than a longer one. IE: .60-.62 wave vs .64 wave or longer. .64 wave is the maximum gain point in theory, but not always the best length for the real world. Most AM-BC's also prefer a shorter 5/8 for the same reasons, as I'm sure you know . I modeled this once. I forgot the length for best pattern, but it was .62 wave or slightly less I think. MK

921. Re: PAR MON-3 Antenna VS Diamond D-130J

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 04:12:58 UTC
From: Jeff Santee <Jeff352@mchsi.com>
Message-ID: <e5w9b.465351$YN5.316465@sccrnsc01>
Source record: 108187
Cross-posted to: alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.scanner

"Bob" <anyisp@anyisp.com> wrote in message news:VwGdnfDj7LSKnviiU-KYuQ@comcast.com...
> Has anyone had any experiences with this antenna good or bad.
>
> PAR MON-3
> Design frequencies: 144-174, 440-470 and 800-900 MHz. Gain: 1.7 dBi.
> Impedance: 50 ohms. Pattern: Omni.
>
> How does it stack up against the Diamond D-130J?
==========

I have one of the Pars, currently not in use. When I had it up
I wasnt really overly impressed with it. Its biggest drawback is the
UHF and 800-900mhz elements are not directly tied to the main
element, which seemed to give somewhat lower performance. Im
currently in the process of testing a discone, the "the new and improved"
scantenna, a scan king , and the Par on my VR5K. I think the VR5K
is going to give me better results than trying them on a scanner. The
Par's biggest asset is its strength, for me in Iowa when the ice storms
hit thats fairly important. To directly answer your question the discone
beats the Par for general reception. So far Im not overly impressed with
the scantenna, it works but I think its going to be too flimsy for the nasty
winters we get sometimes. I had one up before and the ice brought it
down, and I dont want to be doing antenna work when its -0 F with
20mph winds. That 1.7dbi gain figure is for VHF and since they are
using dbi instead of dbd that isnt saying much. There isnt a general
coverage recieve antenna out there that is omni directional
that has any real gain. Actually the Par is very similar in performance
to the RS 20-176 for 24.95.

Jeff

922. Re: LQQKing for Construction Article

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 04:53:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <np4dmv4oouka4e0mpi7ucigui0q4qb7hm6@4ax.com>
Source record: 108188

On 16 Sep 2003 03:02:28 GMT, nedrog@aol.comNOSPAM (NEDROG) wrote:

>Thanks for the information.
>
>I am still looking for the original article, and since it is not going to be
>commercialized, maybe the author would like to send me a copy.
>
>Howard W3CQH

Hi Howard,

In a normal amateur relationship you would get several.

We are not talking about a normal amateur. Kind of like Nixon. Write him at his business address and don't let a whisper of this lead pass within the body of that plea or you go on the enemies list automatically. Be prepared for the equivalent of a body cavity search into your motives for wanting directions. ;-)

The details are fairly simple. Stiff wire holds the shape adequately. You only have to figure out how to jimmy it up with a boom and to add a cap to an identical sized reflector. The reason for that last bit with the cap was it is more than a little complex to bend the wire with one jig for both driven and reflected elements. The boom supports two X shaped wooden forms to hold the far corners (and the various bends that come close).

It is a pleasing to the eye (with the old adage about beauty...) and is no worse nor better than any others have been suggesting in its place. This is truly an example of a project for the project's sake; but I've been there too.

73's
Richard Clark, KB7QHC

923. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 05:03:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f56dmv47vo7v740i2k7t4lan1pai0kd4ju@4ax.com>
Source record: 108189

On Mon, 15 Sep 2003 22:42:00 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Chipman never said the reflected power can be greater than the forward power
>into a passive load.

Hi Cecil,

You are the only one to just have suggested he did. Others (in total
wide-eyed innocence) may have drawn that faulty conclusion by
inference, but they also have missed the boat on many other issues.

73's
Richard Clark, KB7QHC

924. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 07:31:52 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bk6e97$1p3$1@nic.grnet.gr>
Source record: 108190

I would like to emphasize that
the Uniform Transmission Line Theory valid relation

|Xo/Ro| =< 1

is _not_ used
in any step in the proof of

R(l) = Rt >= 0.

This is obvious
from the derivation
in the referenced thread.

Sincerely,

pez
SV7BAX

925. Re: Need HF DF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 07:51:38 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <r2gdmvs1109q9apjkb0tftl51sb5frr4el@4ax.com>
Source record: 108191

On Mon, 15 Sep 2003 12:49:16 -0400, "Peter Gottlieb"
<none@bestweb.net> wrote:

>Thanks for everyone's input. After two months of this interference, it has
>just moved and is no longer a problem for the channels I need to use. So,
>although it is still present, I no longer need to locate its source.
>
>Peter
>
>
>"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
>news:K4mdnTbQCcyDJ_miU-KYuQ@comcast.com...
>>
>> > You know those old WWII movies where you see German vans with DF eqpt
>> > driving around trying to locate spies? Turns out they were HF units.
>> But,
>> > it took three of them, in widely separated locations acting in unison to

It normally only takes two, but three does make it a bit more
accurate. Remember to use the null, rather than peak and if the
offender stays on for long you can do a creditable job of finding them
in 15 to 20 minutes.

We had a big field intensity rig (Singer) at work to measure field
strength and check for RFI (leaks). When you spend a lot of time with
those things you get to the point where you can take readings in a
hurry. Two units within a couple miles of a station should find it
in about 5 minutes if using APRS.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>> get
>> > the job done. And, the triangulation wasn't precise. It took lots of
>> time
>> > and effort to narrow in on the general location of a spy sending.
>>
>> combine an hf loop, with aprs, and you'll be amazed how effective it is.
>> aprs will allow your hounds to share their info easily.
>> you get the location of the other stations, on a map, plus your own, and
>all
>> the bearing data.
>>
>>
>

926. Re: echolink 132,000 users in 139 different countries

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 10:50:34 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <3F66EAFA.908322BD@bloomer.net>
Source record: 108192

Or, it may just save ham radio. Now, repeaters, for example, that sat
idle for long periods of time with very few local users may get used a
lot more as echolinkers move from repeater to repeater working people
from their easy chair.

Scott
N0EDV

Keith wrote:
>
> On Tue, 16 Sep 2003 07:57:26 +0100,
> g3zhi in <1063695446.27144.36@lotis.uk.clara.net> wrote:
> > There are now over 132,000 callsigns registered in 139 different countries.
> >
> > There are daily additions, changes and deletions with over 1,000 new calls validated
each week.
> >
> >
> It just goes to show that the Internet has replaced ham radio. Time
> to transfer all that VHF+ spectrum to cellular and land mobile companies.
> Ham radio operators have provided the ammunition to the corporations of
> the world for the loss of the spectrum they currently are assigned.
>
> --
> Best Regards, Keith AOL IM:kilowattradio
> NW Oregon Radio http://kilowatt-radio.org/
> _Give SCO $699 for using Linux or the Penguin gets it._
> Torvalds: _They are smoking crack._

--

Scott
http://corbenflyer.tripod.com
http://groups.yahoo.com/group/ParasolAirplanes
Building RV-4
Gotta Fly or Gonna Die!

927. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 11:32:05 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmdt3drkdt3j48@corp.supernews.com>
Source record: 108193

AA wrote:
>>I have two good reasons. My homebrew 100 watt
>>solid state MOSFET PA, 160 M to 10 M, provides the
>>signal cleanliness that I designed it for when the
>>power output on SSB is 100 W PEP
>
>
> Hmmmm...plans available for this? QUITE interested!
>
> Tnx de kilo golf 4 golf sierra charlie!!
>
> mycall@arrl dot net

See QEX for Nov/Dec 1999.

Bill W0IYH

928. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 11:38:21 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmdtfl2qcm8iad@corp.supernews.com>
Source record: 108194

Jack Smith wrote:

> Bill:
>
> Your March 1995 QEX article says that you prepared an accompanying
> construction article for QST. I haven't been able to find it in '95,
> 96 or '97 QST editions. Was it published? If so, when?
>
> Jack K8ZOA
>
>

I did not write a construction article, but QEX
for May 1995 has an article on the design of the
transformers for the directional coupler. Actual
construction articles have been described in ARRL
Handbook and Antenna Book editions.

Bill W0IYH

929. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 11:58:50 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <uludmv8ojjt5mo0bd3f6rsaciss748l2t4@4ax.com>
Source record: 108195

On Tue, 16 Sep 2003 06:38:21 -0500, "William E. Sabin"
<sabinw@mwci-news> wrote:

>Jack Smith wrote:
>
>> Bill:
>>
>> Your March 1995 QEX article says that you prepared an accompanying
>> construction article for QST. I haven't been able to find it in '95,
>> 96 or '97 QST editions. Was it published? If so, when?
>>
>> Jack K8ZOA
>>
>>
>
>I did not write a construction article, but QEX
>for May 1995 has an article on the design of the
>transformers for the directional coupler. Actual
>construction articles have been described in ARRL
>Handbook and Antenna Book editions.
>
>Bill W0IYH

Found it. As usual, an excellent piece of work!

Jack K8ZOA

930. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 13:12:17 UTC
From: derswede@aol.comspam.com
Message-ID: <20030916091217.17988.00000594@mb-m24.aol.com>
Source record: 108196

>See QEX for Nov/Dec 1999.

Time to order a CD from ARRL, I see.

Tnx!
A

931. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 14:45:13 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bk77lm$pmuj6$1@ID-175933.news.uni-berlin.de>
Source record: 108197

RE: SWR/Return Loss/Reflection Coefficient

Maybe your post is being taken too seriously, but if knowing and optimiz(s)ing these parameters is unimportant, please explain why their disregard can result in the meltdown of transmission line and transmitter output networks.

RF

Visit http://rfry.org for FM broadcast RF system papers.

932. Re: Source for 1" U brackets?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 14:52:18 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <CsF9b.19557$Aq2.18282@newsread1.news.atl.earthlink.net>
Source record: 108198

I mounted my DirecTV dish on the side of my Rohn 25. Went to a sheet metal shop and had them cut me a 1/4" piece of aluminum a bit wider than the tower face (and about a foot long) which I secured to the Rohn legs with stainless U-bolts. Then mounted the dish to that piece of aluminum.

K8AC

"Curtis" <Curtis46a@netscape.com> wrote in message news:758cbcb9fa6de444b06d5df03951786e@news.teranews.com...
> I am planning to mount a small satellite dish on the side of my tower.
> I think I can rig a mount with four U brackets and a couple of strips
> of metal. The tubing on my tower is 1" OD. Does anyone know of a source
> for the U brackets?
>
> Any tips on making a dish mount will be appreciated.
>
> --
> Curtis

933. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 15:06:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6728cb_2@corp.newsgroups.com>
Source record: 108199

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>Chipman never said the reflected power can be greater than the forward power
>>into a passive load.
>
> You are the only one to just have suggested he did.

Because of a death in the family, I entered the discussion late, but
I thought that was what Roy was asserting using his calculations,
that fP - rP was a negative value.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

934. Yaesu FRT7700 ATU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 15:56:18 UTC
From: derek neill <fishnchips8157@ntlworld.com>
Message-ID: <NvG9b.208$ta6.258689@newsfep1-win.server.ntli.net>
Source record: 108200

Hi could anyone tell me where to connect the grey and the red wire also the small black link wire on my FRG 100 Reciever or E Mail me a copy of the guide book
Thanks Derek

935. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 17:01:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8kfemvclc3a8e2ep5hkn17cv95eb876usu@4ax.com>
Source record: 108201

On Tue, 16 Sep 2003 10:06:52 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>>Chipman never said the reflected power can be greater than the forward power
>>>into a passive load.
>>
>> You are the only one to just have suggested he did.
>
>Because of a death in the family, I entered the discussion late, but
>I thought that was what Roy was asserting using his calculations,
>that fP - rP was a negative value.

Hi Cecil,

Then you should respond to that posting. The reason for this
suggestion is that you now continue to make speculative assertions
pegged against two names in a discussion where you are admittedly in
the dark.

73's
Richard Clark, KB7QHC

936. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 17:36:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f674bf6_2@corp.newsgroups.com>
Source record: 108202

Richard Clark wrote:
> Then you should respond to that posting. The reason for this
> suggestion is that you now continue to make speculative assertions
> pegged against two names in a discussion where you are admittedly in
> the dark.

Richard, why are you trying to hold me to a higher standard than to
which you hold yourself?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

937. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 18:04:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m5jemvopoqugsoh9h6hvnu0pqdcns2u7gb@4ax.com>
Source record: 108203

On Tue, 16 Sep 2003 12:36:56 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> Then you should respond to that posting. The reason for this
>> suggestion is that you now continue to make speculative assertions
>> pegged against two names in a discussion where you are admittedly in
>> the dark.
>
>Richard, why are you trying to hold me to a higher standard than to
>which you hold yourself?

Hi Cecil,

So, is your interest in pursuing unrelated matters here, or posting to
the original technical discussion you can only guess at?

When I offered discussion employing Chipman's comments, I posted them
to those who showed interest, to those who showed they were versed
with the author, to those who showed inquiry into his credentials,
to those who showed ignorance to his specific limitations of requiring
the source Z to match the line and a host of other specifics all
offered in direct response unlike you. I can tell you who has a copy
available, who has shown interest in obtaining a copy, who has a copy
in transit from an Australian vendor, and who has asked about the
author as being a former instructor of theirs. And none of these
individuals has yet to respond to simple but necessary observations by
Chipman of the requirement of the Source Z. Do you join that throng?

If these low standards have the bar set to high for you....

73's
Richard Clark, KB7QHC

938. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 18:45:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmemi487g425dd@corp.supernews.com>
Source record: 108204

I admit to being hazy about what you choose to call "forward power" and "reflected power". So that's probably why I don't understand the meaning of "the reflected power can be greater than the forward power into a passive load." Does this mean that both "reflected power" and "forward power" flow into a load? Then, does the "reflected power" flow back out, to go back down the transmission line, or does it contribute to the load dissipation?

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> I made it over to the Texas A&M library today and read Chipman. What
> seems to
> have been left out of the discussion are the following quotes from Chipman:
>
> "The conclusion is somewhat surprising, though inescapable, that a
> transmission
> line can be terminated with a reflection coefficient whose magnitude is
> as great
> as 2.41 without there being any implication that the power level of the
> reflected
> wave is greater than that of the incident wave."
>
> Chipman never said the reflected power can be greater than the forward
> power
> into a passive load. In fact, he says if X0/R0 is less than or equal to
> one,
> it is impossible for the reflected power to exceed the forward power.

939. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 18:54:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmen3a4tiqp0e0@corp.supernews.com>
Source record: 108205

My analysis shows that <fP> - <rP> can have a negative value for some load impedances when Z0 is complex. Please pay careful attention, though, to the definitions of these terms. As I used them, <fP> = Re{fE * fIc} and <rP> = Re{rE * rIc} where I'm using subscript c to denote complex conjugate to avoid confusion with "*" for multiplication, and E and I magnitudes are RMS. Although I didn't prove it in my analysis, the total net average power, which includes a third average power term, into a passive load of course can't be negative.

In past comments about my analysis you've chosen to define "forward power" and "reverse power" differently. So when you speak of them, be sure to tell us exactly what they consist of in your discussion. Formulas would be best, as I've given above and in my analysis for my meanings of the terms.

Roy Lewallen, W7EL

Cecil Moore wrote:

> Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>
>>> Chipman never said the reflected power can be greater than the
>>> forward power
>>> into a passive load.
>>
>>
>> You are the only one to just have suggested he did.
>
>
> Because of a death in the family, I entered the discussion late, but
> I thought that was what Roy was asserting using his calculations,
> that fP - rP was a negative value.

940. Re: Source for 1" U brackets?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 19:18:47 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F676217.81149166@cwis.net>
Source record: 108206

Curtis,
The local hardware store has them. If your's doesn't,
I'm sure they can get them for you for a price. If that
isn't too appealing, I'd start searching on the internet
for a source. One inch "U" bolts are not rare...
'Doc

941. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 19:37:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk7oqn$ej9$1@titan.btinternet.com>
Source record: 108207

"Richard Fry" wrote

> RE: SWR/Return Loss/Reflection Coefficient
>
> Maybe your post is being taken too seriously, but if knowing and
> optimiz(s)ing these parameters is unimportant, please explain why their
> disregard can result in the meltdown of transmission line and transmitter
> output networks.
>
==========

Regarding the SWR "meter" on the front panel of your transceiver -

Where is the transmission line on which the "measured" SWR is supposed to lie.

What do you do with the SWR when you think you know its value? What further calculations can it participate in? What else does it tell you which you don't already know?

I respectfully suggest the whole thing exists only in your imagination and what you are *really* interested in is whether or not the transmitter is loaded with its designed-for resistive load, usually but not always 50 ohms.

The mystery can be solved, confusion cleared, instead of lies newcomers and learners can be taught the simple facts of life just by changing the name of the useful little instrument to TLI in the handbooks.

Regarding prevention of meltdowns - good transmitter designers remember to incorporate a fast-acting fuse in HT supply.

Reg, G4FGQ

942. HF Portable Group. HFpack.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 20:40:22 UTC
From: expeditionradio@aol.com
Message-ID: <20030916164022.17996.00000908@mb-m01.aol.com>
Source record: 108208

HFpack is an international resource for portable High Frequency communications.
http://www.hfpack.com

HFpack provides an information exchange about transceivers, antennas, systems, packs, propagation, new developments and techniques in HF portable operation. The HFpack egroup and on-the-air schedules are active with amateur radio around the world.
HFpack membership is free and open to all radio operators interested in HF Portable.

HFpack Calling Freqs 5371.5kHz-18157.5kHz-14342.5kHz USB

HFpack is the result of a new type of group developed on-the-air and over the internet. The HFpack e-group is a moderated discussion group primarily utilized by amateur radio operators who are interested in HF portable communications and equipment. Subscription and "membership" in the HFpack e-group is free. It is currently active using the Yahoo groups server system, where it can be read and posted to via the web, direct email, or email daily digest modes. Participants in the HFpack e-group observe friendly cooperation and good netiquette. HFpack also maintains HFpack Hall of Fame, the amateur radio Pedestrian Mobile and Human Powered Mobile world record database.
HFpack is all about...
High Frequency Portable transceivers and antennas. HF SSB/CW/Data. Amateur commercial marine. Handhelds backpacks, carry-ons, manpacks. Pedestrian and Human Powered Mobiles. Manual and automatic antenna tuning. Telescopic tape folding and collapsible antennas, dipole, broadband hf vertical antennas. Battery solar crank alternative energy power supplies. Compact lightweight miniature equipment. Handsets headsets microphones earphones keyers. Low power TX/RX techniques. Portable amplifiers. Hiking camping bicycling kayaking and expeditions.

943. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 21:34:05 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bk7vk5$qbvqc$1@ID-175933.news.uni-berlin.de>
Source record: 108209

> Regarding the SWR "meter" on the front panel of your transceiver -
>
> Where is the transmission line on which the "measured" SWR is supposed to
> lie.

Transmission line is not required in order for RF power to be reflected. If nothing is connected to the transmitter output connector, then all the power the tx is trying to produce will be reflected at that point. Return loss will be zero, and the reflection coefficient will be 100% with respect to that interface. The equivalent of those parameters in terms of SWR is "infinite." Barring RF power foldback coming into operation, whatever circuits that ARE part of that scenario will see additional, and possibly damaging energy levels.

> What do you do with the SWR when you think you know its value? What
further
> calculations can it participate in? What else does it tell you which you
> don't already know?

Circuit parameters more easily can be adjusted to reduce losses and improve the safety margins for the RF components in the output system.

> I respectfully suggest the whole thing exists only in your imagination and
> what you are *really* interested in is whether or not the transmitter is
> loaded with its designed-for resistive load, usually but not always 50
ohms.
>
> The mystery can be solved, confusion cleared, instead of lies newcomers
and
> learners can be taught the simple facts of life just by changing the name
of
> the useful little instrument to TLI in the handbooks.

> Regarding prevention of meltdowns - good transmitter designers remember
to
> incorporate a fast-acting fuse in HT supply.

If reflected power truly was imaginary, HT supplies wouldn't, as you suggest, even _need_ a fast-acting fuse to (attempt to) protect them from meltdown by RF load mismatches.

In any case, a good transmitter designer wouldn't rely on a fuse to protect the tx from RF load problems. Fuses are OK, and commonly used for AC/DC fault protection, but are not fast enough to minimize the damage to RF output networks from high, short risetime mismatches such as arcing, etc.

RF

Visit http://rfry.org for FM broadcast RF system papers.

944. Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 21:40:54 UTC
From: Bill VanAlstyne <Bill.VanAlstyne@xilinx.com>
Message-ID: <3F678366.784CFC9B@xilinx.com>
Source record: 108210

I want to create an air RF choke in the end of my RG-8/U feedline going to the gamma match on my 6M yagi. Does anyone have a good workable formula (number of turns of RG-8/U and diameter of coil)?

Bill / W5WVO

945. Re: Source for 1" U brackets?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 22:16:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmf2u2864voh43@corp.supernews.com>
Source record: 108211

In the past, I've gotten long U bolts at auto supply stores, where
they're sold as muffler or tailpipe clamps. Don't know how suitable
they'd be for your application, but I've had some in light-duty service
outside in the weather for about 20 years now.

Roy Lewallen, W7EL

Curtis wrote:
> In article <CsF9b.19557$Aq2.18282@newsread1.news.atl.earthlink.net>,
> Floyd Sense <sentek@sprintmail.com> wrote:
>
>
>>I mounted my DirecTV dish on the side of my Rohn 25. Went to a sheet metal
>>shop and had them cut me a 1/4" piece of aluminum a bit wider than the tower
>>face (and about a foot long) which I secured to the Rohn legs with stainless
>>U-bolts. Then mounted the dish to that piece of aluminum.
>>
>
>
> That sounds pretty good. U bolts seem to be a little easier to find
> than U brackets, although the only 1" U bolts I've found are at Ace
> Hardware online and are stainless steel min. order 10 ($43). Lowes has
> 1-1/8" zinc plated U bolts at a good price but I am hoping for a better
> fit. There is a local metalsupermarkets.com so I should be able to get
> the aluminum plate easily. Thanks.
>

946. Re: Source for 1" U brackets?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-16 23:31:06 UTC
From: sammmm <zammy@pghmail.com>
Message-ID: <3f679d48@news.pghmail.com>
Source record: 108212

electrical supply, use beam clamps.
sammm

--
toys:
diesel BMW motorcycle, homebuilt electric motorcycle, gold wing trike, honda gyros, dodge diesel dualie, fiat osca 1500 cabriolet,
W3CYO/R, 145.49, 224.40, 443.300 mhz. repeaters.

"Curtis" <Curtis46a@netscape.com> wrote in message news:758cbcb9fa6de444b06d5df03951786e@news.teranews.com...
> I am planning to mount a small satellite dish on the side of my tower.
> I think I can rig a mount with four U brackets and a couple of strips
> of metal. The tubing on my tower is 1" OD. Does anyone know of a source
> for the U brackets?
>
> Any tips on making a dish mount will be appreciated.
>
> --
> Curtis

947. Populating my tower from scratch... need opinions on antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 00:29:49 UTC
From: Pat MacKinnon <pmk2002@foxhollow.ca>
Message-ID: <BB8D233D.954%pmk2002@foxhollow.ca>
Source record: 108213

Okay, here's the situation:

I moved, I took my tower with me, and just poured and set the base into 10,800 pounds of high strength concrete. (4'x4'x5')

So, I have 45' to the thrust bearing, a Yaesu '800 SDX rotor, and a TH3JR so far. I have four 10' copper ground rods pounded into the bottom corners of the hole and double clamped to separate runs of 2/0 copper running up each corner. The rods and cables were covered in clay before the pour, so they are not encased in concrete but rather beside it so as to not have it split in the eventual occurrence of a strike. (I live on some of the highest turn in the city.)

Anyway, I have the TH3JR for HF, and I will use a G5RV for 40/80/160. I bought the TH3 a few years ago and its been stored in the garage attic for a few years.

All feed lines will be 9913 and 9914 except for the 23cm feed which will be 7/8" hardline.

I am in a city, and the tower is 10' from the lot line, so I have to keep it reasonable. Above the HF, I wish to mount a multipurpose yagi. I'm looking at two antennas from Cushcraft:

The A6270-13S (6m, 2m, 70cm beam, 5V elements on 2 & 70, 3H elements on 6m)

and the ASL-670 (6m, 2m, 70cm log periodic, all in one plane, V or H as mounted.)

Anyone have experience on these units?

Above this will be a 900MHz yagi, and finally at the top of the mast will be a Diamond X-6000 or X-7000 for my local 2m/70 contacts, and the 23cm for the repeater which will be housed at the QTH.

So, back to the multipurpose Cushcraft... anyone love/hate either of these? Any other suggestions on what to install or avoid?

Thanks!
Pat, VE3PMK

948. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 00:54:34 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bk8bcaepd1@hercules.btinternet.com>
Source record: 108214

Richard,

I'm sorry I find myself unable to discuss imaginary SWR on non-existent transmission lines any further.

If you are not interested in an indication of whether or not your transmitter is correctly loaded with its design value of resistive ohms then take the precaution of fitting a fast-acting fuse. ;o)

Reg, G4FGQ

949. Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 02:08:05 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <9mP9b.15444$x21.3913@twister.southeast.rr.com>
Source record: 108215

>I am considering connecting a coil from the base of my vertical antenna to
>ground, not for impedance matching, but to allow the charge on the ground to
>slowly leak off at the top of the antenna. I will also use a lightning
arrestor >but wonder if this additional step will further reduce the chance of a
>lightning strike.

About a week ago I posted the above message. Several people responded and there was a general feeling that the idea of allowing a gradual leak off of charge at the top of the antenna would not prevent or even be likely to reduce the chance of a lightning strike.

Tonight I was looking through my old "Elements of Physics" by Shortly and Williams, fourth edition, page 697 and came across the following statement:

"The action of a well-grounded and sharply pointed lightning rod is primarily to discharge quietly into the air the charge that is induced in the surrounding earth by a charged thundercloud above. The electric intensity in the vicinity of the sharp point is high enough to break down the immediately surrounding air and the continual discharge prevents building up sufficient voltage over the whole cloud-to-ground path to break down this long path and give rise to a stroke of lightning at this location."

Comments?

Ron, W4TQT

950. Re: Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 02:21:29 UTC
From: "H. Adam Stevens" <solo@totalaccess.net>
Message-ID: <vmfho971fv5t8c@corp.supernews.com>
Source record: 108216

"Ron" <rmrippy@hotmail.com> wrote in message
news:9mP9b.15444$x21.3913@twister.southeast.rr.com...
> >I am considering connecting a coil from the base of my vertical antenna
to
> >ground, not for impedance matching, but to allow the charge on the
ground to
> >slowly leak off at the top of the antenna. I will also use a lightning
> arrestor >but wonder if this additional step will further reduce the
chance of a
> >lightning strike.
>
> About a week ago I posted the above message. Several people responded and
there
> was a general feeling that the idea of allowing a gradual leak off of
charge at
> the top of the antenna would not prevent or even be likely to reduce the
chance
> of a lightning strike.
>
> Tonight I was looking through my old "Elements of Physics" by Shortly and
> Williams, fourth edition, page 697 and came across the following
statement:
>
> "The action of a well-grounded and sharply pointed lightning rod is
primarily to
> discharge quietly into the air the charge that is induced in the
surrounding
> earth by a charged thundercloud above. The electric intensity in the
vicinity of
> the sharp point is high enough to break down the immediately surrounding
air and
> the continual discharge prevents building up sufficient voltage over the
whole
> cloud-to-ground path to break down this long path and give rise to a
stroke of
> lightning at this location."
>
> Comments?
>
> Ron, W4TQT
>
>

It's called "sharp point discharge".
It can be demonstrated with a swastika-shaped pinwheel with pointed ends
sitting on a pivot bearing on a Van de Graff generator;
fire it up, electrons fly off; it spins.

You will get many opinions here regarding lightning.
I can comment with an observation I've related here before.
Football game: Rice @ Texas Tech, 1973.
Lightning chose to blow a BIG hole in the concrete retaining wall next to
the running track
rather than hit the light poles.
The game was called.
Look it up.

As far as scaling, think of things from the point-of-view of a thunderstorm:
those things just look flat and the ions will follow their forces.

The lightning rod physics is sound, but the amount of power available is so
great, and thunderstorms are so HUGE, that
shit happens, so be careful.

disconnect when suspect, lightning kills a few folks each year

73 es have fun
H.
NQ5H

951. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 03:18:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f67d430_3@corp.newsgroups.com>
Source record: 108217

Richard Clark wrote:
> And none of these
> individuals has yet to respond to simple but necessary observations by
> Chipman of the requirement of the Source Z. Do you join that throng?

Where does Source Z appear in equation 7.34?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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952. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 03:37:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f67d8a9_3@corp.newsgroups.com>
Source record: 108218

Roy Lewallen wrote:
> I admit to being hazy about what you choose to call "forward power" and
> "reflected power". So that's probably why I don't understand the meaning
> of "the reflected power can be greater than the forward power into a
> passive load." Does this mean that both "reflected power" and "forward
> power" flow into a load? Then, does the "reflected power" flow back out,
> to go back down the transmission line, or does it contribute to the load
> dissipation?

Forward power is all the power incident upon the load. Reflected power is all the power flowing away from the load. If the load is passive, the power flowing away from the load cannot be greater than the power flowing toward the load. Chipman says there is no "implication that the power level of the reflected wave is greater than that of the incident wave". He goes on to say the apparent increase is just a resonance effect.

In Dr. Best's QEX article he shows how V1 + V2 = Vtot but P1 + P2 usually doesn't equal Ptot. Chipman's equation 7.34 seems to be of the same ilk. Dr. Best's interference term, 2*Sqrt(P1*P2)cos(theta), has to be added to the power equation to make it balance. I suspect that Chipman's term, 2*X0/R0*Im(rho(z)) is simply that necessary interference term.

On page 137, Chipman says: "The question arises as to whether the transmission line equations predict a reflected wave at the termination having a higher power level than the wave incident on the termination, in violation of the principle of conservation of energy". He goes on to say that if |X0/R0|<=1 then reflected power cannot be greater than incident power. And |X0/R0|<=1 is one of the boundary conditions for the lossy transmission line.
--
73, Cecil http://www.qsl.net/w5dxp

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953. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 03:43:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f67da31$1_3@corp.newsgroups.com>
Source record: 108120

Roy Lewallen wrote:
> My analysis shows that <fP> - <rP> can have a negative value for some
> load impedances when Z0 is complex. Please pay careful attention,
> though, to the definitions of these terms. As I used them, <fP> = Re{fE
> * fIc} and <rP> = Re{rE * rIc} where I'm using subscript c to denote
> complex conjugate to avoid confusion with "*" for multiplication, and E
> and I magnitudes are RMS. Although I didn't prove it in my analysis, the
> total net average power, which includes a third average power term, into
> a passive load of course can't be negative.

Chipman's third term in equation 7.34 certainly resembles Dr. Best's third term in his equation 12. Dr. Best's third term is known to be an interference term. It's a good bet that Chipman's third term is also an interference term.

Incidentally, if that third term is flowing toward the load (as it has to be) it is forward power. So <fP> is obviously not all the forward power.
--
73, Cecil http://www.qsl.net/w5dxp

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954. Re: Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 03:44:15 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f67d9cb_2@news1.prserv.net>
Source record: 108119

Ron:

Because lightning is a difficult process to study, you will find that the references change with time, as more is learned. Blue jets and red sprites come to mind, for example. One startling example is the National Fire Protection Agency Lightning Protection Code. The one I used and became familiar with in the 80s and early 90s was withdrawn and canceled when it was understood that some of the premises on which it was based were simply wrong. The new code, which has finally been released, is very different from the previous one. I no longer have current references to this discipline available, but I suggest reading the recent issues of Journal of Atmospheric and Terrestrial Physics, and Journal of Geophysical Research for more up to date information than an old textbook. The fact is that the phenomenon you cite does not bleed off anywhere near enough charge to make any difference. Yes, it does drain off charge. No, the quantity is like trying to empty the ocean with a leaky coffee can.

--
Crazy George
Remove NO and SPAM from return address
"Ron" <rmrippy@hotmail.com> wrote in message
news:9mP9b.15444$x21.3913@twister.southeast.rr.com...
> >I am considering connecting a coil from the base of my vertical antenna
to
> >ground, not for impedance matching, but to allow the charge on the
ground to
> >slowly leak off at the top of the antenna. I will also use a lightning
> arrestor >but wonder if this additional step will further reduce the
chance of a
> >lightning strike.
>
> About a week ago I posted the above message. Several people responded and
there
> was a general feeling that the idea of allowing a gradual leak off of
charge at
> the top of the antenna would not prevent or even be likely to reduce the
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> Tonight I was looking through my old "Elements of Physics" by Shortly and
> Williams, fourth edition, page 697 and came across the following
statement:
>
> "The action of a well-grounded and sharply pointed lightning rod is primar
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> discharge quietly into the air the charge that is induced in the
surrounding
> earth by a charged thundercloud above. The electric intensity in the
vicinity of
> the sharp point is high enough to break down the immediately surrounding
air and
> the continual discharge prevents building up sufficient voltage over the
whole
> cloud-to-ground path to break down this long path and give rise to a
stroke of
> lightning at this location."
>
> Comments?
>
> Ron, W4TQT
>
>

955. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 04:03:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r4nfmv8381fadjmanse3vu420evgmpm6dp@4ax.com>
Source record: 108121

On Tue, 16 Sep 2003 22:18:09 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> And none of these
>> individuals has yet to respond to simple but necessary observations by
>> Chipman of the requirement of the Source Z. Do you join that throng?
>
>Where does Source Z appear in equation 7.34?

OK, so you are part of the throng. Another Evelyn Wood speedreader.

73's
Richard Clark, KB7QHC

956. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 04:07:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f67dfcb$1_3@corp.newsgroups.com>
Source record: 108122

Richard Clark wrote:
> OK, so you are part of the throng. Another Evelyn Wood speedreader.

On what page in Chipman does the Source Z appear relevant?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

957. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 04:31:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bpofmv80t7sun5pli78u8dgfu44g3cu8cq@4ax.com>
Source record: 108123

On Tue, 16 Sep 2003 23:07:40 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> OK, so you are part of the throng. Another Evelyn Wood speedreader.
>
>On what page in Chipman does the Source Z appear relevant?

You referenced equation 7.34.

What do you see appearing in the illustration on the page opposite?
(Simply one of several obvious statements most skim past.)

73's
Richard Clark, KB7QHC

958. Re: Off Center Fed Dipole: the "Windom" experience.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 05:35:23 UTC
From: K6ME <k6me@adelphia.net>
Message-ID: <voS9b.1560$YO5.937865@news3.news.adelphia.net>
Source record: 108124

I have had one of the Antennas and More 137' Windom for over 5 years now and it has worked great for both at home and for the past 4 years at Field Day.

I will say that I keep it up at least 50 feet in the dipole configuration and have used it portable
as a sloper with the high end at 65' and the long low end at 20 feet with excellent results.

Tunes easily with my Vectronics, MFJ and new LDG Auto Tuner.

73: Terry

959. Re: HyGain Patriot 40 - 10 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 05:52:00 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <uusfmvca44ck7ohduo8gj4gs0lujtemhd1@4ax.com>
Source record: 108125

On Mon, 15 Sep 2003 06:39:43 GMT, Wolfgang K. Meister
<no.mail@please.com> wrote:

>On Fri, 12 Sep 2003 09:12:31 GMT, Roger Halstead
><newsgroups@rogerhalstead.com> wrote:
>
>>Any one have any experience with the Patriot 40 through 10 meter
>>antenna?
>Roger,
>
>I have one on the roof since a few month. The antenna performs well,
>the assambly, as usual, is not exactly as described in the manual.

Sounds like many antennas.

>
>The only thing I have replaced are the tube clamps (hope that is the
>right english word for it). Those are the things that wrap around the
>sloted end of the tubes to fasten the next section. They are
>ridicolous compared to proffessional ones available in some hardware
>stores. The ones I found are around 1 icnch wide, the original are

I normally use stainless steel hose clamps which are quite common on
larger antennas and beams.

>around 1/4 to 1/2 inch wide. The ones I used have two bolts on each
>side and a strong inbus screw between the bolts. If you need more
>info, drop me a line at oe1mww(at)qsl.net. Replace the (at) with a '@'
>I will send you some pictures.
>
>Mount the antenna end at least 4 to 6 feet above ground or obstacles.
>The radials are VERY floppy and hang down. But this apparently how
>they are designed.

The base will be up about 32 feet. AT that point the top of the tower
will have guy lines at roughly 45 degrees.

>
>You NEED guy ropes!! Otherwise the next strong wind will do the rest!

I have lots of 1/8 th inch, or 3/16ths inch nylon rope that has been
out long enough to have most of the "stretch" removed and that should
work.

I'm trying to squeeze in a fan dipole/ inverted V for 160 off the big
tower. I'm going to have to get rid of one of the 75 meter slopers,
but I do want to get on 160 this winter. I need about 5 more acres of

land and at least two towers, but I think I have passed the stage of building those big towers by myself and having a crew install one is a bit expensive on a pension.

We're out in a nice quiet, wooded, rural, subdivision.
I'm having to do a bit of budgeting as the county is trying to get in a jail across the road to the south. If they get in, We'll be moving as both of us are hams. I'm also an amateur astronomer and any parking lot lights will mean an end to that. Unfortunately due to the big tower it'll cost a small fortune to move, so I have hopes the residents can tie the county up in legal battles to the point where they give up.

Here's part of the current station and tower.
http://www.rogerhalstead.com/tower.htm
The vertical is for the old antique station in the shop.

Thanks for the information.

73

Roger (K8RI)
>
>73s de OE1MWW
>Wolfgang

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

960. Re: Source for 1" U brackets?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 05:56:52 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <kotfmvokiru51pt798qf5icomu1i1nbabm@4ax.com>
Source record: 108126

On Tue, 16 Sep 2003 12:47:56 GMT, Curtis <Curtis46a@netscape.com>
wrote:

>I am planning to mount a small satellite dish on the side of my tower.
>I think I can rig a mount with four U brackets and a couple of strips
>of metal. The tubing on my tower is 1" OD. Does anyone know of a source
>for the U brackets?
>

1" is a bit small for muffler clamps but you may find some.
Radio Shack also carries them with the clamp to fit the tower leg.

Another method that works well is to use a piece of channel. Either
aluminum or steel will work. Use that over the face of the tower leg
to distribute the load when the U bolt is tightened.

Jus ta piece of angle works as well.

Roger (K8RI)

>Any tips on making a dish mount will be appreciated.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

961. Re: Off Center Fed Dipole: the "Windom" experience.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 06:49:50 UTC
From: Mark Lunday <lundaym@hotmail.com>
Message-ID: <iuT9b.2320$cT3.888@twister.southeast.rr.com>
Source record: 108127

Interesting observations, Charlie. I don't have a dipole to compare with, but here are my observations:

1. Bought a classic Windom in 1997, worked pretty well and was stealthy.
2. Bought a modified Windom from Antennas and More last month, with 32 feet on each of the ends dropped; supposedly gets lower angles of radiation. I have nothing to compare it to, but I am getting out no prob. Very stealthy.
3. I did not receive an immediate callback when I called Antennas and More (voice mail), but I kept calling over several hours until I did get an answer. The folks were courteous and professional.

I would greatly enjoy some of the details from your comparisons, OM. Since I am pretty restricted on my lot here, I would like to know the details so I can make a better-informed decision in the future.

Thanks

Mark Lunday
WD4ELG
wd4elg@arrl.org

"Charles Wittnam" <wittnam@bresnan.net> wrote in message news:aL49b.59970$mp.27959@rwcrnsc51.ops.asp.att.net...
> I recently hung my commercially produced OCF dipole at a "test" height of
> 20 feet. I just wanted to see how many of the problems I have been warned
> about actually manifested themselves. There is NO question that the coax
> feedline will radiate enough RF to cause problems with rig upon occassion. I
> am jusing a Ten Tec Jupiter. My in rig keyer had a seizure on one band.
> A 1:1 balun or beads for RF suppression is a necessity. Does the antenna
> work? Yes. Better than a dipole, no. The OCF aspect of it enables me to
> hide the balun, and the black insulated antenna wire is virtually invisible.
> So for "stealth", it gets five stars. If you order from Antennas and More
> you will NEVER hear from them despite leaving numerous messages. I would
> not recommend this group under any circumstances. They have nice antenna
> wire, but that is it. BUILD YOUR OWN! I will do a head to head comparison
> with a loop ant in the future. I highly recommend an OCF being fed with
> ladder line, not coax.
>
> Charlie KD7HU
>
>

962. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 06:52:13 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <j6vfmvgen7ib0egcmoc3qgeqakv2mk212o@4ax.com>
Source record: 108128

On Mon, 15 Sep 2003 21:27:25 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Sean wrote:
>"Any and all help appreciated."
>
>Search on "spray-on zinc."
>
>Zinc so applied can attain a thicknes of 10 thousandths of an inch. This
>thicknness should be plenty at h-f, due to skin effect, for
>conductivity. The zinc spray should be economical as it is used for
>corrosion protection on large structures like bridges.

I'd check the stuff for conductivity before using much.
Most spray on paint will probably be on the order of one to three or
four thousandths of an inch instead of 1/10,000 th which is still fine
OTOH, most I've checked din't show much in the way of conductivity.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Best regards, Richard Harrison, KB5WZI

963. MFJ monoband mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 11:13:07 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <ZkX9b.30668$Hb.468985@news4.e.nsc.no>
Source record: 108129

Does anyone have any experience with the MFJ monoband mobile HamTenna Whip, like the 20 m version on
http://www.mfjenterprises.com/products.php?prodid=MFJ-1620T?
It is a 2.1 m antenna that comes in monoband versions for all bands from 75 m to 6 m at only $19.95 per antenna.

I wonder how it performs, how easy it is to mount on the trunk of a sedan, and how easy it is to change bands - i.e. changing antennas.

Sverre
www.qsl.net/la3za

964. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 11:14:11 UTC
From: kd1@sympatico.ca
Message-ID: <3F684203.907FC5BA@sympatico.ca>
Source record: 108131

Cecil Moore wrote:
>
> Forward power is all the power incident upon the load. Reflected power is
> all the power flowing away from the load. If the load is passive, the power
> flowing away from the load cannot be greater than the power flowing toward
> the load.

These are nice words, but unless there is a way to compute and measure
these forward and reflected powers, they won't serve much purpose.

As you are fond of pointing out, there are only two directions on
a transmission line, so if a third term is needed to make the powers
balance, is this third term a forward power or a reflected power or
is it apportioned between forward and reflected in some unstated
way?

Without a clear definition of forward and reflected powers it is
pretty much a useless concept.

Can anyone provide a clear definition of forward and reflected
powers?
Is there a method for measuring forward and reflected powers?

And do remember, we are discussing the GENERAL case here which
includes transmission lines with complex impedances. The
(somewhat limited) utility of the concept of forward and
reflected powers is understood for the special case of
transmission lines with real impedances.

...Keith

965. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 11:17:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6844a3_2@corp.newsgroups.com>
Source record: 108130

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>On what page in Chipman does the Source Z appear relevant?
>
> You referenced equation 7.34.
> What do you see appearing in the illustration on the page opposite?

Sorry, I don't see anything. I don't have the book. I drove over to
Texas A&M to see what equation 7.34 really looks like when it is not
forced into ASCII characters.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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966. Re: MFJ monoband mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 11:25:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f684655_2@corp.newsgroups.com>
Source record: 108132

Sverre Holm wrote:
> Does anyone have any experience with the MFJ monoband mobile HamTenna Whip,
> like the 20 m version on
> http://www.mfjenterprises.com/products.php?prodid=MFJ-1620T?
> It is a 2.1 m antenna that comes in monoband versions for all bands from 75
> m to 6 m at only $19.95 per antenna.
> I wonder how it performs, how easy it is to mount on the trunk of a sedan,
> and how easy it is to change bands - i.e. changing antennas.

It is base loaded which is a disadvantage but it has a relatively high-Q
coil which is an advantage so it's performance should be similar to a
hamstick. Changing antennas should be similar to a hamstick. Like hamsticks,
reasonable performance is probably limited to 14 MHz and above.
--
73, Cecil http://www.qsl.net/w5dxp

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967. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 11:45:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f684b35_2@corp.newsgroups.com>
Source record: 108133

kd1@sympatico.ca wrote:

> Cecil Moore wrote:
>>Forward power is all the power incident upon the load. Reflected power is
>>all the power flowing away from the load. If the load is passive, the power
>>flowing away from the load cannot be greater than the power flowing toward
>>the load.
>
> As you are fond of pointing out, there are only two directions on
> a transmission line, so if a third term is needed to make the powers
> balance, is this third term a forward power or a reflected power or
> is it apportioned between forward and reflected in some unstated
> way?

The third term certainly bears a resemblance to Dr. Best's interference
term where Ptot = P1 + P2 + 2*Sqrt(P1*P2)*cos(theta) Note that the
sign of the third term is determined by cos(theta)

The sign of the third term in Chipman's equation 7.34 indicates whether
it is forward or reverse power, '+' for forward and '-' for reverse.
Forward terms need to be collected and reverse terms need to be collected.

I'm going to play with that third term to see if it can be reduced.
--
73, Cecil http://www.qsl.net/w5dxp

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968. Complex Z0 Consistency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 12:52:10 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bk9ldq$fl1$1@nic.grnet.gr>
Source record: 108134

```
Complex Z0 Consistency

[Complex Z0 mini-Compendium for Example Builders - Part II]
[Please use fixed-space font. 100 Characters per line. Landscape Printout]

[A]
===
From Chipman,
the equations at page 58,
it seems that
they have the following consequences:

+b.Xo/Ro =< a from (5.20),
-b.Xo/Ro =< a from (5.23), hence
--------------
b.|Xo|/Ro =< a

and

-a.Xo/Ro =< b from (5.21),
+a.Xo/Ro =< b from (5.24), hence
--------------
a.|Xo|/Ro =< b

Additionally,
according to a related condition at page 54,
the sign of Xo
is the same as
the sign of (L'G' - R'C').

[B]
===
Therefore,
it seems that,
the only
Transmission Line
Analysis or Design Applications
_Consistent_
with the Uniform Transmission Line Theory
are belong
in one of the following eleven cases:

[1/11]
.--------.--------.--------.--------.
| a = 0 | b > 0 | Ro > 0 | Xo = 0 |
:--------:--------:--------:--------:
| R' = 0 | L' > 0 | G' = 0 | C' > 0 |
```

```
'--------'--------'--------'--------'

[2/11]
.--------.--------.--------.--------.
| a > 0 | b = 0 | Ro > 0 | Xo = 0 |
:--------:--------:--------:--------:
| R' > 0 | L' = 0 | G' > 0 | C' = 0 |
'--------'--------'--------'--------'

[3/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo = 0 |
'--------'--------'--------'--------'
L'G' = R'C'
.--------.--------.--------.--------.
| R' > 0 | L' > 0 | G' > 0 | C' > 0 |
'--------'--------'--------'--------'

[4/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo < 0 |
'--------'--------'--------'--------'
|Xo|/Ro = b/a = a/b = 1
.--------.--------.--------.--------.
| R' > 0 | L' = 0 | G' = 0 | C' > 0 |
'--------'--------'--------'--------'

[5/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo < 0 |
'-----------------------------------'
|Xo/Ro| = b/a < a/b
.--------.--------.--------.--------.
| R' > 0 | L' = 0 | G' > 0 | C' > 0 |
'--------'--------'--------'--------'

[6/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo < 0 |
'-----------------------------------'
|Xo/Ro| = a/b < b/a
.--------.--------.--------.--------.
| R' > 0 | L' > 0 | G' = 0 | C' > 0 |
'--------'--------'--------'--------'

[7/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo < 0 |
'-----------------------------------'
|Xo|/Ro < min{ a/b, b/a }
:-----------------------------------:
L'G' < R'C'
```

```
.--------.--------.--------.--------.
| R' > 0 | L' > 0 | G' > 0 | C' > 0 |
'--------'--------'--------'--------'

[8/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo > 0 |
'--------'--------'--------'--------'
|Xo|/Ro = a/b = b/a = 1
.--------.--------.--------.--------.
| R' = 0 | L' > 0 | G' > 0 | C' = 0 |
'--------'--------'--------'--------'

[9/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo > 0 |
'-----------------------------------'
|Xo/Ro| = a/b < b/a
.--------.--------.--------.--------.
| R' = 0 | L' > 0 | G' > 0 | C' > 0 |
'--------'--------'--------'--------'

[10/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo > 0 |
'-----------------------------------'
|Xo|/Ro = b/a < a/b
.--------.--------.--------.--------.
| R' > 0 | L' > 0 | G' > 0 | C' = 0 |
'--------'--------'--------'--------'

[11/11]
.--------.--------.--------.--------.
| a > 0 | b > 0 | Ro > 0 | Xo > 0 |
'-----------------------------------'
|Xo|/Ro < min{ b/a, a/b }
:-----------------------------------:
R'C' < L'G'
.--------.--------.--------.--------.
| R' > 0 | L' > 0 | G' > 0 | C' > 0 |
'--------'--------'--------'--------'

[C]
===
A Proof.

12345678901234567890123456789012345678901234567890123456789012345678901234567890
1234567
0 1 2 3 4 5 6 7 8 9 9
1=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' 0 : a.X + b.R ~ L' + : b.X + a.R ~ G' 0 : b.R - a.X ~ C' +
```

```
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = 0 :(0.-)+(+.+)~ + = :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = 0 :(0.0)+(+.+)~ + = + :(+.0)+(0.+)~ 0 = 0 :(+.+)-(0.0)~ + = + : 0
+ 0 +
0 + + + :(0.+)-(+.+)~ - = 0 :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
--------:------------------:------------------:------------------:------------------:-
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+ 0 + - :(+.+)-(0.-)~ + = 0 :(+.-)+(0.+)~ - = :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = 0 :(+.0)+(0.+)~ 0 = :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = 0 :(+.+)+(0.+)~ + = :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
--------:------------------:------------------:------------------:------------------:-
-------
+ + + - :(+.+)-(+.-)~ + = 0 :(+.-)+(+.+)~ ? = :(+.-)+(+.+)~ ? = :(+.+)-(+.-)~ + = :
+ + + 0 :(+.+)-(+.0)~ + = 0 :(+.0)+(+.+)~ + = :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = 0 :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = 0 :(+.+)-(+.+)~ ? = :
2=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' 0 : a.X + b.R ~ L' + : b.X + a.R ~ G' + : b.R - a.X ~ C' 0
:R'L'G'C'
--------:------------------:------------------:------------------:------------------:-
------- 0 + + - :(0.+)-(+.-)~ + = 0
:(0.-)+(+.+)~ + = :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = 0 :(0.0)+(+.+)~ + = + :(+.0)+(0.+)~ 0 = + :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = 0 :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = 0 :(+.-)+(0.+)~ - = :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = 0 :(+.0)+(0.+)~ 0 = :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = 0 :(+.+)+(0.+)~ + = :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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+ + + - :(+.+)-(+.-)~ + = 0 :(+.-)+(+.+)~ ? = :(+.-)+(+.+)~ ? = :(+.+)-(+.-)~ + = :
+ + + 0 :(+.+)-(+.0)~ + = 0 :(+.0)+(+.+)~ + = :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = 0 :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = + :(+.+)-(+.+)~ ? = 0 : 0
+ + 0
3=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' + : a.X + b.R ~ L' 0 : b.X + a.R ~ G' 0 : b.R - a.X ~ C' +
:R'L'G'C'
--------:------------------:------------------:------------------:------------------:-
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = 0 :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = 0 :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = 0 :(0.0)+(+.+)~ + = 0 :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = 0 :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = 0 :(+.-)+(+.+)~ ? = 0 :(+.+)-(+.-)~ + = + : +
0 0 +
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = 0 :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = 0 :(+.+)+(+.+)~ + = :(+.+)-(+.+)~ ? = :
4=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' + : a.X + b.R ~ L' 0 : b.X + a.R ~ G' + : b.R - a.X ~ C' 0
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = 0 :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = 0 :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = 0 :(0.0)+(+.+)~ + = + :(0.+)-(+.0)~ 0 = 0 :+
0 + 0
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = 0 :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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-------
+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = 0 :(+.-)+(+.+)~ ? = + :(+.+)-(+.-)~ + = 0 :
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = 0 :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = 0 :(+.+)+(+.+)~ + = :(+.+)-(+.+)~ ? = :
5=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' 0 : a.X + b.R ~ L' + : b.X + a.R ~ G' + : b.R - a.X ~ C' +
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = 0 :(0.-)+(+.+)~ + = :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = 0 :(0.0)+(+.+)~ + = + :(+.0)+(0.+)~ 0 = + :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = 0 :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = 0 :(+.-)+(0.+)~ - = :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = 0 :(+.0)+(0.+)~ 0 = :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = 0 :(+.+)+(0.+)~ + = :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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+ + + - :(+.+)-(+.-)~ + = 0 :(+.-)+(+.+)~ ? = :(+.-)+(+.+)~ ? = :(+.+)-(+.-)~ + = :
+ + + 0 :(+.+)-(+.0)~ + = 0 :(+.0)+(+.+)~ + = :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = 0 :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = + :(+.+)-(+.+)~ ? = + : 0
+ + +
6=======:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' + : a.X + b.R ~ L' 0 : b.X + a.R ~ G' + : b.R - a.X ~ C' +
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = 0 :(+.-)+(0.+)~ - = :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = 0 :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = 0 :(0.0)+(+.+)~ + = + :(0.+)-(+.0)~ 0 = + :
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = 0 :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = 0 :(+.-)+(+.+)~ ? = + :(+.+)-(+.-)~ + = + : +
0 + +
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = 0 :(+.0)+(+.+)~ + = :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = 0 :(+.+)+(+.+)~ + = :(+.+)-(+.+)~ ? = :
7=======:==================:==================:==================:==================:=
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a b R X : a.R - b.X = R' + : a.X + b.R ~ L' + : b.X + a.R ~ G' 0 : b.R - a.X ~ C' +
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = + :(+.-)+(0.+)~ - = 0 :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = + :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = + :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = + :(0.+)+(+.+)~ + = :(0.+)-(+.+)~ - = :
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+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = + :(+.-)+(+.+)~ ? = 0 :(+.+)-(+.-)~ + = + : +
+ 0 +
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = + :(+.0)+(+.+)~ + = 0 :(+.+)-(+.0)~ + = :
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = 0 :(+.+)-(+.+)~ ? = :
8=======:==================:==================:==================:==================:=
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a b R X : a.R - b.X = R' + : a.X + b.R ~ L' + : b.X + a.R ~ G' + : b.R - a.X ~ C' 0
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = + :(+.-)+(0.+)~ - = + :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = + :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = + :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = + :(0.+)+(+.+)~ + = + :(0.+)-(+.+)~ - = 0 :
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+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = + :(+.-)+(+.+)~ ? = + :(+.+)-(+.-)~ + = 0 :
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = + :(+.0)+(+.+)~ + = + :(+.+)-(+.0)~ + = 0 :
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = + :(+.+)-(+.+)~ ? = 0 : +
+ + 0
9-11====:==================:==================:==================:==================:=
=======
a b R X : a.R - b.X = R' + : a.X + b.R ~ L' + : b.X + a.R ~ G' + : b.R - a.X ~ C' +
:R'L'G'C'
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0 + + - :(0.+)-(+.-)~ + = + :(0.-)+(+.+)~ + = + :(+.-)+(0.+)~ - = + :(+.+)-(0.-)~ + = :
0 + + 0 :(0.+)-(+.0)~ 0 = + :(0.0)+(+.+)~ + = :(+.0)+(0.+)~ 0 = :(+.+)-(0.0)~ + = :
0 + + + :(0.+)-(+.+)~ - = + :(0.+)+(+.+)~ + = :(+.+)+(0.+)~ + = :(+.+)-(0.+)~ + = :
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+ 0 + - :(+.+)-(0.-)~ + = + :(+.-)+(0.+)~ - = + :(0.-)+(+.+)~ + = :(0.+)-(+.-)~ + = :
+ 0 + 0 :(+.+)-(0.0)~ + = + :(+.0)+(0.+)~ 0 = + :(0.0)+(+.+)~ + = :(0.+)-(+.0)~ 0 = :
+ 0 + + :(+.+)-(0.+)~ + = + :(+.+)+(0.+)~ + = + :(0.+)+(+.+)~ + = + :(0.+)-(+.+)~ - = + :
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+ + + - :(+.+)-(+.-)~ + = + :(+.-)+(+.+)~ ? = + :(+.-)+(+.+)~ ? = + :(+.+)-(+.-)~ + = + : +
+ + +
+ + + 0 :(+.+)-(+.0)~ + = + :(+.0)+(+.+)~ + = + :(+.0)+(+.+)~ + = + :(+.+)-(+.0)~ + = + : +
+ + +
+ + + + :(+.+)-(+.+)~ ? = + :(+.+)+(+.+)~ + = + :(+.+)+(+.+)~ + = + :(+.+)-(+.+)~ ? = + : +
+ + +
========:==================:==================:==================:==================:=
=======
```

Sincerely,

pez
SV7BAX

969. Re: Populating my tower from scratch... need opinions on antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 14:40:27 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <vn_9b.71776$Mb2.2461917@twister.tampabay.rr.com>
Source record: 108135

hey pat
i have heard several of those cushcraft yagis on 6 meters and they do okay
guess it all depends on what you want to do with the antennas if you
want to do SSB on 2 and 440 then the log would do you better cause you
can have them all horizontally polarized
if you want to use VHF/UHF for FM and SSB on 6 i would suggest getting
the yagi
now if you want to do FM on 6 i would suggest getting the comet GP15
which covers 6-2-440 for FM and get the Log for SSB
good luck

970. Complex Z0 Clearness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 16:33:09 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bka2c5sud1@nic.grnet.gr>
Source record: 108136

Complex Z0 Clearness
[Complex Z0 mini-Compendium for Example Builders - Part III]

With the help of
Mrs. yin,SV7DMC
it was mechanically proved
that:

The transformation
between any set of
Propagation Characteristics
(a, b, Ro, Xo),
and its corresponding set of
Distributed Circuit Coefficients
(R', wL', G', wC')
as well as of its inverse,
for any proper complex Z0,
namely one with X=/=0,
is

one-to-one

everywhere
on its domain and range of values,
since its Jacobian equals to

4.|g|^2/|Zo|^2

that is to say
an obviously non-zero number.

This result
definitively clears any reservation
on the building of examples
within the frame of the
Uniform Transmission Line Theory,
as long as
the propounded conditions
are checked for their validation.

Sincerely,

pez
SV7BAX
&
yin
SV7DMC

971. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 16:55:13 UTC
From: richardharrison@webtv.net
Message-ID: <29997-3F6891F1-56@storefull-2311.public.lawson.webtv.net>
Source record: 108137

Roy, W7EL wrote:
"Then does the "reflected power" flow back out, to go back down the transmission line, or does it contribute to the load dissipation?"

It is a matter of time. Eventually, the reflected power is consumed by the load, though some of it requires several attempts to make it through the load.

The load impedance opposes alternating current and thus the power it can produce.

Reflected power is a misfit in the load. It does not conform to the E / I ratio of the load. There is a surplus E or I when there is a mismatch. This surplus E or I is reflected initiating the reflected wave traveling back toward the transmitter in the Zo of the line. E / I of the reflected wave must be the same as Zo enforces on the incident wave. Zo is usually a resistance (Ro) in useful lines. Zo is nearly the sq. rt. of L/C in useful lines because their series resistance and shunt conductance are insignificant. In such lines, Ro is lossless.

If the transmitter is matched to the feedline to deliver maximum power, no reflected power gets through the matching network. This means that all reflected power is re-reflected by the network.

So, the incident power consists of the transmitter output plus the re-reflected power. When this combo hits the load, the same percentage is absorbed by the load as that extracted when the first power out of the transmitter arrived at the load. The difference is that the incident power is now greater as it has grown by the amount of the reflected power. The re-reflected power is coming around again for another go at the load.

Best regards, Richard Harrison, KB5WZI

972. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 17:39:47 UTC
From: richardharrison@webtv.net
Message-ID: <9599-3F689C63-19@storefull-2312.public.lawson.webtv.net>
Source record: 108138

Keith wrote:
"And do remember, we are discussing the GENERAL case here which includes transmission lines with complex impedances."

This is a radio amateur antenna newsgroup. The lines used with these antennas is a special case in which losses in feedlines are usually so low that Zo does not differ from Ro.

Great simplification results from a surge impedance which equals sq. rt. L/C.

Many still question what happens in the simplified equivalent circuit of a lossless line. Once the simplified line action is understood it will be rewarding to discuss the general case. Keith has repeatedly demenstrated a desire to treat r-f feedlines as d-c wires. That won`t work.

Best regards, Richard Harrison, KB5WZI

973. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 17:50:33 UTC
From: richardharrison@webtv.net
Message-ID: <9598-3F689EE9-69@storefull-2312.public.lawson.webtv.net>
Source record: 108140

Keith wrote:
"Can anyone provide a clear definition of forward and reflected powers?"

Power in the load = forward power - reflected power.

Best regards, Richard Harrison, KB5WZI

974. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 18:02:58 UTC
From: richardharrison@webtv.net
Message-ID: <9599-3F68A1D2-22@storefull-2312.public.lawson.webtv.net>
Source record: 108139

Roger, K8RI wrote:
"I`d check the stuff for conductivity before using much."

Good point. The more conductive it is, the narrower the stripe required
to give suffuicient conductivity for your application.

Best regards, Richard Harrison, KB5WZI

975. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 18:33:10 UTC
From: richardharrison@webtv.net
Message-ID: <18196-3F68A8E6-91@storefull-2314.public.lawson.webtv.net>
Source record: 108142

Reg, G4FGQ wrote:
"I`m sorry I find myself unable to discuss imaginary SWR on non-existent transmission lines any longer."

SWR is easily measured due to its relation to reflected energy, even when there is no transmission line. TLI may be a better name for the reflection indicator.

A perfect match between transmitter and transmission line ensures no reflection reaches back to the transmitter, so the match also ensures that all the reflected energy becomes re-reflected energy.

Best regards, Richard Harrison, KB5WZI

976. Re: MFJ monoband mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 18:33:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F68A8F7.61834030@cwis.net>
Source record: 108141

Bill,
If you get a wild burning desire to try an 80 meter
Hamstick, because you haven't before, let me save you
the purchase and shipping price. They do work, but not
very well at all. Neither will the other brands of the
same type, including MFJ's. Almost any other type of
antenna will do as ~least~ as good and in most cases,
better.
The 160 meter version of a Hamstick type antenna is
one of the cheapest, long, thin dummy loads I've ever
seen. No fluids to find and buy, fairly unobtrusive,
and certainly different. And it can be painted in many
different colors to match your vehicle!
Although I haven't seen one specifically for 60 meters,
and considering the power requirements for those frequencies,
you could probably run legal limit with no problems at all.
'Doc

977. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 18:37:41 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <uQyxbTA1nKa$EAhg@ifwtech.co.uk>
Source record: 108154

Richard Harrison wrote:
>Roger, K8RI wrote:
>"I`d check the stuff for conductivity before using much."
>
>Good point. The more conductive it is, the narrower the stripe required
>to give suffuicient conductivity for your application.

Also beware of the nickel-based EMI shielding paint which is magnetic
and *meant* to be lossy.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

978. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 19:08:47 UTC
From: richardharrison@webtv.net
Message-ID: <18197-3F68B13F-38@storefull-2314.public.lawson.webtv.net>
Source record: 108145

Richard Clark wrote:
"Has anyone here actually measured SWR without using a diode?"

I did something similar and could have used the same rig to measure SWR in a feedline.

I used a wire loop which included a thermoammeter suspended from a horizontal antenna element. I pulled this along the element to measure its current distribution using a long tow rope and a telescope.

Pulled along a transmission line wire, this would have produced the currents at the minima and maxima along the wire. From these we could calculate SWR.

Best regards, Richard Harrison, KB5WZI

979. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 19:16:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rgahmvkpg4mmrn2cucb7hla4ajedg4n231@4ax.com>
Source record: 108143

On Wed, 17 Sep 2003 06:17:54 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>>On what page in Chipman does the Source Z appear relevant?
>>
>> You referenced equation 7.34.
>> What do you see appearing in the illustration on the page opposite?
>
>Sorry, I don't see anything. I don't have the book. I drove over to
>Texas A&M to see what equation 7.34 really looks like when it is not
>forced into ASCII characters.

Then there is no reason to expect you have access to any other page you asked me for is there? Such is the plight of speed reading. Everyone selects their favorite passage in ignorance to the whole of the work.

I have recited enough extractions (including, additionally, my response to you above) to no refutation. I note that those who asked for those same examples continue to embrace Chipman despite refusing to observe his cautions and, frankly, you are less prepared than they to engage in that discussion much less debate.

The only point of reciting the source is to establish a basis of common ground. Without that, it devolves to the common sense that the load and the source are interchangeable and both observe the same mechanics of reflection that exist as a terminus to a line. Cecil, I know that you have already stated as much. The quality (sic) of other discussion that usually attends this issue from more than a few correspondents, the source somehow deserves some special status where it magically exhibits no loss, no gain, no reflection, total reflection, and each-or-all uttered by those who go numb when asked just what quantitative value enforces such mysterious actions they purport to occur.

Some suggest it is the imponderability of nature and the cosmos; others say confusion exists (but not in themselves - even when they stumble to answer the simplest question); one suggests that methods and accuracy are in doubt (and cannot say how much error, nor which method is vague); many say it doesn't matter (and they rage on demanding just that); and ALL of them cannot answer simple bench examples that confound their myopic theories.

Such is the kulture of Institutionalized Ignorance that exists.

73's
Richard Clark, KB7QHC

980. Re: Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 19:16:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309171116.54861df0@posting.google.com>
Source record: 108144

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3f67d9cb_2@news1.prserv.net>...
> Ron:
> The fact is that the
> phenomenon you cite does not bleed off anywhere near enough charge to make
> any difference. Yes, it does drain off charge. No, the quantity is like
> trying to empty the ocean with a leaky coffee can.

Very true. Also, you sure wouldn't want to rely on that discharge
theory to prevent a strike. Will be the other way around if it's a
pointed tip. It will be struck sooner or later. But, if that tip were
hit by lightning, the lightning would have struck in that close area
anyway. I have tall trees in the yard in both the front and back. The
last two close strikes, which BTW, have been in the last few weeks,
have hit the trees instead of my mast. But my mast is not pointed.
It's just pipe. Not as good a streamer as a point. Lightning has no
idea where it's going until it gets to about the last step of it's
travel and finds a streamer to hook up with. In a strike zone, there
will be many, many streamers poking up all looking for attention.
Which gets the call is akin to throwing a dice. Many times, the best
streamer in the area is not in the right location to get the job. I
always assume any object I stick up in the air will be struck sooner
or later. To think anything else is foolish. The brush dischargers
work on the same "theory". They are still struck at times. Trying to
discharge fast enough in a storm to avoid a strike is like taking a
whiz in a whirlwind. You may still get something on you...:/ MK

981. Re: Mostly of Entertainment value - Questions & Answers.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 19:37:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m2dhmv4hioank9ukadio562vjt57qoi1rb@4ax.com>
Source record: 108146

On Wed, 17 Sep 2003 13:33:10 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>TLI may be a better name for the
>reflection indicator.

Which, if one were to examine the logic of the original complaint
about SWR meters, then would be forced to ask:
"What Transmission Line? There's none in there!"
(second verse, same as the first.)

And if they were able to swallow the absurdity, they would then be
forced to ask:
"What units? None? What makes one value worse than the last?"

And if they were able to suppress these outrages and were handed the
Red/Green LED would ask:
"How do YOU calibrate the Red one?"

And if they were shushed with Housewifery admonitions of the bogeyman
coming to get them if they inquired further, they would then ask:
"Do you have an insurance policy you are trying to sell?"

Let's see, 4 problems for every perceived solution (something only a
committee could accomplish). With such acumen in the space race, we
would be blowing up shuttles weekly.

73's
Richard Clark, KB7QHC

982. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 19:44:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m3ehmvcbfvmq649qvabn0lrrfr0g6r1a93@4ax.com>
Source record: 108147

On Wed, 17 Sep 2003 14:08:47 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark wrote:
>"Has anyone here actually measured SWR without using a diode?"
>
>I did something similar and could have used the same rig to measure SWR
>in a feedline.
>
>I used a wire loop which included a thermoammeter suspended from a
>horizontal antenna element. I pulled this along the element to measure
>its current distribution using a long tow rope and a telescope.
>
>Pulled along a transmission line wire, this would have produced the
>currents at the minima and maxima along the wire. From these we could
>calculate SWR.
>
>Best regards, Richard Harrison, KB5WZI

Bravo Richard!

You response from the wilderness exposes the poverty of experience
within the city of enlightenment. Cake and circus seems to be the
daily fare here.

73's
Richard Clark, KB7QHC

983. Re: echolink 132,000 users in 139 different countries

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:01:39 UTC
From: "Dick, AA5VU" <aa5vu@arrl.net>
Message-ID: <aa5vu-7B5BE9.15013617092003@central.isp.giganews.com>
Source record: 108148

Don't forget the Macintosh users and the EchoMac software at

http://www.echolink.org/

73 de Dick, AA5VU

In article <1063695446.27144.36@lotis.uk.clara.net>,
g3zhi<g3zhi@hotmail.com> wrote:

> There are now over 132,000 callsigns registered in 139 different countries.
>
> There are daily additions, changes and deletions with over 1,000 new calls
> validated each week.
>
>
> For more information check
>
> http://web.radio-ham.org/radioham/documents/ARIC_Sep2003.zip
>
> http://www.echolink.org/links.asp
>
> http://www.echolink.org/logins.asp
>
> http://home.insightbb.com/~n9yty/
>
> 73 Ian G3ZHI
>
>
> http://www.qsl.net/g3zhi - has many ham radio links
>
>
> I usually monitor G4NJI node 5200 simplex 145.2875mhz
>
> Ian Abel G3ZHI
> 52 Hollytree Ave
> Maltby
> Rotherham
> Yorkshire
> S66 8DY
>
> Tel: 01709 799911
> Mobile 0776 481 3363
>
>
>

984. Re: Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:07:51 UTC
From: richardharrison@webtv.net
Message-ID: <18197-3F68BF17-42@storefull-2314.public.lawson.webtv.net>
Source record: 108150

Ron, W4TQT wrote:
"---Shortly and Williams, fourth edition."

Hang on to your Shortly and Williams. That was one if my textbooks long ago and I found it usually reliable.

There are lightning elimination companies which erect spikes said to drain the charge difference at your site. This, they say, drains your site of charge which might initiate a strike.

Yet, I`ve seen towertop lightning damage where the tower was the most salient item in the area. So, why didn`t it successfully discharge the site and obviate the strokes?

Cecil`s 400-pound gorilla analogy may apply.

Protection relies upon residence within a conductive enclosure and clamping the voltage level on every conductor which penetrates.

Best regards, Richard Harrison, KB5WZI

985. NYC, NNJ Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:11:58 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030917161158.23672.00001146@mb-m22.aol.com>
Source record: 108149

Howdy Antenna and other Radio Afficionados!

Here it is again, if you missed it last year, here is your chance to have radio and polka fun at Montville, NJ Oktoberfest!

There will be special Ham tables or you can book your exclusive. The price is paltry $25 per person, no need for donations, bribes or taxes. Unbelievable fun fueled by original, direct from Schwartzwald - Spaten Oktoberfest Bier on tap, all you can drink! You can also bring your favorite booze, setups - glasses will be provided, no need to hide it. Don't miss it, make your reservations now before we run out of tables.

Easy to get to: from Hwy 80 take 287 north, to exit 47 for 202 east, about 1/4 mile make right at traffic light by Exxon onto Changebridge Rd., St. Pius X Church and center is about 1/2 mile on the left, plenty of parking. No need to travel to Germany, it is right here in your backyard. Excellent opportunity to meet by good beer, tell the lies and have fun with your brothers and sisters hams.

Directions and poster are at www.K3BU.US

See you all there!

Oktoberfest Oberchairman
Yuri Blanarovich, K3BU

Montville Oktoberfest Dinner - Dance

Saturday, October 11, 2003 7 - 11 p.m.

Dinner includes:
Main course:
Sauerbraten mit gravy, Bratwurst,
Spaetzel, Red Cabbage

Desert:
Applestrudel, Coffee, Soft drinks

Main attraction:
Spaten Oktoberfest Beer on tap

For dancing and listening pleasure:
DJ music by popular European bands

by Knights of Columbus
at Msgr. Meyer Parish Center
St. Pius X RC Church
24 Changebridge Rd., Montville, NJ 07045

Admission $25/person, dinner and drinks included, BYOB setups

Reservations required by 10/4, tables for groups of 8 - 12 available

Call Yuri Blanarovich, tel. 973 808-1981, Email K3BU@aol.com
or mail your reservations by Oct. 4th with checks made to
St. Pius X KoC,
Box 282, Pine Brook, NJ 07058

Bring your friends and have a great time!

Ein prosit!

986. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:28:51 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F68C403.80FA54A7@uci.edu>
Source record: 108151

Richard Clark wrote:
> The quality (sic) of other
> discussion that usually attends this issue from more than a few
> correspondents, the source somehow deserves some special status where
> it magically exhibits no loss, no gain, no reflection, total
> reflection, and each-or-all uttered by those who go numb when asked
> just what quantitative value enforces such mysterious actions they
> purport to occur.

Easy for you to say. Would you mind diagraming that sentence?

> Such is the kulture of Institutionalized Ignorance that exists.

Indubitably.

73 de ac6xg

987. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:32:53 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <KLe1JEO1TMa$Ew1r@pickmere.demon.co.uk>
Source record: 108152

In message <18197-3F68B13F-38@storefull-2314.public.lawson.webtv.net>,
Richard Harrison <richardharrison@webtv.net> writes
>Richard Clark wrote:
>"Has anyone here actually measured SWR without using a diode?"
>
>I did something similar and could have used the same rig to measure SWR
>in a feedline.
>
>I used a wire loop which included a thermoammeter suspended from a
>horizontal antenna element. I pulled this along the element to measure
>its current distribution using a long tow rope and a telescope.
>
>Pulled along a transmission line wire, this would have produced the
>currents at the minima and maxima along the wire. From these we could
>calculate SWR.

This was a common task for the students at Marconi College in the 50's.

The meter was read with binoculars.

Mike
--
M.J.Powell

988. Re: What is Pfwd and Pref with Complex Zo?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 20:58:39 UTC
From: richardharrison@webtv.net
Message-ID: <18196-3F68CAFF-111@storefull-2314.public.lawson.webtv.net>
Source record: 108153

Reg, G4FGQ wrote:
"Voltage is a function of position along the slot even when a standing wave is NOT present."

Yes but within the short length of a short slotted line, the line loss is likely so small that the voltage will appear constant along the slot in the absence of a reflected wave.

Best regards, Richard Harrison, KB5WZI

989. Re: Bird wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 21:26:47 UTC
From: richardharrison@webtv.net
Message-ID: <18196-3F68D197-113@storefull-2314.public.lawson.webtv.net>
Source record: 108155

Mike Powell wrote:
"This was a common task fot the students at Marconi College in the
`50`s."

The student practice had a commercial application. It was in the same decade but at a different locale. It was during the tune-up of a SW broadcast curtain array near Lisbon, Portugal.

Best regards, Richard Harrison, KB5WZI

990. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 21:46:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f68d7f2$1_6@corp.newsgroups.com>
Source record: 108156

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>Sorry, I don't see anything. I don't have the book. I drove over to
>>Texas A&M to see what equation 7.34 really looks like when it is not
>>forced into ASCII characters.
>
> Then there is no reason to expect you have access to any other page
> you asked me for is there?

Of course there is, Richard. I just bought a new Harley Road King Classic
and relish any reason to ride it over to the Texas A&M library.

> ... the source somehow deserves some special status where
> it magically exhibits no loss, no gain, no reflection, total
> reflection, ...

I agree with you on that point. But there seems to be little
choice except the above due to measurement problems.

> Such is the kulture of Institutionalized Ignorance that exists.

I tend to agree but the ignorance is caused by the difficulty in making
meaningful measurements. It's like, "Prove that God doesn't exist."
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

991. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 22:27:13 UTC
From: richardharrison@webtv.net
Message-ID: <18196-3F68DFC1-119@storefull-2314.public.lawson.webtv.net>
Source record: 108159

Reg wrote:
"How does each repeater generate its unique pilot tone when a trawler or earthquake breaks the inner conductor?"

Well, I`ve checked and find that some subsea multiplex units do generate pilot tones for the purpose I speculated and for others. There is an "SD" model equipment in which each group modulator generates a pilot tone used for switching, level adjustment, equalization, etc. If these tones are being recorded and start losing power, I expect they fade away but die all at once when the path is interrupted. By examining the record, it should be possible to see which tones suffered sudden death and which faded away. There is capacitance in the system and the power is high-voltage and low current. My information says there is 5500 volts at each end of the transatlantic cable and that the system current drain is 389 milliamperes. It has 182 repeaters spaced at about 23 miles. An equalizer follows each 10th repeater.

I have experience doing similar things with terrestrial radio multiplex. We used cheap pressure stamping Rust-Rack event recorders to record breaks in pilot reception. I`ve pored over years of these records, 24 hours at a time.

Best regards, Richard Harrison, KB5WZI

992. LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 22:29:37 UTC
From: fumper@aol.com
Message-ID: <20030917182937.23306.00000921@mb-m19.aol.com>
Source record: 108157

I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
Steve

993. Re: NYC, NNJ Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 22:37:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmhohkti8itc2e@corp.supernews.com>
Source record: 108158

Yuri Blanarovich wrote:
> Howdy Antenna and other Radio Afficionados!
>
> Here it is again, if you missed it last year, here is your chance to have radio
> and polka fun at Montville, NJ Oktoberfest!
>
> There will be special Ham tables or you can book your exclusive. The price is
> paltry $25 per person, no need for donations, bribes or taxes. Unbelievable fun
> fueled by original, direct from Schwartzwald - Spaten Oktoberfest Bier on tap,
> all you can drink! You can also bring your favorite booze, setups - glasses
> will be provided, no need to hide it. Don't miss it, make your reservations now
> before we run out of tables.
>
> Easy to get to: from Hwy 80 take 287 north, to exit 47 for 202 east, about 1/4
> mile make right at traffic light by Exxon onto Changebridge Rd., St. Pius X
> Church and center is about 1/2 mile on the left, plenty of parking. No need to
> travel to Germany, it is right here in your backyard.
>. . .

Some backyard. I wouldn't even have to travel twice as far to get to Germany than to get to your ham radio beer garden.

I hope this newsgroup doesn't become a posting ground for every regional hamfest in the world, or even the U.S., or even New Jersey. Wouldn't rec.radio.amateur.misc be more appropriate, if any group at all is? Or do you think the readers of this group would be interested in hearing about the swapfest at Rickreall twice a year or the convention at Seaside? I'm sure there are a few others that you guys in NJ would love to attend.

Roy Lewallen, W7EL

994. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:07:29 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F68E6D7.A827E40D@gte.net>
Source record: 108160

Fumper wrote:

> I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> Steve

Gets a tad big at 0 MHz.

Dale W4OP

995. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:09:57 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <7R5ab.139846$kP.76114@fed1read03>
Source record: 108161

Such an antenna will be huge, see ARRL Antenna Book (17th Edition).
Example: It states a 3.5 MHz to 28 MHz discone would be 75 feet high and
huge circular areas above and below as well.

But from 7 MHz to 28 MHz, an HF discone would be about 36 feet high and the
above circular portion about 26 feet.
Still a big fella.

Construction details are given in the ARRL Antenna Book - mine is 16th
edition
Photos included

--
73 From The Signal In The Noise
Caveat Lector Ya All

"Fumper" <fumper@aol.com> wrote in message
news:20030917182937.23306.00000921@mb-m19.aol.com...
> I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> Steve

996. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:20:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <doqhmv4abcv21ruq958oao94btujk17v74@4ax.com>
Source record: 108162

On Wed, 17 Sep 2003 13:28:51 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Easy for you to say. Would you mind diagraming that sentence?

Hi Jim,

Odd that you should ask. In fact I could, and it would be quite easy
except for the restraint of display imposed here. Unlike many of my
cohorts working on their BA English, I took a bonehead class in
sentence analysis and I am still proficient. Consult:
http://www.cybernalysis.com/diagrams/diagrams.htm

73's
Richard Clark, KB7QHC

997. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:42:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m2rhmv8kpmp71g8stb6rcpajopc50ouut9@4ax.com>
Source record: 108163

On Wed, 17 Sep 2003 16:46:23 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>>Sorry, I don't see anything. I don't have the book. I drove over to
>>>Texas A&M to see what equation 7.34 really looks like when it is not
>>>forced into ASCII characters.
>>
>> Then there is no reason to expect you have access to any other page
>> you asked me for is there?
>
>Of course there is, Richard. I just bought a new Harley Road King Classic
>and relish any reason to ride it over to the Texas A&M library.

Fine, you can start with the illustration offered on the page facing
your referenced equation. You may notice no one here is willing to
give you any help. They act like this is minefield where any mis-step
will make them an amputee candidate in the theory ward.

>
>> ... the source somehow deserves some special status where
>> it magically exhibits no loss, no gain, no reflection, total
>> reflection, ...
>
>I agree with you on that point. But there seems to be little
>choice except the above due to measurement problems.

Measurement problems are in direct proportion for those that try to
first calibrate the bone density between their ears. The difficult
part is using simple calipers and a common ruler.

For newcomers it is easily within their skill. Two resistors, a hank
of transmission line, less than an hour's effort and they are done
with unambiguous results. Clearly many, older and slower "students"
here prefer the comfort of ambiguity that so mimics their conditions
of mental constipation.

>
>> Such is the kulture of Institutionalized Ignorance that exists.
>
>I tend to agree but the ignorance is caused by the difficulty in making
>meaningful measurements. It's like, "Prove that God doesn't exist."

Cecil,

You stand head and shoulders above that crowd of midgets. Hit the road and prove you can find that page's illustration and I might suggest several more. Post your query (with proof of reading) from the student union computers and I will fulfill that offer to save you time; otherwise find yourself some hog babe along the way, follow the road out of Texas and enjoy life instead. Choices, choices, choices....

73's
Richard Clark, KB7QHC

998. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:48:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <meshmvc8uhr1dg31v6gvpcoc0gdu3afgt6@4ax.com>
Source record: 108164

On Wed, 17 Sep 2003 16:09:57 -0700, "Caveat Lector" <CL@latin.com>
wrote:

>But from 7 MHz to 28 MHz, an HF discone would be about 36 feet high and the
>above circular portion about 26 feet.
>Still a big fella.
>
>Construction details are given in the ARRL Antenna Book - mine is 16th
>edition
>Photos included

A better, comparative source may be found at:
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm

It hardly equals a construction project, which is quite difficult in
fact (building the disc of the discone), but it does offer a
significant appreciation of the simple design aspect of how to flare
the cone part of the discone.

73's
Richard Clark, KB7QHC

999. Re: Populating my tower from scratch... need opinions on antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-17 23:56:28 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ZpKdnd8M15AqafWiU-KYvA@comcast.com>
Source record: 108165

"Pat MacKinnon" <pmk2002@foxhollow.ca> wrote in message
news:BB8D233D.954%pmk2002@foxhollow.ca...
> Okay, here's the situation:
>
>>
> All feed lines will be 9913 and 9914 except for the 23cm feed which will
be
> 7/8" hardline.

Make sure the 9913 (I don't know about 9914) is run so that if water gets in at the antenna end, it will drain back out the same way. Once 9913 gets water in one end, it WILL act like a hose, since it is semi hollow on the inside. The 9913 FLEX is OK.

Tam/WB2TT

1000. Re: NYC, NNJ Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 00:16:55 UTC
From: richardharrison@webtv.net
Message-ID: <13801-3F68F977-114@storefull-2316.public.lawson.webtv.net>
Source record: 108166

Yuri wrote:
"See you all there!"

You got Hof Brau und Wil Glahe? I`ll be there snell!

Best regards, Richard Harrison KB5WZI

1001. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 01:33:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkb222fhg1@hercules.btinternet.com>
Source record: 108167

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:18196-3F68DFC1-119@storefull-2314.public.lawson.webtv.net...
> Reg wrote:
> "How does each repeater generate its unique pilot tone when a trawler or
> earthquake breaks the inner conductor?"
>
> Well, I`ve checked and find that some subsea multiplex units do generate
> pilot tones for the purpose I speculated and for others. There is an
> "SD" model equipment in which each group modulator generates a pilot
> tone used for switching, level adjustment, equalization, etc. If these
> tones are being recorded and start losing power, I expect they fade away
> but die all at once when the path is interrupted. By examining the
> record, it should be possible to see which tones suffered sudden death
> and which faded away. There is capacitance in the system and the power
> is high-voltage and low current. My information says there is 5500 volts
> at each end of the transatlantic cable and that the system current drain
> is 389 milliamperes. It has 182 repeaters spaced at about 23 miles. An
> equalizer follows each 10th repeater.
>
> I have experience doing similar things with terrestrial radio multiplex.
> We used cheap pressure stamping Rust-Rack event recorders to record
> breaks in pilot reception. I`ve pored over years of these records, 24
> hours at a time.
>
> Best regards, Richard Harrison, KB5WZI

==========

OK, Richard, so we've located by some automatic means the cable damage to be somewhere between the n'th and (n+1)'th repeaters. This is nowhere good enough for the repair ship captain. He wants to be back in port again for Christmas. And it costs a million dollars in lost revenue each day the cable is out of service plus the cost of keeping an 8000-ton ship and its crew at sea.

The repair ship is just leaving Southampton docks. There's an Atlantic storm brewing. There are spare lengths of cable and repeaters aboard. This time they remember to collect the cable jointer. The ship's doctor retires to his cabin as he is always sea-sick. The ship's Chief Engineer Officer, always a Scotsman, and the Cable Testing Officer, neither of whom ever seem to have anything to do, are outside the duty-free bar waiting for it to open.

The captain is pacing up and down the bridge waiting impatiently for a radio message, cursing the poor fellow at the cable terminal station 500 miles away on the Scottish rocky Atlantic coast, who is sweating blood twiddling

knobs trying to balance the wideband, 0.05 to 50 Hz, reflection-coefficient bridge to within plus or minus 0.1 miles along the articial line and adjusting the artificial fault (R and C in parallel) to within 10 ohms with a biassing current of 50 milliamps.

After another couple of hours with a sliderule, correcting for seasonal water temperature, etc., he changes his mind for the tenth time, takes another swig of scotch, plucks up courage, swallows, and calls the operator. He asks to send an urgent radio telegram to a cable ship heading westwards down the English Channel. The message is brief, polite and states "Fault estimated to be 623.7 miles from Oban". The captain issues a brief instruction to the duty officer and retires to the loneliness of his cabin.

It is deep dusk. The lights of Plymouth from where Drake set sail 400 years before can be seen on the starboard horizon. The radar ppi display in the darkness of the bridge sweeps round monotonously every three seconds clearly displaying a dozen merchant ships sharing the roughening waters.

The ships engines quietly, monotonously, emit a steady thud, thud, thud, thud . . . . . until they merge unnoticed into everybody's unconsciousness and on deck only the sea and wind can be felt and heard.

Reg.

1002. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 02:20:09 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309171820.6be854fd@posting.google.com>
Source record: 108168

kd1@sympatico.ca wrote in message news:<3F6297D5.9E3225C@sympatico.ca>...
>
> Its not. Its 3.8 volts, which is entirely consistent with circuit
> theory and 'classic' rho. Not only is it higher than the incident
> voltage, it is higher than the source voltage.
>

Ok, now take the capacitor off, and measure the voltage at the end
of the inductor. What do you get?

>
> > And the reflected power can never be greater than the incident.
>
> Classic rho does seem to produce all the proper voltages.
> And using the equations implemented in a directional voltmeter,
> we get back the expected Vfwd and Vrev.
>
> Using revised rho does not produce the voltages computed with
> circuit theory, nor those measured on the bench.
> So revised rho does not seem to be the answer to the power
> dilemma.
>
> ...Keith

Not really. A rho= -1 means something else with a complex
Zo.

Hint: What is the center of the Smith Chart when it is normalized
to Zo=50+j50?

Slick

1003. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 02:21:39 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309171821.19028a75@posting.google.com>
Source record: 108069

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<u-ScnRJLwN9sTPiiU-KYvA@crocker.com>...
> "David Robbins" <k1ttt@arrl.net> wrote in message
> news:eZSdnRy-kpeqk_6iU-KYuA@crocker.com...
>
> > i think the more important thing now is to point out to the arrl the error
> > of using that form of the reflection coefficient in place of the
> > 'conventional' one in the latest antenna book so it doesn't become gospel
> in
> > the future.
> >

Conventional RC formula is fine, just assume Zo is purely real,
which is what you almost always do anyways.

Slick

1004. Re: NYC, NNJ Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 03:36:48 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030917233648.23785.00001281@mb-m22.aol.com>
Source record: 108070

concerned W7EL:

>I hope this newsgroup doesn't become a posting ground for every regional
>hamfest in the world, or even the U.S., or even New Jersey.

I am terribly sorry for trying to offer NYC - NNJ radio aficionados the opportunity to discuss reflections, SWR, and "what kind of antenna should I put up" topics in person, while having fun dealing with real people, instead of Internetchiks.

Sorry to disturb this highly charged NG and take your attention away from Fractals, CFAs, EHs, SWRs and wet coax.

Long live antenna police, long live SWR and keep your heads inside the radios, Isabel is coming (but that is localized too, shoot.)

BUm

Spaten Oktoberfest Bier ist sehr gut!

1005. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 04:16:18 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f6932cd_3@news1.prserv.net>
Source record: 108071

Model 230 from Antenna Products. (817) 325-3301

TCI makes one also, but I can't lay my hands on the catalog at the moment.
Call them at (415) 961-9180 and ask for their HF inverted cone.

Telex/HyGain also sold one, but I think they discontinued it a few years
back. Might look them up and try there also, theirs were always a few
thousand dollars cheaper than TCI, Granger or Antenna Products.

--
Crazy George
Remove NO and SPAM from return address
"Fumper" <fumper@aol.com> wrote in message
news:20030917182937.23306.00000921@mb-m19.aol.com...
> I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> Steve

1006. Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 07:16:00 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkbm3i$en3$1@nic.grnet.gr>
Source record: 108072

Permit me please to conclude
my point of view on the Complex Z0 subject
with three
claims:

1.
The well known relation

|rho| =< 1 + Sqrt[2]

has been sharpened
to be exactly

|rho| =< Sqrt[(1+Sin|to|)/(1-Sin|to|)]

where 'to' is the 'angle' of rho.
This is a
claim
that no one else has verified it.

2.
Also,
the well known relation

|Xo|/Ro =< 1

is sharpened too, to be exactly

|Xo|/Ro =< min{ a/b, b/a }.

This is as well a
claim
no one else has verified it yet.

3.
The well known non-violation of the
Principle of Conservation of Energy
at any point of a line,
has been found to be surely valid
only at the terminal load.
There is no proof yet of its validation
at any other point.
Once again this is a
claim
no one else has verified it.

The impressive worm with which
these facts

have been generally welcomed
by the members of the current Newsgroup
-devoted to the Amateur Truth I presume-
it seems that is a characteristic
of the contemporary Amateur Ethics.

In any case,
I would delightedly look forward
for any contribution
to these three matters.

But until then

-Farewell my Darling, Complex Z0!

Sincerely,

pez
SV7BAX

1007. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 07:55:13 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkbod2gvh1@nic.grnet.gr>
Source record: 108073

The a, b are the propagation constants
and of course,
'to' is not the 'angle' of the
Reflection Coefficient rho
but that of
Z0 = Ro +j Xo.

It has rather to do with
the emotional charge of the moments...

Sincerely,

pez
SV7BAX

1008. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 08:26:04 UTC
From: richardharrison@webtv.net
Message-ID: <18196-3F696C1C-187@storefull-2314.public.lawson.webtv.net>
Source record: 108074

Reg, G4FGQ wrote:
"The captain is pacing up and down the bridge waiting impatiently for a radio message, cursing the poor fellow at the cable terminal 500 miles away on the Scottish rocky Atlantic coast, who is sweating blood twiddling knobs trying to balance the wideband, 0.05 to 50 Hz reflection-coefficient bridge to within plus or minus 0.1 miles along the artificial line and---."

O.K., plus or minus 25 miles isn`t close enough to find a sunsea cable fault.

I`ve found broken pipelines offshore by placing an audio tone on the pipe and grounding the second tone generator connection. The diver uses a search coil to locate the tone on the pipeline and follows it out the pipe until it drops off precipitously at the break in the pipe. This works like gangbusters.

A cable is not necessary to communicate with a repeater on the ocean floor. Acoustic (ultrasonic) communications work well at sea. Equip your repeaters with acoustic communications gear and you can find them and talk to them and get them to reporrt to you and to execute your orders even if the cable is cut on both of their sides.

The company I served for 26 years found oil and gas in waters of ever increasing depth. They then produced, transported, refined, and distrubited the oil and gas and produvcts derived from the oil and gas. This was one of the company`s many lines of business. We also were in banking, insurance, farming, real estate, and manufacturing many things including tractors, automotive parts. nuclear war ships, liquified natural gas tankers, packaging, plastics, and at one time electronics parts and systems.

In the deeper waters it became very expensive to install offshore platforms so we switched to subsurface production and control facilities on the ocean floor. We used acoustic location , status, measuring, monitoring, and control facilities.

This was before global positioning systems (GPS) and every bucket of sea water looked very much like any other. That required the acoustic locating equipment. It amounted to a transponder that when interrogated, responded with its reply that could be homed in upon.

We would travel by helicopter or boat to a location near the equipment for data and control. We then dunked our transducer and used it to guide us to our gear. Once we were stationed just over our gear we demanded a status report. If adjustment were needed, it was so ordered and when

executed we got an updated status report indicating the successful operation.

30 years ago when this operation was initiated, the available acoustic equipment was nearly all designed for deep water as found in the ocean depths. This is because it had been developed for the defense department to keep track of Soviet submarines etc. We were initiating monitiring and control using acoustics in water only a few hundred feet deep in the Gulf of Mexico. So we had to pay for developing shallow-water acoustic equipment. Fortunately this shallow-water equipment worked well in the Gulf of Mexico, as expected.

GPS obviates the homing in on your equipment. You can locate exactly over your equipment with very few problems.

Battery power can be installed for data acquisition and control on the ocean floor even though the repeaters are powered from shore. The acoustic equipment could be located at each repeater.

Web found batteries could last for about 5 years on the ocen bottom. Ours had no opportunity for recharging. We found the battery was going to perish from age in 5 years even though it is kept cool by its site and a large enough battery is used to handle the discharge demanded of the battery.

You could dunk a transducer near a repeater and interrogate for almost any type and number of data points. You can now make the box smart and program it to do all sorts of things. It could be designed to perform various diagonistics on demand and to automatically store a variety of information.

We traveled to the acquisition and control point. This might be avoided by long-range acoustic communications as a "PlanB" just in case the offshore point was hard to reach.

Weather in the Gulf of Mexico is usualy so good that you don`t have to wait too long to make a trip out into the gulf. In the North Sea and the Atlantic I think the weather is less good.

Best regards, Richard Harrison, KB5WZI

1009. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 09:50:38 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Jdfab.6346$v%5.3723@fed1read02>
Source record: 108075

"Dale Parfitt" <parinc@gte.net> wrote in message
news:3F68E6D7.A827E40D@gte.net...
>
>
> Fumper wrote:
>
> > I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> > Steve
>
> Gets a tad big at 0 MHz.
>
> Dale W4OP
>

Far-field is really, really far out, and the efficiency is pretty bad too.

Ed
WB6WSN

1010. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 11:42:04 UTC
From: kd1@sympatico.ca
Message-ID: <3F699A0C.5FA23405@sympatico.ca>
Source record: 108076

"Dr. Slick" wrote:
>
> kd1@sympatico.ca wrote in message news:<3F6297D5.9E3225C@sympatico.ca>...
> > >
> > > Its not. Its 3.8 volts, which is entirely consistent with circuit
> > > theory and 'classic' rho. Not only is it higher than the incident
> > > voltage, it is higher than the source voltage.
> >
> > Ok, now take the capacitor off, and measure the voltage at the end
> > of the inductor. What do you get?

Not possible for me. My scope probes are in the order of 15 pf, which
is signifcant for this experiment.

But try using classic rho and revised rho to predict the results for
a shorted load (Zl = 0). Only classic rho gives a reasonable result
for voltage and current.

> > > And the reflected power can never be greater than the incident.
> > >
> > > Classic rho does seem to produce all the proper voltages.
> > > And using the equations implemented in a directional voltmeter,
> > > we get back the expected Vfwd and Vrev.
> > >
> > > Using revised rho does not produce the voltages computed with
> > > circuit theory, nor those measured on the bench.
> > > So revised rho does not seem to be the answer to the power
> > > dilemma.
> >
> > Not really. A rho= -1 means something else with a complex
> > Zo.
> >
> > Hint: What is the center of the Smith Chart when it is normalized
> > to Zo=50+j50?

Let's review. Two competing proposals (classic and revised rho) were
used to predict the outcome of an experiment. The experiment was
performed; the results resoundingly in favour of classic rho.

Are you questioning the scientific method or just the results of
this experiment? If the former, the discussion should probably
move to a different group; if the latter, you are invited to
replicate the experiment and demonstrate that an error was made.

Otherwise, there is no reasonable choice except to accept that
classic rho correctly predicts the reflected voltage.

...Keith

1011. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 11:49:39 UTC
From: kd1@sympatico.ca
Message-ID: <3F699BD3.2F23736D@sympatico.ca>
Source record: 108077

"Dr. Slick" wrote:
>
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<u-ScnRJLwN9sTPiiU-KYvA@crocker.com>...
> > "David Robbins" <k1ttt@arrl.net> wrote in message
> > news:eZSdnRy-kpeqk_6iU-KYuA@crocker.com...
> >
> > > i think the more important thing now is to point out to the arrl the error
> > > of using that form of the reflection coefficient in place of the
> > > 'conventional' one in the latest antenna book so it doesn't become gospel
> > in
> > > the future.
> > >
>
> Conventional RC formula is fine, just assume Zo is purely real,
> which is what you almost always do anyways.

In another branch of this thread it has been demonstrated that the
conventional RC formula correctly predicts the reflected voltage
for lines with non-real Z0. Convential RC is the general predictor
for transmission lines.

The caveat is that for lines with non-real Z0, |rho|^2 can not be
used to predict reflected power. |rho|^2 predicts power only for
the special case of lines with real Z0.

...Keith

1012. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 11:55:55 UTC
From: kd1@sympatico.ca
Message-ID: <3F699D4B.E12CCC30@sympatico.ca>
Source record: 108078

pez wrote:
> 3.
> The well known non-violation of the
> Principle of Conservation of Energy
> at any point of a line,
> has been found to be surely valid
> only at the terminal load.
> There is no proof yet of its validation
> at any other point.
> Once again this is a
> _claim_
> no one else has verified it.

Is the following a proof?

At any point on the line, the line can be cut and the load side replaced with a lumped impedance which presents the same impedance as was presented by the line with its load.

The conditions on the source side of the cut do not change when this is done. Since this new lumped impedance is a terminal impedance, Conservation of Energy is not violated.

Therefore Conservation of Energy will not be violated when this lumped impedance is removed and the line is restored to its former state.

...Keith

1013. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 12:07:55 UTC
From: kd1@sympatico.ca
Message-ID: <3F69A01B.D1B1BD5B@sympatico.ca>
Source record: 108079

Richard Harrison wrote:
>
> Keith wrote:
> "Can anyone provide a clear definition of forward and reflected powers?"
>
> Power in the load = forward power - reflected power.

Finally. You have seen the light.

Once you know the value of Pload, you can pick any pair of numbers
for Pfwd and Pref satisfying the above relation and you now KNOW
Pfwd and Pref. This is about as useful as the concept gets.

Toss it away.

Stick with Vfwd and Vref; they always work. There is no need for
caveats like 'sort of works when Z0 is mostly real'. And you
won't be misled into questions like 'where does the reflected
power go?' and 'how does reflected power fry the final?'

...Keith

1014. Re: Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 13:55:44 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bkcdh3$1cri$1@f04n12.cac.psu.edu>
Source record: 108081

But a gamma match is an un-balanced load and a 1:1 balun is not needed.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Bob Miller" <bxmiller@texas.netNOSPAM> wrote in message
news:5plkmvov9u1v4n517sgsvf3oudnf0uk7fs@4ax.com...
> On Tue, 16 Sep 2003 15:40:54 -0600, Bill VanAlstyne
> <Bill.VanAlstyne@xilinx.com> wrote:
>
> >I want to create an air RF choke in the end of my RG-8/U feedline going
> >to the gamma match on my 6M yagi. Does anyone have a good workable
> >formula (number of turns of RG-8/U and diameter of coil)?
> >
> >Bill / W5WVO
> >
>
> You might be able to extrapolate from this info -- the arrl antenna
> book shows a 21 mhz choke of rg-8 is 8 ft. of coax, 6-8 turns; a 28
> mhz choke is 6 ft., 6-8 turns.
>
> Bob
> k5qwg
>
>

1015. Re: Lightning protection question revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 13:58:58 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <bkcdn2$74s$0@208.207.71.157>
Source record: 108082

"H. Adam Stevens" wrote:

> "Ron" <rmrippy@hotmail.com> wrote in message
>

> The electric intensity in the
> vicinity of
> > the sharp point is high enough to break down the immediately surrounding
> air and
> > the continual discharge prevents building up sufficient voltage over the
> whole
> > cloud-to-ground path to break down this long path and give rise to a
> stroke of
> > lightning at this location."
> >
> > Comments?
> >
> > Ron, W4TQT
> >
> >
>
> It's called "sharp point discharge".
> It can be demonstrated with a swastika-shaped pinwheel with pointed ends
> sitting on a pivot bearing on a Van de Graff generator;
> fire it up, electrons fly off; it spins.
>
> You will get many opinions here regarding lightning.
> I can comment with an observation I've related here before.
> Football game: Rice @ Texas Tech, 1973.
> Lightning chose to blow a BIG hole in the concrete retaining wall next to
> the running track
> rather than hit the light poles.
> The game was called.
> Look it up.
>
> As far as scaling, think of things from the point-of-view of a thunderstorm:
> those things just look flat and the ions will follow their forces.
>
> The lightning rod physics is sound, but the amount of power available is so
> great, and thunderstorms are so HUGE, that
> shit happens, so be careful.
>

It is well known that you can only raise the voltage on a sharp point to
around 30,000 volts before coronal discharge occurs. Thus the ball shaped

electrodes on the HV generators intended to go way beyond 30K.

And the noted lightning strike is not that unusual, although most strikes wind up going to something tall.

>
> disconnect when suspect, lightning kills a few folks each year

Exactly. Lightning kills more people than all other weather phenomena.
Doesn't make the news since it usually takes them one or a few at a time instead of in large numbers. Like car crashes vs airliners. Small numbers don't make headlines.

Sometimes the concentration of electron charge is overwhelming and the "usual" becomes unusual.

Dick

1016. Re: Conductive paint ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 14:26:16 UTC
From: richardharrison@webtv.net
Message-ID: <29998-3F69C088-81@storefull-2311.public.lawson.webtv.net>
Source record: 108083

Ian, G3SEK wrote:
"Also beware of the nickel-based EM shielding paint which is magnetic and "meant to be lossy".

Good idea.

Does nickel-based paint make an aircraft disappear from the radar? I`m kidding but there are such paints and they should probably be avoided too.

I advised the questioner to SEARCH on "spray-on zinc". Doing that myself, there were many responses so the product must be popular. I saw offers of combined zinc and aluminum.

Due to their places at the top of the electromotive series, aluminum and magnesium may be considered more protective of steel than zinc. Metals at the top of the series tend to pass into ionic form more readily than metals lower in the series. The ions are formed by loss of electrons.

If aluminum is thought to give better protection, it`s probably not surprising to see it offered in a protective coating. Aluminum is one of the most abundant substances on earth, so its cost is likely reasonable even though refining is not as cheap as some other metals.

I did not study the responses very long, but I don`t remember any mention of nickel. If Ian says it is on the market, I believe it is available and is to be avoided.

Best regards, Richard Harrison, KB5WZI

1017. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 14:44:15 UTC
From: richardharrison@webtv.net
Message-ID: <29998-3F69C4BF-82@storefull-2311.public.lawson.webtv.net>
Source record: 108084

Keith wrote:
"Toss it away."

Terman and Bird Electronic Corporation say, Power in the load = forward power - reflected power.

Having long successful experience with the Bird wattmeter, I`ll stick with Terman and Bird.

Best regards, Richard Harrison, KB5WZI

1018. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 15:33:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f69d22c_1@corp.newsgroups.com>
Source record: 108085

kd1@sympatico.ca wrote:
> Stick with Vfwd and Vref; they always work.

On the contrary, from the results of Roy's calculations, it appears
that Vfwd and Vref cannot be used to predict total forward power and
total reflected power in a lossy line system.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1019. Re: Complex Z0 Clearness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 16:39:07 UTC
From: Geoff <vision105**@hotmail.com>
Message-ID: <Kclab.2706$I9.303@newsfep4-winn.server.ntli.net>
Source record: 108086

Hello,

Can you explain that in a simple sentence as what you have copied from a
book doesn't really make much sense!
Do you actually know what it means.

"pez" <pez7sv@hotmail.com> wrote in message
news:bka2c5sud1@nic.grnet.gr...
> Complex Z0 Clearness
> [Complex Z0 mini-Compendium for Example Builders - Part III]
>
> With the help of
> Mrs. yin,SV7DMC
> it was mechanically proved
> that:
>
> The transformation
> between any set of
> Propagation Characteristics
> (a, b, Ro, Xo),
> and its corresponding set of
> Distributed Circuit Coefficients
> (R', wL', G', wC')
> as well as of its inverse,
> for any proper complex Z0,
> namely one with X=/=0,
> is
>
> one-to-one
>
> everywhere
> on its domain and range of values,
> since its Jacobian equals to
>
> 4.|g|^2/|Zo|^2
>
> that is to say
> an obviously non-zero number.
>
>
> This result
> definitively clears any reservation
> on the building of examples
> within the frame of the
> Uniform Transmission Line Theory,

> as long as
> the propounded conditions
> are checked for their validation.
>
> Sincerely,
>
> pez
> SV7BAX
> &
> yin
> SV7DMC
>

1020. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 17:29:03 UTC
From: richardharrison@webtv.net
Message-ID: <13801-3F69EB5F-223@storefull-2316.public.lawson.webtv.net>
Source record: 108087

Keith wrote:
"Stick to the incident and reflected voltage (or current) waves for analysis. They work."

Bird Technical Series #1 may be enlightning:
"By proper combination of the two samples (derived from volts and amps) we obtain an RF voltage proportional to the square root of main line power---."

"---the scale which has been marked in watts corresponding to the power being sampled from the main line."

With a little review of wave behavior on transmission lines (I like Terman) in almost any good text, it is seen that voltage and current continuously vary along a line containing a reflection. This results from interference between the forward and reflected waves.

However, The power, forward or reflected, is free of the oscillations produced in the volts and amps by interference between forward and reflected waves. This steady power flow makes power the electrical property to measure and this was the impetus for the Bird wattmeter. It`s been around for about 50 years, and I`d wager it will be around for another 50 years.

Best regards, Richard Harrison, KB5WZI

1021. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 17:50:54 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vmjs2dtfhcin21@corp.supernews.com>
Source record: 108088

TCI has a cone antenna that will do the job.
http://www.tcibr.com/PDFs/550webs.pdf

73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3f6932cd_3@news1.prserv.net...
> Model 230 from Antenna Products. (817) 325-3301
>
> TCI makes one also, but I can't lay my hands on the catalog at the
moment.
> Call them at (415) 961-9180 and ask for their HF inverted cone.
>
> Telex/HyGain also sold one, but I think they discontinued it a few
years
> back. Might look them up and try there also, theirs were always a few
> thousand dollars cheaper than TCI, Granger or Antenna Products.
>
> --
> Crazy George

> "Fumper" <fumper@aol.com> wrote in message
> news:20030917182937.23306.00000921@mb-m19.aol.com...
> > I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> > Steve
>
>

1022. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 17:58:45 UTC
From: Caveat Lector <CL@latin.com>
Message-ID: <pnmab.143125$kP.131378@fed1read03>
Source record: 108089

Bet the HOA will love this one! 1.9 to 32 MHz --- 122 feet high -- hmmmm

Still haven't seen one down to zero Mega hertz -- Hi Hi

A more practical one (barely) ARRL Antenna Handbook
16th or 17th Edition
See 40M to 10M discone --- 30 some feet high

--
73 From The Signal In The Noise
Caveat Lector Ya All
"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vmjs2dtfhcin21@corp.supernews.com...
> TCI has a cone antenna that will do the job.
> http://www.tcibr.com/PDFs/550webs.pdf
>
> 73 Mac N8TT
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
>
> > "Fumper" <fumper@aol.com> wrote in message
> > news:20030917182937.23306.00000921@mb-m19.aol.com...
> > > I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> > > Steve
> >
> >
>

1023. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 18:08:57 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkcsbp$s7i$1@hercules.btinternet.com>
Source record: 108090

Whichever nitwit of a Ph.D invented imaginary 'power waves' should be made to provide a complete mathematical treatise, an indisputable proof of their existence, before going to bed on his wedding night.

1024. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 18:12:52 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkcsj4$6rk$1@sparta.btinternet.com>
Source record: 108091

> Toss it away.
>
And while you are about it - toss away the so-called meter.

1025. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 18:29:28 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <07CdnbNn1YDpZPSiXTWJiw@comcast.com>
Source record: 108092

"Caveat Lector" <CL@latin.com> wrote in message
news:pnmab.143125$kP.131378@fed1read03...
> Bet the HOA will love this one! 1.9 to 32 MHz --- 122 feet high -- hmmmm

wait till december, call it a christmas tree with halo.

1026. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 18:41:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f69fc52$1_2@127.0.0.1>
Source record: 108093

Reg Edwards wrote:
> Whichever nitwit of a Ph.D invented imaginary 'power waves' should be made
> to provide a complete mathematical treatise, an indisputable proof of their
> existence, before going to bed on his wedding night.

Hi Reg, If you don't like the word, "imaginary", just call it reactive
power. All it means is that the voltage and current are not in zero
phase. For 50-60 Hz power, it's called the power factor involving
watts = V*I*cos(theta), vars = V*I*sin(theta), volt-amps = V*I
--
73, Cecil, W5DXP

1027. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 19:51:08 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-1809031251080001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108096

In articles <bkbm3i$en3$1@nic.grnet.gr> and <bkbod2gvh1@nic.grnet.gr>,
"pez" <pez7sv@hotmail.com> wrote:

> 1.
> The well known relation
>
> |rho| =< 1 + Sqrt[2]
>
> has been sharpened
> to be exactly
>
> |rho| =< Sqrt[(1+Sin|to|)/(1-Sin|to|)]
>
> where 'to' is the 'angle' of rho.

> 'to' is not the 'angle' of the
> Reflection Coefficient rho
> but that of
> Z0 = Ro +j Xo.
>
> It has rather to do with
> the emotional charge of the moments...
>
> Sincerely,
>
> pez
> SV7BAX

In article <ryeburn-2808032231020001@bni030qny8kc.bc.hsia.telus.net>
the argument I gave showed that if you look at an ellipse with foci at
Z_0 and at - Z_0 then among the points Z_L on any such ellipse that are
in the fourth and first quadrants, the one for which the magnitude of
the reflection coefficient (non-conjugate definition, of course) is
maximized is the one on the imaginary axis near - Z_0 and far from Z_0,
i.e. having opposite reactance to that of Z_0. If you then use geometry,
or algebra, or even calculus if you feel compelled to use it, to see
which such point on the imaginary axis is best (i.e., which of the
ellipses of various eccentricities has the best "best" point) you will
find that the maximum occurs when the magnitude of Z_L is the same as
that of Z_0. In symbols, you will want to have
Z_L = +/- j sqrt ((R_0)^2 + (X_0)^2), where Z_0 = R_0 + j X_0 and the
sign to be chosen (+/-) is the opposite to that of X_0. When you use
this value of Z_L you will indeed get a reflection coefficient
magnitude of sqrt [(1 + sin |t_0|)/(1 - sin |t_o|)], thereby
confirming your formula

|rho| =< sqrt [(1 + sin |t_o|)/(1 - sin |t_o|)].

> This is a
> _claim_
> that no one else has verified it.

Now some one has. Details left for the reader -- you can think of what I wrote above as a "Heathkit proof" ;-)! I used to enjoy giving "Heathkit proofs" for my students to build; as they became more proficient, the construction manuals offered became sketchier and sketchier. Eventually the students got to the point where they could design and build their own rigs (er, proofs) and the days of "Heathkit proofs" were over for them.

> 2.
> Also,
> the well known relation
>
> |Xo|/Ro =< 1
>
> is sharpened too, to be exactly
>
> |Xo|/Ro =< min{ a/b, b/a }.
>
> This is as well a
> _claim_
> no one else has verified it yet.

I'll see if I can sketch a nice demonstration of this second result, preferably one that does *not* involve calculus ;-)!

David, ex-W8EZE, retired math professor, and not quite finished with either of these things

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

1028. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 19:56:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkd2lb$ib3$1@sparta.btinternet.com>
Source record: 108095

"Cecil Moore" wrote
> Reg Edwards wrote:
> > Whichever nitwit of a Ph.D invented imaginary 'power waves' should be
made
> > to provide a complete mathematical treatise, an indisputable proof of
their
> > existence, before going to bed on his wedding night.
>
>
> Hi Reg, If you don't like the word, "imaginary", just call it reactive
> power. All it means is that the voltage and current are not in zero
> phase. For 50-60 Hz power, it's called the power factor involving
> watts = V*I*cos(theta), vars = V*I*sin(theta), volt-amps = V*I
>
>
Cec, you disappoint me. At least you could have expressed a little sympathy
for the poor inconsummated bride. ;o)

1029. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 19:56:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmk3g42q9lfo36@corp.supernews.com>
Source record: 108094

<Chuckle>

You're right about that. All Vfwd and Vref can be used for is to predict:

-- Both average and instantateous power flowing at any point on the
line, including at the source and load
-- Voltage and current at any point on the line, including at the source
and load
-- Impedance seen at any point on the line, including at the source and load

But gee, whiz, not the "total forward power" and "total reflected power".

So, I'll let you play with whatever mysterious equations you use to
predict those two quantitites, whatever they are and whatever they mean
to you, and I'll settle for just knowing all the voltages, currents,
impedances, and powers.

Roy Lewallen, W7EL

Cecil Moore wrote:
> kd1@sympatico.ca wrote:
>
>> Stick with Vfwd and Vref; they always work.
>
>
> On the contrary, from the results of Roy's calculations, it appears
> that Vfwd and Vref cannot be used to predict total forward power and
> total reflected power in a lossy line system.

1030. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 20:31:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a16ae_2@127.0.0.1>
Source record: 108097

Roy Lewallen wrote:
> So, I'll let you play with whatever mysterious equations you use to
> predict those two quantitites, whatever they are and whatever they mean
> to you, and I'll settle for just knowing all the voltages, currents,
> impedances, and powers.

Point was that your <fP> didn't represent the total forward power
and resulted in the false conclusion that reflected power was greater
than forward power. If the total average Poynting vector points toward
the load, it is impossible for the total reflected power to be greater
than the total forward power.
--
73, Cecil, W5DXP

1031. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:10:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmk7q15nmdr057@corp.supernews.com>
Source record: 108098

Yep, I restricted my definition of "forward power" <fP> to the same one you've always used -- the average power calculated from the forward V and I. And the "reverse power" <rP> to the same one you've always used -- the average power calculated from the reverse V and I. (It's what you've been calling the "power in the forward wave" and "power in the reverse wave" respectively.) And then, using those definitions of yours, I showed in the analysis that the "forward power" can be less than the "reverse power", while still delivering net power to the load. Cool, huh?

Fact is, I'm not having any trouble at all resolving this. But then I don't have any investment in the notion of waves of average power bouncing around on a line.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So, I'll let you play with whatever mysterious equations you use to
>> predict those two quantitites, whatever they are and whatever they
>> mean to you, and I'll settle for just knowing all the voltages,
>> currents, impedances, and powers.
>
>
> Point was that your <fP> didn't represent the total forward power
> and resulted in the false conclusion that reflected power was greater
> than forward power. If the total average Poynting vector points toward
> the load, it is impossible for the total reflected power to be greater
> than the total forward power.
> --
> 73, Cecil, W5DXP
>

1032. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:10:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmk7qso8afsd6d@corp.supernews.com>
Source record: 108099

Amen.

Roy Lewallen, W7EL

kd1@sympatico.ca wrote:
> Richard Harrison wrote:
>
>>Keith wrote:
>>"Can anyone provide a clear definition of forward and reflected powers?"
>>
>>Power in the load = forward power - reflected power.
>
>
> Finally. You have seen the light.
>
> Once you know the value of Pload, you can pick any pair of numbers
> for Pfwd and Pref satisfying the above relation and you now KNOW
> Pfwd and Pref. This is about as useful as the concept gets.
>
> Toss it away.
>
> Stick with Vfwd and Vref; they always work. There is no need for
> caveats like 'sort of works when Z0 is mostly real'. And you
> won't be misled into questions like 'where does the reflected
> power go?' and 'how does reflected power fry the final?'
>
> ...Keith

1033. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:19:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a21f2$1_2@127.0.0.1>
Source record: 108100

Roy Lewallen wrote:
> I showed in the analysis that the "forward power" can be less than the
> "reverse power", while still delivering net power to the load. Cool, huh?

Actually pretty uncool. That's what happens when you don't deal with total average powers. You can come up with apparent violations of the conservation of energy principle that don't actually exist in reality. Your "forward power" is simply not all of the forward power. Just as explained in Dr. Best's QEX article, the constructive/destructive interference terms must also be taken into account.
--
73, Cecil, W5DXP

1034. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:27:09 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <Nqpab.40528$Aq2.18845@newsread1.news.atl.earthlink.net>
Source record: 108101

"Dale Parfitt" <parinc@gte.net> wrote in message
news:3F68E6D7.A827E40D@gte.net...
>
>
> Fumper wrote:
>
> > I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
> > Steve
>
> Gets a tad big at 0 MHz.
>
> Dale W4OP
>

You got that right. Had two of them at the SAC Fasttalk site I was at.
Think they stood 80 foot tall and took up couple of acres.

Dan/W4NTI

1035. Re: Complex Z0 Clearness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:27:15 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkd7vj$7a8$1@nic.grnet.gr>
Source record: 108102

| Geoff wrote:
|
| Hello,
|
| Can you explain that in a simple sentence
| as what you have copied from a
| book doesn't really make much sense!
| Do you actually know what it means.
|

Dear Geoff,

I am not so sure about what I have to explain
to prove that
I did not made just a copy of a book sentence...

Okay,
I will try,
I will do my best,
but I am afraid,
I am not in position
to do it in a simple sentence.
I need something more than this...

Let us suppose that
-for some reason, see below at (*)-
we begin by choosing, a set of four
"Propagation Characteristics"-"PCs" values
that is,
a couple of non negative values for a and b, not both zeroes,
a positive value for Ro
and a negative/zero/positive value for Xo.

This choice belongs necessarily
to one of the eleven cases referenced in the opening message
at the thread
"Complex Z0 Consistency".

From the above categorization and
according to which of additional condition
-if there is any-
is fulfilled,
we know definitely,
the kind of values of
the four "Distributed Circuit Parameters"-"DCCs":

These values are either zero or positive.

After that
we can apply a set of book formulas
-yes, here we need some copies from a _book_-
to calculate the DCCs.

It is now the time when
it comes the "Clearness" property
to assure us
that there is no reason to worry
about the calculated DCCs.
Apart from the fact that
these are the proper ones
we are sure,
without any further doubt,
that in addition this is
_the_only_one_
set of parameters
which obey the complete set of our requirements.

What is the next step, it depends.

I can think, off the cuff, two possibilities (*):

I.
If our task was to design and construct
a line presenting the
desired PCs
we have just completed only the easy very first step,
that of the design.
To go to the construction step we have to look for
the proper geometry and materials for a line,
capable to produce the calculated DCCs.
This is a truly difficult practical problem, indeed.

II.
If our desire was to built a working example
to enlighten or demonstrate
some aspects of the theory
then we are now fully equipped with the right
eight in total parameters plus frequency
to go on
without to worry that
any inconsistency surprise skulks in every next corner.

And conversely.

All the story is to be told once again,
but now beginning from DCCs to end with PCs.
Plus we have to deal with an analysis problem this time.

As I told you at the beginning,
-lets take into account the language barrier-

I am not so sure
if I attained to convince you,
this is the only way
by which we can gain a foothold
to concentrate exclusively,
devoid of cares,
in our central aim,
which usually is
to construct a line or build an example.

But I believe it is now
a complete and a right one.

Sincerely,

pez
SV7BAX

1036. Re: Complex Z0 Clearness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:28:49 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkd82h$7ce$1@nic.grnet.gr>
Source record: 108103

| Geoff wrote:
|
| Hello,
|
| Can you explain that in a simple sentence
| as what you have copied from a
| book doesn't really make much sense!
| Do you actually know what it means.
|

Dear Geoff,

I am not so sure about what I have to explain
to prove that
I did not made just a copy of a book sentence...

Okay,
I will try,
I will do my best,
but I am afraid,
I am not in position
to do it in a simple sentence.
I need something more than this...

Let us suppose that
-for some reason, see below at (*)-
we begin by choosing, a set of four
"Propagation Characteristics"-"PCs" values
that is,
a couple of non negative values for a and b, not both zeroes,
a positive value for Ro
and a negative/zero/positive value for Xo.

This choice belongs necessarily
to one of the eleven cases referenced in the opening message
at the thread
"Complex Z0 Consistency".

From the above categorization and
according to which of additional condition
-if there is any-
is fulfilled,
we know definitely,
the kind of values of
the four "Distributed Circuit Parameters"-"DCCs":

These values are either zero or positive.

After that
we can apply a set of book formulas
-yes, here we need some copies from a _book_-
to calculate the DCCs.

It is now the time when
it comes the "Clearness" property
to assure us
that there is no reason to worry
about the calculated DCCs.
Apart from the fact that
these are the proper ones
we are sure,
without any further doubt,
that in addition this is
_the_only_one_
set of parameters
which obey the complete set of our requirements.

What is the next step, it depends.

I can think, off the cuff, two possibilities (*):

I.
If our task was to design and construct
a line presenting the
desired PCs
we have just completed only the easy very first step,
that of the design.
To go to the construction step we have to look for
the proper geometry and materials for a line,
capable to produce the calculated DCCs.
This is a truly difficult practical problem, indeed.

II.
If our desire was to built a working example
to enlighten or demonstrate
some aspects of the theory
then we are now fully equipped with the right
eight in total parameters plus frequency
to go on
without to worry that
any inconsistency surprise skulks in every next corner.

And conversely.

All the story is to be told once again,
but now beginning from DCCs to end with PCs.
Plus we have to deal with an analysis problem this time.

As I told you at the beginning,
-lets take into account the language barrier-

I am not so sure
if I attained to convince you,
this is the only way
by which we can gain a foothold
to concentrate exclusively,
devoid of cares,
in our central aim,
which usually is
to construct a line or build an example.

But I believe it is now
a complete and a right one.

Sincerely,

pez
SV7BAX

1037. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:41:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmk9k3m47ddl0a@corp.supernews.com>
Source record: 108104

If you read my analysis, you'll see that there's no violation of the law of conservation of energy. All the power is accounted for. It's just not bouncing around in the neat packets that you envision. The "apparent" violation is entirely in your own mind.

And I'm still waiting for your analysis that illustrates how you think it should really work. But based on past responses, I'm not holding my breath. I'm afraid all we're going to get from you is more vague complaints about my analysis. But I hope you surprise me, and show by a reasoned mathematical analysis that you really understand what you're talking about.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I showed in the analysis that the "forward power" can be less than the
>> "reverse power", while still delivering net power to the load. Cool, huh?
>
>
> Actually pretty uncool. That's what happens when you don't deal with total
> average powers. You can come up with apparent violations of the
> conservation
> of energy principle that don't actually exist in reality. Your "forward
> power" is simply not all of the forward power. Just as explained in Dr.
> Best's
> QEX article, the constructive/destructive interference terms must also be
> taken into account.
> --
> 73, Cecil, W5DXP
>

1038. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 21:50:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a292f$1_2@127.0.0.1>
Source record: 108105

Roy Lewallen wrote:
> The "apparent" violation is entirely in your own mind.

You claim that the reflected power is greater than the forward
power while at the same time the Poynting vector points toward
the load. That's an obvious contradiction which can be remedied
simply by collecting like terms.
--
73, Cecil, W5DXP

1039. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 22:10:46 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A2D66.A5570408@sympatico.ca>
Source record: 108107

Richard Harrison wrote:
>
> Keith wrote:
> "Toss it away."
>
> Terman and Bird Electronic Corporation say, Power in the load = forward
> power - reflected power.

Well, Bird I don't expect much of. But if that is all Terman has to
say about Pfwd and Pref, he isn't worth much.

> Having long successful experience with the Bird wattmeter, I`ll stick
> with Terman and Bird.

I have often suspected that it is the existence and use of 'Bird watt'
meters that has convinced so many of the existence of forward and
reverse power; a belief which many seem absolutely unwilling to
relax their hold on despite the difficulties it causes them.

Ohhh, if only it had been called a TLI.

...Keith

1040. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 22:14:46 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkdaom$9uj$1@nic.grnet.gr>
Source record: 108106

Dear Keith,

Your conclusions are surely
(specifically) valid
_if_
we recall their assumptions,
which require a transmission line
with purely _Real_ Z0.

But,
lets state the problem
following your terms.

If we have a piece of a proper Complex Z0 line
- that is one with Xo =/= 0 -
terminated by a passive Impedance
then
we still have to prove that
its Input Impedance Formula,
-which, don't forget, is a result of
a _mathematical_ theory-
results in a non negative real part,
equivalent with a passive lumped Impedance,
even if
it has already the _physical_ dimensions
of the Resistance.

In other words
it is neither enough that
it has already
the _physical_ dimensions of the Resistance
nor
it is a valid one
in the special Real Z0 case.

Sincerely,

pez
SV7BAX

<kd1@sympatico.ca> wrote in message news:3F699D4B.E12CCC30@sympatico.ca...
| pez wrote:
| > 3.
| > The well known non-violation of the
| > Principle of Conservation of Energy
| > at any point of a line,

| > has been found to be surely valid
| > only at the terminal load.
| > There is no proof yet of its validation
| > at any other point.
| > Once again this is a
| > _claim_
| > no one else has verified it.
|
| Is the following a proof?
|
| At any point on the line, the line can be cut and the load
| side replaced with a lumped impedance which presents the same
| impedance as was presented by the line with its load.
|
| The conditions on the source side of the cut do not change
| when this is done. Since this new lumped impedance is a
| terminal impedance, Conservation of Energy is not violated.
|
| Therefore Conservation of Energy will not be violated when
| this lumped impedance is removed and the line is restored
| to its former state.
|
| ...Keith

1041. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 22:32:48 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A3290.272FA255@sympatico.ca>
Source record: 108109

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Stick with Vfwd and Vref; they always work.
>
> On the contrary, from the results of Roy's calculations, it appears
> that Vfwd and Vref cannot be used to predict total forward power and
> total reflected power in a lossy line system.

Of course if you let go of Pfwd and Pref and just used Vfwd and Vref
you would quickly learn that you had no interest in Pfwd and Pref
and thus your inability to determine them would not cause you
much distress.

Which is good since it will turn out that there is no value in
forward and reverse power on a line with non-real Z0.

...Keith

1042. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 22:46:48 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkdcko$bg3$1@nic.grnet.gr>
Source record: 108108

Dear Professor David or Jo Anne Ryeburn,

At Last!

Definitely I am a follower
of learning by doing techniques
and I am going now to study your article
to build a "Heathkit"
-how do you still remember such an old time legend?-
"Proof project",
by following the instructions...

Sincerely yours,

pez
SV7BAX

"David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
news:ryeburn-1809031251080001@bni030qny8kc.bc.hsia.telus.net...
| In articles <bkbm3i$en3$1@nic.grnet.gr> and <bkbod2gvh1@nic.grnet.gr>,
| "pez" <pez7sv@hotmail.com> wrote:
|
| > 1.
| > The well known relation
| >
| > |rho| =< 1 + Sqrt[2]
| >
| > has been sharpened
| > to be exactly
| >
| > |rho| =< Sqrt[(1+Sin|to|)/(1-Sin|to|)]
| >
| > where 'to' is the 'angle' of rho.
|
|
| > 'to' is not the 'angle' of the
| > Reflection Coefficient rho
| > but that of
| > Z0 = Ro +j Xo.
| >
| > It has rather to do with
| > the emotional charge of the moments...
| >
| > Sincerely,
| >
| > pez

| > SV7BAX
|
| In article <ryeburn-2808032231020001@bni030qny8kc.bc.hsia.telus.net>
| the argument I gave showed that if you look at an ellipse with foci at
| Z_0 and at - Z_0 then among the points Z_L on any such ellipse that are
| in the fourth and first quadrants, the one for which the magnitude of
| the reflection coefficient (non-conjugate definition, of course) is
| maximized is the one on the imaginary axis near - Z_0 and far from Z_0,
| i.e. having opposite reactance to that of Z_0. If you then use geometry,
| or algebra, or even calculus if you feel compelled to use it, to see
| which such point on the imaginary axis is best (i.e., which of the
| ellipses of various eccentricities has the best "best" point) you will
| find that the maximum occurs when the magnitude of Z_L is the same as
| that of Z_0. In symbols, you will want to have
| Z_L = +/- j sqrt ((R_0)^2 + (X_0)^2), where Z_0 = R_0 + j X_0 and the
| sign to be chosen (+/-) is the opposite to that of X_0. When you use
| this value of Z_L you will indeed get a reflection coefficient
| magnitude of sqrt [(1 + sin |t_0|)/(1 - sin |t_o|)], thereby
| confirming your formula
| |rho| =< sqrt [(1 + sin |t_o|)/(1 - sin |t_o|)].
|
| > This is a
| > _claim_
| > that no one else has verified it.
|
| Now some one has. Details left for the reader -- you can think of what I
| wrote above as a "Heathkit proof" ;-)! I used to enjoy giving "Heathkit
| proofs" for my students to build; as they became more proficient, the
| construction manuals offered became sketchier and sketchier. Eventually
| the students got to the point where they could design and build their own
| rigs (er, proofs) and the days of "Heathkit proofs" were over for them.
|
| > 2.
| > Also,
| > the well known relation
| >
| > |Xo|/Ro =< 1
| >
| > is sharpened too, to be exactly
| >
| > |Xo|/Ro =< min{ a/b, b/a }.
| >
| > This is as well a
| > _claim_
| > no one else has verified it yet.
|
| I'll see if I can sketch a nice demonstration of this second result,
| preferably one that does *not* involve calculus ;-)!
|
| David, ex-W8EZE, retired math professor, and not quite finished with either

| of these things
|
| --
| David or Jo Anne Ryeburn
| ryeburn@sfu.caz
| To send e-mail, remove the letter "z" from this address.

1043. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-18 23:09:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmkepdl4qljkde@corp.supernews.com>
Source record: 108110

It's simple, yet too complicated for you to actually do it and show us.

Over the years, I had the unfortunate experience to occasionally meet an engineer for whom everything was very simple. They could never understand why it took the rest of us so long to solve all those really trivial problems. But after watching these folks in action for a while, I noticed that they were somehow never able to actually produce any hardware that actually worked. When pressed, they were very skilled at working themselves into a spot where they wouldn't ever have to actually deliver a working device, changing groups, projects, or responsibilities whenever they got too close to actually having to deliver. One common ploy was to regard the mere creation of a working model beneath their dignity and an unworthy use of their great knowledge.

Surely you're not one of those, are you?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> The "apparent" violation is entirely in your own mind.
>
>
> You claim that the reflected power is greater than the forward
> power while at the same time the Poynting vector points toward
> the load. That's an obvious contradiction which can be remedied
> simply by collecting like terms.
> --
> 73, Cecil, W5DXP
>

1044. Re: echolink 132,000 users in 139 different countries

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 01:02:38 UTC
From: "Dick, AA5VU" <aa5vu@arrl.net>
Message-ID: <aa5vu-9A46B4.20023818092003@central.isp.giganews.com>
Source record: 108111

correction to earlier message

Don't forget the Macintosh users and the EchoMac software at

http://www.dogparksoftware.com/EchoMac.html

or

http://www.versiontracker.com/dyn/moreinfo/macosx/18881&vid=94517

73 de Dick, AA5VU

In article <1063695446.27144.36@lotis.uk.clara.net>,
g3zhi<g3zhi@hotmail.com> wrote:

> There are now over 132,000 callsigns registered in 139 different countries.
>
> There are daily additions, changes and deletions with over 1,000 new calls
> validated each week.
>
>
> For more information check
>
> http://web.radio-ham.org/radioham/documents/ARIC_Sep2003.zip
>
> http://www.echolink.org/links.asp
>
> http://www.echolink.org/logins.asp
>
> http://home.insightbb.com/~n9yty/
>
> 73 Ian G3ZHI
>
>
> http://www.qsl.net/g3zhi - has many ham radio links
>
>
> I usually monitor G4NJI node 5200 simplex 145.2875mhz
>
> Ian Abel G3ZHI
> 52 Hollytree Ave
> Maltby
> Rotherham
> Yorkshire
> S66 8DY
>

> Tel: 01709 799911
> Mobile 0776 481 3363
>
>
>

1045. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 01:11:49 UTC
From: radio913@aol.com
Message-ID: <20030918211149.20786.00001338@mb-m21.aol.com>
Source record: 108112

>In another branch of this thread it has been demonstrated that the
>conventional RC formula correctly predicts the reflected voltage
>for lines with non-real Z0. Convential RC is the general predictor
>for transmission lines.
>

I disagree with the demonstration. Maybe you are a bit biased?

:)

Use conventional RC formula for purely real Zo only, which is what we
mostly do anyways.

>The caveat is that for lines with non-real Z0, |rho|^2 can not be
>used to predict reflected power. |rho|^2 predicts power only for
>the special case of lines with real Z0.
>

This may be true, but are you saying that a capacitor can reflect an
RMS voltage wave that is greater than the one that charges it?

Slick

1046. Re: Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 01:13:07 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5plkmvov9u1v4n517sgsvf3oudnf0uk7fs@4ax.com>
Source record: 108080

On Tue, 16 Sep 2003 15:40:54 -0600, Bill VanAlstyne
<Bill.VanAlstyne@xilinx.com> wrote:

>I want to create an air RF choke in the end of my RG-8/U feedline going
>to the gamma match on my 6M yagi. Does anyone have a good workable
>formula (number of turns of RG-8/U and diameter of coil)?
>
>Bill / W5WVO
>

You might be able to extrapolate from this info -- the arrl antenna
book shows a 21 mhz choke of rg-8 is 8 ft. of coax, 6-8 turns; a 28
mhz choke is 6 ft., 6-8 turns.

Bob
k5qwg

1047. Mosley TA-53

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 01:17:12 UTC
From: Karl Sandstrom <k5man@cox.net>
Message-ID: <sOsab.184880$xf.178574@lakeread04>
Source record: 108113

I am looking for a complete manual for the Mosley TA-53. Please let me know if you can help.

1048. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 01:23:26 UTC
From: radio913@aol.com
Message-ID: <20030918212326.20786.00001339@mb-m21.aol.com>
Source record: 108114

>> kd1@sympatico.ca wrote in message news:<3F6297D5.9E3225C@sympatico.ca>...
>> >
>> > Its not. Its 3.8 volts, which is entirely consistent with circuit
>> > theory and 'classic' rho. Not only is it higher than the incident
>> > voltage, it is higher than the source voltage.
>>
>> Ok, now take the capacitor off, and measure the voltage at the end
>> of the inductor. What do you get?
>
>Not possible for me. My scope probes are in the order of 15 pf, which
>is signifcant for this experiment.
>

Afraid to measure it, eh? Go ahead, we can ignore the 15 pF for now, as
the
load was 100pF. What do you get?

>But try using classic rho and revised rho to predict the results for
>a shorted load (Zl = 0). Only classic rho gives a reasonable result
>for voltage and current.
>

Classic Rho gives -1, which is a short, and conjugate Rho gives
+1j, which is ALSO a short.

Hint: What is the center of the Smith Chart when it is normalized
to Zo=50+j200?

>>
>> Not really. A rho= -1 means something else with a complex
>> Zo.
>>
>> Hint: What is the center of the Smith Chart when it is normalized
>> to Zo=50+j50?
>
>Let's review. Two competing proposals (classic and revised rho) were
>used to predict the outcome of an experiment. The experiment was
>performed; the results resoundingly in favour of classic rho.
>

I disagree. You need to answer the "hint" question.

Plus, you never measured the Vi (incident voltage wave) coming out of the

inductor, which is what you would use for the voltage RC.

>Are you questioning the scientific method or just the results of
>this experiment? If the former, the discussion should probably
>move to a different group; if the latter, you are invited to
>replicate the experiment and demonstrate that an error was made.
>

I question your methods and your calculations.

I will try the experiment when i get the chance.

>Otherwise, there is no reasonable choice except to accept that
>classic rho correctly predicts the reflected voltage.
>
>...Keith
>

Are you saying that a capacitor can reflect a RMS voltage wave that
is greater than the incident voltage wave that charges it?

Hint: What is the center of the Smith Chart when it is normalized
to Zo=50+j200?

Slick

1049. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 02:17:57 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A6755.5EF0BA82@sympatico.ca>
Source record: 108115

Radio913 wrote:
>
> >> kd1@sympatico.ca wrote in message news:<3F6297D5.9E3225C@sympatico.ca>...
> >> >
> >> > Its not. Its 3.8 volts, which is entirely consistent with circuit
> >> > theory and 'classic' rho. Not only is it higher than the incident
> >> > voltage, it is higher than the source voltage.
> >>
> >> Ok, now take the capacitor off, and measure the voltage at the end
> >> of the inductor. What do you get?
> >
> >Not possible for me. My scope probes are in the order of 15 pf, which
> >is signifcant for this experiment.
>
> Afraid to measure it, eh? Go ahead, we can ignore the 15 pF for now, as
> the load was 100pF. What do you get?

You asked for an open. 15pf is about 1000 ohms at 10 Mhz. This is a long
way
from an open. In any case, I suggest it might be your turn to produce
some
experimental results.

> >But try using classic rho and revised rho to predict the results for
> >a shorted load (Zl = 0). Only classic rho gives a reasonable result
> >for voltage and current.
>
> Classic Rho gives -1, which is a short, and conjugate Rho gives
> +1j, which is ALSO a short.

As I recall, the purpose of rho was to compute the reflected voltage so
that net voltage could be computed using:
Vnet = Vfwd + Vref
Using rho = -1 produces Vref = -Vfwd yielding Vnet = 0 as expected for
a short.
Using rho = +1j produces Vref = +1j * Vfwd which does not produce
Vnet=0.
This is not the expected result for a short.

Note that the success and failure above are independent of the actual
value of Vi.

Although when I compute rho using the revised formula for the experiment
being considered I obtain rho = 0.885 + j0.464 = 1.0 /_ 27
rho = (Zl-Z0conj)/(Zl+Z0conj) = -(34-j138)/(34+j138) = as above

Has a new revised definition for rho suddenly appeared?

> Hint: What is the center of the Smith Chart when it is normalized
> to Zo=50+j200?
>
> >> Not really. A rho= -1 means something else with a complex
> >> Zo.
> >>
> >> Hint: What is the center of the Smith Chart when it is normalized
> >> to Zo=50+j50?
> >
> >Let's review. Two competing proposals (classic and revised rho) were
> >used to predict the outcome of an experiment. The experiment was
> >performed; the results resoundingly in favour of classic rho.
>
> I disagree. You need to answer the "hint" question.

I invite you to demonstrate an error in the logic, the evaluation,
or the experimental results.

Riddles just do not cut it.

> Plus, you never measured the Vi (incident voltage wave) coming out of the
> inductor, which is what you would use for the voltage RC.
>
> >Are you questioning the scientific method or just the results of
> >this experiment? If the former, the discussion should probably
> >move to a different group; if the latter, you are invited to
> >replicate the experiment and demonstrate that an error was made.
>
> I question your methods and your calculations.

Feel free to point out the flaws. If you can find none, question why
you hold so tenaciously to revised rho when it does not work.

> I will try the experiment when i get the chance.

Excellent. There is nothing better than seeing it with your own
eyes.

> Are you saying that a capacitor can reflect a RMS voltage wave that
> is greater than the incident voltage wave that charges it?

That is the result of the theory and of the observation. What more can
one ask for? (And since the circuit is resonant, it should not really
be a surprise).

...Keith

1050. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 02:27:41 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A699D.DD4C2FEA@sympatico.ca>
Source record: 108116

Radio913 wrote:
>
> >In another branch of this thread it has been demonstrated that the
> >conventional RC formula correctly predicts the reflected voltage
> >for lines with non-real Z0. Convential RC is the general predictor
> >for transmission lines.
>
> I disagree with the demonstration.

Feel free to point out the flaws in the method or the evaluation.

> Maybe you are a bit biased?

The experiment and its evaluation has been published in sufficient
detail so that anyone may replicate it. If your lab obtains different
results, please publish them and we can work on why this occurred.

I submit that the behaviour of the circuit in your location should
be the same as the behaviour in mine and that with a little effort
we will be able to agree on the outcome of the experiment.

> Use conventional RC formula for purely real Zo only, which is what we
> mostly do anyways.
>
> >The caveat is that for lines with non-real Z0, |rho|^2 can not be
> >used to predict reflected power. |rho|^2 predicts power only for
> >the special case of lines with real Z0.
>
> This may be true, but are you saying that a capacitor can reflect an
> RMS voltage wave that is greater than the one that charges it?

Yes indeed. Resonant circuits achieve this with ease.

...Keith

1051. TET TE23 & TE23M antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 02:49:38 UTC
From: Denis <vk3bgs@yahoo.com.au>
Message-ID: <aerkmv8bi2a3ujpi1kkfqb3gam8bk74t9r@4ax.com>
Source record: 108117

Has anybody used either of these antennas.
Would be interested in perofrmance and construction etc.
Have a need for a compact antenna, have used verticals before, but
looking for an alternative.

Denis VK3BGS

1052. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 02:52:18 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A6F62.9FC453D6@sympatico.ca>
Source record: 108118

Richard Harrison wrote:
>
> If the transmitter is matched to the feedline to deliver maximum power,
> no reflected power gets through the matching network. This means that
> all reflected power is re-reflected by the network.

But then if there is no matching network, the reflected power must enter the transmitter. Where does it go then? Is this what cooks the final?

This is demonstrative of the difficulties that arise when the loose wording
promulgated by Bird, et al, is accepted literally. Not to mention the difficulties that arise on lines with complex Z0.

Reasonable answers are only obtained once this view of reflected power travelling back along the line is discarded. It is a voltage wave which does the travelling.

Once this view of reflected power is discarded, you will be free to study the implementation of your Bird and understand how it computes the average of p(t) = v(t) * i(t) (the real definition of average power on the line), by doing some additions and subtractions of v(t) and i(t) and displaying it on an appropriate scale.

Unfortunately for clear understanding, the intermediate results of this mathematical manipularion have been labelled Pfwd and Pref with the result that many believe these actually exist.

I'd encourage anyone who doubts to do the derivation and show that when you subtract the Pfwd and Pref displayed by your Bird that all you have done is calculate Pnet = average(v(t) * i(t)) in a round about fashion, so that of course it produces the right answer.
But this is no reason to ascribe physical meaning to Pfwd and Pref, especially when it is clear that the whole notion collapses in the general case of lines with complex Z0.

Rejecting the notion of Pfwd and Pref does not mean that your Bird will stop being useful. When used to obtain a Pref of 0 it will be functioning perfectly fine as a TLI and when Pref is not 0, you can still obtain Pnet by subtracting Pref from Pfwd. But you will now understand how it really works and will not be misled by false labels.

...Keith

1053. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 02:56:13 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A704D.AD448DB8@sympatico.ca>
Source record: 108019

Good day Pez,

Thank you. I now understand the challenge.

...Keith

pez wrote:
>
> Dear Keith,
>
> Your conclusions are surely
> (specifically) valid
> _if_
> we recall their assumptions,
> which require a transmission line
> with purely _Real_ Z0.
>
> But,
> lets state the problem
> following your terms.
>
> If we have a piece of a proper Complex Z0 line
> - that is one with Xo =/= 0 -
> terminated by a passive Impedance
> then
> we still have to prove that
> its Input Impedance Formula,
> -which, don't forget, is a result of
> a _mathematical_ theory-
> results in a non negative real part,
> equivalent with a passive lumped Impedance,
> even if
> it has already the _physical_ dimensions
> of the Resistance.
>
> In other words
> it is neither enough that
> it has already
> the _physical_ dimensions of the Resistance
> nor
> it is a valid one
> in the special Real Z0 case.
>
> Sincerely,
>

> pez
> SV7BAX
>
> <kd1@sympatico.ca> wrote in message news:3F699D4B.E12CCC30@sympatico.ca...
> | pez wrote:
> | > 3.
> | > The well known non-violation of the
> | > Principle of Conservation of Energy
> | > at any point of a line,
> | > has been found to be surely valid
> | > only at the terminal load.
> | > There is no proof yet of its validation
> | > at any other point.
> | > Once again this is a
> | > _claim_
> | > no one else has verified it.
> |
> | Is the following a proof?
> |
> | At any point on the line, the line can be cut and the load
> | side replaced with a lumped impedance which presents the same
> | impedance as was presented by the line with its load.
> |
> | The conditions on the source side of the cut do not change
> | when this is done. Since this new lumped impedance is a
> | terminal impedance, Conservation of Energy is not violated.
> |
> | Therefore Conservation of Energy will not be violated when
> | this lumped impedance is removed and the line is restored
> | to its former state.
> |
> | ...Keith

1054. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 03:13:02 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmkt05mp4at6d@corp.supernews.com>
Source record: 108020

Richard Harrison wrote:
>
> Bird Technical Series #1 may be enlightning:
> "By proper combination of the two samples (derived from volts and amps)
> we obtain an RF voltage proportional to the square root of main line
> power---."
>
> "---the scale which has been marked in watts corresponding to the power
> being sampled from the main line."
>

IF Z0 is perfectly resistive, or if the line is
distortionless, then

Pdelivered = Pforward - Preflected
= |V+|^2/Z0 - |V-|^2/Z0

is perfectly correct (W.C. Johnson, pages 150-151).

The Bird voltmeter readings (scale marked in
watts) take into account phase relations between
forward and reflected voltage waves and forward
and reflected current waves.

The formula and the Bird Company assume that low
loss line is being used, so that Z0 is nearly
resistive and the error due to non-resistive Z0 is
small compared to the sum of all other system errors.

If Z0 is sufficiently reactive that I have to
doubt the usefulness of the Bird meter, then I
need to take other action with respect to the
lossiness of the coax. My 600 W PA was not
intended to be a heating element for the coax.

There is an old saying "if you look hard enough
you can find fault with anything".

Or anyone, including Terman and Bird.

Bill W0IYH

1055. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 03:35:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a7b2c$1_6@corp.newsgroups.com>
Source record: 108021

kd1@sympatico.ca wrote:
> I have often suspected that it is the existence and use of 'Bird watt'
> meters that has convinced so many of the existence of forward and
> reverse power; a belief which many seem absolutely unwilling to
> relax their hold on despite the difficulties it causes them.

OTOH, a TDR causes you difficulties. And just how do you explain
standing waves without a forward wave and a reflected wave?
--
73, Cecil http://www.qsl.net/w5dxp

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1056. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 03:38:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a7c00_6@corp.newsgroups.com>
Source record: 108022

kd1@sympatico.ca wrote:
> Of course if you let go of Pfwd and Pref and just used Vfwd and Vref
> you would quickly learn that you had no interest in Pfwd and Pref
> and thus your inability to determine them would not cause you
> much distress.

Uh Keith, radiated *POWER* is what we are trying to get from our
antennas.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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1057. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 03:55:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a7ffe_6@corp.newsgroups.com>
Source record: 108023

Roy Lewallen wrote:

> It's simple, yet too complicated for you to actually do it and show us.
>
> Over the years, I had the unfortunate experience to occasionally meet an
> engineer for whom everything was very simple. They could never
> understand why it took the rest of us so long to solve all those really
> trivial problems. But after watching these folks in action for a while,
> I noticed that they were somehow never able to actually produce any
> hardware that actually worked. When pressed, they were very skilled at
> working themselves into a spot where they wouldn't ever have to actually
> deliver a working device, changing groups, projects, or responsibilities
> whenever they got too close to actually having to deliver. One common
> ploy was to regard the mere creation of a working model beneath their
> dignity and an unworthy use of their great knowledge.
>
> Surely you're not one of those, are you?

Nope, I accept your model and point out the conceptual error you made.
Probably in grammer school, you were taught to collect like terms. Why
are you so dead set against performing that simple necessary math function?

You say "the real power that would be calculated for the incident wave
alone" is the forward power but Chipman does ***NOT*** say that! In fact,
he says there is additional interaction (interference power) that must be
taken into account when Z0 is complex.
--
73, Cecil http://www.qsl.net/w5dxp

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1058. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 04:05:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6a8253$1_6@corp.newsgroups.com>
Source record: 108024

kd1@sympatico.ca wrote:
> Reasonable answers are only obtained once this view of reflected power
> travelling back along the line is discarded. It is a voltage wave which
> does the travelling.

Let's say we send a TDR pulse down the line and witness the reflection.
Are you saying there's no power (energy) in the reflected pulse?
--
73, Cecil http://www.qsl.net/w5dxp

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1059. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 04:47:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vml2is7g5bcoae@corp.supernews.com>
Source record: 108025

I've done my analysis, and am satisfied with it. That's why I don't rearrange things to suit your view of reality.

Why are you unable to calculate the correct terms, collect them, or whatever you think necessary, and show us what values they are and how they add up to give us the forward and reverse powers you hypothesize?

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> Nope, I accept your model and point out the conceptual error you made.
> Probably in grammer school, you were taught to collect like terms. Why
> are you so dead set against performing that simple necessary math function?
> . . .

1060. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 04:55:48 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A8C54.2B4FAC03@sympatico.ca>
Source record: 108026

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > I have often suspected that it is the existence and use of 'Bird watt'
> > meters that has convinced so many of the existence of forward and
> > reverse power; a belief which many seem absolutely unwilling to
> > relax their hold on despite the difficulties it causes them.
>
> OTOH, a TDR causes you difficulties. And just how do you explain
> standing waves without a forward wave and a reflected wave?

Can you expand on why you think a TDR causes me difficulties?
I can't think of any reasons.

As for standing waves, I have no difficulties with forward
and reflected voltage waves. They work perfectly fine.

...Keith

1061. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 04:58:42 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A8D02.1BFA0520@sympatico.ca>
Source record: 108027

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Of course if you let go of Pfwd and Pref and just used Vfwd and Vref
> > you would quickly learn that you had no interest in Pfwd and Pref
> > and thus your inability to determine them would not cause you
> > much distress.
>
> Uh Keith, radiated *POWER* is what we are trying to get from our
> antennas.

Yes indeed. Net power. The only power that counts.
Pnet = average(v(t) * i(t))

Forget that forward and reverse stuff. That's not what is radiated.

...Keith

1062. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 05:06:18 UTC
From: kd1@sympatico.ca
Message-ID: <3F6A8ECA.826508AA@sympatico.ca>
Source record: 108028

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Reasonable answers are only obtained once this view of reflected power
> > travelling back along the line is discarded. It is a voltage wave which
> > does the travelling.
>
> Let's say we send a TDR pulse down the line and witness the reflection.
> Are you saying there's no power (energy) in the reflected pulse?

Dear me no. But we usually aren't talking pulses in this forum.
We are usually talking continuous sinusoidal excitation.

When you use a pulse, p(t) = v(t) * i(t) shows the pulse going
by and coming back too, if it reflects. But for that, you have to
look at things in the time domain, something a number of readers
here refuse to do for continuous sinusoidal excitation. When you
look at continuous sinusoidal excitation in the time domain all
the information you need about power is provided without having
to resort to Pfwd and Prev.

...Keith

1063. G5IJ antenna: What is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 11:28:32 UTC
From: Bernhard Rhondin <bernhard_rhondin@hotmail.com>
Message-ID: <3F6AE860.889640BC@hotmail.com>
Source record: 108029

I've read some references to the "G5IJ antenna".
Can anyone pse tell what thingamajig this is?

BR

1064. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 12:00:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6af1c3_7@corp.newsgroups.com>
Source record: 108030

Roy Lewallen wrote:
> I've done my analysis, and am satisfied with it. That's why I don't
> rearrange things to suit your view of reality.

I've never before seen a person so proud of a contradiction. If reflected power is greater than forward power, then the Poynting vector points away from the load, but you have said it doesn't. So which is it?

> Why are you unable to calculate the correct terms, collect them, or
> whatever you think necessary, and show us what values they are and how
> they add up to give us the forward and reverse powers you hypothesize?

I don't choose to waste my time on such a no-brainer issue. If the Poynting vector points toward the load, the reflected power cannot be greater than the forward power. Chipman goes out of his way to indicate that such an apparent contradiction is caused by a resonance effect. The opposite sign of the reactance of Z0 Vs the load is re-reflecting energy back to the load because the load resistance is in series with the inductive reactance of the load and the capacitive reactance of the feedline. The re-reflected energy supplied by the capacitive reactance becomes forward power in the resistance. That's why the Poynting vector points toward the load. According to Chipman, that's why forward power minus reflected power CANNOT be negative.
--
73, Cecil http://www.qsl.net/w5dxp

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1065. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 12:07:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6af34f$1_7@corp.newsgroups.com>
Source record: 108031

kd1@sympatico.ca wrote:
> Can you expand on why you think a TDR causes me difficulties?
> I can't think of any reasons.

There's more than just voltage in those returned pulses.

> As for standing waves, I have no difficulties with forward
> and reflected voltage waves. They work perfectly fine.

That takes care of the E-field. But do you think a wave can exist
without an H-field? If not, the wave possesses energy, by definition.
Energy flowing past a point is power.

Your voltage-only waves violate the conservation of energy
principle and the accepted laws of physics for EM waves.
--
73, Cecil http://www.qsl.net/w5dxp

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1066. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 12:11:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6af42c$1_7@corp.newsgroups.com>
Source record: 108032

kd1@sympatico.ca wrote:
> Forget that forward and reverse stuff. That's not what is radiated.

Uh Keith, power delivered to the antenna equals forward power minus
reflected power. I notice you have not provided a way for standing
waves to develop without the existence of reflected waves. Do you
also believe that standing waves don't exist?
--
73, Cecil http://www.qsl.net/w5dxp

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1067. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 12:14:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6af4d2$1_7@corp.newsgroups.com>
Source record: 108033

kd1@sympatico.ca wrote:
> When you use a pulse, p(t) = v(t) * i(t) shows the pulse going
> by and coming back too, if it reflects. But for that, you have to
> look at things in the time domain, something a number of readers
> here refuse to do for continuous sinusoidal excitation. When you
> look at continuous sinusoidal excitation in the time domain all
> the information you need about power is provided without having
> to resort to Pfwd and Prev.

Yes, but those steady-state shortcuts often lead to a distorted
view of reality. Exactly what magic happens at the instant when a
system goes from the transient state to steady-state?
--
73, Cecil http://www.qsl.net/w5dxp

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1068. Re: Complex Z0 Farewell

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 13:52:06 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkf1m7$r0u$1@nic.grnet.gr>
Source record: 108034

Thank you for asking!

<kd1@sympatico.ca> wrote in message news:3F6A704D.AD448DB8@sympatico.ca...
| Good day Pez,
|
| Thank you. I now understand the challenge.
|
| ...Keith
|
| pez wrote:
| >
| > Dear Keith,
| >
| > Your conclusions are surely
| > (specifically) valid
| > _if_
| > we recall their assumptions,
| > which require a transmission line
| > with purely _Real_ Z0.
| >
| > But,
| > lets state the problem
| > following your terms.
| >
| > If we have a piece of a proper Complex Z0 line
| > - that is one with Xo =/= 0 -
| > terminated by a passive Impedance
| > then
| > we still have to prove that
| > its Input Impedance Formula,
| > -which, don't forget, is a result of
| > a _mathematical_ theory-
| > results in a non negative real part,
| > equivalent with a passive lumped Impedance,
| > even if
| > it has already the _physical_ dimensions
| > of the Resistance.
| >
| > In other words
| > it is neither enough that
| > it has already
| > the _physical_ dimensions of the Resistance
| > nor
| > it is a valid one

| > in the special Real Z0 case.
| >
| > Sincerely,
| >
| > pez
| > SV7BAX
| >
| > <kd1@sympatico.ca> wrote in message news:3F699D4B.E12CCC30@sympatico.ca...
| > | pez wrote:
| > | > 3.
| > | > The well known non-violation of the
| > | > Principle of Conservation of Energy
| > | > at any point of a line,
| > | > has been found to be surely valid
| > | > only at the terminal load.
| > | > There is no proof yet of its validation
| > | > at any other point.
| > | > Once again this is a
| > | > _claim_
| > | > no one else has verified it.
| > |
| > | Is the following a proof?
| > |
| > | At any point on the line, the line can be cut and the load
| > | side replaced with a lumped impedance which presents the same
| > | impedance as was presented by the line with its load.
| > |
| > | The conditions on the source side of the cut do not change
| > | when this is done. Since this new lumped impedance is a
| > | terminal impedance, Conservation of Energy is not violated.
| > |
| > | Therefore Conservation of Energy will not be violated when
| > | this lumped impedance is removed and the line is restored
| > | to its former state.
| > |
| > | ...Keith

1069. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 13:58:36 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <Ls2dnWfKnqINIvaiU-KYvg@crocker.com>
Source record: 108035

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6af4d2$1_7@corp.newsgroups.com...
> Yes, but those steady-state shortcuts often lead to a distorted
> view of reality. Exactly what magic happens at the instant when a
> system goes from the transient state to steady-state?

there is no magic, and real systems can never get to steady state. the steady state approximations are used by engineers who understand their limitations and know when they can apply them to easily get answers that are good enough for every day use. engineers who don't understand them can always use the full field equations and calculate the exact answers if they have the time and enough information about the system... but they will never be able to answer the question about forward and reflected power except at a specific instant in time and single location in the system as the transients never go away and power in is never equal to power out except by coincidence.

1070. Re: Mosley TA-53

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 14:22:15 UTC
From: Maurice ON4BAM <on4bam@yahoo.com>
Message-ID: <un3mmv0622g24qtomnkjtnbi111ej2f1pi@4ax.com>
Source record: 108036

On Thu, 18 Sep 2003 20:17:12 -0500, "Karl Sandstrom" <k5man@cox.net>
wrote:

>I am looking for a complete manual for the Mosley TA-53. Please let me know
>if you can help.

Hi Karl,

I think I have one somewhere around in the shack, I can make a copy if
you want.

Bye Maurice
--
Hamradio: ON4BAM / M0CIL / 9H3Z http://www.qsl.net/on4bam
Travelstories from Alaska, Scotland, South Africa,Iceland,
Faroe Isl. and IOTA activations

1071. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:02:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j69mmvot758mjq9fm1fcqfrfik0bca8kf6@4ax.com>
Source record: 108037

On Fri, 19 Sep 2003 07:07:35 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Your voltage-only waves violate the conservation of energy
>principle and the accepted laws of physics for EM waves.

Hi Cecil,

Problems of speed reading again afflict you. Or is it the phenomenon
of copy machine hypnosis, where with each sweep of the light you
acquire more virtual education? That technique works better if you
hold single pages up instead while looking down through sunglasses.
(Not nearly as expensive as tuition by the way ;-)

From Chipman (no point in offer the page # is there?):
"Postulate 4. At the intersection of any transverse
plane with the line conductors there is a unique
value of potential difference between the conductors
at any instant..."

As you reject Postulate 4 explicitly in your statement(s), you also
reject your own arguments couched in Chipman's discussion that you
cut-and-paste into your derivative works.

Next time you ride your bike to the library, take the time to read
Chipman's work instead of copying it. Given the nearly universal
silence in this group to such insights offered above in the quote, it
seems you should be in rather crowded circumstances competing to read
that same volume - none here seem to have time to read nor quote the
obvious.

The kulture of Institutionalized Ignorance festers on.

73's
Richard Clark, KB7QHC

1072. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:21:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <17ammv0f6rnkd4i2qnr38onuspkc7bn05h@4ax.com>
Source record: 108038

On Fri, 19 Sep 2003 13:58:36 -0000, "David Robbins" <k1ttt@arrl.net>
wrote:
>"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
>news:3f6af4d2$1_7@corp.newsgroups.com...
>> Exactly what magic happens at the instant when a
>> system goes from the transient state to steady-state?
>
>there is no magic, and real systems can never get to steady state. the
>steady state approximations are used by engineers who understand their
>limitations and know when they can apply them to easily get answers that are
>good enough for every day use.

Hi David,

This is the difference between Engineering and religion. All
Engineering works with error and simply states the limits of
confidence to known factors. That is 1 Ohm/Volt/Ampere to a tolerance
of 20% or 10% or 5% or better. When differences between known
boundary conditions far exceed the error of their determination, then
you can rest assured that you have a solution that is an accurate
portrayal of those different boundary conditions. (On reflection,
even religion acknowledges error; so comparisons are an affront to
that study as well. What goes on in these "debates" is simple,
narcissistic laziness.)

I offered a simple line loss problem some time ago to which there was
only one correct submission (be e-mail no less). This problem
approached this "debate" with known errors and the correspondent found
a solution to within 0.06 dB while others, frozen in mental gridlock,
failed to even choose the conventional "perfect" answer. In the work
place they would be staring at the bench, transfixed in the agony of
Zeno's paradox, while real techs (not even engineers) would have the
problem whipped before the first break (and still had done productive
work too).

73's
Richard Clark, KB7QHC

1073. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:21:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6b2d9e$1_2@127.0.0.1>
Source record: 108039

Richard Clark wrote:
> From Chipman (no point in offer the page # is there?):
> "Postulate 4. At the intersection of any transverse
> plane with the line conductors there is a unique
> value of potential difference between the conductors
> at any instant..."
>
> As you reject Postulate 4 explicitly in your statement(s), ...

Richard, you really need to grasp the difference between exclusive
and inclusive statements. Keith implies a voltage-only wave. It
is my understanding that an EM wave cannot exist without an
associated H-field. Chipman doesn't say EM waves can exist
without an H-field. EM waves possess both E-fields and H-fields.
The power associated with an EM wave is E x H. An H-field around
a wire implies a current in that wire. My objection to Keith's
statement is his voltage-only wave existing without current, energy,
or power.
--
73, Cecil, W5DXP

1074. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:37:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hkbmmvghrko9hsndqtfoh3hgk3306q2op0@4ax.com>
Source record: 108040

On Fri, 19 Sep 2003 09:21:21 -0700, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>My objection to Keith's
>statement is his voltage-only wave existing without current, energy,
>or power.

Hi Cecil,

It is more than evident that your "objections" are inventions of your own construction. You did not respond to your refutation of your own source, you instead created an issue that does not exist. You are an unreliable correspondent. The condemning characteristic about it is that you are lost in a field of more than several and struggling to be the most conspicuous. :-)

73's
Richard Clark, KB7QHC

1075. Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:40:04 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bkfc18fhb1@reader2.nmix.net>
Source record: 107741

Well, went back to the books and restudied the section on common-mode currents on feed lines, and it appears that such currents are only caused when a balanced driven element is fed with an unbalanced feeder. Since (if I understand it correctly) the gamma match excites the driven element only on one side, there is no way for the antenna to couple common-mode currents into the feed line.

That said, I'm not sure I really understand how the gamma match works and whether it represents a significant compromise. The Antenna Book doesn't go into a great deal of detail about the gamma match, treating it basically as a "subset" of the T-match. This, coupled with the fact that many amateurs I've talked with unequivocally trash the gamma as a poor matching system that should not be used where there is any choice, makes me want a better understanding of this whole field.

So, the questions:

1) Is the gamma match inherently inferior to a balanced matching system?
2) If so, why? What are the trade-offs?

Comments, please...

Bill / W5WVO

1076. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 16:58:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6b3646_2@127.0.0.1>
Source record: 108041

Richard Clark wrote:
> It is more than evident that your "objections" are inventions of your
> own construction.

Perhaps you missed Keith's assertion that he believes in voltage
waves but not in power waves, thus implying that voltage waves are
not associated with (E x H) power.

>You did not respond to your refutation of your own source, ...

Chipman's assertion of voltage doesn't imply that he doesn't believe
in current. He just didn't mention current. Exclusive Vs inclusive -
please learn the difference.
--
73, Cecil, W5DXP

1077. Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 17:20:41 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <vfemmv09r6dtb4j5fkvnacdpqj0hl34gpj@4ax.com>
Source record: 108042

Hey group,

I was looking for a cheap source of toroids and stumbled across a blown ATX computer power supply. It was chock full of toroids.

I've attached a picture and used a chapstick stick as a size reference.

While I have everyones attention, let me repost my question posted to the shortwave group. It may be better addressed in here.

Got a few questions concerning the fabrication of an antenna tuner.

I am using Arnie Coro of DX Unlimited's instructions for a simple PI network tuner.

http://www.radiohc.org/Distributions/Dxers/pi-tuner1.htm

Instead of a 10 position switch I am using a 2 pole 6 position switch then fliping a toggle to use the other 6 positions for a total of 12 inductance settings. But thats not my question.

My question is:

Given the small size of the box this all is going to fit into, I would like to use a torroidal core instead of an air core.

1) Does Radio Shack sell torroidial cores?

2) Would I wind it similarly to the air core in that each winding is separated by one wire width and tapped every 3rd turn?

If I understand the concept correctly, it's seems the PI network tuner tunes both ends of the equation. This would be good as I am using a Sony ICF-SW7600GR and dont have a clue what the input impedance might be.

3) Is that how it really works? Tuning both the antenna and the line out to the receiver?

Arnie says this tuner will work down to 5kHz. And given my research of this tuner type, I would need to switch in extra capacitance to get down low for say the AM band. I am considering adding in a few more toggles to achieve this. My variables are 365pf.

4)How much extra capacitance would be needed? And would this be practical or should I switch in another inductor creating a PI-L?

Thanks in advance,

Mike

1078. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 17:45:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <abfmmv4adv7q52jajc08auvel20h3s57n4@4ax.com>
Source record: 108044

On Fri, 19 Sep 2003 09:58:25 -0700, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> It is more than evident that your "objections" are inventions of your
>> own construction.
>
>Perhaps you missed Keith's assertion that he believes in voltage
>waves but not in power waves, thus implying that voltage waves are
>not associated with (E x H) power.
>
>>You did not respond to your refutation of your own source, ...
>
>Chipman's assertion of voltage doesn't imply that he doesn't believe
>in current. He just didn't mention current.
He does mention current as Postulate 2 - you simply suffer from speed
reading past that passage.
>Exclusive Vs inclusive -
>please learn the difference.
Please try reading your references rather than using them as
cut-and-paste crutches to wobbly arguments.

Hi Cecil,

The difference is found by interchanging the names Keith and Chipman
(forgive me both) from these originals:
>Keith's assertion that he believes in voltage
>waves but not in power waves
and
>Chipman's assertion of voltage doesn't imply that he doesn't believe
>in current.

finds by your own logic that:
>Keith's assertion of voltage doesn't imply that he doesn't believe
>in current.
which is consistent with what he has published (not what you have
projected).
and
>Chipman's assertion that he believes in voltage
>waves but not in power waves
is literally stated in his postulates (of which you are admittedly
wholly ignorant).

Thus Chipman and Keith are not in contradiction, that is a product of
your own invention and your violations of Chipman's postulates.

73's
Richard Clark, KB7QHC

1079. Re: G5IJ antenna: What is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 18:28:43 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F6B4ADB.DB656235@cwis.net>
Source record: 108046

BR,
This is the 'best' that I could find with a quick
'Google' search. (Spelling as I found it.)

"Basically it is a twin line radiator driven by a
toroidal transformer so as the two lines are fed
in fase.
This article was originally inspired by the
"G5IJ
Push-Push Twin Line antenna" in Radcom March
1996 - Technical Topics by Pat Hawker G3VA."

Don't know as it will help much, but at least it's a start.
'Doc

1080. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 18:48:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <npimmv0sf24fgijodchkvsqm494q1v04tg@4ax.com>
Source record: 108047

On Fri, 19 Sep 2003 13:15:05 -0700, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Thus, it is an absurd argument that Chipman never made.

Well Cecil,

Given you are eminently untutored in Chipman's greater work, and
choose only those portions that suit your cut-and-paste philosophy; it
comes as no surprise what arguments of invention you might project.

73's
Richard Clark, KB7QHC

1081. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 19:31:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6b3d77$1_2@127.0.0.1>
Source record: 108043

mike wrote:
> I was looking for a cheap source of toroids and stumbled across a
> blown ATX computer power supply. It was chock full of toroids.

Probably powdered iron cores and not very useful at RF frequencies.
--
73, Cecil, W5DXP

1082. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 19:52:52 UTC
From: richardharrison@webtv.net
Message-ID: <29363-3F6B5E94-21@storefull-2318.public.lawson.webtv.net>
Source record: 108048

Keith wrote:
"---it will turn out that there is no value in forward and reverse power on a line with non-real Zo."

The Bird wattmeter works well enough on coax lines used between the usual transmitter and antenna. Loss produces reactance in coax. We don`t seek lossy coax. If it becomes lossy, the line is likely to be replaced.

If a transmitter isn`t matched when the load is matched to the coax, an improved match between the transmitter and the coax may come from mismatching the load.

A true conjugate match exists everywhere in the system between the transmitter and the antenna. That is, one could check the impedances in both directions at any place in the system and find that the two inpedances are conjugates of each other.

There is reactance in every non-resonant length of coax which is not terminated in its characteristic impedance value.

The vector sum of the incident and reflected wave voltages is less than the arithmetic sum at a point 1/8 wavelength back from the reflection point. At 1/8 wavelength back from a reflection, the incident and reflected wave voltage vectors are 90-degrees apart. At 1/8 wavelength in coax, the reactance is numerically equal to the Zo of the line, as a piece of trivia.

At 1/4 wavelebgth back from the reflection, the incident and reflected wave voltage vectors are 180-degrees apart. The line voltage total is thus the arithmetic difference of the incident and reflected wave voltages.

At 1/2 wavelength back from the reflection, the incident and reflected wave phases have continued their phase changes in opposite directions with distance back from the reflection until the voltages have reached the in-phase condition. In a lossless line, the conditions at the reflection point would be repeated at a point 1/2-wavelength back.

When a resistance load matches the Zo of its feedline, the reflection coefficient is zero, so there is no reflection from the load. The load absorbs all the incident wave. The effect of a reactive load is merely to displace the positions of the minima and maxima along the line but not with respect to each other.

Best regards, Richard Harrison, KB5WZI

1083. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 20:15:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6b4794$1_2@127.0.0.1>
Source record: 108045

Richard Clark wrote:
> Thus Chipman and Keith are not in contradiction, ...

Hint: If one accepts reflected voltage but not reflected
power, then it follows that one's reflected voltage wave
contains no power, i.e. an in-phase H-field cannot exist.
Thus, it is an absurd argument that Chipman never made.
--
73, Cecil, W5DXP

1084. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 20:50:18 UTC
From: richardharrison@webtv.net
Message-ID: <29362-3F6B6C0A-82@storefull-2318.public.lawson.webtv.net>
Source record: 108049

Keith wrote:
"Not to mention the difficulties that arise on lines with complex Zo."

Transmission lines are strict enforcers. They only allow a volts to amps ratio traveling the line of Zo.

Transmission lines are almost always selected and used for low-loss. The Zo`s which are real (non-reactive) are not complex. The series resistance is small as compared with te series inductive reactance. The shunt conductance and dielectric loss are small as compared with susceptance.

The square root of L/C is a nearly pure resistance and equals Zo, and equals the square root of Z/Y. Zo is not complex.

The incident and reflected waves are both forced to have a V/I = Zo. In the case of the reflected wave, the ratio is often written -Zo to indicate a travel in the direction of the transmitter instead of toward the load.

Keith also wrote:
"It is a voltage wave which does the travelling."

Sure. That`s why it is called a TEM wave. The E-field is all alone.

Best regards, Richard Harrison, KB5WZI

1085. Re: Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:30:41 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309191330.34cce8ad@posting.google.com>
Source record: 108050

"John Passaneau" <jxp16@psu.edu> wrote in message
news:<bkcdh3$1cri$1@f04n12.cac.psu.edu>...
> But a gamma match is an un-balanced load and a 1:1 balun is not needed.
>
>
> --
> John Passaneau, W3JXP
> Penn State University
> w3jxp@arrl.net

In a way I agree, and don't bother with chokes on many of my beams.
But I have heard of some that reported some common mode problems with
the gamma match alone. A choke should clean this up, but it will be
pretty small choke for 6m use, and be effective. For 6m, beads might
be a route to consider. ?
Myself, I've never really had any trouble not adding a choke. My 2m FM
3 el has a gamma and no choke. Same for my 3 el 6m yagi. Here, they
are some of my "coldest" antennas as far as rf on the feedline. Maybe
I just lead a charmed life..:) MK

1086. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:46:52 UTC
From: radio913@aol.com
Message-ID: <20030919174652.07635.00001057@mb-m17.aol.com>
Source record: 108051

>> >> Ok, now take the capacitor off, and measure the voltage at the end
>> >> of the inductor. What do you get?

>> Afraid to measure it, eh? Go ahead, we can ignore the 15 pF for now,
>as
>> the load was 100pF. What do you get?
>
>You asked for an open. 15pf is about 1000 ohms at 10 Mhz. This is a long
>way
>from an open. In any case, I suggest it might be your turn to produce
>some
>experimental results.

Go ahead and measure it anyways, i'd like to know what you get. If you
think about it, this would be a
clue as to the forward Vi voltage.

>>
>> Classic Rho gives -1, which is a short, and conjugate Rho gives
>> +1j, which is ALSO a short.
>
>As I recall, the purpose of rho was to compute the reflected voltage so
>that net voltage could be computed using:
> Vnet = Vfwd + Vref
>Using rho = -1 produces Vref = -Vfwd yielding Vnet = 0 as expected for
>a short.
>Using rho = +1j produces Vref = +1j * Vfwd which does not produce
>Vnet=0.
>This is not the expected result for a short.
>

You don't understand what i wrote. Rho = +1j is a short if Zo=50+j50 and
Zl= - j50

For our example, rho= -1 , but this is
NOT a short!! As it shouldn't be!

Hint: What is the center of the Smith Chart when it is normalized
to Zo=50+j50?

If you can't answer this question, that's
ok, most people don't understand the Smith very well.

>Riddles just do not cut it.
>

My questions are indeed riddles for those whose don't understand the
concepts.

>
>Feel free to point out the flaws. If you can find none, question why
>you hold so tenaciously to revised rho when it does not work.
>

i just did point out the flaws.

And i will let go of this argument as
soon as someone can give me evidence
that i should. You certainly have not.

>> I will try the experiment when i get the chance.
>
>Excellent. There is nothing better than seeing it with your own
>eyes.
>

I don't need to see it with my eyes,
when i know you can't get a larger RMS voltage reflected from a capacitor, than
the RMS that charges it.

Slick

1087. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:53:15 UTC
From: radio913@aol.com
Message-ID: <20030919175315.07635.00001058@mb-m17.aol.com>
Source record: 108053

>>
>> I disagree with the demonstration.
>
>Feel free to point out the flaws in the method or the evaluation.
>

I already did. See other post.

>> Maybe you are a bit biased?
>
>The experiment and its evaluation has been published in sufficient
>detail so that anyone may replicate it. If your lab obtains different
>results, please publish them and we can work on why this occurred.
>

You never measured the incident voltage. And you refused to measure the
end of the inductor, with the capacitor removed (even with the 15 pF, it should
tell us something about Vi).

>>
>> This may be true, but are you saying that a capacitor can reflect an
>> RMS voltage wave that is greater than the one that charges it?
>
>Yes indeed. Resonant circuits achieve this with ease.
>
>...Keith
>

Absolutely incorrect! If capacitance is defined as Coulombs/Volt, then
how are you getting more coulombs than you put in? Remember, i said Root Mean
Square voltage.

How does a capacitor reflect more power than you feed it?

It's almost time for me to cut out of this discussion, if you still don't
understand me.

Slick

1088. Re: LOOKING WTB HF discone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:53:41 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <8kummvc8rtok6qs2sj1fok06pg1cjc3t7e@4ax.com>
Source record: 108052

On Wed, 17 Sep 2003 23:07:29 GMT, Dale Parfitt <parinc@gte.net> wrote:

>
>
>Fumper wrote:
>
>> I am looking for an HF discone 0 to 30 MHZ antenna. Any Ideas?
>> Steve
>
>Gets a tad big at 0 MHz.
Expensive too....I wanted on, but couldn't find an infinite supply of
copper wire at a reasonable price and the support structore was going
to have to be ....

Sorry, couldn't help myself.

Roger (K8RI).
>
>Dale W4OP

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1089. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:58:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmmv0keepgnp5a@corp.supernews.com>
Source record: 108054

TEM stands for transverse electro-magnetic. It means that both the electric (E) and magnetic (H) fields are transverse (at a right angle) to the direction of propagation. It refers only to the orientation of the fields relative to the direction of propagation.

A time-varying E field is never "all alone" -- it's always accompanied by an H field. Consequently, a voltage wave on a transmission line is always accompanied by a current wave. I'm certain that Keith didn't mean to imply otherwise.

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> Keith also wrote:
> "It is a voltage wave which does the travelling."
>
> Sure. That`s why it is called a TEM wave. The E-field is all alone.
>
> Best regards, Richard Harrison, KB5WZI
>

1090. Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 21:59:10 UTC
From: radio913@aol.com
Message-ID: <20030919175910.07635.00001059@mb-m17.aol.com>
Source record: 108055

Hello,

The other thread reminds me that i need a high powered, used Bird power meter.

Up to 1000-2000 watts, 50-150 Mhz or more, VSWR too...what models can you folks recommend? Preferably one that doesn't screw up the 50 ohms of the dummy load too much! (check with an MFJ before and after putting the meter in)

Birds are supposed to be very accurate, or so i have heard.

Any advice or Ebay links are appreciated.

Slick

1091. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 22:08:01 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkfuo1$g70$1@hercules.btinternet.com>
Source record: 108056

"Richard Harrison" wrote -

> A true conjugate match exists everywhere in the system between the
> transmitter and the antenna. That is, one could check the impedances in
> both directions at any place in the system and find that the two
> inpedances are conjugates of each other.
>
==========

Richard, is there a conjugate match immediately at the junction between the transmitter output socket and whatever follows it ?

If there is NOT a conjugate match at this junction then there cannot be a conjugate match anywhere else in the system.

Reg, G4FGQ

1092. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 22:27:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmn0mog9p0un80@corp.supernews.com>
Source record: 108057

Radio913 wrote:
> Hello,
>
> The other thread reminds me that i need a high powered, used
Bird power
> meter.
>
> Up to 1000-2000 watts, 50-150 Mhz or more, VSWR too...what
models can
> you folks recommend? Preferably one that doesn't screw up the 50
ohms of the
> dummy load too much! (check with an MFJ before and after putting the
meter in)
>
> Birds are supposed to be very accurate, or so i have heard.
>
> Any advice or Ebay links are appreciated.
>
>
> Slick

From http:www.metroactive.com/papers/metro/08.28.97/beat-9735.html:

I missed Creech but got to hear a tape of the band's performance two days later on a micropowered radio station broadcasting at 91.3FM out of Los Gatos known as Radio Free Lost Gatos. The guys in Creech guest DJed, heckled callers and played the whole of their set along with some of their favorite bands. According to RFLG owner/manager/DJ Dr. Slick, the station has been operating out of a house "buried in the Los Gatos hills" for three years. "I do it for fun," Slick says. "I don't do it because I'm an 'anarchist.' I don't go out and say, 'Kill the cops.' I'm positive with radio."

Slick was mum on the wattage but said that 91.3 reaches all of Los Gatos and parts of Campbell. Slick plays classic rock, jazz and "a little bit of Bach" when not turning the controls over to guest DJs like the members of Creech. The station can be heard Sundays and Wednesdays, 8pmï¿½3am. Meanwhile, the next Gaslighter Theater show stars Monkey, Blue Beat Stompers, Steadyups, Lucky Strike and Pigs in Space on Friday (Sept. 5). As always: all ages and five bucks.

From http://www.svcn.com/archives/lgwt/05.06.98/PirateCat.html

Monkey Man stepped into the world of microbroadcasting about a year ago, with his friend Michael Magic at Free-Radio San Jose, 93.7 FM, but had to leave the station after some of his on-air hi-jinks went too far.

After that, he started working with Dr. Slick, whose station, Free-Radio Los Gatos, is on 91.3 FM on Sunday and Wednesday nights from 8 p.m. to 11 p.m.

"Then Dr. Slick said I should get my own station, so I went down to Fry's and got one of those little radio kits for, like, $30." Dr. Slick gave Monkey Man an old one-watt amplifier, and another friend, Austin Tatious of KKUD 104.1 in Willow Glen, donated a mixing board. Pirate Cat was on the air.

It looks like we can look forward to a bigger signal from Radio Free Lost Gatos (or is it Free-Radio Los Gatos?). No more "all of Los Gatos and parts of Campbell"! Or are you be building FM transmitters and amplifiers for sale?

Roy Lewallen, W7EL

1093. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 23:03:23 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6B8B3B.A555F2F3@uci.edu>
Source record: 108058

Radio913 wrote:
>
> Hello,
>
> The other thread reminds me that i need a high powered, used Bird power
> meter.
>
> Up to 1000-2000 watts, 50-150 Mhz or more,

You mean 88-108 MHz, don't you?

ac6xg

1094. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 23:19:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ol3nmv8iksuttp9u3j14at9cqbbk00mr09@4ax.com>
Source record: 108059

On Fri, 19 Sep 2003 22:08:01 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:
>Richard, is there a conjugate match immediately at the junction between the
>transmitter output socket and whatever follows it ?

Even kids know to look both ways before crossing. ;-)

73's
Richard Clark, KB7QHC

1095. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-19 23:40:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmn502skk84db1@corp.supernews.com>
Source record: 108060

Roy Lewallen wrote:
> . . .
> It looks like we can look forward to a bigger signal from Radio Free
> Lost Gatos (or is it Free-Radio Los Gatos?). No more "all of Los Gatos
> and parts of Campbell"! Or are you be building FM transmitters and
> amplifiers for sale?

Oops, never mind. Just answered my own question.

From http://groups.google.com:

From: Dr. Slick (radio913@aol.com)
Subject: Re: Length of Coax Affecting Incident Power to Meter?
Newsgroups: rec.radio.amateur.antenna
Date: 2003-08-11 03:25:37 PST

. . . This is certainly not the case on our bench, which is a problem,
because i want to have an approximation of how it will perform
attached to the antenna before i ship it out to the customer. A
difference of 70 watts is not acceptable. . . .

So, out of curiosity, what does a 1 - 2 kW FM transmitter bring on the
pirate market? I'd think it would easily be enough to pay for a *new*
Bird wattmeter. But would you be able to deduct it as a business expense?

From http://www.artwanted.com/artist.cfm?ArtID=4990:

Garvin Yee

Address: 17287 Grosvenor Ct.
Monte Sereno, CA 95030
Phone: (408)395-6674

Are you still at that address? If so, could we drop by your house
"buried in the Los Gatos hills" for a demo of your handiwork in
operation, before dropping the bucks for one?

Roy Lewallen, W7EL

1096. FS shakespeare military antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 00:45:50 UTC
From: denton <denton@oregontrail.net>
Message-ID: <bkg7iq$88j$1@news.oregontrail.net>
Source record: 108061

I have for sale a multi-section shakespeare military 120 antenna with canvus cover and base.
Please see the following for details:
http://www.shakespeare-military.com/catalog/military_products-p02.pdf
for the antenna descprition and:
http://www.shakespeare-military.com/catalog/military_products-p03.pdf
for description of 120-43 base.
I will be taking these to the Spokane hamfest in a few days if I don't get a reply.
both antenna and base is in good condition.
Asking $250.00 plus shipping from Pendleton Or.

1097. Re: Populating my tower from scratch... need opinions on antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 01:53:21 UTC
From: Je Forget <je.forget@frenchconnection.fr>
Message-ID: <BB912B51.CE3%je.forget@frenchconnection.fr>
Source record: 108062

9913 acting as a hose!
Good point, I'll make sure all feeds go up a few inches before looping down.

EXCELLENT SUGGESTION!

Thanks!

PS:9914 is just like 9913 except the dielectric is solid foam, no teflon/air helix, therefore more water resistant.

Pat
--
Reply address is:

papa mike kilo (figures: too zeero zeero three)
AT
foxhollow
ca

Sorry for the munging folks, but there it is.

Pat

1098. Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 02:13:41 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <YcucnZOJrsZJKvaiU-KYhw@comcast.com>
Source record: 108063

http://www.tentec.com/3402.PDF

The writeup says the terminating resistors make it non-resonant. I wonder how they affect efficiency.

Tom, N3IJ

1099. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 02:53:43 UTC
From: k9sqg@aol.com
Message-ID: <20030919225343.03304.00001098@mb-m11.aol.com>
Source record: 108064

I wonder what the advantages are in terms of performance over a traditional V beam antenna?

1100. Re: FS shakespeare military antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 03:56:53 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f6bd14d_1@news1.prserv.net>
Source record: 108065

Denton:

A month or three back, someone posted a message on here looking for one of those. I pointed him to the Shakespeare page, but I suspect the price scared him off. Do a Google Groups search of this NG using my name and Shakespeare as the key words, and it should lead to the identity original poster who wanted one. I have one, so don't send the info to me..

--
Crazy George
Remove NO and SPAM from return address
"denton" <denton@oregontrail.net> wrote in message
news:bkg7iq$88j$1@news.oregontrail.net...
> I have for sale a multi-section shakespeare military 120 antenna with
canvus
> cover and base.
> Please see the following for details:
> http://www.shakespeare-military.com/catalog/military_products-p02.pdf
> for the antenna descprition and:
> http://www.shakespeare-military.com/catalog/military_products-p03.pdf
> for description of 120-43 base.
> I will be taking these to the Spokane hamfest in a few days if I don't get
a
> reply.
> both antenna and base is in good condition.
> Asking $250.00 plus shipping from Pendleton Or.
>
>

1101. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 04:00:57 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f6bd2e8_4@news1.prserv.net>
Source record: 108066

Unterminated V beams, believe it or not, are bidirectional. Terminated are unidirectional. See any antenna textbook.

--
Crazy George
Remove NO and SPAM from return address
"K9SQG" <k9sqg@aol.com> wrote in message
news:20030919225343.03304.00001098@mb-m11.aol.com...
> I wonder what the advantages are in terms of performance over a
traditional V
> beam antenna?

1102. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 04:03:43 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f6bd2e9_4@news1.prserv.net>
Source record: 108067

They absorb the 'back wave'. Forward efficiency is unchanged, but half the
power goes into the resistors instead of radiating off the rear. See Kraus
or Johnson/Jasik, or back issues of RCA review.

--
Crazy George
Remove NO and SPAM from return address
"Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
news:YcucnZOJrsZJKvaiU-KYhw@comcast.com...
> http://www.tentec.com/3402.PDF
>
> The writeup says the terminating resistors make it non-resonant. I wonder
> how they affect efficiency.
>
> Tom, N3IJ
>
>

1103. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 04:05:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6bd3d2$1_4@corp.newsgroups.com>
Source record: 108068

Reg Edwards wrote:
> If there is NOT a conjugate match at this junction then there cannot be a
> conjugate match anywhere else in the system.

That statement applies to lossless systems. How about lossy systems?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1104. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 04:19:22 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <mfinmvkcqh24duvm63buf9dejqrsqd70fp@4ax.com>
Source record: 107969

On Fri, 19 Sep 2003 22:13:41 -0400, "Tom Coates"
<tecoatesHatesSpam@comcast.net> wrote:

>http://www.tentec.com/3402.PDF
>
>The writeup says the terminating resistors make it non-resonant. I wonder
>how they affect efficiency.
>
>Tom, N3IJ
>

Using TenTec's Operation and Installation manual (downloaded from
their web page) for the antenna I modeled it with an apex angle of 90ï¿½
and an apex height of 36 feet with the ends at 10 feet above ground as
per their illustration on page one.

NEC reports the following maximum forward gain as:

50 foot version

Freq. MHz Gain dBi Elevation Angle

3.5 -14.8 83ï¿½
7.0 -7.0 56ï¿½
14 1.0 31ï¿½
21 5.8 23ï¿½
28 7.1 48ï¿½

100 version

3.5 -9.7 65ï¿½
7.0 -1.09 48ï¿½
14 4.31 25ï¿½
21 5.27 17ï¿½
28 2.47 58ï¿½

Danny, K6MHE

1105. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 05:08:32 UTC
From: radio913@aol.com
Message-ID: <20030920010832.16681.00001580@mb-m02.aol.com>
Source record: 107970

Come on down if you want Roy, I'd love to meet you in person too!

But you won't find any FCC violations at my place! No siree!

This will be going into a dummy load bedwarmer!

Thanks for the free plugs, i don't like to toot my own horn, i'd rather others do it for me. i tried looking your name up too, but nothing nearly as interesting...boring ham stuff!

Can you folks recommend a Bird model?

Slick

1106. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 07:12:58 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309192312.55401d30@posting.google.com>
Source record: 107971

"Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
news:<YcucnZOJrsZJKvaiU-KYhw@comcast.com>...
> http://www.tentec.com/3402.PDF
>
> The writeup says the terminating resistors make it non-resonant. I wonder
> how they affect efficiency.
>
> Tom, N3IJ

Seems to me it's already non resonant except on certain frequencies
where it's multiples of a 1/2 wave. But you do have reactance on most
frequencies. The resisters absorb rf that travels along the wire to
the resister. The rf traveling to the rig in the other direction, is
absorbed by that load. So there are no standing waves. Basically, all
the resisters do is make the antenna fairly unidirectional. About the
same deal as a terminated rhombic. You have a good f/b ratio. But
overall total efficiency is appx cut in half, being the waves to the
resister are absorbed. I think this is correct anyway...:/ MK

1107. Re: Uses of Reflection Coefficient Bridges.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 08:00:35 UTC
From: Ian Jackson <PLEASEREMOVE@g3ohx.demon.co.uk>
Message-ID: <EBh1$0IjkAb$Ewd5@g3ohx.demon.co.uk>
Source record: 107972

In message <bkb222fhg1@hercules.btinternet.com>, Reg Edwards
<g4fgq.regp@btinternet.com> writes
>"Richard Harrison" <richardharrison@webtv.net> wrote in message
>news:18196-3F68DFC1-119@storefull-2314.public.lawson.webtv.net...
>> Reg wrote:
>> "How does each repeater generate its unique pilot tone when a trawler or
>> earthquake breaks the inner conductor?"
>>
>> Well, I`ve checked and find that some subsea multiplex units do generate
>> pilot tones for the purpose I speculated and for others. There is an
>> "SD" model equipment in which each group modulator generates a pilot
>> tone used for switching, level adjustment, equalization, etc. If these
>> tones are being recorded and start losing power, I expect they fade away
>> but die all at once when the path is interrupted. By examining the
>> record, it should be possible to see which tones suffered sudden death
>> and which faded away. There is capacitance in the system and the power
>> is high-voltage and low current. My information says there is 5500 volts
>> at each end of the transatlantic cable and that the system current drain
>> is 389 milliamperes. It has 182 repeaters spaced at about 23 miles. An
>> equalizer follows each 10th repeater.
>>
>> I have experience doing similar things with terrestrial radio multiplex.
>> We used cheap pressure stamping Rust-Rack event recorders to record
>> breaks in pilot reception. I`ve pored over years of these records, 24
>> hours at a time.
>>
>> Best regards, Richard Harrison, KB5WZI
>
>=====================================
>
>OK, Richard, so we've located by some automatic means the cable damage to be
>somewhere between the n'th and (n+1)'th repeaters. This is nowhere good
>enough for the repair ship captain. He wants to be back in port again for
>Christmas. And it costs a million dollars in lost revenue each day the cable
>is out of service plus the cost of keeping an 8000-ton ship and its crew at
>sea.
>
>The repair ship is just leaving Southampton docks. There's an Atlantic storm
>brewing. There are spare lengths of cable and repeaters aboard. This time
>they remember to collect the cable jointer. The ship's doctor retires to his
>cabin as he is always sea-sick. The ship's Chief Engineer Officer, always a
>Scotsman, and the Cable Testing Officer, neither of whom ever seem to have
>anything to do, are outside the duty-free bar waiting for it to open.
>

>The captain is pacing up and down the bridge waiting impatiently for a radio
>message, cursing the poor fellow at the cable terminal station 500 miles
>away on the Scottish rocky Atlantic coast, who is sweating blood twiddling
>knobs trying to balance the wideband, 0.05 to 50 Hz, reflection-coefficient
>bridge to within plus or minus 0.1 miles along the articial line and
>adjusting the artificial fault (R and C in parallel) to within 10 ohms with
>a biassing current of 50 milliamps.
>
>After another couple of hours with a sliderule, correcting for seasonal
>water temperature, etc., he changes his mind for the tenth time, takes
>another swig of scotch, plucks up courage, swallows, and calls the operator.
>He asks to send an urgent radio telegram to a cable ship heading westwards
>down the English Channel. The message is brief, polite and states "Fault
>estimated to be 623.7 miles from Oban". The captain issues a brief
>instruction to the duty officer and retires to the loneliness of his cabin.
>
>It is deep dusk. The lights of Plymouth from where Drake set sail 400 years
>before can be seen on the starboard horizon. The radar ppi display in the
>darkness of the bridge sweeps round monotonously every three seconds clearly
>displaying a dozen merchant ships sharing the roughening waters.
>
>The ships engines quietly, monotonously, emit a steady thud, thud, thud,
>thud . . . . . until they merge unnoticed into everybody's
>unconsciousness and on deck only the sea and wind can be felt and heard.
>----
>Reg.
>
>
>
>
>
Reg. Please be careful. I nearly choked with laughter on my cornflakes
as I read this this morning. Whatever you are taking, do I need a
prescription, or can I get it over the counter? A great start to the day
(but I'd better get my tax return done before the deadline of the end of
the month).
Ian.
--

1108. Re: Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 08:14:37 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <FaFbpmDtxAb$EANz@ifwtech.co.uk>
Source record: 107973

Mark Keith wrote:
>"John Passaneau" <jxp16@psu.edu> wrote in message
>news:<bkcdh3$1cri$1@f04n12.cac.psu.edu>...
>> But a gamma match is an un-balanced load and a 1:1 balun is not needed.
>>
>>
>> --
>> John Passaneau, W3JXP
>> Penn State University
>> w3jxp@arrl.net
>
>In a way I agree, and don't bother with chokes on many of my beams.
>But I have heard of some that reported some common mode problems with
>the gamma match alone. A choke should clean this up, but it will be
>pretty small choke for 6m use, and be effective. For 6m, beads might
>be a route to consider. ?

The potential problems with a gamma match are that:

1. It is an unbalanced (asymmetrical) connection to the dipole. This means that the physical centre, where the coax shield is connected, is not the electrical centre. Therefore there is always an EMF that makes some current flow on the outer surface of the coax. However, the value of this current depends on the impedance presented by the shield. Winding the coax to form a choke at the feedpoint, or adding large ferrite beads, will increase the shield impedance at the feedpoint and reduce this stray current.

2. A gamma-matched yagi often has the driven element connected to the boom at its physical centre... and so too is the shield of the coax. Therefore as well as launching stray currents onto the shield, the gamma match also launches stray currents onto the boom of the yagi, which flow down the mast, the rotator, the tower, the cables etc. Even if you choke-off the coax, those currents in the metalwork remain.

Note that I did say *potential* problems. Those stray currents are always going to be there, at some level, but they may or may not be a problem for you and your station.

On the one hand we have Mark:
>Myself, I've never really had any trouble not adding a choke. My 2m FM
>3 el has a gamma and no choke. Same for my 3 el 6m yagi. Here, they
>are some of my "coldest" antennas as far as rf on the feedline. Maybe
>I just lead a charmed life..:) MK

On the other hand, I had RFI and severe noise pickup with a very similar gamma-matched 3 el 6m yagi. A clip-on RF current meter showed significant currents on the surface of the coax *and* the rotator cable. When I changed the driven element to an insulated split dipole with a choke balun, those stray currents all but disappeared - and so did the RFI and the noise.

Over on the RFI list, we also had a G who put up a new 20-15-10m quad and was plagued with noise pickup. This went down from S9 to S2 when he tried a small choke balun at the feedpoint, and with a better balun (more turns on a larger core) it should go lower yet.

A clip-on RF current meter is an excellent tool for RFI investigations - at last you can *see* which cables are carrying stray RF, and how much. You can also *see* which of your solutions is working, and how well. For homebrew versions see my website, or see the Palomar and MFJ ads.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1109. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 08:27:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmo3sd3m3lj08a@corp.supernews.com>
Source record: 107974

People can really get hung up on "gain", "takeoff angle", and "efficiency", using them as shorthand ways to decide how good or effective an antenna is. But they aren't, in themselves, what count. What counts is how strong a signal you're radiating in the direction you want. (I'll talk about transmitting antennas and ignore the somewhat different problems of receiving antennas in this discussion.) Let's take a brief look at each of these and when it is and isn't important.

GAIN - It's often given as a single number for an antenna, as "this antenna has a gain of . . .". Assuming that a reference is understood or also otherwise specified, you can usually assume that the gain figure is in the most favorable direction for the antenna. If the antenna is a rotatable Yagi, where you can point the most favorable direction of the antenna toward the person you're talking to, then the single gain figure is meaningful. Otherwise, it's not. Who cares what the gain is in some other direction? What you care about is what the gain is in the direction you're communicating to. In general, an antenna with more gain has narrower lobes. So if you're working people in all directions, the odds are that the signal will be weaker with high gain fixed antenna than it will with a lower gain antenna, since it's more likely to be in an unfavorable direction for the antenna.

TAKEOFF ANGLE - This usually means the elevation angle at which the gain is maximum. Just like the gain figure, it's meaningless unless you happen to be communicating at that angle. An antenna with lower takeoff angle can easily be, and often is, lousier for DX than one with a higher takeoff angle -- if it has lower gain at both angles.

EFFICIENCY - This is a good comparative predictor of antenna performance, but only if all else is equal. For example, improving the ground system of a ground-mounted vertical will improve its efficiency, but won't appreciably affect the pattern. So whatever direction you're using to communicate, the signal will be better if the efficiency is better. Likewise, reducing the conductor or capacitor loss of a small loop antenna improves the efficiency but doesn't affect the pattern. So it will improve your ability to communicate in whatever direction. But the vee beam and rhombic are different critters. All else isn't equal with these antennas when the efficiency changes. The resistors, as others have pointed out, kill only one lobe and leave the other pretty much alone. So if you're using only the one lobe for communicating, the lowered efficiency doesn't matter a bit.

I don't know if the resistors in the Ten-Tec antenna also absorb some of the power radiated from the front lobe. If so, then they do reduce the antenna's effectiveness when communicating with that lobe. But it's an

easy antenna to model with any of the currently available programs (except MININEC-based ones if it's less than about a fifth of a wavelength high). Figure out what direction(s) you'll be communicating in. Use a propagation program like W6ELProp to figure out about what elevation angles will be important. Then model the antenna and look at the pattern, not just the maximum gain or the takeoff angle, to see what the gain is at the azimuth and elevation angles you'll be using. Model a dipole or other reference antenna at the same height and compare it to the antenna at the azimuth and elevation angles of interest. That will tell you what you'll get when you replace one antenna with the other. You might be surprised. At the very least, you'll learn a lot.

Roy Lewallen, W7EL

1110. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 09:43:02 UTC
From: Bill <brian@iquest.net>
Message-ID: <GiVab.44970$Aq2.7253@newsread1.news.atl.earthlink.net>
Source record: 107975

Good source of roids can be found:

http://www.kitsandparts.com

See Diz, he's the Toroid King! <grin>

"mike" <intotheapex@yahoo.com> wrote in message
news:vfemmv09r6dtb4j5fkvnacdpqj0hl34gpj@4ax.com...
> Hey group,
>
> I was looking for a cheap source of toroids and stumbled across a
> blown ATX computer power supply. It was chock full of toroids.
>
> I've attached a picture and used a chapstick stick as a size
> reference.
>
> While I have everyones attention, let me repost my question posted to
> the shortwave group. It may be better addressed in here.
>
> ----------

>
> Got a few questions concerning the fabrication of an antenna tuner.
>
> I am using Arnie Coro of DX Unlimited's instructions for a simple PI
> network tuner.
>
> http://www.radiohc.org/Distributions/Dxers/pi-tuner1.htm
>
> Instead of a 10 position switch I am using a 2 pole 6 position switch
> then fliping a toggle to use the other 6 positions for a total of 12
> inductance settings. But thats not my question.
>
> My question is:
>
> Given the small size of the box this all is going to fit into, I would
> like to use a torroidal core instead of an air core.
>
> 1) Does Radio Shack sell torroidial cores?
>
> 2) Would I wind it similarly to the air core in that each winding is
> separated by one wire width and tapped every 3rd turn?
>
> If I understand the concept correctly, it's seems the PI network tuner
> tunes both ends of the equation. This would be good as I am using a

> Sony ICF-SW7600GR and dont have a clue what the input impedance might
> be.
>
> 3) Is that how it really works? Tuning both the antenna and the line
> out to the receiver?
>
> Arnie says this tuner will work down to 5kHz. And given my research of
> this tuner type, I would need to switch in extra capacitance to get
> down low for say the AM band. I am considering adding in a few more
> toggles to achieve this. My variables are 365pf.
>
> 4)How much extra capacitance would be needed? And would this be
> practical or should I switch in another inductor creating a PI-L?
>
>
> Thanks in advance,
>
> Mike

1111. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 10:51:41 UTC
From: richardharrison@webtv.net
Message-ID: <20021-3F6C313D-2@storefull-2314.public.lawson.webtv.net>
Source record: 107977

Dr. Slick wrote:
"Can you folks recommend a Bird model?"

Bird Electronic Corporation
30303 Aurora Road
Cleveland (Solon) Ohio 44139
(216) 248 1200
Fax (216) 248 5426
TLX 706898
Cable BIRDELEC

Contact for a catalog and copies of Bird Technical Series (Watts New From Bird), even if you are not buying from Bird now.

There is a wealth of information available from Bird, SWR slide rule, various wattmeter instruction books, application notes, and catalogs. Ask for everything they can send you to help understand their products. Their list of products is diverse.

The Model 43 has been around for about 50 years. It shares an instruction book with Models: 4430, 4431, 4521, 4522, 4523, 4525, 4526, and 4527. But, that is not all the models Bird has made or makes.

When you become thoroughly familiar with Bird`s instructions, you will necessarily be familiar with how the lines that the Bird is used with work. The literature Bird provides makes learning about transmission lines much easier.

Best regards, Richard Harrison, KB5WZI

1112. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 10:55:22 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkhbmr$1dv$1@nic.grnet.gr>
Source record: 107976

```
| "Ian White, G3SEK" wrote:
|
| ...
| The difference is that an academic journal
| ...
| can publish material
| ...
| provided only that
| it's original and of high academic merit.
| ...
|

Dear Mr. Ian White,

This is an interesting point of view indeed,
which the last days
returns from time to time in my mind
so that I decided finally to ask you,
about it:

Is it a formal professional opinion,
or a deeper amateur hope of you?

Sincerely,

pez
SV7BAX

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:BGEa+2HaxtX$EA8O@ifwtech.co.uk...
| Peter O. Brackett wrote:
| >
| >I would be willing to write such an article for QEX, however... not
| >without an invitation to do so. An unsolicted contribution would be a
| >lot of work on the part of anyone who undertook such a project and it
| >might all be for naught.
| >
| >Personally I wouldn't do so without a clear indication from the editor
| >that such an article could be published. This is simply because time
| >is valuable and the fear that an unsolicited manuscript might be be
| >rejected simply because, although interesting, it would be of little
| >interest to the amateur radio community.
| >
| Looking at this from a writer and an editor's point of view (though
| obviously not speaking for the editor of QEX)...
|
```

| First of all, QEX is not an academic journal but a technical magazine.
| The difference is that an academic journal has a guaranteed income from
| college libraries, and thus can publish material that is stunningly
| boring, provided only that it's original and of high academic merit.
|
| QEX on the other hand has to earn its living by publishing articles that
| are *interesting* and *useful* to subscribers. Every single issue will
| determine whether a substantial fraction of subscribers decide to renew,
| or not. This cold commercial fact tends to concentrate the editor's mind
| - and it also improves the quality of articles that he or she chooses to
| publish.
|
| Editors don't like giving open-ended invitations to writers whose work
| they don't already know. On the other hand, they love receiving e-mails
| asking if they'd consider an article on a certain subject. The more
| professional you are about this, by justifying why that article would be
| interesting, outlining the topics you'd like to cover, showing that you
| understand the needs of the magazine, and estimating an overall length
| that's appropriate to both the topic and the magazine... why, the more
| they'll like you.
|
| Oh, by the way, that e-mail will also be read as a sample of your
| writing style...
|
| But even then, no editor will say "Go ahead - you write it, we'll
| publish it." No self-respecting editor ever *should* say that! The best
| any author can legitimately expect is an enthusiastic promise to
| "consider it". It's then up to you to write an article that the editor
| cannot refuse.
|
| >I can however provide professional technical references to anyone who
| >might have a sincere interest in learning about such things.
| >
| Very few people - even in this learned newsgroup - would be interested
| in learning about the subject for its own academic sake. But enough
| people have become intrigued by the topic of complex Zo to feel the
| foundations of our understanding(?) of transmission lines shifting
| underneath us. We now need to know which of the formulae and
| relationships that we've been using are universally correct, and which
| of them are actually only approximations. An article with that focus
| really *would* be interesting!
|
| An article really is needed now. Sorry, Walt, we can't go back to sleep
| - the genie is out of the bottle, and only more understanding (not less)
| will put it back. Reg's program is not the solution either. I'd trust
| that particular program all the way, but I also want to understand
| *why*, and using a program won't show me that.
|
| What's needed here is more like an academic review article. Such
| articles don't normally contain new, original results. The originality

| of a good review consists in pulling together existing results from a
| whole field of study and *explaining* what they mean.
|
| Reviews generally shouldn't go into the same heavy detail as the
| original references. For this particular topic, the mathematical level
| of a magazine article would be a make-or-break issue... and another very
| good reason why editors always say "Show me first." Academic papers tend
| to deal in high-level general concepts that are already familiar to
| academic readers, but that is not appropriate for an amateur readership.
| To emphasize the difference, it's not that amateur readers are stupid
| (far from it!) but that very few of us have covered this particular
| academic territory. As an author, don't take us into there unless
| there's absolutely no other way. If the same results can be obtained
| using lower-level concepts such as Ohm's and Kirchhoff's laws, then -
| for this readership - that's how it should be done.
|
| The existence of academic papers would allow you to skip over some of
| the heavy math, and keep your article interesting and moving forward.
| For example, it's legitimate in an article of this kind to work with a
| simplified example of a complex-Zo problem, derive a useful result, and
| quote a reference that proves (at the expense of much heavier math) that
| that result is actually a general one. A review-type article is one of
| the few cases where the notorious "it can be shown that" is actually a
| legitimate and useful tool to keep your story moving.
|
|
|
| --
| 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
| Editor, 'The VHF/UHF DX Book'
| http://www.ifwtech.co.uk/g3sek

1113. Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 11:22:28 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6C3980.5010403@optonline.net>
Source record: 107978

I am still waiting for the lawyer to review the CC&Rs for the property we are hoping to buy, but in the meantime . . .

Does anybody have any knowledge or experience whether a tower is a "structure," as the term is used in CC&Rs? -- e.g., "No structure may be erected on any of the lots except for a single-family dwelling . . . [then come the size limitations}. No more than one outbuilding may be erected on any lot . . . [then come the size limitations}."

The context suggests that "structure" means "building," but if it includes towers, then would it not also include the set-in-concrete basketball hoops that abound in the subdivision? Not to mention the amateur radio tower that is already there on another lot -- but I want to make sure that the owner isn't simply "getting away with it" because he has nice neighbors, whereas we might turn out to have not-so-nice ones.

Alan AB2OS

1114. screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 12:20:58 UTC
From: jwsmid <jwsmid@home.nl>
Message-ID: <bkhg7c$2nu$1@news2.tilbu1.nb.home.nl>
Source record: 107979

hi

I want to buy a screwdriver antenna
I lookt on the www and fount :High Sierra (HS-1800) and Hi-Q antennas
(Hi-Q-4/80 RT)
Which one is better.

JW SMID (PE1RZM)

The Netherlands

1115. Heights Aliminum towers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 14:37:00 UTC
From: captian_ron99@yahoo.com
Message-ID: <bkhomo$ekr@library2.airnews.net>
Source record: 107980

Has anyone had any experience with Heights aluminum towers and would you recommend them?
I am not a Ham operator but I am looking for a tower to mount a parabolic dish for Wireless internet as well as a TV antenna and rotor.

1116. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 14:45:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6c69eb_3@corp.newsgroups.com>
Source record: 107981

Mark Keith wrote:
> "Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
news:<YcucnZOJrsZJKvaiU-KYhw@comcast.com>...
>>The writeup says the terminating resistors make it non-resonant. I wonder
>>how they affect efficiency.
>
> Seems to me it's already non resonant except on certain frequencies
> where it's multiples of a 1/2 wave. But you do have reactance on most
> frequencies. The resisters absorb rf that travels along the wire to
> the resister. The rf traveling to the rig in the other direction, is
> absorbed by that load. So there are no standing waves. Basically, all
> the resisters do is make the antenna fairly unidirectional. About the
> same deal as a terminated rhombic. You have a good f/b ratio. But
> overall total efficiency is appx cut in half, being the waves to the
> resister are absorbed. I think this is correct anyway...:/ MK

What Tom probably means is that the resistors turn the antenna into a
traveling wave antenna where the feedpoint impedance is a few hundred
ohms mostly resistive over a relatively wide range of frequencies. It
is somewhat like that infinite feedline that we sometimes talk about.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1117. Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 15:58:20 UTC
From: radio913@aol.com
Message-ID: <20030920115820.17956.00000902@mb-m25.aol.com>
Source record: 107982

Hi,

I've just become aware of the answers to these questions, but i thought i might see if anyone agrees/disagrees with me.

What is the center of the Smith Chart when characteristic impedance Zo= 50 + j50?

And what will the complex series impedance be for Rho = -1 in this case?

(Hint: it will NOT be a short!)

Slick (Garvin)

1118. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 16:37:51 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <Nm-dnUOWScX5H_GiU-KYvw@crocker.com>
Source record: 107983

"Radio913" <radio913@aol.com> wrote in message
news:20030920115820.17956.00000902@mb-m25.aol.com...
> Hi,
>
> I've just become aware of the answers to these questions, but i
thought i
> might see if anyone agrees/disagrees with me.
>
> What is the center of the Smith Chart when characteristic impedance
> Zo= 50 + j50?
>
> And what will the complex series impedance be for Rho = -1 in this
case?
>
> (Hint: it will NOT be a short!)
>
>
> Slick (Garvin)

the center of the smith chart is defined to be a normalized 1+j0.

lets see...

rho = (Z - Zo)/(Z + Zo)
if rho = -1 then

-1=(Z-Zo)/(Z+Zo)
or
-1*(Z+Zo)=(Z-Zo)
or
-Z - Zo = Z - Zo
or
-Z = Z
the only value i know that satisfies that is zero.
lets substitute it back in to be sure...
-1=(0-(50+j50))/(0+(50+j50))
-1=(-50-j50)/(50+j50)
-1=-1(50+j50)/(50+j50)
-1=-1 qed.

1119. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 17:53:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6c95ee_1@corp.newsgroups.com>
Source record: 107984

Radio913 wrote:
> What is the center of the Smith Chart when characteristic impedance
> Zo= 50 + j50?

I suspect that the standard Smith Chart is incapable of handling
a Z0 = 50 + j50. On the standard Smith Chart, would the center of
the SWR spiral be 1 + j for a Z0 = 50 +j50? If so, that would make
for some interesting impedance transformations.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1120. Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 17:57:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6c96ed$1_1@corp.newsgroups.com>
Source record: 107985

```
Is anyone else being deluged with Virus/Worm email messages?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----
```

1121. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:19:05 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <tS0bb.1004$qK1.1040806@news2.news.adelphia.net>
Source record: 107986

Yes, Don' know where it from. Got any info?

Jim

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

---
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.520 / Virus Database: 318 - Release Date: 9/18/03

1122. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:23:01 UTC
From: Steve <steve_lyon@prodigy.net>
Message-ID: <9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com>
Source record: 107987

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
Yes, 14 yesterday and 4 so far this morning.

73, Steve
WB6RIB

1123. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:38:00 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F6C9E84.8040609@get.lost>
Source record: 107988

Alan Beagley wrote:

> Does anybody have any knowledge or experience whether a tower is a
> "structure," as the term is used in CC&Rs? -- e.g., "No structure may
> be erected on any of the lots except for a single-family dwelling . . .
> [then come the size limitations}. No more than one outbuilding may be
> erected on any lot . . . [then come the size limitations}."

Of course it is a structure. After all, even when you apply for a permit
in a non-CC&R-infested area, everyone recommends applying for an
"antenna support structure", not a tower.
Besides, the whole idea behind CC&R's is to prohibit anything other than
houses in the neighborhood.

> The context suggests that "structure" means "building," but if it
> includes towers, then would it not also include the set-in-concrete
> basketball hoops that abound in the subdivision? Not to mention the
> amateur radio tower that is already there on another lot -- but I want
> to make sure that the owner isn't simply "getting away with it" because
> he has nice neighbors, whereas we might turn out to have not-so-nice ones.

This just means that CC&R's are not being enforced strictly, so any
towers you erected, even if you got an official permit for, would be
violating them. You'd likely never win against the association if they
took you to court, because generally the fact that others are violating
them freely does not give you permission to do the same. It's too risky.

I'd keep looking if I were you.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1124. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:42:36 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <8bWdnTNS6Lw_AvGiU-KYuA@crocker.com>
Source record: 107989

"Steve" <steve_lyon@prodigy.net> wrote in message
news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
>
> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> news:3f6c96ed$1_1@corp.newsgroups.com...
> > Is anyone else being deluged with Virus/Worm email messages?
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
> >
> Yes, 14 yesterday and 4 so far this morning.
>
>
you must not have many friends who have you in their address book... i got
about 1000 overnight last night and about 2500 the day before.

1125. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:44:24 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <HbSdnUXBM8-RPfGiU-KYuA@crocker.com>
Source record: 107990

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3F6C9E84.8040609@get.lost...
> Alan Beagley wrote:
>
> > Does anybody have any knowledge or experience whether a tower is a
> > "structure," as the term is used in CC&Rs? -- e.g., "No structure may
> > be erected on any of the lots except for a single-family dwelling . . .
> > [then come the size limitations}. No more than one outbuilding may be
> > erected on any lot . . . [then come the size limitations}."
>
> Of course it is a structure. After all, even when you apply for a permit
> in a non-CC&R-infested area, everyone recommends applying for an
> "antenna support structure", not a tower.
> Besides, the whole idea behind CC&R's is to prohibit anything other than
> houses in the neighborhood.

not in this town.. according to our local zoning and assessing people it has to have a roof to be a 'structure' here. this is a question best asked of a local lawyer who knows the local rules.

1126. Re: Painting a Yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:52:11 UTC
From: Karl Sandstrom <k5man@cox.net>
Message-ID: <vl1bb.1088$sp2.302@lakeread04>
Source record: 107991

Peter,

I have sprayed the elements and booms of many antennas with clear enamel with no ill effects. The big caveat is to know what needs to be electrically connected to what and make sure those connections are preserved thru the coating process. As always, check the antenna VSWR after coating to make sure it still works properly.

Karl R. Sandstrom, K5MAN

"Peter" <pmolsen@one.net.au> wrote in message news:6ba442b.0309141230.163ba825@posting.google.com...
> Does it affect the performance of a Yagi antenna (433 MHz) to paint the elements?

1127. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:54:43 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <Tn1bb.1239$Hd6.952515@newssvr28.news.prodigy.com>
Source record: 107992

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp

Yes over 600 in the last 3 or 4 days.

Dee D. Flint, N8UZE

1128. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 18:58:21 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vmp8ou2ictcb81@corp.supernews.com>
Source record: 107993

YES. MB worth. So many that E-mail drive was filled on Friday. Just
received five in a five minute period.
Not hard to trap, however they are quite a pain. Have yet to get
ISP to block them.
Good luck. Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>

1129. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:01:51 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bki86ulmc1@hercules.btinternet.com>
Source record: 107994

> Is anyone else being deluged with Virus/Worm email messages?
> --
==========

Me too - 2000 per day.

Terrorist attack or just another up-and-coming Bill Gates?

G4FGQ, UK

1130. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:07:12 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <GrSdnQ4ag5f4OPGiU-KYvw@crocker.com>
Source record: 107995

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vmp8ou2ictcb81@corp.supernews.com...
> YES. MB worth. So many that E-mail drive was filled on Friday. Just
> received five in a five minute period.
> Not hard to trap, however they are quite a pain. Have yet to get
> ISP to block them.
> Good luck. Mac N8TT

my isp is stopping the infected ones, which appears to be most of them.. its
funny though, some get through with an empty attachment. there must be a
bug in the virus that occasionally attaches an empty file instead of itself.

1131. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:21:58 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <t3apmvcvo15sjodcdnd0o48g72eh236opt@4ax.com>
Source record: 107996

On Sat, 20 Sep 2003 19:01:51 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>> Is anyone else being deluged with Virus/Worm email messages?
>> --
>================================
>
>Me too - 2000 per day.
>
>Terrorist attack or just another up-and-coming Bill Gates?
>
>G4FGQ, UK
>
>
Me too, 49 yesterday and 80 today.

Walt, W2DU

1132. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:35:15 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>
Source record: 107997

"David Robbins" <k1ttt@arrl.net> wrote in message
news:GrSdnQ4ag5f4OPGiU-KYvw@crocker.com...
>
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> news:vmp8ou2ictcb81@corp.supernews.com...
> > YES. MB worth. So many that E-mail drive was filled on Friday. Just
> > received five in a five minute period.
> > Not hard to trap, however they are quite a pain. Have yet to get
> > ISP to block them.
> > Good luck. Mac N8TT
>
> my isp is stopping the infected ones, which appears to be most of them..
its
> funny though, some get through with an empty attachment. there must be a
> bug in the virus that occasionally attaches an empty file instead of
itself.
>

Actually my ISP is blocking the actual virus/worms but then the message itself gets passed on to me with a statement from the ISP that if I want the file to contact the sender and arrange another means of getting it. However, that still is a huge number of emails in my box.

I've tried to trap them but the headers and senders, etc are all different. If you have a suggestion on how to stop them, please let us all in on it.

Dee D. Flint, N8UZE

1133. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:40:51 UTC
From: Tom Coates <tecoatesHatesSpam@comcast.net>
Message-ID: <F7mcnXyk_v6mMPGiXTWJlg@comcast.com>
Source record: 107998

A number of systems administrators have posted inquiries on the Microsoft Windows 2000 Security newsgroup about this artful little piece of social engineering. I'm afraid it's going to be with us for a while. People who should know better have trouble remembering that Microsoft never distributes software via e-mail.

http://securityresponse.symantec.com/avcenter/venc/data/w32.swen.a@mm.html has information on how it works and what to do about it. .

It's Internet Explorer-specific, so Opera or Mozilla, etc. shouldn't be affected.

Tom, N3IJ

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1134. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:45:49 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <kBGdnVnkvuHvM_GiXTWJig@crocker.com>
Source record: 107999

"Dee D. Flint" <deehays@qix.net> wrote in message
news:TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com...
>
> "David Robbins" <k1ttt@arrl.net> wrote in message
> news:GrSdnQ4ag5f4OPGiU-KYvw@crocker.com...
> >
> > "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> > news:vmp8ou2ictcb81@corp.supernews.com...
> > > YES. MB worth. So many that E-mail drive was filled on Friday.
Just
> > > received five in a five minute period.
> > > Not hard to trap, however they are quite a pain. Have yet to get
> > > ISP to block them.
> > > Good luck. Mac N8TT
> >
> > my isp is stopping the infected ones, which appears to be most of them..
> its
> > funny though, some get through with an empty attachment. there must be
a
> > bug in the virus that occasionally attaches an empty file instead of
> itself.
> >
>
> Actually my ISP is blocking the actual virus/worms but then the message
> itself gets passed on to me with a statement from the ISP that if I want
the
> file to contact the sender and arrange another means of getting it.
> However, that still is a huge number of emails in my box.
>
> I've tried to trap them but the headers and senders, etc are all
different.
> If you have a suggestion on how to stop them, please let us all in on it.
>
> Dee D. Flint, N8UZE
>

if you can filter by the text in the body use "September 2003, Cumulative
Patch" that should be unique enough to catch them without taking out other
messages. the isp messages should be easy to filter out, i use the phrases
"virus found in received message" and "problem found in received message" to
send them to the deleted folder.

1135. Re: 40M HF antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:49:30 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.19d62fddc25db13e989695@news.west.earthlink.net>
Source record: 108000

In article <ja6okvkd196k8c83bs4fspu7qih0kkbotp@4ax.com>,
sheffield@earthlink.net says...
> With the downturn in the solar cycle and worse days ahead, I'm faced
> with operating on the lower hf bands. 20M has gotten to be very hit
> or miss wrt propagation and it seems that more and more dx is
> happening on 40 (with some on 30). I have a 40M dipole up about 30 ft
> or so, but that really doesn't cut it.
>
> I know that this is like a discussion about "what's the best color",
> but what antenna systems will work well on 40M, maybe even 80M, that I
> could mount either on the ground or up no higher than 30 ft? I need
> to at least get some general direction on this from an experiential
> data set rather than starting with the ads in QST or CQ.

I'd suggest the same solution I'm using: a "shorty" G5RV antenna. It
supports 40m up through 10m. The full-size G5RV is 80m thru 10m, and
there is also a version that goes 160m up thru 10m.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

1136. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 19:51:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <8wY1z5AbKbEAoq@ifwtech.co.uk>
Source record: 108006

pez wrote:
>
>| "Ian White, G3SEK" wrote:
>|
>| ...
>| The difference is that an academic journal
>| ...
>| can publish material
>| ...
>| provided only that
>| it's original and of high academic merit.
>| ...
>|
>
>Dear Mr. Ian White,
>
>This is an interesting point of view indeed,
>which the last days
>returns from time to time in my mind
>so that I decided finally to ask you,
>about it:
>
>Is it a formal professional opinion,
>or a deeper amateur hope of you?

Your editing has changed my original meaning. The answers are in the
parts that you cut out.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1137. Re: Coax air choke for 6M yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:08:33 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bkicm7erf1@reader2.nmix.net>
Source record: 107742

Excellent information, Ian. This is the kind of "education" I was looking for. :-) I'll check out your website, too, for more info on the clip-on RF current meter. Sounds like a good thing to have when optimizing an antenna setup.

Bill / W5WVO

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message news:FaFbpmDtxAb$EANz@ifwtech.co.uk...
> Mark Keith wrote:
> >"John Passaneau" <jxp16@psu.edu> wrote in message
> >news:<bkcdh3$1cri$1@f04n12.cac.psu.edu>...
> >> But a gamma match is an un-balanced load and a 1:1 balun is not needed.
> >>
> >>
> >> --
> >> John Passaneau, W3JXP
> >> Penn State University
> >> w3jxp@arrl.net
> >>
> >In a way I agree, and don't bother with chokes on many of my beams.
> >But I have heard of some that reported some common mode problems with
> >the gamma match alone. A choke should clean this up, but it will be
> >pretty small choke for 6m use, and be effective. For 6m, beads might
> >be a route to consider. ?
>
> The potential problems with a gamma match are that:
>
> 1. It is an unbalanced (asymmetrical) connection to the dipole. This
> means that the physical centre, where the coax shield is connected, is
> not the electrical centre. Therefore there is always an EMF that makes
> some current flow on the outer surface of the coax. However, the value
> of this current depends on the impedance presented by the shield.
> Winding the coax to form a choke at the feedpoint, or adding large
> ferrite beads, will increase the shield impedance at the feedpoint and
> reduce this stray current.
>
> 2. A gamma-matched yagi often has the driven element connected to the
> boom at its physical centre... and so too is the shield of the coax.
> Therefore as well as launching stray currents onto the shield, the gamma
> match also launches stray currents onto the boom of the yagi, which flow
> down the mast, the rotator, the tower, the cables etc. Even if you
> choke-off the coax, those currents in the metalwork remain.
>
> Note that I did say *potential* problems. Those stray currents are

> always going to be there, at some level, but they may or may not be a
> problem for you and your station.
>
> On the one hand we have Mark:
> >Myself, I've never really had any trouble not adding a choke. My 2m FM
> >3 el has a gamma and no choke. Same for my 3 el 6m yagi. Here, they
> >are some of my "coldest" antennas as far as rf on the feedline. Maybe
> >I just lead a charmed life..:) MK
>
> On the other hand, I had RFI and severe noise pickup with a very similar
> gamma-matched 3 el 6m yagi. A clip-on RF current meter showed
> significant currents on the surface of the coax *and* the rotator cable.
> When I changed the driven element to an insulated split dipole with a
> choke balun, those stray currents all but disappeared - and so did the
> RFI and the noise.
>
> Over on the RFI list, we also had a G who put up a new 20-15-10m quad
> and was plagued with noise pickup. This went down from S9 to S2 when he
> tried a small choke balun at the feedpoint, and with a better balun
> (more turns on a larger core) it should go lower yet.
>
> A clip-on RF current meter is an excellent tool for RFI investigations -
> at last you can *see* which cables are carrying stray RF, and how much.
> You can also *see* which of your solutions is working, and how well. For
> homebrew versions see my website, or see the Palomar and MFJ ads.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> Editor, 'The VHF/UHF DX Book'
> http://www.ifwtech.co.uk/g3sek

1138. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:21:39 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3F6CB652.DFE3B834@shaw.ca>
Source record: 108001

Cecil Moore wrote:
>
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

You are not alone! We are not alone! You can learn a bit about
it -- just hit google with 'swen virus' as a search term and look'
at any of the antivirus sites such as Symantec. It may take a while
before this one dies down!
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1139. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:34:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1ldpmvoqc9qgq1j5qrvjh1en5rlccjpeol@4ax.com>
Source record: 108002

On 20 Sep 2003 05:08:32 GMT, radio913@aol.com (Radio913) wrote:

> Can you folks recommend a Bird model?
>Slick

Hi OM,

Why do you pine on for such an expensive piece of equipment when what you admittedly need is a good load? The best Watt meter in the world is useless without that load. Many loads come with their own built in Watt meters, and you can build your own Watt meter for about $5 ($4.95 for the meter movement).

I can anticipate your cry for the need of calibration. A used Bird is far from a standard in that regard - especially when you could achieve far greater accuracy with a thermometer and a good load sitting in a bucket of water.

But, then again, maybe there's redemption in you after all in emulating the time honored Ham tradition of pushing a credit card across a display case. Pretty soon the FCC will only offer a handful of call signs (by region) like K6VISA.

73's
Richard Clark, KB7QHC

1140. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:36:36 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <dT2bb.279$La.87@fed1read02>
Source record: 108003

There is a major net attack in progress. The Swen worm can bug even well-protected computers, since the payload arrives as a 106 kB email attachment. If your mailbox has a 10 MB capacity, then all you need is 90+, and you admin will automatically start bouncing ALL your incoming mail. In effect, a Denial of Service fringe benefit for the worm.

In addition to trying to look like an official MS announcement, the worm is also arriving in the form of a fake notice of undeliverable email. Don't investigate ANY attachments unless you want to live very dangerously.

Ed
WB6WSN

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vmp8ou2ictcb81@corp.supernews.com...
> YES. MB worth. So many that E-mail drive was filled on Friday. Just
> received five in a five minute period.
> Not hard to trap, however they are quite a pain. Have yet to get
> ISP to block them.
> Good luck. Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> news:3f6c96ed$1_1@corp.newsgroups.com...
> > Is anyone else being deluged with Virus/Worm email messages?
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
> >
> >
> >
>

1141. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:37:54 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net>
Source record: 108004

In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee D. Flint" <deehays@qix.net> wrote:

> I've tried to trap them but the headers and senders, etc are all different.

The "From:" lines are likely forged. Many such worms and viruses pick recipients and purported senders randomly from the infected computer's Outlook or Outlook Express address list. If you want to see where the message really is coming from, examine full headers carefully -- specifically, the "Received: from" lines.

> If you have a suggestion on how to stop them, please let us all in on it.

Persuade the universe to cease using unsafe operating system software, browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including the version now marketed by Apple, is pretty safe.

David, ex-W8EZE, whose computers are happily MS-free except for safe 11 year old versions of Word and Excel

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

1142. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:41:03 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <nX2bb.281$La.211@fed1read02>
Source record: 108005

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bki86ulmc1@hercules.btinternet.com...
> > Is anyone else being deluged with Virus/Worm email messages?
> > --
> ================================
>
> Me too - 2000 per day.
>
> Terrorist attack or just another up-and-coming Bill Gates?
>
> G4FGQ, UK
>
>
>

I don't recall anything in Gates' career that's equivalent to the present
worm attack.
Do you have any factual backup for your off-hand slander?

Ed
WB6WSN

1143. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:45:42 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F6CBC6E.9080505@get.lost>
Source record: 108007

David Robbins wrote:

>>>Does anybody have any knowledge or experience whether a tower is a
>>>"structure," as the term is used in CC&Rs? -- e.g., "No structure may
>>>be erected on any of the lots except for a single-family dwelling . . .
>>>[then come the size limitations}. No more than one outbuilding may be
>>>erected on any lot . . . [then come the size limitations}."
>>
>>Of course it is a structure. After all, even when you apply for a permit
>>in a non-CC&R-infested area, everyone recommends applying for an
>>"antenna support structure", not a tower.
>>Besides, the whole idea behind CC&R's is to prohibit anything other than
>>houses in the neighborhood.
>
>
> not in this town.. according to our local zoning and assessing people it has
> to have a roof to be a 'structure' here. this is a question best asked of a
> local lawyer who knows the local rules.

If that's the case in his town, then I'd be shocked if antenna towers
were not prohibited explicitly in that CC&R. Either way, he has to see a
lawyer.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1144. Re: Reflection Delay is it real???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 20:56:53 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkieum$2nq$1@nic.grnet.gr>
Source record: 108008

You have right.
I see.
Wrong conclusion.
I am sorry.
Thank you.

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:8wY1z5AbKbEAoq@ifwtech.co.uk...
| pez wrote:
| >
| >| "Ian White, G3SEK" wrote:
| >|
| >| ...
| >| The difference is that an academic journal
| >| ...
| >| can publish material
| >| ...
| >| provided only that
| >| it's original and of high academic merit.
| >| ...
| >|
| >
| >Dear Mr. Ian White,
| >
| >This is an interesting point of view indeed,
| >which the last days
| >returns from time to time in my mind
| >so that I decided finally to ask you,
| >about it:
| >
| >Is it a formal professional opinion,
| >or a deeper amateur hope of you?
|
| Your editing has changed my original meaning. The answers are in the
| parts that you cut out.
|
|
| --
| 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
| Editor, 'The VHF/UHF DX Book'
| http://www.ifwtech.co.uk/g3sek

1145. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 21:03:53 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkifbp$359$1@nic.grnet.gr>
Source record: 108009

Yes.
In the last two or three days.
A lot of them.

pez
SV7BAX

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
| Is anyone else being deluged with Virus/Worm email messages?
| --
| 73, Cecil http://www.qsl.net/w5dxp
|
|
|
| -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
| http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
| -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1146. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 21:17:32 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <Mt3bb.18104$Od.594436@twister.tampabay.rr.com>
Source record: 108010

boy looks like you guys are getting the long end of the stick
i have had over 300 emails in the past 24 hours and i would say 100 of
them had virus attachments with them
thank the gods for spam filters and norton antivirus running all the time

1147. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 21:46:47 UTC
From: radio913@aol.com
Message-ID: <20030920174647.23376.00000952@mb-m19.aol.com>
Source record: 108011

Thanks Richard,

Do you use an SO-239 connector to type "N" for the input and output
with a model 43?

Hopefully good connectors won't affect
the SWR.

Someone else also recommended model 43 too. I'll be looking...

Slick

1148. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:00:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4ogpmvcne4mk2dagi9dqseqars7jmfg46m@4ax.com>
Source record: 108012

On Sat, 20 Sep 2003 12:57:53 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Is anyone else being deluged with Virus/Worm email messages?

Hi All,

Almost across the board, the problem is glaringly evident, and
certainly one you choose to live with. :-)

>X-Newsreader: Microsoft Outlook Express 6.00.2800.1158
>X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1165
the body count associated with those reporting:
>> 1000 overnight last night and about 2500 the day before
>> over 600
>> MB worth. So many that E-mail drive was filled on Friday.
>> 2000 per day

Of ten current correspondents, 8 use insecure MS products and their
numbers of incoming mails are easily 10 fold over the two that are
not. (Walt, even though you now use Agent for news reading, you still
use Outlook Express for mail).

My count stands at 0 aside from the usual load of porn that Agent
filters directly into the bit bucket (perhaps one half to one dozen a
day).

This doesn't protect me entirely. My own ISP's newserver (being a
microsoft product) decided to whack out during the Blaster attack by
resetting my cable modem every 15 seconds (through the early hours
when I simply turned off my machine). Through the attack (again, my
machine was still off), I contacted Comcast's service line to get a
fellow pitifully scripted to provide no real answers:
him: "our network is currently down"
me: "are you using MS servers?"
him: "No"
me: "What are you doing about it?"
him: "We are in contact with MS about the problem."
me: (significant silence)
him: (keys banging away) "I cannot ping your modem."
me: "The network is down. Why did you even try?"
him: (significant silence)

For several weeks afterword, their still infected server was sending
infected e-mails in my behalf, using an old address (not even in my
machine anymore after being changed from AT&T) they keep for
forwarding. How do I know I wasn't infected? I corresponded daily

through another ISP (my co-host) without a hitch through the entire
period.

Visit:
http://grc.com/default.htm
to obtain security fixes BEFORE the viruses are diagnosed through
autopsy. I've been living quite free of these problems (aside from
stupid Comcast) WITHOUT ONE MS security (sic) upgrade for 8 years.

Now, as to you having made this choice of product and enjoying the
virtues of all the marketing concepts. MS has clearly described how
to fix these problems by turning all javascript and OLE switches off -
and I might add, never double clicking OE or IE.
feds: "When are you going to take care of these virus problems?"
MS: "Viruses are not our fault, prosecute the lawbreakers."

In today's Business section (Seattle):
"Goodby, Mr. Bill Gates?
Japan, South Korea and China
discuss working to promote Linux"
"But the Redmond-based company
said 'consumers and market forces,
not government preferences, should
determine software selection...'"

8 out of 10 here support MS's agenda, and it shows in the numbers.

73's
Richard Clark, KB7QHC

1149. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:09:58 UTC
From: kd1@sympatico.ca
Message-ID: <3F6CD036.653010E6@sympatico.ca>
Source record: 108018

Radio913 wrote:
> >> I will try the experiment when i get the chance.
> >
> >Excellent. There is nothing better than seeing it with your own
> >eyes.
>
> I don't need to see it with my eyes,
> when i know you can't get a larger RMS voltage reflected from a capacitor, than
> the RMS that charges it.

Scientists are usually interested in producing models which will
allow them to predict the behaviour of the real world. To do this
it is necessary to check the predictions of the models against
the real world. If you find it unnecessary to do this, then you
are not interested in producing models which can predict real
world outcomes and your models can be anything you want.

But such models won't have much utility.

...Keith

1150. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:12:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309201412.27507c48@posting.google.com>
Source record: 108013

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f6c69eb_3@corp.newsgroups.com>...
> Mark Keith wrote:
> > "Tom Coates" <tecoatesHatesSpam@comcast.net> wrote in message
news:<YcucnZOJrsZJKvaiU-KYhw@comcast.com>...
> >>The writeup says the terminating resistors make it non-resonant. I wonder
> >>how they affect efficiency.
> >
> > Seems to me it's already non resonant except on certain frequencies
> > where it's multiples of a 1/2 wave. But you do have reactance on most
> > frequencies. The resisters absorb rf that travels along the wire to
> > the resister. The rf traveling to the rig in the other direction, is
> > absorbed by that load. So there are no standing waves. Basically, all
> > the resisters do is make the antenna fairly unidirectional. About the
> > same deal as a terminated rhombic. You have a good f/b ratio. But
> > overall total efficiency is appx cut in half, being the waves to the
> > resister are absorbed. I think this is correct anyway...:/ MK
>
> What Tom probably means is that the resistors turn the antenna into a
> traveling wave antenna where the feedpoint impedance is a few hundred
> ohms mostly resistive over a relatively wide range of frequencies. It
> is somewhat like that infinite feedline that we sometimes talk about.

I guess so. But I think it already qualifies as a traveling wave
antenna on the bands where the wires are actually long enough. My
moment of indecision really came trying to decide if the reduction of
the wave towards the resister qualified as a reduction of efficiency,
or would be a directive loss, IE: like the backside of a yagi. I guess
from reading Roy's post, it does qualify as a reduction of efficiency.
I hope I read that right anyway...But like he says, if you are working
a station in the opposite direction of the resisters, "IE: desired
direction" the loss of efficiency doesn't matter. That lobe *should*
stay appx the same. You are only knocking down the unwanted wave to
the rear. So the gain to the desired station you are pointing to
should be about the same as without the resisters. But the s/n ratio
should improve as you lose the crud and extra noise off the back. Am I
correct here? If not, feel free to jump in... MK

1151. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:14:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vojpmv0h0t78dqk16fbct4q4bdm2v4enr9@4ax.com>
Source record: 108015

On 20 Sep 2003 21:46:47 GMT, radio913@aol.com (Radio913) wrote:
>
> Hopefully good connectors won't affect
>the SWR.

Hi OM,

Bird connectors are the single greatest contributor to error. The second is the plug-in. Both suffer erosion problems that in the VHF/UHF regions put them ALL out of Calibration after 3 months of normal bench service (normal for FAA flight line servicing requirements).

Pick up any two, three, ten, or hundred, and they may all read the same level of power to the same level of poor accuracy. Folks get so used to the repeatability that they mistake it for accuracy. But then, accuracy is not really all that necessary in the first place; otherwise they would use better equipment.

You can recognize this last when you observe commonplace bench servicing instructions to tune a final to display 75W to 125W for a 100W amplifier. The instructions are already anticipating worst case tolerances.

73's
Richard Clark, KB7QHC

1152. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:14:39 UTC
From: Wedgew <wedgew@rochester.rr.com>
Message-ID: <3F6CD14F.80803@rochester.rr.com>
Source record: 108014

I'm getting 30 to 50 per day and another about half that number of of
messages from my isp stating that they had trapped a virus (blaster worm)

David Robbins wrote:
> "Steve" <steve_lyon@prodigy.net> wrote in message
> news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
>
>>"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
>>news:3f6c96ed$1_1@corp.newsgroups.com...
>>
>>>Is anyone else being deluged with Virus/Worm email messages?
>>>--
>>>73, Cecil http://www.qsl.net/w5dxp
>>>
>>
>>Yes, 14 yesterday and 4 so far this morning.
>>
>>
>
> you must not have many friends who have you in their address book... i got
> about 1000 overnight last night and about 2500 the day before.
>
>

1153. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:17:17 UTC
From: radio913@aol.com
Message-ID: <20030920181717.23376.00000954@mb-m19.aol.com>
Source record: 108016

>I suspect that the standard Smith Chart is incapable of handling
>a Z0 = 50 + j50. On the standard Smith Chart, would the center of
>the SWR spiral be 1 + j for a Z0 = 50 +j50? If so, that would make
>for some interesting impedance transformations.
>--

Cecil, I'm not sure either.

I can't say that i have ever seen
the Smith presented with Zo not being purely real.

However, I believe the center of the chart should be the conjugate of Zo,
or Zo*.
This sounds reasonable to me, because the series reactances should cancel,
giving you purely real, matched impedances, with zero reflections.

Additionally, when Rho = -1, we get -j50 (in the case of Zo=50+j50), and
NOT a short. So in essence, the added reactance to purely real Zo would seem
to shift the phase of the entire Smith.

But perhaps the constant VSWR circles remain circles, even with the phase
shift, and do not become spirals or something not as nice.

Slick

1154. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:23:36 UTC
From: radio913@aol.com
Message-ID: <20030920182336.23376.00000956@mb-m19.aol.com>
Source record: 108017

>
>I can anticipate your cry for the need of calibration. A used Bird is
>far from a standard in that regard - especially when you could achieve
>far greater accuracy with a thermometer and a good load sitting in a
>bucket of water.
>

I've heard that the Bird Model 43 is very accurate.

>But, then again, maybe there's redemption in you after all in
>emulating the time honored Ham tradition of pushing a credit card
>across a display case. Pretty soon the FCC will only offer a handful
>of call signs (by region) like K6VISA.
>

Well, it's appropriate that you point this out, Richard. In the sense
that the FCC has always sold off the spectrum to the highest bidders:
Clearchannel, Time/Warner, etc.

Slick

1155. 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:30:35 UTC
From: BIG AL <imafuckingwindbag@bigalk4oka.net>
Message-ID: <vmpl8a7gu2319d@corp.supernews.com>
Source record: 107919
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO

1156. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:47:22 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <_N4bb.113152$mp.57797@rwcrnsc51.ops.asp.att.net>
Source record: 107920

Cecil, the virus/worm messages at my QTH got so bad that I went to my non read mail list at Comcast and deleted over 65 message related to Microsoft with attachments and file sizes greater than 100K. I had two days of being flooded with messages containing viri and McAffee kept deleting them and I had to reboot to get control. Finally, tonight, Saturday at 6:45 EST, the backlog is temporarily [I hope] cleared off and I am using Netscape 7.1 again instead of Comcast.

Expolit-MIME.gen and W32/SWEN@MM really flooded the net this weekend.

Deacon Dave, W1MCE
+ + +

Cecil Moore wrote:
> Is anyone else being deluged with Virus/Worm email messages?

1157. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 22:53:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1ampmv4mm2alkb4jc2uju41nncctglj8hl@4ax.com>
Source record: 107921

On 20 Sep 2003 22:23:36 GMT, radio913@aol.com (Radio913) wrote:
> I've heard that the Bird Model 43 is very accurate.

Hi OM,

Now you know different. Besides, NO ONE is accurate without
comparison to a known Standard.

A Bird can be made accurate, better, in fact, than the manufacturer's
claims. I doubt you would spend the money to do it the first time,
much less each time required to keep it accurate (much less more
accurate).

It makes more sense to invest in a good load and calibrate it. It is
not at all difficult, except for the cash-and-carry tech who shuns
benchwork.

73's
Richard Clark, KB7QHC

1158. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 23:05:46 UTC
From: Kwaadwillende Gebruiker <m.vliet9@planet.nl>
Message-ID: <bkindblid1@reader08.wxs.nl>
Source record: 107924
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

feeling lonesome, and hoping the people just go their ??

Marco

"BIG AL" <imafuckingwindbag@bigalk4oka.net> schreef in bericht
news:vmpl8a7gu2319d@corp.supernews.com...
> ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
> W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
>
>

1159. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 23:06:00 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309201506.24b7e51f@posting.google.com>
Source record: 107922

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f6c96ed$1_1@corp.newsgroups.com>...
> Is anyone else being deluged with Virus/Worm email messages?

Only about 800 in the last 3 weeks...Sobigf was a real PIA. All the servers thought I was sending that crap, being the e-mails are forged. The "server" notices are as bad a spam as the actual spam or virus itself as far as clogging bandwidth. Not to mention the 100's of "microsoft" patches I get. My frigging anti-spam filter probably traps 75-80 funky e-mails a day. I have to weed through them often for "good" e-mails, or I get so many stacked up, it takes an hour to weed through them all. I have my anti-spam set to industrial strength. It catches some "good" emails... MK

1160. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 23:12:08 UTC
From: Harry Quiff <quiff@merkin.net>
Message-ID: <bkims8qhf1@216.221.129.15>
Source record: 107923
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:

> ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
> W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO

Why don't you go fuck yourself?

No one cares about the assclowns on night time HF. Every one is a loser.

I hope Riley eventually finds and ass fucks every one of you.

1161. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 23:42:25 UTC
From: core_dump <corenodumpspam0@mernocuryspamlink.net>
Message-ID: <Xns93FCC87B397CFcoredumpmercurylinkn@216.168.3.44>
Source record: 107925
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in
news:vmpl8a7gu2319d@corp.supernews.com:

> ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG
> AL'S FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
> ESPECIALLY W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
>
>

Say no to drugs, kids.

--
-core_dump

-----BEGIN GEEK CODE BLOCK-----
Version: 3.12
GCS/M/CC d- s-:+ a--- C+++ UL+ P L++++ E--- W++ N+++ o? K? w(--)
O? M-- V? PS+(---) PE(++) Y+ PGP- t+ 5? X+ R tv b+ DI+ D+(---) G e h!
r--(---) z--
------END GEEK CODE BLOCK------
Segmentation fault (core dumped)

1162. Re: Ten-tec vee beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-20 23:47:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmpppe1l92dm1b@corp.supernews.com>
Source record: 107926

The short answer is, yes, you're correct.

I ignored receiving antennas in my other posting, so I'll say a few words about them here.

For both transmitting and receiving, the goal is to maximize the signal/noise ratio at the receive end. But, despite the reality of reciprocity, the way you go about this in selecting the best receive antenna is somewhat different than for a transmit antenna. The reason is that the location of the noise at HF(*) is between the transmit antenna at one end and the receive antenna at the other. "Noise" can be atmospheric noise, QRM, or QRN -- anything other than what you're trying to listen to. To select a transmit antenna to maximize the S/N ratio at the receive end, you want the antenna that will radiate as strong a signal as possible in the direction (azimuth and elevation) the signal will take to the receive station. Period. Your choice of a transmit antenna has no affect on the amount of noise the other station hears -- it only affects the strength of your signal he hears. So the stronger your signal, the better the S/N ratio at the other end. If you're modeling an antenna, just look at the gain in that direction. The more, the better.

But that's not necessarily true for an HF receive antenna. Consider the effect of efficiency, for example. If you reduce the efficiency of a receive antenna in a way that doesn't affect the pattern, both the incoming signal and noise are attenuated equally. There's no effect at all on the S/N ratio. Turn up your receiver gain, if you want to make everything as loud as before, but the S/N ratio won't change. So while it's desirable to have an efficient transmitting antenna (if efficiency applies equally to the whole pattern), it doesn't matter with a receiving antenna. Eventually, of course, you can reach a point where the incoming noise is so small that the receiver noise becomes audible. Any reduction of antenna efficiency below that point does impact the S/N ratio. It's easy to tell if you've reached that level -- just connect a dummy load to your receiver in place of the antenna. If the noise level drops, it means that atmospheric noise is still dominating, so your antenna is adequately efficient. A couple of examples of inefficient yet effective receive antennas are the Beverage and the AM loopstick.

Another major way to improve the S/N ratio when receiving is to restrict the antenna's response to the direction the signal is coming from. Anything coming from other directions is only noise, so if the antenna doesn't respond to it, the noise is reduced. In the case of a terminated vee or rhombic, then, the terminating resistors actually improve the receive S/N ratio by eliminating noise coming from the direction of the

backlobe. (That's assuming, of course, that the station you're communicating with isn't in that direction.) Nulls in the antenna pattern in directions of particularly intense noise but not in the direction of the signal also improve the S/N ratio when listening. When there are thunderstorms in the Midwest and Gulf Coast, I can hear VK and ZL stations easily with my 40 meter 4 square array turned to the southwest that I can't hear with a single vertical. It has nothing to do with the moderate amount of antenna gain -- the improvement is entirely due to rejection of the QRN from the thunderstorms.

If you play around a bit with a modeling program looking at two element arrays, you'll find that the maximum gain occurs when there's quite a substantial rear lobe. The rear lobe doesn't hurt you when transmitting, but it can be quite detrimental to S/N ratio when receiving. So most designers compromise and accept slightly less (actually, an insignificant amount less) forward gain in order to reduce the rear lobe and thereby improve the performance when receiving.

If you're considering an antenna for receive use, just remember that your goal is to maximize the signal to noise ratio. At HF, increasing the amount of signal invariably increases the amount of noise, at least from the direction of the signal. So usually, you can help the ratio a lot more by concentrating on reducing the noise.

(*) At VHF and above, the receiver's internal noise is usually greater than the atmospheric noise, and this noise isn't between the transmit and receive antennas. So for most terrestrial communications at VHF and UHF, the best transmit antenna is also the best receive antenna. One exception might be the necessity to reject a strong local signal that's causing intermodulation or receiver overload, placing additional requirements on the receive antenna.

Roy Lewallen, W7EL

Mark Keith wrote:
> . . . should be about the same as without the resisters. But the s/n ratio
> should improve as you lose the crud and extra noise off the back. Am I
> correct here? If not, feel free to jump in... MK

1163. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:11:00 UTC
From: kd1@sympatico.ca
Message-ID: <3F6CEC94.C56F971A@sympatico.ca>
Source record: 107927

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Can you expand on why you think a TDR causes me difficulties?
> > I can't think of any reasons.
>
> There's more than just voltage in those returned pulses.

Yes, there is actually energy in them; easily computed at any point
on the line by using the voltage and current waveform at that point.

> > As for standing waves, I have no difficulties with forward
> > and reflected voltage waves. They work perfectly fine.
>
> That takes care of the E-field. But do you think a wave can exist
> without an H-field? If not, the wave possesses energy, by definition.
> Energy flowing past a point is power.
>
> Your voltage-only waves violate the conservation of energy
> principle and the accepted laws of physics for EM waves.

I somewhat sympathize with your dilemma. You have latched on to
these forward and backwards waves for so long that you have started
to believe that they are real and are therefore ascribing to
them all the properties one would expect of a real EM wave such
as current and power.

Some of the authors you quote are not so convinced of their reality.
Consider this quote from sometime back....

"Johnson continues: "We can regard the first term in this
expression as the power associated with the forward-traveling wave,
and the second term as the reflected power (associated with the
rearward-traveling wave)""

As Peter points out in

http://groups.google.ca/groups?q=regard+group:rec.radio.amateur.antenna&hl=en&lr=&ie=UTF-8
&group=rec.radio.amateur.antenna&selm=9fjhhq%24pni%241%40slb4.atl.mindspring.net&rnum=5

the use of the word "regard" is critical to this passage. Mr Johnson
seems well regarded and it seems likely that if he had intended the
passage to mean "is" he would have used "is" rather than "regard".

Just for a brief moment attempt to relax your hold on forward and
reverse waves and think of the real voltages and currents on the
line. These can be read with real voltmeters and real current meters.

These are the voltages and currents that have to satisfy Es and Hs and energy flows and power. (And before Richard H pipes up about directional voltmeters, I take this opportunity to remind him that all a directional voltmeter actually detects is the real voltage and current at the point of insertion in the line; all the rest is computation based on the real voltage and current).

Forward and reflected voltage and current waves are convenient ways of describing the real voltage and current distributions on the line, but that does not make them real. And the fact that they correctly predict the voltages and currents but sometimes fail to predict the power (when Z0 is not real, for example, but there are many other examples in simple circuit theory) is a strong indicator that they are a convenience and not a reality.

Consider a mundane example in the physical world. You have a post supporting two clotheslines each leaving the post at 90 degrees. At 135 degrees from the clotheslines is a single guy wire to keep the post from bending. While for the purposes of analysis you can pretend that there are two guy wires and this will assist you in discovering the forces involved, never forget that there is really only one for otherwise you may be sorely surprised.

Much like this example, the superposition of voltages is a useful analytical technique, but one must always be aware of its limitations or one will be lead quite astray.

When one starts believing that the intermediate results represent reality, trouble begins. It is for this reason that quality authors use mushy words like "regard" when describing these intermediate results and not solid words like "is".

...Keith

1164. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:27:29 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3F6CEFF0.CFD6B71F@shaw.ca>
Source record: 107928

Cecil Moore wrote:
>
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Last night I downloaded a program called Mailwasher. It is freeware,
and very easy to use. It checks your e-mail while it is still on the
server, and you can delete it from there without having to download
it to your computer. It allows you to check the e-mail addresses
of the originating messages and have them deleted. You can then
just download what you want -- messages from friends. I just went
to Google, typed in Mailwasher, and it took me directly to the
download site. It sure helps here as I have had well over 1500
messages in the past twenty four hours! Only about fifty were wanted.
The problem is that I belong to 8 newsgroups, and that's where a
lot of the email addresses get harvested! This is one of the eight!

I don't think there's much can be done until everyone clears the
virus off their computers. Although I am virus free, it still doesn't
stop the e-mails from coming in!
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1165. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:29:59 UTC
From: Scott Schrader <swschrad@visi.com>
Message-ID: <3F6CF107.531F3ADD@visi.com>
Source record: 107930
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

dude needs to recheck his regs as to who owns what...

BIG AL wrote:
>
> ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
> W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO

-- If it's a "new economy," why do they want my obsolete old money?

1166. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:31:58 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <9cspmvokh2jv7ijua3uhhs2j9t93ug6nfv@4ax.com>
Source record: 107929

On Fri, 19 Sep 2003 12:31:56 -0700, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>> I was looking for a cheap source of toroids and stumbled across a
>> blown ATX computer power supply. It was chock full of toroids.

>Probably powdered iron cores and not very useful at RF frequencies.

Yep your right. I found them to be mostly very high Al....totaly
useless at RF frequencies.

mike

1167. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:33:00 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <3F6CF208.1080102@adelphia.net>
Source record: 107931

Ed Price wrote:
> "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> news:bki86ulmc1@hercules.btinternet.com...
>
>>>Is anyone else being deluged with Virus/Worm email messages?
>>>--
>>
>>==========
>>
>>Me too - 2000 per day.
>>
>>Terrorist attack or just another up-and-coming Bill Gates?
>>
>>G4FGQ, UK
>>
>>
>>
>
>
> I don't recall anything in Gates' career that's equivalent to the present
> worm attack.
> Do you have any factual backup for your off-hand slander?

He isn't responsible for this.

But he IS responsible for the abysmally poor software his company
writes. It is a litany of flaws.

- Mike KB3EIA -

1168. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:33:12 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <1fspmvkr5oqtc8muc4j3gumvas890l444c@4ax.com>
Source record: 107932

On Sat, 20 Sep 2003 09:43:02 GMT, "Bill" <brian@iquest.net> wrote:

>Good source of roids can be found:
>
>http://www.kitsandparts.com
>
>See Diz, he's the Toroid King! <grin>
>

Cool link. Thanks. Guess I can buy em in bulk and sell the rest on
EBAY <grin>

mike

1169. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:35:23 UTC
From: RB <rbigg@seii.net>
Message-ID: <bkirodpef1@news.utelfla.com>
Source record: 107933

The virus is in the original attachments and at the web site the text urges you to download. If you don't open the attachment, or download the "security patch", you won't get the virus. However, you will get floods of this kind of traffic. It's coming from infected computers that have your email address, and from your email address harvested from newsgroups, and even from some web sites you've gone to. I think the flooding will continue for awhile longer.

Some ISPs neutralize the attachment, but the message comes on through with an empty attachment. Whatever, don't take a chance and open the attachment.

If you haven't done it yet, mung your newsgroup email address so this won't happen in the future. Something like xxxxx@yyyy.nospam.net. That will keep you from getting flooded in the future.

1170. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:41:10 UTC
From: kd1@sympatico.ca
Message-ID: <3F6CF3A6.BF000770@sympatico.ca>
Source record: 107935

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Forget that forward and reverse stuff. That's not what is radiated.
>
> Uh Keith, power delivered to the antenna equals forward power minus
> reflected power. I notice you have not provided a way for standing
> waves to develop without the existence of reflected waves. Do you
> also believe that standing waves don't exist?

I think you have the tail wagging the dog a bit here.

It is the real voltages and currents on the line which deliver the power to the antenna. These real voltages and currents sometimes are in a standing wave pattern on the line. This standing wave pattern can be described by postulating and using forward and reflected voltage and current waves. Superposition lets you compute the real voltages and currents but this does not make the postulated forward and reflected voltages and currents real.

And this model works so well (unfortunately) that, even though in general you can not use superposition with power, in the special case of lines with non-complex Z0, it even works for power. This fluke, of course, serves to reinforce in the minds of many the 'reality' of these forward and reflected powers.

When 'the many' encounter the general case, they are quite perturbed that superposition no longer works for power and strive mightily to modify the flawed model to account for the discrepancies rather than just letting go of the model.

The reality is that forward and reflected voltage and current waves are a convenience that assist in solving problems but only real voltages and currents move energy.

...Keith

1171. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:44:23 UTC
From: kd1@sympatico.ca
Message-ID: <3F6CF467.685FED28@sympatico.ca>
Source record: 107937

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > When you use a pulse, p(t) = v(t) * i(t) shows the pulse going
> > by and coming back too, if it reflects. But for that, you have to
> > look at things in the time domain, something a number of readers
> > here refuse to do for continuous sinusoidal excitation. When you
> > look at continuous sinusoidal excitation in the time domain all
> > the information you need about power is provided without having
> > to resort to Pfwd and Prev.
>
> Yes, but those steady-state shortcuts often lead to a distorted
> view of reality. Exactly what magic happens at the instant when a
> system goes from the transient state to steady-state?

I am unsure where you construed "steady-state" in the original
passage. It is, of course, in the time domain that one can explore
the non-steady state mature of the system.

...Keith

1172. JAY GOOCH SK

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:45:04 UTC
From: jder8745@aol.com
Message-ID: <20030920204504.24421.00001179@mb-m16.aol.com>
Source record: 107934

Greetings,

I never met him, know nothing about him, never worked him. But Jay Gooch is the originator of the phrase, "The RF has gotta go somewhere!"

In any ragchew about antennas and their various properties, you cud bet that someone would finally utter the words, "As Jay Gooch always sed, The RF Has Gotta Go Somewhere."

73 de Jack, K9CUN

1173. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 00:57:41 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F6CF785.17A080EC@cwis.net>
Source record: 107936

Cecil,
The two smartest things I've ever done was invest in a
good antivirus program and a good firewall. They should
be on every computer thats capable of accessing the internet,
no matter if you're a regular internet user or not. The
first time one of them stops an attack, they've paid for
themselves.
If it's at all possible, do your self a favor and do not
use 'MSN' or 'Outlook Express'. They just beg to be hacked.
'Doc

1174. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:01:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmpu48ifctb2f4@corp.supernews.com>
Source record: 107938

High Al (high permeability) ferrites are very useful at RF. They're widely used for broadband transformers, baluns, and EMI suppression chokes, and are in fact very often the best choice for those applications. If DC current is low enough to avoid saturation, they also make excellent RF chokes -- ones that maintain a high impedance over a very wide bandwidth and don't show any appreciable self resonant effect.

The only RF application they're not good for is inductors in tuned or high-Q circuits, such as filters and tank circuits, or as tuned transformers.

Roy Lewallen, W7EL

mike wrote:
> On Fri, 19 Sep 2003 12:31:56 -0700, Cecil Moore
> <Cecil.A.Moore@ieee.org> wrote:
>
>
>
>
>>>I was looking for a cheap source of toroids and stumbled across a
>>>blown ATX computer power supply. It was chock full of toroids.
>
>
>
>>Probably powdered iron cores and not very useful at RF frequencies.
>
>
> Yep your right. I found them to be mostly very high Al....totaly
> useless at RF frequencies.
>
> mike

1175. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:02:26 UTC
From: Martin <marty123@optonline.net>
Message-ID: <CM6bb.59575$BS1.25020916@news4.srv.hcvlny.cv.net>
Source record: 107939

If you use Norton System Works or Norton Antivirus, bring up their main configuration screen, click on antivirus > options > email and choose the last item: "Repair and silently delete if unsuccessful". The messages end up pronto in the Deleted Item folder where you can check later for desirable messages that might have slipped through and then get rid of all the nasties with one right click on that folder. Saves a lot of aggravation. Keep incoming email scanning on.

Marty K1FHR

"RB" <rbigg@seii.net> wrote in message news:bkirodpef1@news.utelfla.com...
> The virus is in the original attachments and at the web site the text urges
> you to download. If you don't open the attachment, or download the
> "security patch", you won't get the virus. However, you will get floods of
> this kind of traffic. It's coming from infected computers that have your
> email address, and from your email address harvested from newsgroups, and
> even from some web sites you've gone to. I think the flooding will continue
> for awhile longer.
>
> Some ISPs neutralize the attachment, but the message comes on through with
> an empty attachment. Whatever, don't take a chance and open the attachment.
>
> If you haven't done it yet, mung your newsgroup email address so this won't
> happen in the future. Something like xxxxx@yyyy.nospam.net. That will keep
> you from getting flooded in the future.
>
>

1176. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:04:57 UTC
From: kd1@sympatico.ca
Message-ID: <3F6CF939.C5B82C35@sympatico.ca>
Source record: 107943

Richard Harrison wrote:
>
> Keith wrote:
> "---it will turn out that there is no value in forward and reverse power
> on a line with non-real Zo."
>
> The Bird wattmeter works well enough on coax lines used between the
> usual transmitter and antenna. Loss produces reactance in coax. We don`t
> seek lossy coax. If it becomes lossy, the line is likely to be replaced.

You, of course, are correct. I overstate the case slightly in an attempt to get readers to let go of their model. Once they are free of forward and reverse power as being an accurate model of reality, they are then free to understand what a Bird really indicates.

And it is useful for lines with near real impedances (as many RF lines are) as a TLI. And in cases where reflected power is near zero, it will even give a hint as to how much power is being delivered to the load (within 5% of full scale).

The question is, does the reader understand how it works, why it is useful and its limitation; or does the reader believe the markings on the scale and think that it is actually MEASURING the power in a forward and reverse wave.

...Keith

1177. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:08:44 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <kS6bb.324$La.267@fed1read02>
Source record: 107940

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:3F6CF208.1080102@adelphia.net...
> Ed Price wrote:
> > "Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
> > news:bki86ulmc1@hercules.btinternet.com...
> >
> > >>>Is anyone else being deluged with Virus/Worm email messages?
> > >>>--
> > >>
> > >>==========
> > >>
> > >>Me too - 2000 per day.
> > >>
> > >>Terrorist attack or just another up-and-coming Bill Gates?
> > >>
> > >>G4FGQ, UK
> > >>
> > >>
> > >>
> > >
> > >
> > > I don't recall anything in Gates' career that's equivalent to the
present
> > > worm attack.
> > > Do you have any factual backup for your off-hand slander?
> >
> > He isn't responsible for this.
> >
> > But he IS responsible for the abysmally poor software his company
> > writes. It is a litany of flaws.
> >
> > - Mike KB3EIA -
> >

My point is that you should save your litanies for the correct occasions.
You can't respond to every net problem with a half-ass reference to
"Redmond" or "Gates".

In point of fact, this IS a terrorist attack. Although software should be
robust, the majority of your ire should be directed toward the terrorist
attacker.

Ed
WB6WSN

1178. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:09:41 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6CFB5F.1010607@optonline.net>
Source record: 107941

On 09/20/03 02:38 pm Zoran Brlecic put fingers to keyboard and launched
the following message into cyberspace:

>> Does anybody have any knowledge or experience whether a tower is a
>> "structure," as the term is used in CC&Rs? -- e.g., "No structure may
>> be erected on any of the lots except for a single-family dwelling . .
>> . [then come the size limitations}. No more than one outbuilding may
>> be erected on any lot . . . [then come the size limitations}."

> Of course it is a structure. After all, even when you apply for a permit
> in a non-CC&R-infested area, everyone recommends applying for an
> "antenna support structure", not a tower.
> Besides, the whole idea behind CC&R's is to prohibit anything other than
> houses in the neighborhood.

> This just means that CC&R's are not being enforced strictly, so any
> towers you erected, even if you got an official permit for, would be
> violating them. You'd likely never win against the association if they
> took you to court, because generally the fact that others are violating
> them freely does not give you permission to do the same. It's too risky.

The township has no rules at all for a tower under 70 feet used by a
federally licensed amateur radio operator. They don't even require a
building permit to make sure that it's safe.

If there ever was a Homeowners' Association, it has been defunct for years.

And I read of a case where a judge ruled that non-enforcement of the
rules did in fact make the rules of no effect. The HA (or the neighbors)
objected when somebody put up a basketball hoop. When evidence was
presented that there were already 28 basketball hoops in the
subdivision, the judge said that they couldn't suddenly start enforcing
the rules now when they hadn't in the past. (This was not in the same
subdivision, of course.)

-=-
Alan AB2OS

1179. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:11:36 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6CFBD2.7060608@optonline.net>
Source record: 107942

On 09/20/03 04:45 pm Zoran Brlecic put fingers to keyboard and launched
the following message into cyberspace:

>>> Of course it is a structure. After all, even when you apply for a permit
>>> in a non-CC&R-infested area, everyone recommends applying for an
>>> "antenna support structure", not a tower.
>>> Besides, the whole idea behind CC&R's is to prohibit anything other than
>>> houses in the neighborhood.

>> not in this town.. according to our local zoning and assessing people
>> it has
>> to have a roof to be a 'structure' here. this is a question best
>> asked of a
>> local lawyer who knows the local rules.

> If that's the case in his town, then I'd be shocked if antenna towers
> were not prohibited explicitly in that CC&R. Either way, he has to see a
> lawyer.

No mention of towers or antennas in the CC&Rs for this subdivision.

-=-
Alan AB2OS

1180. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:31:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bqvpmvsf597lcmno8p731cmb2rm6qk0pn1@4ax.com>
Source record: 107944

On Sun, 21 Sep 2003 01:09:41 GMT, Alan Beagley
<abeagley@optonline.net> wrote:

>The township has no rules at all for a tower under 70 feet used by a
>federally licensed amateur radio operator. They don't even require a
>building permit to make sure that it's safe.

Hi Alan,

How does your insurance provider feel about that?

73's
Richard Clark, KB7QHC

1181. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:41:21 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Wk7bb.330$La.63@fed1read02>
Source record: 107945

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:1ampmv4mm2alkb4jc2uju41nncctglj8hl@4ax.com...
> On 20 Sep 2003 22:23:36 GMT, radio913@aol.com (Radio913) wrote:
> > I've heard that the Bird Model 43 is very accurate.
>
> Hi OM,
>
> Now you know different. Besides, NO ONE is accurate without
> comparison to a known Standard.
>
> A Bird can be made accurate, better, in fact, than the manufacturer's
> claims. I doubt you would spend the money to do it the first time,
> much less each time required to keep it accurate (much less more
> accurate).
>
> It makes more sense to invest in a good load and calibrate it. It is
> not at all difficult, except for the cash-and-carry tech who shuns
> benchwork.
>
> 73's
> Richard Clark, KB7QHC

I'll bet you'd love an invitation to expand on your comments about a "good load" and "calibrate it."

The only good load is one that presents the desired, purely resistive impedance. Maybe you can adjust the load, but you don't make it better by calibration.

Or perhaps you are assuming a good load, and by calibration, you are meaning some type of thermal calibration to indicate power.

I don't use loads to measure power, I use attenuators (sufficient for the expected power), and put a bolometer on the end of the attenuator string. Of course, I have the luxury of other test equipment, so I can check the attenuators, with low power, against my spectrum analyzer and signal generators.

All that said, I still think that a Bird 43 (and yes, a good load or attenuator string [once you get 60 dB or so on the attenuator string, an open-end reflection is quite minor]) is the best route for a ham. A ham typically doesn't need even the factory accuracy of a Bird, but the versatility of forward and reverse power, with multiple power ranges and multiple frequency ranges, is very nice. Plus, it doesn't even need batteries, and it's small and light. (Anybody who ever lifted HP gear can now grin.)

For the 100 MHz region, you can think about a directional coupler. Nice, but you still need either a bolometric power meter or a calibrated spectrum analyzer. If you don't already have those two goodies, then the Bird is the champion choice.

Ed
WB6WSN

1182. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 01:43:37 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <1n7bb.332$La.205@fed1read02>
Source record: 107946
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Harry Quiff" <quiff@merkin.net> wrote in message
news:bkims8qhf1@216.221.129.15...
> On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:
>
> > ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> > FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
ESPECIALLY
> > W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
>
>
> Why don't you go fuck yourself?
>
> No one cares about the assclowns on night time HF. Every one is a loser.
>
> I hope Riley eventually finds and ass fucks every one of you.

Hmmm, 3.894.5 is a rather unique way to express it. Accuracy always commands
respect.

Ed
WB6WSN

1183. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:03:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t61qmvc67ragfs7k46b2rom7fb8pchn436@4ax.com>
Source record: 107947

On Sat, 20 Sep 2003 18:41:21 -0700, "Ed Price" <edprice@cox.net>
wrote:
>
>I'll bet you'd love an invitation to expand on your comments about a "good
>load" and "calibrate it."

Perhaps, but very few bench techs are found here.

>
>The only good load is one that presents the desired, purely resistive
>impedance. Maybe you can adjust the load, but you don't make it better by
>calibration.

Arguable. Calibration is not what you do to something, that is tuning
or adjusting. Calibration is knowledge.

>Or perhaps you are assuming a good load, and by calibration, you are meaning
>some type of thermal calibration to indicate power.

There are many ways to accomplish the calibration, again, there are
too few bench techs here to care.

>I don't use loads to measure power, I use attenuators (sufficient for the
>expected power), and put a bolometer on the end of the attenuator string.

The Bolometer is a classic load, there are many others (like a
barreter).

> Of
>course, I have the luxury of other test equipment, so I can check the
>attenuators, with low power, against my spectrum analyzer and signal
>generators.

A good method that employs the easier methods of measuring differences
rather than absolutes. However, you must eventually obtain some
standard to make the final determination.

>All that said, I still think that a Bird 43 (and yes, a good load or
>attenuator string [once you get 60 dB or so on the attenuator string, an
>open-end reflection is quite minor]) is the best route for a ham. A ham
>typically doesn't need even the factory accuracy of a Bird, but the
>versatility of forward and reverse power, with multiple power ranges and
>multiple frequency ranges, is very nice. Plus, it doesn't even need
>batteries, and it's small and light. (Anybody who ever lifted HP gear can
>now grin.)
>
>For the 100 MHz region, you can think about a directional coupler. Nice, but

>you still need either a bolometric power meter or a calibrated spectrum
>analyzer. If you don't already have those two goodies, then the Bird is the
>champion choice.
>
>Ed
>WB6WSN

Hi Ed,

I've never run across a need for batteries, except to light the meter.
There are better meters than a Bird. The AN/URM-120 is easily better,
and sells cheaper, has all the same qualities, but for its advantage
it also is larger and presents its readings with the meter horizontal.
If those were the only down-sides, then it is much like personal
choices in tie color.

73's
Richard Clark, KB7QHC

1184. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:14:53 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6D0AA9.7060805@optonline.net>
Source record: 107948

I am fully intending to follow the tower manufacturer's specifications
for the footing, so I don't see why that should worry the insurer.

Anyway, this whole deal is conditional on a favorable legal
interpretation of the CC&Rs, so we may have to start searching for a
house all over again.

-=-
Alan

On 09/20/03 09:31 pm Richard Clark put fingers to keyboard and launched
the following message into cyberspace:

>>The township has no rules at all for a tower under 70 feet used by a
>>federally licensed amateur radio operator. They don't even require a
>>building permit to make sure that it's safe.

> How does your insurance provider feel about that?

1185. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:33:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r73qmvgs8aeb0l4gtv7np4i6i9b03216ng@4ax.com>
Source record: 107949

On Sun, 21 Sep 2003 02:14:53 GMT, Alan Beagley
<abeagley@optonline.net> wrote:

>I am fully intending to follow the tower manufacturer's specifications
>for the footing, so I don't see why that should worry the insurer.
>
>Anyway, this whole deal is conditional on a favorable legal
>interpretation of the CC&Rs, so we may have to start searching for a
>house all over again.
>
>-=-
>Alan

Hi Alan,

It won't worry any insurer, they will simply walk away from a claim;
if one walks the others will ask why. If none can be found to replace
the first, then the bank will call the full note due. All rather
typical legalese in the fine print. An attorney is as likely to be
ignorant of these as anyone unless their specialty is real estate law
(I visited one with exactly that point of experience, spent less too
by spending more once.)

73's
Richard Clark, KB7QHC

1186. Re: screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:38:24 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <s98bb.5353$iO.3941@bignews5.bellsouth.net>
Source record: 107950

"jwsmid" <jwsmid@home.nl> wrote in message
news:bkhg7c$2nu$1@news2.tilbu1.nb.home.nl...
> hi
>
> I want to buy a screwdriver antenna
> I lookt on the www and fount :High Sierra (HS-1800) and Hi-Q antennas
> (Hi-Q-4/80 RT)
> Which one is better.
>
> JW SMID (PE1RZM)
>
> The Netherlands

Check out www.qsl.net/k4kwh
>
>

1187. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:53:37 UTC
From: tater schuld <taters1@maps.charter.net>
Message-ID: <vmq574a06e11ee@corp.supernews.com>
Source record: 107953
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

i think a new target frequency for cw just announced itself!

--
Tater
President of MARS Club
www.treece.org/mars.htm
KC9ESF
NAR #79654 L1
AMA #747769
EAA #703312
remove spam spelled backwards to reply

"BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
news:vmpl8a7gu2319d@corp.supernews.com...
> ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
> W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
>
>

1188. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 02:57:12 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <ms8bb.12$LJ5.2141@iad-read.news.verio.net>
Source record: 107951
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Ed Price" <edprice@cox.net> wrote in message
news:1n7bb.332$La.205@fed1read02...
>
> "Harry Quiff" <quiff@merkin.net> wrote in message
> news:bkims8qhf1@216.221.129.15...
> > On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:
> >
> > > ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG
AL'S
> > > FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
> ESPECIALLY
> > > W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
> >
> >
> > Why don't you go fuck yourself?
> >
> > No one cares about the assclowns on night time HF. Every one is a loser.
> >
> > I hope Riley eventually finds and ass fucks every one of you.
>
>
>
> Hmmm, 3.894.5 is a rather unique way to express it. Accuracy always
commands
> respect.
>
> Ed
> WB6WSN
>

Since when did it become a "private" frequency? The H.F. Frequencies used for Ham operation are open to any one with the proper class of license to use them. Of course common courtesy does count when the frequency may already be in use. No wonder people are turning away from Ham. It is getting horrible. Used to be, I boasted it to anyone interested. Now, I tell them not to waste their time. It is getting to be High Power CB. As for the FCC, they have lost the battle so far as I'm concerned. The horses are out of the barn. TOO LATE! I'm about ready to sell all my ham gear.. Get my cash out of it while there is still some value left to it. I would NEVER buy a new rig again, that is for sure. I'll buy "used" if I decide to stay in it. It just isn't worth the huge cash lay out.

Lou

1189. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:04:11 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6D1639.2040902@optonline.net>
Source record: 107954

You mean that the insurer will require the installation to be inspected
and a certificate of safety be issued, even though the only body with
the authority to do this (i.e., the township's building dept.) does not
require it and might refuse to do it even if asked?

-=-
Alan AB2OS

On 09/20/03 10:33 pm Richard Clark put fingers to keyboard and launched
the following message into cyberspace:

>>I am fully intending to follow the tower manufacturer's specifications
>>for the footing, so I don't see why that should worry the insurer.

> It won't worry any insurer, they will simply walk away from a claim;
> if one walks the others will ask why. If none can be found to replace
> the first, then the bank will call the full note due. All rather
> typical legalese in the fine print. An attorney is as likely to be
> ignorant of these as anyone unless their specialty is real estate law
> (I visited one with exactly that point of experience, spent less too
> by spending more once.)

1190. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:05:01 UTC
From: BIG AL <imafuckingwindbag@bigalk4oka.net>
Message-ID: <vmq5ars9c9i455@corp.supernews.com>
Source record: 107955
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG ALS FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO

AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO HO

"Lou" <Spamfree@Spamfree.com> wrote in message
news:ms8bb.12$LJ5.2141@iad-read.news.verio.net...
> "Ed Price" <edprice@cox.net> wrote in message
> news:1n7bb.332$La.205@fed1read02...
> >
> > "Harry Quiff" <quiff@merkin.net> wrote in message
> > news:bkims8qhf1@216.221.129.15...
> > > On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:
> > >
> > > > ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG
> AL'S
> > > > FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
> > ESPECIALLY
> > > > W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
> > >
> > >
> > > Why don't you go fuck yourself?
> > >
> > > No one cares about the assclowns on night time HF. Every one is a
loser.
> > >
> > > I hope Riley eventually finds and ass fucks every one of you.
> >
> >
> >
> > Hmmm, 3.894.5 is a rather unique way to express it. Accuracy always
> commands
> > respect.
> >
> > Ed
> > WB6WSN
> >
>
> Since when did it become a "private" frequency? The H.F. Frequencies used
> for Ham operation are open to any one with the proper class of license to
> use them. Of course common courtesy does count when the frequency may
> already be in use. No wonder people are turning away from Ham. It is
getting

> horrible. Used to be, I boasted it to anyone interested. Now, I tell them
> not to waste their time. It is getting to be High Power CB. As for the
FCC,
> they have lost the battle so far as I'm concerned. The horses are out of
the
> barn. TOO LATE! I'm about ready to sell all my ham gear.. Get my cash out
of
> it while there is still some value left to it. I would NEVER buy a new rig
> again, that is for sure. I'll buy "used" if I decide to stay in it. It
just
> isn't worth the huge cash lay out.
>
> Lou
>
>

1191. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:08:09 UTC
From: BIG AL <imafuckingwindbag@porkbutt.net>
Message-ID: <vmq5gsd628nq14@corp.supernews.com>
Source record: 107956
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

CW IS FINE AS LONG AS YOU CAN KEEP UP. HO HO

"tater schuld" <taters1@maps.charter.net> wrote in message
news:vmq574a06e11ee@corp.supernews.com...
> i think a new target frequency for cw just announced itself!
>
> --
> Tater
> President of MARS Club
> www.treece.org/mars.htm
> KC9ESF
> NAR #79654 L1
> AMA #747769
> EAA #703312
> remove spam spelled backwards to reply
>
>
> "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> news:vmpl8a7gu2319d@corp.supernews.com...
> > ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
> > FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
ESPECIALLY
> > W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
> >
> >
>
>

1192. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:17:02 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <vmq625lg4b4kf2@corp.supernews.com>
Source record: 107957
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In a word he "GOTYA".

Harry Quiff wrote:
> On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:
>
>
>>ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG AL'S
>>FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY. ESPECIALLY
>>W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
>
>
>
> Why don't you go fuck yourself?
>
> No one cares about the assclowns on night time HF. Every one is a loser.
>
> I hope Riley eventually finds and ass fucks every one of you.

1193. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:20:35 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <iO8bb.13$LJ5.2273@iad-read.news.verio.net>
Source record: 107958
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
news:vmq5ars9c9i455@corp.supernews.com...
> HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG ALS
> FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
>
> AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO HO
>
>

If I choose to talk on that frequency, I will, so long as I'm abiding by the rules and regulations as they are spelled out. YOU or no one else, can tell me to stay off. ASS WIPE.

BIG AL.. the only thing big about you, is your mouth....

Lou

1194. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 03:37:53 UTC
From: radio913@aol.com
Message-ID: <20030920233753.10672.00001187@mb-m29.aol.com>
Source record: 107959

>> I don't need to see it with my eyes,
>> when i know you can't get a larger RMS voltage reflected from a capacitor,
>than
>> the RMS that charges it.
>
>Scientists are usually interested in producing models which will
>allow them to predict the behaviour of the real world. To do this
>it is necessary to check the predictions of the models against
>the real world. If you find it unnecessary to do this, then you
>are not interested in producing models which can predict real
>world outcomes and your models can be anything you want.
>
>But such models won't have much utility.
>
>...Keith
>

"Scientists" are also human too, and tend to want to disregard or not even try to measure data that may contradict their models. This makes them feel comfortable that they are "right".

Slick

1195. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 04:04:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6d251f_6@corp.newsgroups.com>
Source record: 107960

kd1@sympatico.ca wrote:
> I somewhat sympathize with your dilemma. You have latched on to
> these forward and backwards waves for so long that you have started
> to believe that they are real and are therefore ascribing to
> them all the properties one would expect of a real EM wave such
> as current and power.

So what causes standing waves if there are no forward and backwards
waves?

> Just for a brief moment attempt to relax your hold on forward and
> reverse waves and think of the real voltages and currents on the
> line.

I will just as soon as you demonstrate how to generate standing
waves without the existence of a forward wave and reverse wave.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1196. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 04:10:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6d2693$1_6@corp.newsgroups.com>
Source record: 107961

kd1@sympatico.ca wrote:
> This standing wave
> pattern can be described by postulating and using forward and
> reflected voltage and current waves. Superposition lets you
> compute the real voltages and currents but this does not make
> the postulated forward and reflected voltages and currents
> real.

Can you think of any other way for standing waves to exist
except for the superposition of a forward wave and a reverse
wave? Until you can describe how standing waves can even exist
without a forward wave and a reverse wave, it doesn't do any
good to deny their existence.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1197. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 04:12:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6d2713$1_6@corp.newsgroups.com>
Source record: 107962

'Doc wrote:
> The two smartest things I've ever done was invest in a
> good antivirus program and a good firewall.

I've got those but they don't block the emails telling me a virus
has been removed.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1198. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 04:25:42 UTC
From: "mkelly@powerup.com.au" <mkelly@powerup.com.au>
Message-ID: <3F6D2846.BEE8D8B0@powerup.com.au>
Source record: 107963

I was advised by a Finnish ham that the rules are a lot
looser for temporary
structures - and the tower is only bolted to the house and
is therefore 'temporary'

Maybe worth a try?
:-)

Murray

Alan Beagley wrote:
>
> You mean that the insurer will require the installation to be inspected
> and a certificate of safety be issued, even though the only body with
> the authority to do this (i.e., the township's building dept.) does not
> require it and might refuse to do it even if asked?
>
> -=-
> Alan AB2OS
>
> On 09/20/03 10:33 pm Richard Clark put fingers to keyboard and launched
> the following message into cyberspace:
>
> >>I am fully intending to follow the tower manufacturer's specifications
> >>for the footing, so I don't see why that should worry the insurer.
>
> > It won't worry any insurer, they will simply walk away from a claim;
> > if one walks the others will ask why. If none can be found to replace
> > the first, then the bank will call the full note due. All rather
> > typical legalese in the fine print. An attorney is as likely to be
> > ignorant of these as anyone unless their specialty is real estate law
> > (I visited one with exactly that point of experience, spent less too
> > by spending more once.)

--
****
* Murray Kelly vk4aok
mailto://mkelly@powerup.com.au *
* 6 Spyglass Place, Oxley Ridge QLD. 4075.
Australia *
* ph/fax Intl+ 61 7 3879
7968 *
****

1199. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 04:45:27 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309202045.7042ce13@posting.google.com>
Source record: 107964

"Ed Price" <edprice@cox.net> wrote in message
>
> I don't recall anything in Gates' career that's equivalent to the present
> worm attack.
> Do you have any factual backup for your off-hand slander?
>
> Ed
> WB6WSN

Well, as far as I'm concerned, he had as much hand in it as anyone. If his company would quit selling reader software with enough holes to qualify as swiss cheese, many of these macro viruses wouldn't have a leg to stand on. I've had 100's of server returns accusing me of spreading viruses, and also that I'm running Microsoft Outlook Express 6.00.2600.0000. But this is not the case. I use old bulletproof netscape 3.1 to read mail. These viruses are a non issue to me. Why are they an issue to a software that is supposed to be a step up from the ancient reader I'm using? If everyone would quit running Billware 6.00.2600.0000, we could nip this macro virus thing in the bud. Probably would stop 90% of it overnight. Heck, with all the latest holes in these new win OS's they are spitting out, I'm temped to stay with win98 a few more years. MK

1200. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 05:52:20 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F6D3BEB.4090602@get.lost>
Source record: 107965

Alan Beagley wrote:

>> This just means that CC&R's are not being enforced strictly, so any
>> towers you erected, even if you got an official permit for, would be
>> violating them. You'd likely never win against the association if they
>> took you to court, because generally the fact that others are
>> violating them freely does not give you permission to do the same.
>> It's too risky.
>
> The township has no rules at all for a tower under 70 feet used by a
> federally licensed amateur radio operator. They don't even require a
> building permit to make sure that it's safe.
>
> If there ever was a Homeowners' Association, it has been defunct for years.

Then you don't have to comply with the CC&R's at all, because there is
no one to enforce them. Make sure it is 100% defunct, though.

> And I read of a case where a judge ruled that non-enforcement of the
> rules did in fact make the rules of no effect. The HA (or the neighbors)
> objected when somebody put up a basketball hoop. When evidence was
> presented that there were already 28 basketball hoops in the
> subdivision, the judge said that they couldn't suddenly start enforcing
> the rules now when they hadn't in the past. (This was not in the same
> subdivision, of course.)

Right, but this is the case of a discriminate enforcement of one rule
(iow, the fact that this particular rule was broken would not give you
permission to violate other rules). Unfortunately (or maybe not) for
your case, there are no 28 amateur radio towers in that subdivision.
That's where it gets tricky in the case of a lawsuit with only one other
tower used as a precedent.

But, again, if the HOA is definitely dead, CC&R's are a worthless
document. You may be lucky.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1201. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 06:21:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jpgqmvka0b2niruhina3eu124b9ro4dpg4@4ax.com>
Source record: 107966

On Sun, 21 Sep 2003 03:04:11 GMT, Alan Beagley
<abeagley@optonline.net> wrote:

>You mean that....

That question is best left to the expert.

73's
Richard Clark, KB7QHC

1202. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 06:41:41 UTC
From: Roger Wiseman <Dumbass@NoSlpam.comz>
Message-ID: <bkjh77$n6n$0@pita.alt.net>
Source record: 107967
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Lou" <Spamfree@Spamfree.com> wrote in message
news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...

"BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
news:vmq5ars9c9i455@corp.supernews.com...
> HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG ALS
> FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
>
> AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO HO
>
>

If I choose to talk on that frequency, I will, so long as I'm abiding by the
rules and regulations as they are spelled out. YOU or no one else, can tell
me to stay off. ASS WIPE.
.....
Good thing old Rich Whiten is gone...THAT was a radio Hog times two....
The old YI YI song reminds me of Rich's selfish stupidity as he keyed over
all but a few of his chosen "butt buddies".
Rich would, in his arrogance, ignore all Hams who weren' t running
megawatts....of course old Rich got caught running over the legal
limit...among other things.
Story is that Rich got pissed and sent his resignation of his license to
Riley Hollingsworth. Riley accepted the resignation and rescinded Rich's
license.
Enter another story...Rich is now claiming that his letter of resignation
was sent "by mistake" to Hollingsworth and Whiten wants his license back.
Sorry, Rich. Your weak story ain't holding water up this way.
Gosh...how does one send email "by mistake"?
Rich is full of it...he screwed up out of anger and now he wants to take it
all back. It doesn't work that way.
Porkbutt Song.....YI, YI, YI.....

1203. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 07:37:03 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <nycbb.565$La.239@fed1read02>
Source record: 107968

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0309202045.7042ce13@posting.google.com...
> "Ed Price" <edprice@cox.net> wrote in message
> >
> > I don't recall anything in Gates' career that's equivalent to the
present
> > worm attack.
> > Do you have any factual backup for your off-hand slander?
> >
> > Ed
> > WB6WSN
>
> Well, as far as I'm concerned, he had as much hand in it as anyone. If
> his company would quit selling reader software with enough holes to
> qualify as swiss cheese, many of these macro viruses wouldn't have a
> leg to stand on. I've had 100's of server returns accusing me of
> spreading viruses, and also that I'm running Microsoft Outlook Express
> 6.00.2600.0000. But this is not the case. I use old bulletproof
> netscape 3.1 to read mail. These viruses are a non issue to me. Why
> are they an issue to a software that is supposed to be a step up from
> the ancient reader I'm using? If everyone would quit running Billware
> 6.00.2600.0000, we could nip this macro virus thing in the bud.
> Probably would stop 90% of it overnight. Heck, with all the latest
> holes in these new win OS's they are spitting out, I'm temped to stay
> with win98 a few more years. MK

In other words, nothing factual, just "as far as I'm concerned." Thank you
for your rant.

Ed
WB6WSN

1204. news site web multi-antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 08:54:09 UTC
From: F5MNU <f5mnu@yahoo.fr>
Message-ID: <bkjovifmr1@news-reader1.wanadoo.fr>
Source record: 107869

Hello ,
is information the news site Multi-antennas beam big performancy
visites sites
www.dxsr-antennas.com
Thank you max

1205. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 09:38:50 UTC
From: BIG AL <imafuckingwindbag@porkbutt.net>
Message-ID: <vmqsd54hmlp907@corp.supernews.com>
Source record: 107870
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

BIG AL IS TELLING YOU TO STAY OFF OF 3.894.5 AY YI YI YI YES ITS THE
PROKBUTT SONG A YI YI YI YES ITS THE PORKBUTT SONG. HO HO BIG AL OWNS
3.894.5 AND SOON 3.898 HO HO STOP SCREAMING ELVIE. HO HO

"Roger Wiseman" <Dumbass@NoSlpam.comz> wrote in message
news:bkjh77$n6n$0@pita.alt.net...
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
>
>
> "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> news:vmq5ars9c9i455@corp.supernews.com...
> > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG
ALS
> > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> >
> > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO HO
> >
> >
>
> If I choose to talk on that frequency, I will, so long as I'm abiding by
the
> rules and regulations as they are spelled out. YOU or no one else, can
tell
> me to stay off. ASS WIPE.
> .....
> Good thing old Rich Whiten is gone...THAT was a radio Hog times two....
> The old YI YI song reminds me of Rich's selfish stupidity as he keyed over
> all but a few of his chosen "butt buddies".
> Rich would, in his arrogance, ignore all Hams who weren' t running
> megawatts....of course old Rich got caught running over the legal
> limit...among other things.
> Story is that Rich got pissed and sent his resignation of his license to
> Riley Hollingsworth. Riley accepted the resignation and rescinded Rich's
> license.
> Enter another story...Rich is now claiming that his letter of resignation
> was sent "by mistake" to Hollingsworth and Whiten wants his license back.
> Sorry, Rich. Your weak story ain't holding water up this way.
> Gosh...how does one send email "by mistake"?
> Rich is full of it...he screwed up out of anger and now he wants to take
it
> all back. It doesn't work that way.

> Porkbutt Song.....YI, YI, YI.....
>
>

1206. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 09:41:05 UTC
From: BIG AL <imafuckingwindbag@porkbutt.net>
Message-ID: <vmqshdfh78hr4b@corp.supernews.com>
Source record: 107871
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO

"Lou" <Spamfree@Spamfree.com> wrote in message
news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
>
>
> "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> news:vmq5ars9c9i455@corp.supernews.com...
> > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG
ALS
> > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> >
> > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO HO
> >
> >
>
> If I choose to talk on that frequency, I will, so long as I'm abiding by
the
> rules and regulations as they are spelled out. YOU or no one else, can
tell
> me to stay off. ASS WIPE.
>
> BIG AL.. the only thing big about you, is your mouth....
>
> Lou
>
>

1207. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 09:42:10 UTC
From: BIG AL <imafuckingwindbag@porkbutt.net>
Message-ID: <vmqsjcp4qn3968@corp.supernews.com>
Source record: 107872
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

IT BECAME MY PRIVATE FREQUENCY YEARS AGO. HO HO . STAY AWAY UNLESS INVITED
PORKBUTT.

"Lou" <Spamfree@Spamfree.com> wrote in message
news:ms8bb.12$LJ5.2141@iad-read.news.verio.net...
> "Ed Price" <edprice@cox.net> wrote in message
> news:1n7bb.332$La.205@fed1read02...
> >
> > "Harry Quiff" <quiff@merkin.net> wrote in message
> > news:bkims8qhf1@216.221.129.15...
> > > On Sat, 20 Sep 2003 18:30:35 -0400, BIG AL wrote:
> > >
> > > > ALL OF YOU PEOPLE NEED TO STAY OFF OF MY FREQUENCY. 3.894.5 IS BIG
> AL'S
> > > > FREQUENCY. UNLESS YOU ARE INVITED DO NOT COME TO MY FREQUENCY.
> > ESPECIALLY
> > > > W8RBK ELVIE WITH HIS GIRLY VOICE. HO HO
> > >
> > >
> > > Why don't you go fuck yourself?
> > >
> > > No one cares about the assclowns on night time HF. Every one is a
loser.
> > >
> > > I hope Riley eventually finds and ass fucks every one of you.
> >
> >
> >
> > Hmmm, 3.894.5 is a rather unique way to express it. Accuracy always
> commands
> > respect.
> >
> > Ed
> > WB6WSN
> >
>
> Since when did it become a "private" frequency? The H.F. Frequencies used
> for Ham operation are open to any one with the proper class of license to
> use them. Of course common courtesy does count when the frequency may
> already be in use. No wonder people are turning away from Ham. It is
getting
> horrible. Used to be, I boasted it to anyone interested. Now, I tell them
> not to waste their time. It is getting to be High Power CB. As for the

FCC,
> they have lost the battle so far as I'm concerned. The horses are out of
the
> barn. TOO LATE! I'm about ready to sell all my ham gear.. Get my cash out
of
> it while there is still some value left to it. I would NEVER buy a new rig
> again, that is for sure. I'll buy "used" if I decide to stay in it. It
just
> isn't worth the huge cash lay out.
>
> Lou
>
>

1208. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 11:00:18 UTC
From: kd1@sympatico.ca
Message-ID: <3F6D84C2.27DD2108@sympatico.ca>
Source record: 107874

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > I somewhat sympathize with your dilemma. You have latched on to
> > these forward and backwards waves for so long that you have started
> > to believe that they are real and are therefore ascribing to
> > them all the properties one would expect of a real EM wave such
> > as current and power.
>
> So what causes standing waves if there are no forward and backwards
> waves?

When you solve the differential equations describing the circuit
with distributed capacitance, inductance, resistance and conductance,
given the excitation and boundary conditions, you discover that
the voltage and current distributions along the line form a
standing wave. No need for reflections at all.

It is a whole lot more convenient using the reflection model
though.

> > Just for a brief moment attempt to relax your hold on forward and
> > reverse waves and think of the real voltages and currents on the
> > line.
>
> I will just as soon as you demonstrate how to generate standing
> waves without the existence of a forward wave and reverse wave.

OK. Go for it.

...Keith

1209. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 11:06:59 UTC
From: kd1@sympatico.ca
Message-ID: <3F6D8653.D6BF9423@sympatico.ca>
Source record: 107875

Radio913 wrote:
>
> >> I don't need to see it with my eyes,
> >> when i know you can't get a larger RMS voltage reflected from a capacitor,
> >than
> >> the RMS that charges it.
> >
> >Scientists are usually interested in producing models which will
> >allow them to predict the behaviour of the real world. To do this
> >it is necessary to check the predictions of the models against
> >the real world. If you find it unnecessary to do this, then you
> >are not interested in producing models which can predict real
> >world outcomes and your models can be anything you want.
> >
> >But such models won't have much utility.
>
> "Scientists" are also human too, and tend to want to disregard or not even
> try to measure data that may contradict their models. This makes them feel
> comfortable that they are "right".

I completely agree.

So can you overcome your "tend[ancy] to want to disregard or
not even try to measure data that may contradict their models."?

...Keith

1210. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 11:10:09 UTC
From: Michael Hart <mixstat-donotspam@bigpond.net.au>
Message-ID: <IGfbb.115199$bo1.9091@news-server.bigpond.net.au>
Source record: 107873

Can you please tell us what happened to the 10meter amateur band fractal antenna design that was on your web site?

We would appreciate it being put back if possible as I had not got around to building one before you took it off.

Michael

"Fractenna" <fractenna@aol.com> wrote in message news:20030913000514.06150.00001129@mb-m10.aol.com...

>
> May I suggest that you monitor the web site:
>
> http://www.fractenna.com
>
> 73,
> Chip N1IR
>

1211. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 11:33:44 UTC
From: kd1@sympatico.ca
Message-ID: <3F6D8C98.8F3BD3C6@sympatico.ca>
Source record: 107876

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > This standing wave
> > pattern can be described by postulating and using forward and
> > reflected voltage and current waves. Superposition lets you
> > compute the real voltages and currents but this does not make
> > the postulated forward and reflected voltages and currents
> > real.
>
> Can you think of any other way for standing waves to exist
> except for the superposition of a forward wave and a reverse
> wave? Until you can describe how standing waves can even exist
> without a forward wave and a reverse wave, it doesn't do any
> good to deny their existence.

Regardless of whether there is an alternative explanation,
you should reject the reflected power model because....
In general, IT DOES NOT WORK.

As has been aptly demonstrated in another thread, it does
not work for lines with complex Z0.

And when you try to follow the reflected power near a Z0
matched source, you can not find where it goes. Sometimes
it increases dissipation in the source, sometimes it
reduces dissipation in the source, all dependant on
things like the length of the transmission line and
construction of the source.

The reflected power model, in general, DOES NOT WORK.

For this reason alone, you should reject it.

This, of course, will not prevent you from taking advantage
of it where it does work. But always remember that it ONLY
works in special cases.

...Keith

1212. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 12:28:16 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <APgbb.1421$Hd6.1108178@newssvr28.news.prodigy.com>
Source record: 107877

"David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
news:ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net...
> In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee D.
> Flint" <deehays@qix.net> wrote:
>
> > I've tried to trap them but the headers and senders, etc are all
different.
>
> The "From:" lines are likely forged. Many such worms and viruses pick
> recipients and purported senders randomly from the infected computer's
> Outlook or Outlook Express address list. If you want to see where the
> message really is coming from, examine full headers carefully --
> specifically, the "Received: from" lines.
>
> > If you have a suggestion on how to stop them, please let us all in on
it.
>
> Persuade the universe to cease using unsafe operating system software,
> browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including
> the version now marketed by Apple, is pretty safe.
>
> David, ex-W8EZE, whose computers are happily MS-free except for safe 11
> year old versions of Word and Excel

If everyone switched to UNIX, the solution would be short-lived as the virus
writers would then switch to attacking it. Right now, they simply get more
"bang for the buck" by attacking Windows and it doesn't give them much of a
thrill to also go after UNIX system users or Apple computer users.

Dee D. Flint, N8UZE

1213. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 12:59:39 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkk7bshom1@nic.grnet.gr>
Source record: 107878

```
| <kd1@sympatico.ca> wrote:
| ...
| As has been aptly demonstrated in another thread, it does
| not work for lines with complex Z0.
| ...
```

Dear Keith,

Could you tell me please
in which thread?

Sincerely,

pez
SV7BAX

1214. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 13:15:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkk89g$fg6$1@hercules.btinternet.com>
Source record: 107879

> The question is, does the reader understand how it works,
> why it is useful and its limitation; or does the reader
> believe the markings on the scale and think that it is
> actually MEASURING the power in a forward and reverse
> wave.
>
==========

I've been saying the same thing for years.

A so-called directional wattmeter or SWR meter merely responds to the magnitude of a reflection coefficient usually, but not necessarily, relative to 50 + j0 ohms. Half of the information, the angle, is discarded without being aware of its existence.

Just a little box containing assumptions, preconceived notions, suppositions, ambiguitiues and a lot of imagination. The amount of information which can be extracted from a single number is indeed extrordinary.

However, this indispensible instrument has for many years provided both technical satisfaction and entertainment to hams and professionals alike. Its longevity will be exceeded only by the morse key.

Reg, G4FGQ

1215. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 13:43:27 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6DAC0E.5070406@optonline.net>
Source record: 107880

On 09/21/03 01:52 am Zoran Brlecic put fingers to keyboard and launched the following message into cyberspace:

>> If there ever was a Homeowners' Association, it has been defunct for
>> years.

> Then you don't have to comply with the CC&R's at all, because there is
> no one to enforce them. Make sure it is 100% defunct, though.

That would be nice if it were true, but I think that any other homeowner(s) in the subdivision could file suit if they had deep enough pockets.

-=-
Alan AB2OS

1216. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 14:39:34 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <fodrmvc3hmkhhlaarto5psusr2io06ua19@4ax.com>
Source record: 107952

On 19 Sep 2003 21:59:10 GMT, radio913@aol.com (Radio913) wrote:

>Hello,
>
> The other thread reminds me that i need a high powered, used Bird power
>meter.
>
> Up to 1000-2000 watts, 50-150 Mhz or more, VSWR too...what models can
>you folks recommend? Preferably one that doesn't screw up the 50 ohms of the
>dummy load too much! (check with an MFJ before and after putting the meter in)
>
> Birds are supposed to be very accurate, or so i have heard.
>
> Any advice or Ebay links are appreciated.
>
>
>Slick

I'd certainly recommend the Bird 43 -- it's worked well for me. You
can go to http://www.radiodan.com/ and look at their selection. They
have both new and used Bird meters, new and used plug-in elements,
dummy loads, etcetera. They might even be within driving distance of
you.

Bob
k5qwg

1217. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:08:46 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F6DBEFE.E41B8A79@cwis.net>
Source record: 107881

Cecil,
Each antivirus program is different, but most have
an email checking option, both incoming and outgoing
email. That option should be activated. The options
for email checking vary, some require that you decide
what to do about an infected email, some will 'clean'
it automatically or get rid of it in some way. Which
method you choose is up to you.
Firewalls are even more varied than antivirus
programs and are a real P.I.T.A. to set up correctly.
so R.T.F.M. is the key with them. It also depends on
the programs/TSR's you use. Some are not safe at all.
Richard listed a site in his post that is very very good
about telling you the how/what/where about spamming and
virus/worm/?? activities. The utilities on that site
work, are a good idea, and I recommend them.
'Doc

PS - These virus 'floods' are still a P.I.T.A. and I
have to delete them, but they stand NO chance of
infecting my machine.

1218. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:12:33 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vmrftgoufl1ob2@corp.supernews.com>
Source record: 107882

Dear Mr. Flint and group:
I am told by knowledgeable UNIX people (another partitioning of the world) that the structure of UNIX is such that attacks can not be successful. I am told that there are only three ports into/outof UNIX modules and it is simple to guard them.
The Bill ware OSs allow all sorts of back doors and side doors and over-the-transom ports.
What I do not understand is why someone has not funded a set of bright Indian programmers to produce an OS that can execute Window programs without committing the errors made by Bill's people. There is a Unix based program that is able to execute some, well behaved Windows programs.
I threaten my students with eternal haunting if they ever write a control program in Bill style. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Dee D. Flint" <deehays@qix.net> wrote in message
news:APgbb.1421$Hd6.1108178@newssvr28.news.prodigy.com...
>
> "David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
> news:ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net...
> > In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee
D.
> > Flint" <deehays@qix.net> wrote:
> >
<snip>
> >
> > Persuade the universe to cease using unsafe operating system
software,
> > browsers, and e-mail programs coming from Redmond, WA ;-). UNIX,
including
> > the version now marketed by Apple, is pretty safe.
> >
> > David, ex-W8EZE, whose computers are happily MS-free except for safe
11
> > year old versions of Word and Excel
>
> If everyone switched to UNIX, the solution would be short-lived as the
virus
> writers would then switch to attacking it. Right now, they simply get
more
> "bang for the buck" by attacking Windows and it doesn't give them much

of a
> thrill to also go after UNIX system users or Apple computer users.
>
> Dee D. Flint, N8UZE
>

1219. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:13:33 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <q_CdnQMpUPS5XfCiXTWJig@crocker.com>
Source record: 107883

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bkk89g$fg6$1@hercules.btinternet.com...
>
> > The question is, does the reader understand how it works,
> > why it is useful and its limitation; or does the reader
> > believe the markings on the scale and think that it is
> > actually MEASURING the power in a forward and reverse
> > wave.
> >
> ========================
>
> I've been saying the same thing for years.
>
> A so-called directional wattmeter or SWR meter merely responds to the
> magnitude of a reflection coefficient usually, but not necessarily,
relative
> to 50 + j0 ohms. Half of the information, the angle, is discarded without
> being aware of its existence.
>
> Just a little box containing assumptions, preconceived notions,
> suppositions, ambiguitiues and a lot of imagination. The amount of
> information which can be extracted from a single number is indeed
> extrordinary.
>
> However, this indispensible instrument has for many years provided both
> technical satisfaction and entertainment to hams and professionals alike.
> Its longevity will be exceeded only by the morse key.
> ----
> Reg, G4FGQ
>
>
i'll agree with that... the ubiquitous 'SWR' meter provides useful
information for real world application, its easy to read, and easy to use.
Just because it may not be reading exactly what the name implies doesn't
reduce its usefulness. after all, who would want to use some other more
complex and probably expensive meter just so you could know the angle of the
reflection coefficient or the phase relation between the forward and
reflected waves just to tweak a knob on your (also poorly named) antenna
tuner to make your transmitter happy.

1220. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:13:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6dc1f8_7@corp.newsgroups.com>
Source record: 107884

kd1@sympatico.ca wrote:
> When you solve the differential equations describing the circuit
> with distributed capacitance, inductance, resistance and conductance,
> given the excitation and boundary conditions, you discover that
> the voltage and current distributions along the line form a
> standing wave. No need for reflections at all.

You are saying that a math model dictates reality rather than vice versa. So prove your assertion. Describe a physical experiment that creates standing waves without a reflected wave. I have spent many hours at the Texas A&M library. Every author, when faced with the need to illustrate standing waves, presents an example of a forward wave superposing with a reflected wave.

Differential equations don't cause standing waves. But differential equations can divorce one's concepts from reality. Please demonstrate standing waves in a system possessing only one wave, presumably a forward-traveling wave.

>>I will just as soon as you demonstrate how to generate standing
>>waves without the existence of a forward wave and reverse wave.
>
> OK. Go for it.

I don't think you understand. You have asserted that there are no such things as reflections even though, without reflections, you cannot see anything except light sources. The onus is upon you to prove that reflections don't exist. A good time to cogitate upon such is while staring at your reflection in a mirror.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1221. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:23:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6dc44a_7@corp.newsgroups.com>
Source record: 107885

kd1@sympatico.ca wrote:
> Regardless of whether there is an alternative explanation,
> you should reject the reflected power model because....
> In general, IT DOES NOT WORK.

In general, our feedline losses are low enough that it does
work. In general on HF, we are dealing with near-resistive
Z0's and Z0-matched systems.

> As has been aptly demonstrated in another thread, it does
> not work for lines with complex Z0.

Actually it does. All one has to do is take the power interference
terms into account.

> This, of course, will not prevent you from taking advantage
> of it where it does work. But always remember that it ONLY
> works in special cases.

With the possible exception of QED, that statement is true of ALL
math models, including yours. Yours only works in the special case
of perfect steady-state conditions which, because of noise and
information modulation, are impossible to achieve in reality.

Your argument can be used against you, e.g. in QED, there are
no fields at all. Pot, meet Kettle.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1222. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 15:27:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6dc524_7@corp.newsgroups.com>
Source record: 107886

pez wrote:

> | <kd1@sympatico.ca> wrote:
> | As has been aptly demonstrated in another thread, it does
> | not work for lines with complex Z0.

> Could you tell me please in which thread?

Seems he is talking about that third power term in Chipman's
equation, the one caused by the resonance effect between the
feedline's Z0 reactance and the load's reactance.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1223. Re: Toroids anyone? - P1010033.JPG (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:04:20 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <81jrmvomud5am780m9a4gqo3mk1e63nhip@4ax.com>
Source record: 107887

On Sat, 20 Sep 2003 18:01:45 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>High Al (high permeability) ferrites are very useful at RF. They're
>widely used for broadband transformers, baluns, and EMI suppression
>chokes, and are in fact very often the best choice for those
>applications. If DC current is low enough to avoid saturation, they also
>make excellent RF chokes -- ones that maintain a high impedance over a
>very wide bandwidth and don't show any appreciable self resonant effect.
>
>The only RF application they're not good for is inductors in tuned or
>high-Q circuits, such as filters and tank circuits, or as tuned
>transformers.
>
>Roy Lewallen, W7EL
>

Thats what I figured. I have kept them for this very purpose.

mike

1224. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:05:03 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <P_jbb.1454$Hd6.1142787@newssvr28.news.prodigy.com>
Source record: 107888

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vmrftgoufl1ob2@corp.supernews.com...
> Dear Mr. Flint and group:
> I am told by knowledgeable UNIX people (another partitioning of the
> world) that the structure of UNIX is such that attacks can not be
> successful. I am told that there are only three ports into/outof UNIX
> modules and it is simple to guard them.
> The Bill ware OSs allow all sorts of back doors and side doors and
> over-the-transom ports.
> What I do not understand is why someone has not funded a set of
> bright Indian programmers to produce an OS that can execute Window
> programs without committing the errors made by Bill's people. There is
> a Unix based program that is able to execute some, well behaved Windows
> programs.
> I threaten my students with eternal haunting if they ever write a
> control program in Bill style. 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net

It's Ms. Flint actually. Keep in mind that when someone says it can't be done, other people set out and end up proving it can be done. They can't resist the challenge.

Dee D. Flint, N8UZE

1225. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:11:35 UTC
From: "William E. Sabin" <sabinw@mwci-news>
Message-ID: <vmrjbq8i94gu0b@corp.supernews.com>
Source record: 107889

Reg Edwards wrote:
>
> A so-called directional wattmeter or SWR meter merely responds to the
> magnitude of a reflection coefficient usually, but not necessarily, relative
> to 50 + j0 ohms. Half of the information, the angle, is discarded without
> being aware of its existence.
>

Not exactly correct.

The phase information is not displayed explicitly
on a scaler instrument like the Bird meter, but
phase is definitely involved in the principles of
operation of the directional coupler.

Very seldom, if ever, do we care a feather or a
fig what the exact phase value is, but the
directional coupler is not balanced unless the
phase is zero.

All automatic antenna tuners utilize this fact.

Bill W0IYH

1226. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:12:45 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <cFRtubO93cb$EAPR@ifwtech.co.uk>
Source record: 107895

Reg Edwards wrote:
>A so-called directional wattmeter or SWR meter merely responds to the
>magnitude of a reflection coefficient
[...]
>Just a little box containing assumptions, preconceived notions,
>suppositions, ambiguitiues and a lot of imagination.

The box responds only to the voltage and the current on the line. Those are the only *physical* things it responds to. All the rest is about ideas.

The basic design of the instrument is inspired by the idea of forward and reflected V and I waves, and the idea of the reflection coefficient. The circuit is designed so that the meter displays the magnitude of the reflection coefficient on a linear scale.

The further *calibration* of the meter scale in terms of SWR and forward/reflected power is then inspired(?) by yet more ideas - which Reg so aptly describes as a mix of "assumptions, preconceived notions, suppositions, ambiguities and a lot of imagination."

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1227. LDG AT-11MP versus SGC-230?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:48:44 UTC
From: Per Brix <"oz5abo tdcadsl.dk">
Message-ID: <3f6dd66b$0$153$edfadb0f@dread11.news.tele.dk>
Source record: 107890

Hi

Planning on erecting a long wire antenna in my "restricted" garden. I am looking at these two ATU (or coupler...) but I can't make up my mind.

Anyone having experiences with the two types of ATU?

73's, Per

1228. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:55:06 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <VJkbb.17$LJ5.2836@iad-read.news.verio.net>
Source record: 107891
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"W7TI" <noway@nohow.com> wrote in message
news:j6ermvgs0q3mt67h82b4f4c0ia8httd2ef@4ax.com...
> On Sat, 20 Sep 2003 22:57:12 -0400, "Lou" <Spamfree@Spamfree.com> wrote:
>
> >Since when did it become a "private" frequency? The H.F. Frequencies used
> >for Ham operation are open to any one with the proper class of license to
> >use them. O
>
> --
>
> Does the word "troll" have any meaning to you?
>
> He trolled, you bit, he's happy.
>
> --
> Bill, W7TI
>

Well, yes, I did reply.. among others.. Troll? Ass Hole is a better term.
And back to his comment, he will not run me off, if I so desire to chat on
that frequency. Not a chance.... Lou

1229. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 16:57:49 UTC
From: Alexander Schewelew <dl1pbd@gmx.net>
Message-ID: <bkklf6$2n8ma$1@ID-34767.news.uni-berlin.de>
Source record: 107892

Virus/Worm - What is it?

73!,
Alexander, DL1PBD

1230. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 17:25:33 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2109031025330001@bni030qny8kc.bc.hsia.telus.net>
Source record: 107894

In article <vmirmv0tquk9gu5s588jt11ercu8ggd9cv@4ax.com>,
mxcduffiex@xactcom.net wrote:

> On Sun, 21 Sep 2003 00:37:03 -0700, "Ed Price" <edprice@cox.net>
> wrote:
>
> > In other words, nothing factual, just "as far as I'm concerned." Thank you
> > for your rant.
>
> That was no rant, and pretty factual. Microsoft has left security
> hole after security hole. Further, almost none of this would happen
> if people would stop using Outlook and Outlook Express for mail. A
> good text based email and news program like Agent goes a long way
> toward preventing both accidental infection and spreading of the
> trash that currently pollutes the system so heavily. Eudora used to
> be good also, but I haven't used it in almost 10 years so it could
> have given in to the weaknesses by now.

Eudora is a mail-only program, not a mail plus news program. It hasn't given in to those weaknesses, at least not on the Mac platform, and I understand that the Windows version of it is very similar to the Mac version. (Historically, the Mac version of Eudora came first, and it was ported to Windows when Qualcomm bought it from the University of Illinois.)

The latest version, Eudora 6, has been available on both platforms for several weeks now, and I recently upgraded to it. As has been the case for some time, Eudora can be configured three ways: Light, Sponsored, and Paid. The Paid version has no ads and has a new SPAM filter which can learn what to do over time, very effective I am told. The Sponsored version is the same as the Paid version except that it doesn't cost money, there are small ads in the corner of the screen (easily ignorable, and I ignore them), and the anti-SPAM feature is missing (but you can use other SPAM-filtering software, or you can easily set up your own filters within Eudora if you don't opt for Eudora's built-in method of filtering). The Light version has no ads but lacks many features of the other two versions. SFU and Telus have very effective SPAM-defeating and virus-defeating features so I didn't spend the extra US $ 40 to get the Paid version; otherwise, I would have done so.

Eudora can import mailboxes and address lists from many common e-mail programs including Outlook and Outlook Express. Using this effective and safe e-mail program, or another safe one, is an easy first step in avoiding incoming malware.

Using a different browser than IE is another easy thing to do. My wife likes Mozilla (available for both Windows and Macintosh). Mozilla today is what Netscape will be many months from now. The latest completed version is 1.4; 1.5 is in alpha or beta, but I don't play with such things. Mozilla is OK but I like iCab better. iCab (Macs only) is an excellent browser that can be configured to tell useful lies about its identity, and that of the computer on which it is installed. My copy of iCab is configured to claim to be IE 6 running on a Windows machine. This lets me access certain sites (such as some banks) which, for no good reason, turn away browsers other than IE, or computers other than Windows machines, or both. Mozilla and iCab are a lot safer browsers than IE. Lying about being IE doesn't make a browser susceptible to the things IE is susceptible, and lying about being a Windows machine doesn't make a Mac susceptbile to Windows-only worms and viruses.

By the way, what "J. McLaughlin" <JCM@Power-Net.Net> said in article <vmrftgoufl1ob2@corp.supernews.com>

> I am told by knowledgeable UNIX people (another partitioning of the
> world) that the structure of UNIX is such that attacks can not be
> successful. I am told that there are only three ports into/outof UNIX
> modules and it is simple to guard them.
> The Bill ware OSs allow all sorts of back doors and side doors and
> over-the-transom ports.

agrees with what I have been told by people at SFU. It's not just the popularity of Windows that accounts for its susceptibility to viruses and worms.

To cheer everyone up some more, I just learned that a Windows variant will be coming soon to an ATM near you. See

<http://www.wired.com/news/technology/0,1282,60497,00.html>

When I gave this URL to an old friend of mine (currently a Windows user, and not enjoying it) who is a retired IBM employee, she replied

> Yuck! I wish I was back on OS/2.

David, ex-W8EZE, strong believer in safer computing

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

1231. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 17:27:33 UTC
From: BIG AL <imafuckingwindbag@porkbutt.net>
Message-ID: <vmro0vgbgi3kab@corp.supernews.com>
Source record: 107893
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

YOU WILL NOT TALK ON MY FREQUENCY. DO NOT EVEN GET NEAR 3.894.5. STAY ON 2 METERS WHERE YOU BELONG.

I HEAR ALL.

aY yi YI yi

HO HO

"Lou" <Spamfree@Spamfree.com> wrote in message news:VJkbb.17$LJ5.2836@iad-read.news.verio.net...
> Well, yes, I did reply.. among others.. Troll? Ass Hole is a better term.
> And back to his comment, he will not run me off, if I so desire to chat on
> that frequency. Not a chance.... Lou
>
>

1232. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 18:31:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nsprmvcdq8nomeur4f85948uvqgik1ttva@4ax.com>
Source record: 107896

On Sun, 21 Sep 2003 10:08:46 -0500, 'Doc <w5lz@cwis.net> wrote:

>Cecil,
> Each antivirus program is different, but most have
>an email checking option, both incoming and outgoing
>email. That option should be activated. The options
>for email checking vary, some require that you decide
>what to do about an infected email, some will 'clean'
>it automatically or get rid of it in some way. Which
>method you choose is up to you.
> Firewalls are even more varied than antivirus
>programs and are a real P.I.T.A. to set up correctly.
>so R.T.F.M. is the key with them. It also depends on
>the programs/TSR's you use. Some are not safe at all.
>Richard listed a site in his post that is very very good
>about telling you the how/what/where about spamming and
>virus/worm/?? activities. The utilities on that site
>work, are a good idea, and I recommend them.
> 'Doc
>
>PS - These virus 'floods' are still a P.I.T.A. and I
>have to delete them, but they stand NO chance of
>infecting my machine.

Hi Doc,

To again offer that link:
>http://grc.com/default.htm
>to obtain security fixes BEFORE the viruses are diagnosed through
>autopsy. I've been living quite free of these problems (aside from
>stupid Comcast) WITHOUT ONE MS security (sic) upgrade for 8 years.

I also have not used an "antivirus" program in 12 years. In that same time I have probably downloaded several 10's of GB of software, run it, kept some, discarded most, and to no ill effect. In fact, I am probably my own worst enemy when some 15 years ago I was writing a file interface where one wrong bit erased my hard drive before my jaw could sag.

Yesterday only two (2) emails arrived and were caught by one of 7 email filters in my purchased version of Agent - all of them set to trash porn. No other email at all (pretty slow day). They may have been part of this latest Virus, perhaps not, I will never know and I don't care either way. Clearly 80% of those who suffer and complain have some sort of Masochistic need to feed their habit.

The folks at Agent are about to release version 2 which will have many more configurable features like multiple accounts support, multiple connection support, folders within folders (for hierarchal email and article storage) and all while maintaining a safe separation between sanity and MS. I will only have to pay an upgrade fee, but I would buy into it full price without hesitation.

I also use Agnitum Outpost Firewall. Visit:
http://www.agnitum.com/
This blows away nearly all the ads that fill up the browser display (leaving only their default titles as links). When an ad slips through to annoy me, I just add it to the list Outpost ignores downloading. I can set any application's level of trust and block traffic in configurable settings (however, default Outpost works quite well out of the box) - and this is the FREE version.

73's
Richard Clark, KB7QHC

1233. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 18:45:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rmrrmvs6j4u21atrva34id1h0pdb8vsun9@4ax.com>
Source record: 107897

On Sun, 21 Sep 2003 11:10:09 GMT, "Michael Hart"
<mixstat-donotspam@bigpond.net.au> wrote:

>Can you please tell us what happened to the 10meter amateur band fractal
>antenna design that was on your web site?
>
>We would appreciate it being put back if possible as I had not got around to
>building one before you took it off.
>
>Michael
>

Hi Michael,

Two words of caution.

1. DO NOT ASK WHY.
2. Do not ask here.

Either constitutes the most fruitless appeal offered in this forum.
Approach him directly and ask for only what you want without comment,
color, or explanation. Failure to observe protocol will invariably
lead to difficult correspondence, unless of course you approach on
your knees with hands clasped and raised (a few "hosannas" might be
appreciated too). ;-)

To date (for 4 years?), absolutely no other such plea has been
fulfilled. There have been absolutely no reports of any successful
constructions of this design (although it is not particularly
difficult once you do some preparation).

73's & Good luck, write when you have one warming the air,
Richard Clark, KB7QHC

1234. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 18:52:02 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkks0i$81e$1@titan.btinternet.com>
Source record: 107898

"William E. Sabin" wrote > Reg Edwards wrote:
> >
> > A so-called directional wattmeter or SWR meter merely responds to the
> > magnitude of a reflection coefficient usually, but not necessarily,
relative
> > to 50 + j0 ohms. Half of the information, the angle, is discarded
without
> > being aware of its existence.
> >
>
> Not exactly correct.
>
> The phase information is not displayed explicitly
> on a scaler instrument like the Bird meter, but
> phase is definitely involved in the principles of
> operation of the directional coupler.
>
> Very seldom, if ever, do we care a feather or a
> fig what the exact phase value is, but the
> directional coupler is not balanced unless the
> phase is zero.
>
> All automatic antenna tuners utilize this fact.
>
> Bill W0IYH

==========

Bill, why the unnecessarily complications?

It is possible to imagine the so-called SWR meter is telling you the imaginary value of the SWR on a non-existent transmission line. But it's hardly of educational value when novices, even experienced engineers, are trying to understand what the reading really means. It's as confusing and as untruthful as Blair.

Why don't we accept the simple fact that the meter tells us only whether the transmitter is loaded with a resistance of a particular value or not. Which is no more nor less than what the instrument on the front panel of your transceiver is provided for.

Then we can forget all about SWR, fwd and reflected power, until needed on real ines. Change the name of the meter to TLI.

Reg, G4FGQ

1235. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 18:55:08 UTC
From: Roger Wussman <BastardSon@NoSlpam.comp>
Message-ID: <bkks6f$7ok$0@pita.alt.net>
Source record: 107899
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Lou" <Spamfree@Spamfree.com> wrote in message
news:VJkbb.17$LJ5.2836@iad-read.news.verio.net...
"W7TI" <noway@nohow.com> wrote in message
news:j6ermvgs0q3mt67h82b4f4c0ia8httd2ef@4ax.com...
> On Sat, 20 Sep 2003 22:57:12 -0400, "Lou" <Spamfree@Spamfree.com> wrote:
>
> >Since when did it become a "private" frequency? The H.F. Frequencies used
> >for Ham operation are open to any one with the proper class of license to
> >use them. O
>
> ____
>
> Does the word "troll" have any meaning to you?
>
> He trolled, you bit, he's happy.
>
> --
> Bill, W7TI
>

Well, yes, I did reply.. among others.. Troll? Ass Hole is a better term.
And back to his comment, he will not run me off, if I so desire to chat on
that frequency. Not a chance.... Lou
.....

Oh, DUH!! You still don't get it, do you?
Sure your name isn't Barney? As in Fife?

1236. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 19:20:18 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Xbudnejt_8ljZPCiU-KYjA@comcast.com>
Source record: 107900

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bkks0i$81e$1@titan.btinternet.com...
> It is possible to imagine the so-called SWR meter is telling you the
> imaginary value of the SWR on a non-existent transmission line. But it's
> hardly of educational value when novices, even experienced engineers, are
> trying to understand what the reading really means. It's as confusing and
> as untruthful as Blair.
>
> Why don't we accept the simple fact that the meter tells us only whether
the
> transmitter is loaded with a resistance of a particular value or not.
Which
> is no more nor less than what the instrument on the front panel of your
> transceiver is provided for.
>
> Then we can forget all about SWR, fwd and reflected power, until needed on
> real ines. Change the name of the meter to TLI.
> ---
> Reg, G4FGQ
>
Amen to that. I turned down the power on my transmitter, and measured P
forward and P rev while feeding about 100 feet of unterminated 9913. I then
REMOVED the coax; i.e. there was nothing connected to the output side of the
meter. Still measured the same Pf and Pr. (Daiwa meter)

Tam/WB2TT

1237. Van Gorden Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 19:41:47 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <rgvrmv46vahbl1v86u40ctkq5aubqenj30@4ax.com>
Source record: 107902

I was laying out the wire to cut a 160 meter fan dipole when I
discovered I have no information on the balun I dug out of the drawer.
As it's a new balun I probably have the information sheet *somewhere*

It's a Van Gorden Engineering Hi-Q 1:1 Balun.
I know they are relatively inexpensive, but what I need is the
frequency range and power handling capability.

I've spent over an hour doing searches and aparently didn't hit the
right combination.

Roger (K8RI)
Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1238. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 19:42:49 UTC
From: virustest2@anker.ath.cx
Message-ID: <1mvrmvk418nsih3gjavga64ivrcumb4r3c@4ax.com>
Source record: 107901
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 21 Sep 2003 01:05:46 +0200, "Kwaadwillende Gebruiker"
<m.vliet9@planet.nl> wrote:

-

1239. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:04:08 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <nvvrmv0evu2dsaq9vki4gfdr4sn90ut509@4ax.com>
Source record: 107903

On 20 Sep 2003 21:45:27 -0700, nm5k@wt.net (Mark Keith) wrote:

>"Ed Price" <edprice@cox.net> wrote in message
>>
>> I don't recall anything in Gates' career that's equivalent to the present
>> worm attack.
>> Do you have any factual backup for your off-hand slander?
>>
>> Ed
>> WB6WSN
>
>Well, as far as I'm concerned, he had as much hand in it as anyone. If
>his company would quit selling reader software with enough holes to
>qualify as swiss cheese, many of these macro viruses wouldn't have a
>leg to stand on. I've had 100's of server returns accusing me of
>spreading viruses, and also that I'm running Microsoft Outlook Express
>6.00.2600.0000. But this is not the case. I use old bulletproof
>netscape 3.1 to read mail. These viruses are a non issue to me. Why

I would respectfully suggest that you upgrade to one of the later
versions of Netscape. 3.1 is about as open to giving out your
information as any produced.

I run Netscape, Mozilla (slightly different but Netscape used a
Mozilla core) Thunderbird, and Pearl.

>are they an issue to a software that is supposed to be a step up from
>the ancient reader I'm using? If everyone would quit running Billware
>6.00.2600.0000, we could nip this macro virus thing in the bud.

If every one would practice safe computing even Bill Ware would work
well.
>Probably would stop 90% of it overnight. Heck, with all the latest

The users alone could prevent more than that. Remember that in *most*
cases they worms and viruses require the user to run them. Only
recently have the true viruses that run when you read them become much
of a problem.
>holes in these new win OS's they are spitting out, I'm temped to stay

It's not the OS. IT's the mail and news readers and even then it's
more of a problem with the default settings. It's also a lack of
firewalls and virus checkers.

If people would just turn off java, HTML, the automated entry of
addresses into their address books, turn off the ability to
automatically run macros when opening a document, and not run

attachments until they verify who ever sent it did so on purpose.
there would be few successful viruses.

It's a knee jerk reaction to blame the OS (which do have lots of holes
in them), but in reality the blame for well over 90% of the problem
comes directly from us...the users.
How many people have you heard state that "they" only open attachments
from people they know. That virus, or worm had to get the address
form some where and it was in some ones address book.
>with win98 a few more years. MK

The new ones are no worse than 98, or 98 SE.
And the early versions of Netscape were terrible for leaking
information about the user.

Computer People forget that over 90% of computer users are clueless.

Roger K8RI (Retired computer systems project manager)

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1240. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:04:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vms129bt3mofaf@corp.supernews.com>
Source record: 107904

Yet you've found it impossible to explain, either numerically or in
equation form, which "power wave" these "interference terms" belongs to,
or how this "interference" comes about in your model of superposing,
traveling power waves.

The explanation is indeed simple -- as long as you can continue to avoid
explaining it.

Roy Lewallen, W7EL

Cecil Moore wrote:
> kd1@sympatico.ca wrote:
>
>> Regardless of whether there is an alternative explanation,
>> you should reject the reflected power model because....
>> In general, IT DOES NOT WORK.
>
>
> In general, our feedline losses are low enough that it does
> work. In general on HF, we are dealing with near-resistive
> Z0's and Z0-matched systems.
>
>> As has been aptly demonstrated in another thread, it does
>> not work for lines with complex Z0.
>
>
> Actually it does. All one has to do is take the power interference
> terms into account.
> . . .

1241. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:10:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6e076a_4@corp.newsgroups.com>
Source record: 107905

Tarmo Tammaru wrote:
> Amen to that. I turned down the power on my transmitter, and measured P
> forward and P rev while feeding about 100 feet of unterminated 9913. I then
> REMOVED the coax; i.e. there was nothing connected to the output side of the
> meter. Still measured the same Pf and Pr. (Daiwa meter)

Of course, you were simply getting a same-cycle reflection. The reflected
wave model is consistent. If the open-circuit is at the transmitter terminal,
all the power is reflected immediately.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1242. Re: Van Gorden Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:21:24 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <15ydnSeW4MHJlfOiU-KYvg@comcast.com>
Source record: 107906

According to the AES catalog, it is rated 3 - 40 MHz. The Unadilla baluns, which go for about $25 , are rated down to 1.8 MHz.

Tam/WB2TT
"Roger Halstead" <newsgroups@rogerhalstead.com> wrote in message news:rgvrmv46vahbl1v86u40ctkq5aubqenj30@4ax.com...
> I was laying out the wire to cut a 160 meter fan dipole when I
> discovered I have no information on the balun I dug out of the drawer.
> As it's a new balun I probably have the information sheet *somewhere*
>
> It's a Van Gorden Engineering Hi-Q 1:1 Balun.
> I know they are relatively inexpensive, but what I need is the
> frequency range and power handling capability.
>
> I've spent over an hour doing searches and aparently didn't hit the
> right combination.
>
> Roger (K8RI)
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

1243. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:29:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6e0bf7_4@corp.newsgroups.com>
Source record: 107907

Roy Lewallen wrote:

> Yet you've found it impossible to explain, either numerically or in
> equation form, which "power wave" these "interference terms" belongs to,
> or how this "interference" comes about in your model of superposing,
> traveling power waves.

For the record, I don't superpose things that lack phase. But if you
turn on two 100 watt light bulbs, don't you double the light output?
This stuff is all explained in _Optics_, by Hecht.

> The explanation is indeed simple -- as long as you can continue to avoid
> explaining it.

It is all explained in Chipman's "Transmission Lines". Please take the time
to read it and understand it. Just as the voltage and current increase depending
upon the 'Q' of a resonant circuit, the same thing happens with reactive
transmission lines. I am not going to waste my time explaining such an easy
concept. You probably can simulate the situation by drawing the dividing
plane between the cap and the resistor in the following circuit.

```
|
RF source----//----capacitor---|---resistor------inductor-------+
| | |
+-------//----------------|--------------------------------+
|
plane
```

The voltage across the capacitor or inductor, depending upon the 'Q' of
the circuit, can be greater than the RF source voltage. You can add 1WL
of transmission line at the '//' point without changing anything. In this
case, the energy exchanged between the capacitor and inductor travels through
the resistor and contributes to power dissipation in the radiation resistance
(if that is what that resistance is). Like I said before, it's a no-brainer.
Once I read Chipman's explanation, it was as clear as day.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1244. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:45:52 UTC
From: radio913@aol.com
Message-ID: <20030921164552.15782.00000242@mb-m13.aol.com>
Source record: 107908

>>
>>I'll bet you'd love an invitation to expand on your comments about a "good
>>load" and "calibrate it."
>
>Perhaps, but very few bench techs are found here.
>

How about a bench engineer? How did you come to the conclusion that the
Bird plugs go bad after 3 months?

Do you have a transmitter of known Pout that you use as a standard? Of
what
power level?

Or do you use known good attenuators, and measure the error of relative
powers?

>
>The Bolometer is a classic load, there are many others (like a
>barreter).
>

I'm not familiar with these, tell me more.

>
>>All that said, I still think that a Bird 43 (and yes, a good load or
>>attenuator string [once you get 60 dB or so on the attenuator string, an
>>open-end reflection is quite minor]) is the best route for a ham.

Yeah, someone suggested using long lengths of RG-58 (the lossier, the
better) to improve the return loss of a no-so-50 ohm dummy load.

>>
>>For the 100 MHz region, you can think about a directional coupler. Nice, but
>>you still need either a bolometric power meter or a calibrated spectrum
>>analyzer. If you don't already have those two goodies, then the Bird is the
>>champion choice.
>>
>>Ed
>>WB6WSN
>
>
>Hi Ed,
>
>I've never run across a need for batteries, except to light the meter.
>There are better meters than a Bird. The AN/URM-120 is easily better,
>and sells cheaper, has all the same qualities, but for its advantage

>it also is larger and presents its readings with the meter horizontal.

For the AN/URM-120, i found this:

"On the 25-250 and 200-1000 Mhz slugs 10, 50, 100, and 500 watts
are available."

No 1000 or 2000 watt slugs for 25-250 MHz?

Slick

1245. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:52:10 UTC
From: radio913@aol.com
Message-ID: <20030921165210.15782.00000243@mb-m13.aol.com>
Source record: 107909

>> "Scientists" are also human too, and tend to want to disregard or not
>even
>> try to measure data that may contradict their models. This makes them
>feel
>> comfortable that they are "right".
>
>I completely agree.
>
>So can you overcome your "tend[ancy] to want to disregard or
>not even try to measure data that may contradict their models."?
>
>...Keith
>

I'll think about it after you tell us what you get when you measure the
end of the inductor.

Slick

1246. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:55:54 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F6E100E.4060403@get.lost>
Source record: 107911

Alan Beagley wrote:
> On 09/21/03 01:52 am Zoran Brlecic put fingers to keyboard and launched
> the following message into cyberspace:
>
>>> If there ever was a Homeowners' Association, it has been defunct for
>>> years.
>>
>
>> Then you don't have to comply with the CC&R's at all, because there is
>> no one to enforce them. Make sure it is 100% defunct, though.
>
>
> That would be nice if it were true, but I think that any other
> homeowner(s) in the subdivision could file suit if they had deep enough
> pockets.

I admit this is best left to lawyers, but generally CC&R's are passed on from the developer only to the HOA, not to the individual owners. Once the HOA dissolves, CC&R's are not binding and individuals have no legal ground to pursue the matters based on them.

Good luck,

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1247. Tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 20:57:42 UTC
From: Robert Daniel <pagerman@worldnet.att.net>
Message-ID: <ahobb.153629$3o3.10921074@bgtnsc05-news.ops.worldnet.att.net>
Source record: 107910

A freind is setting up a tower (HDX-589 MDPL) from U S Tower in soil that appears to be all sand. Has anyone had experience in doing this. This is a very heavy duty fold over and crank up tower. Anyone with thoughts or experience on this i would like to hear from you. I am gathering info for friend.

Robert K5RGD

1248. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:08:14 UTC
From: richardharrison@webtv.net
Message-ID: <20020-3F6E214E-253@storefull-2314.public.lawson.webtv.net>
Source record: 107821

Keith wrote:
"Scientists are usually interested in producing models which will allow them to predict the behaviour of the real world.

True. Models must be adjusted to reality, not the other way around. But, once the model is verified it becomes useful.

You don`t have to measure the area of a rectangle with a planimeter once you know that area is the product of the length and width of the rectangle.

Best regards, Richard Harrison, KB5WZI

1249. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:23:18 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E16C6.4A686038@sympatico.ca>
Source record: 107913

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > Regardless of whether there is an alternative explanation,
> > you should reject the reflected power model because....
> > In general, IT DOES NOT WORK.
>
> In general, our feedline losses are low enough that it does
> work. In general on HF, we are dealing with near-resistive
> Z0's and Z0-matched systems.

There seems to be a bit of a vocabulary problem. The 'general
case' is the one that is more encompassing as in 'general
relativity' when compared to 'special relativity'.

So in your passage above, you are agreeing with my assertion.

In GENERAL, IT DOES NOT WORK.

In the specific case of RF, "our feedline losses are [usually]
low enough that it does work."
In the specific case of HF, "we are [usually] dealing with
near-resistive Z0's and Z0-matched systems."

With which I have no dispute. But that still leaves us with....

In GENERAL, IT DOES NOT WORK.

This strongly suggests a flaw in the model.

> > As has been aptly demonstrated in another thread, it does
> > not work for lines with complex Z0.
>
> Actually it does. All one has to do is take the power interference
> terms into account.

Exactly my point. So now the net power is no longer the sum of
the forward and reflected power; there is a third term which is
neither the forward nor the reflected power.

In GENERAL, IT DOES NOT WORK.

> > This, of course, will not prevent you from taking advantage
> > of it where it does work. But always remember that it ONLY
> > works in special cases.
>
> With the possible exception of QED, that statement is true of ALL
> math models, including yours. Yours only works in the special case

> of perfect steady-state conditions

I am unsure what you think my model is. Perhaps you could elaborate?

In any case, my argument is that in GENERAL, the reflected power model DOES NOT WORK. This is independent of whether I (or anyone) has an alternative which does work.

...Keith

1250. Re: Tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:24:37 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <gNednWvMnLyBivOiU-KYvw@crocker.com>
Source record: 107912

"Robert Daniel" <pagerman@worldnet.att.net> wrote in message
news:ahobb.153629$3o3.10921074@bgtnsc05-news.ops.worldnet.att.net...
> A freind is setting up a tower (HDX-589 MDPL) from U S Tower in soil that
> appears to be all sand. Has anyone had experience in doing this. This is
a
> very heavy duty fold over and crank up tower. Anyone with thoughts or
> experience on this i would like to hear from you. I am gathering info for
> friend.
>
> Robert K5RGD
>
>
you want him to contact a local engineer who can check the soil and design
the proper foundation.

1251. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:28:21 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E17F5.AAA199B4@sympatico.ca>
Source record: 107914

David Robbins wrote:
>
> i'll agree with that... the ubiquitous 'SWR' meter provides useful
> information for real world application, its easy to read, and easy to use.
> Just because it may not be reading exactly what the name implies doesn't
> reduce its usefulness.

On the one hand, it is still useful for what it does.

On the other hand, poor names have lead many to a mis-understanding of
how it works.

So overall, it has been less useful than if it were not mis-named.

...Keith

1252. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:44:09 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vms6rl6jfempaf@corp.supernews.com>
Source record: 107915

Dear Ms. Flint:
My sincere apology for making a completely unwarranted assumption
about your gender. I shall remember not to do so again.

Please note that the contention is that UNIX has very, very little
that needs to be protected. If a vault has only one door, it needs to
be guarded. When Windows has multiple windows, doors, and transoms
through which attacks can be effected - too many to plug - it is no
wonder that it can be so readily attacked.
Warm regards, Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Dee D. Flint" <deehays@qix.net> wrote in message
news:P_jbb.1454$Hd6.1142787@newssvr28.news.prodigy.com...
>
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> news:vmrftgoufl1ob2@corp.supernews.com...
> > Dear Mr. Flint and group:
> > I am told by knowledgeable UNIX people (another partitioning of
the
> > world) that the structure of UNIX is such that attacks can not be
> > successful. I am told that there are only three ports into/outof
UNIX
> > modules and it is simple to guard them.
> > The Bill ware OSs allow all sorts of back doors and side doors
and
> > over-the-transom ports.
> > What I do not understand is why someone has not funded a set of
> > bright Indian programmers to produce an OS that can execute Window
> > programs without committing the errors made by Bill's people. There
is
> > a Unix based program that is able to execute some, well behaved
Windows
> > programs.
> > I threaten my students with eternal haunting if they ever write
a
> > control program in Bill style. 73 Mac N8TT
> >
> > --
> > J. Mc Laughlin - Michigan USA
> > Home: JCM@Power-Net.Net
>

> It's Ms. Flint actually. Keep in mind that when someone says it can't
be
> done, other people set out and end up proving it can be done. They
can't
> resist the challenge.
>
> Dee D. Flint, N8UZE
>

1253. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 21:47:21 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E1C69.29EF7824@sympatico.ca>
Source record: 107916

pez wrote:
>
> | <kd1@sympatico.ca> wrote:
> | ...
> | As has been aptly demonstrated in another thread, it does
> | not work for lines with complex Z0.
> | ...
>
> Dear Keith,
>
> Could you tell me please in which thread?

It was a thread started by Roy Lewellan titled "Complex line
Z0: A numerical example" to which I refer.

On the assumption that you have access to and that google will give
the same answer to you that it gives to me, try...

http://groups.google.ca/groups?hl=en&lr=&ie=UTF-8&threadm=vl2kp2cdlork04%40corp.supernews.com&rnum=1&prev=/groups%3Fq%3Dchose%2Ban%2Bapproximate%2Bmodel%2Bgroup:rec.radio.amateur.antenna%2Bauthor:lewallen%26hl%3Den%26lr%3D%26ie%3DUTF-8%26selm%3Dvl2kp2cdlork04

...Keith

1254. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:05:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6e2297_5@corp.newsgroups.com>
Source record: 107819

kd1@sympatico.ca wrote:
> In GENERAL, IT DOES NOT WORK.

Depends upon the definition of "general". A synonym for "general" is
"average" and it does work in the average case.

> I am unsure what you think my model is. Perhaps you could elaborate?

If your model depends on fields at all, it goes against the QED model
which is 100% dependent upon particles.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1255. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:09:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ri4smvo74nqn7e9qqa97sa346jt33lokhh@4ax.com>
Source record: 107918

On 21 Sep 2003 20:45:52 GMT, radio913@aol.com (Radio913) wrote:

> How about a bench engineer? How did you come to the conclusion that the
>Bird plugs go bad after 3 months?

This is the standard calibration cycle. I did not come to the
conclusion, it is commonplace schedule subscribed to by registered
laboratories performing calibrations traceable to the NIST.

The necessity is driven by experience of the industry exhibiting that
need. In other words, for 100 Birds and 100 URM-120's coming into the
lab for calibration or qualification, 70 to 90 of the Birds were out
of tolerance; and 70 to 90 of the URM-120's met spec. 10 to 30% out
of tolerance hits are not acceptable for FAA flight line work (the
Birds are much worse).

If you waited a year instead of 3 months, the Bird that was out of
whack would still be out of whack, but probably at the same level.
You could say pretty much the same for 20 years later (barring smoke
curling up at hot connectors). Repeatability is accurate only when
you've calibrated it. In other words, if I had simply noted what
Power was being read (like 60W) for an applied Power (like 100W); then
it would probably stay that way until judgement day (evidenced by
smoking connectors). If someone lost that calibration certificate,
then for those many years after, they would have been repeatedly off
by a considerable margin (and probably trying in vain to force any amp
to do what it was already doing). This is called "clueless." They
would sneer at the vendor of the amps, change their sources, and
snuggle up to their meter each evening.

>Do you have a transmitter of known Pout that you use as a standard?

Of course. And a reflection free system.

>Of what power level?

Full Scale and at each Cardinal point to calibrate scale linearity.
As I said, even the Bird can be calibrated to accuracies that exceed
their specification.

>Or do you use known good attenuators, and measure the error of relative
>powers?

Attenuators do nothing for the required input. The reference to
attenuators offered by Ed was for the detector head in a Directional
Coupled system.

>>The Bolometer is a classic load, there are many others (like a
>>barreter).
>I'm not familiar with these, tell me more.

Maybe because I mis-spelled it: Barretter.

Anyway, it is a fine wire detector (that's right, just a wire). The most accessible form, and most common item is found in a 10 mA fuse. Another form is called a Wollaston wire. The Barretter is used in a lot of HP Power Meters (the premium stuff). They are usually found in pairs with one being half of a bridge with a steady bias, and the other being the termination to a coupler connection into the transmission line feeding the load. Only takes about +10dBm to wipe out one of these detectors (be prepared to spend a couple hundred to fix it too).

>>>All that said, I still think that a Bird 43 (and yes, a good load or
>>>attenuator string [once you get 60 dB or so on the attenuator string, an
>>>open-end reflection is quite minor]) is the best route for a ham.

> Yeah, someone suggested using long lengths of RG-58 (the lossier, the
>better) to improve the return loss of a no-so-50 ohm dummy load.

That, too, is suitable. Calibration, as I pointed out, is not making adjustments, it is gathering information. You might optimize performance as an ancillary function of this; and to maintain equipment in good order (plus keep customers); but if you offer no information, then no calibration has been performed.

Calibration would also reveal that this suggestion of lossy cable was a loser proposition if you didn't check for connector mismatch. If it was considered trash cable, it probably has trash connectors.

> For the AN/URM-120, i found this:
>
> "On the 25-250 and 200-1000 Mhz slugs 10, 50, 100, and 500 watts
>are available."
>
> No 1000 or 2000 watt slugs for 25-250 MHz?
>
>
>Slick
>

Hi OM,

I wouldn't know off-hand. Not really important anyway as Ed pointed out. Directional Couplers work just as well too, plus they make the bench more versatile than one instrument with several plug-ins. You can use Direction Couplers for many things, the plugs-ins for only one.

Power can be measured by calorimeters (HP made one decades ago that is still better than any suggestions here). Or measured by a Lamp

(photometrically, as long as you are matched to its Z). Or measured by a Lamp (by calorimetric method, as long as you are matched to its Z). Or measured by a Thermistor (another calorimetric method). Or measured by Thermocouple (guess what, another calorimetric method). Or measured by substitution (using any of the above as non-matched loads as long as both sources are fully matched). By measuring the resistance of the load (especially carbon) as long as the power changes the resistance to a matched condition (or by substitution if not).

73's
Richard Clark, KB7QHC

1256. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:11:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sd8smv8pd97mncdg9irh2c242mjob0gmlk@4ax.com>
Source record: 107917

On Sun, 21 Sep 2003 15:29:26 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>It is all explained in Chipman's "Transmission Lines". Please take the time
>to read it and understand it

:-)

1257. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:16:18 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Sqpbb.120500$mp.61690@rwcrnsc51.ops.asp.att.net>
Source record: 107820

Rare DX from a Wormhole in deep space!

DD

Alexander Schewelew wrote:

> Virus/Worm - What is it?
>
> 73!,
> Alexander, DL1PBD
>
>

1258. Re: Tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:20:32 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Qupbb.120522$mp.61588@rwcrnsc51.ops.asp.att.net>
Source record: 107822

David Robbins wrote:

> "Robert Daniel" <pagerman@worldnet.att.net> wrote in message
> news:ahobb.153629$3o3.10921074@bgtnsc05-news.ops.worldnet.att.net...
>
>>A freind is setting up a tower (HDX-589 MDPL) from U S Tower in soil that
>>appears to be all sand. Has anyone had experience in doing this. This is
>
> a
>
>>very heavy duty fold over and crank up tower. Anyone with thoughts or
>>experience on this i would like to hear from you. I am gathering info for
>>friend.
>>
>>Robert K5RGD
>>
>>
>
> you want him to contact a local engineer who can check the soil and design
> the proper foundation.
>
>
The base will be BIG, HEAVY [in the range of tons] and RE-BAR
reinforced. As stated above, check with engineering.

Deacon Dave, W1MCE

1259. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:38:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmsa3ukt39g5b3@corp.supernews.com>
Source record: 107823

Good example. But let's suppose you've never seen any rectangle that wasn't square. You've learned that you only need to measure one side (with a Bird side-meter, undoubtedly) in order to determine the area. Works fine. Always has. You swear up and down that the area of a rectangular figure is always the square of one side. Then someone gives you a rectangle. Worse yet, they claim there's something called a rectangle, which you've never seen.

It's been really interesting to see how the various participants in this discussion react to this new concept.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Keith wrote:
> "Scientists are usually interested in producing models which will allow
> them to predict the behaviour of the real world.
>
> True. Models must be adjusted to reality, not the other way around. But,
> once the model is verified it becomes useful.
>
> You don`t have to measure the area of a rectangle with a planimeter once
> you know that area is the product of the length and width of the
> rectangle.
>
> Best regards, Richard Harrison, KB5WZI
>

1260. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:49:47 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E2B0B.A4378132@sympatico.ca>
Source record: 107824

Radio913 wrote:
>
> >> "Scientists" are also human too, and tend to want to disregard or not
> >even
> >> try to measure data that may contradict their models. This makes them
> >feel
> >> comfortable that they are "right".
> >>
> >I completely agree.
> >
> >So can you overcome your "tend[ancy] to want to disregard or
> >not even try to measure data that may contradict their models."?
>
> I'll think about it after you tell us what you get when you measure the
> end of the inductor.

I've been to the lab.

May I suggest that it is now your turn to do so.

Otherwise you are simply adding to the evidence that you are having
difficulty overcoming a "tend[ancy] to want to disregard or not even
try to measure data that may contradict [your] models."

...Keith

1261. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 22:59:47 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E2D63.C9E94012@sympatico.ca>
Source record: 107825

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > In GENERAL, IT DOES NOT WORK.
>
> Depends upon the definition of "general". A synonym for "general" is
> "average" and it does work in the average case.

So you are agreed? Using my definition of "general"....

In GENERAL, IT DOES NOT WORK.

> > I am unsure what you think my model is. Perhaps you could elaborate?
>
> If your model depends on fields at all, it goes against the QED model
> which is 100% dependent upon particles.

As I thought. You have not been able to discern MY model.

My interest is with highlighting the lack of generality of the
reflected power model.

And it appears you are now in agreement once we got the definition of
"general" out of the way.

So now that it is not a general model (using my defintion of
general), whenever you refer to it you will have to know whether
you are dealing with one of the special cases for which it works.

...Keith

1262. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:15:44 UTC
From: richardharrison@webtv.net
Message-ID: <20020-3F6E3120-264@storefull-2314.public.lawson.webtv.net>
Source record: 107829

Keith wrote:
"Some of the authors you quote are not so convinced of their (waves) reality."

Symbols merely represent reality but are important to the exchange of ideas just the same. The effects seen on transmission lines are reliably explained and predicted by wave action. In one of my physics classes over a half century ago, the prof asked another student a question about atoms. The reply was that the student had never been inside an atom. Neither the prof nor anyone else seemed impressed with the retention of the student, but the prof agreed that he had never been inside an atom either, but found atomic theory useful.

Terman is as reliable as anyone I know of, and he says:
"The voltage and current existing on a transmission line as given by Eqs. (4-6) can be conveniently exprerssed as the sum of the voltages and currents of two waves, one traveling toward the receiving or load end of the line, and is called the "incident wave" because it is incident upon the load. The second wave can be thought of as traveling from the load toward the generator end of the line; it is termed the "reflected wave", and is generated at the load by reflection of the incident wave."

Terman has no qualms, it seems, but says "regarded as traveling". Those aren`t weasel words. Terman is more direct on page one in the opening sentance:
"Electrical energy that has escaped into free space exists in the form of electromagnetic waves."

How else could their energy be transferred at the speed of light?

Best regards, Richard Harrison, KB5WZI

1263. Re: Are fractal antennas being used in cellphones?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:28:39 UTC
From: Mike Painter <m.painter@att.net>
Message-ID: <Huqbb.153845$3o3.10933854@bgtnsc05-news.ops.worldnet.att.net>
Source record: 107826

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20030915164704.26616.00000602@mb-m26.aol.com...
> >
> >Such is the "science" of fractal electromagnetics.
> >
> >Such is the "legitimacy" of patents published.
> >
> >73's
> >Richard Clark, KB7QHC
>
> Paint it brown, add the claim that it is faster than light, and you got
another
> "winner" or sucker?
>
> Wonder if somebody would repay the treatment and actually sue the clowns
for
> misleading claims or advertising.
>
> If Art got patent for reflecting directors, then looks like anyone can get
> patent for anything and then rattle it in the face of ignoramuses.

That seems to be near the truth. Over energy machines are still getting
patents as well as many other things that not only violate what we know
about the universe but DO NOT WORK.

http://www.randi.org/ touches on this frequently.
The good news is that the patent office will reexamine and remove patents if
enough pressure is brought to bear.

1264. Folded monopole w/ Al sailboat mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:38:09 UTC
From: "Albert P. Belle Isle" <belleisl@CerberusSystems.com>
Message-ID: <f8dsmv0q6oq359qkvmdvvn7n0ogqgqlidc@4ax.com>
Source record: 107827

It would seem that a 40+ foot aluminum mast with a grounded bottom
just calls out for a wire from its top, parallel to it, down to a
deck-level feedpoint with a tuner.

Does anyone have any experience trying to do this? Was it any better
than the typical weakening of your backstay with insulators? (I have a
B&R rig, so I don't even have a backstay, anyway.)

Good listening,
Al
==========
Location: 42N39, 71W09 (Near Boston, MA)
HF Antennas: 65ft TFD, 45ft T2FD, 28ft vertical, 65ft doublet
HF Receivers: Ten-Tec RX340, RX320, Harris R2368, Cubic R3030A
Decoders: Code300-32, Universal M-8000, PK-232MBX/DSP
==========

1265. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:41:23 UTC
From: richardharrison@webtv.net
Message-ID: <20020-3F6E3723-272@storefull-2314.public.lawson.webtv.net>
Source record: 107831

Keith wrote:
"---does the reader believe the markings on the scale and think that it is actually MEASURING the power in a forward and reverse wave?"

The wattmeter markings have been calibrated to indicate watts. One only must measure a quantity proportional to watts then interpret that accurately.

A speedometer indicates miles per hour but gets that from electricity which is proportional to speed. Neither miles nor hours are measured.

Best regards, Richard Harrison, KB5WZI

1266. OT external cell phone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:41:59 UTC
From: Mike Painter <m.painter@att.net>
Message-ID: <bHqbb.148420$0v4.10983426@bgtnsc04-news.ops.worldnet.att.net>
Source record: 107828

I need to improve the signal to my cell phone while inside my house.
Currently there is one place where I can get enough signal to talk to people
(most of the time.)

AT&T is the carrier and the model I have (3560 - not - 3650) does not seem
to have an external antenna available on the internet.
Antennas for similar phones don't plug in but snap on to the outside of the
case.

I'd like something that would allow me to move around the house a bit but
would not mind standing in one place.

Years ago I wrapped a TV antenna lead around a cheap transistor radio and
could not move the dial without picking up a station. With out that wire the
radio picked up 2 or 3 stations.

Would my TV antenna pick up enough to be a help?

1267. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-21 23:55:12 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <eJ6dnZaNko5g0_OiU-KYvw@comcast.com>
Source record: 107836

Cecil,

I don't have a schematic for the Daiwa. So, I don't really know what it was measuring; but, I think more than likely, the voltage that reached the meter. If the scale were calibrated in gallons per minute, I might have read 2.5 gallons per minute.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message news:3f6e076a_4@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > Amen to that. I turned down the power on my transmitter, and measured P
> > forward and P rev while feeding about 100 feet of unterminated 9913. I
then
> > REMOVED the coax; i.e. there was nothing connected to the output side of
the
> > meter. Still measured the same Pf and Pr. (Daiwa meter)
>
> Of course, you were simply getting a same-cycle reflection. The reflected
> wave model is consistent. If the open-circuit is at the transmitter
terminal,
> all the power is reflected immediately.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1268. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 00:10:59 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bklemj$63b$1@titan.btinternet.com>
Source record: 107830

"Tarmo Tammaru" wrote -
> "Reg Edwards" wrote -
> > It is possible to imagine the so-called SWR meter is telling you the
> > imaginary value of the SWR on a non-existent transmission line. But it's
> > hardly of educational value when novices, even experienced engineers,
are
> > trying to understand what the reading really means. It's as confusing
and
> > as untruthful as Blair.
> >
> > Why don't we accept the simple fact that the meter tells us only whether
> > the transmitter is loaded with a resistance of a particular value or
not.
> > Which is no more nor less than what the instrument on the front panel
> > of your transceiver is provided for.
> >
> > Then we can forget all about SWR, fwd and reflected power, until needed
> > on real ines. Change the name of the meter to TLI.
> >
==========

> Amen to that. I turned down the power on my transmitter, and measured P
> forward and P rev while feeding about 100 feet of unterminated 9913. I
then
> REMOVED the coax; i.e. there was nothing connected to the output side of
the
> meter. Still measured the same Pf and Pr. (Daiwa meter)
>
> Tam/WB2TT

==========

Tam, what did I tell you ?

Your meter twice indicated the correct valuable information : In neither case was your transmitter loaded with 50 ohms!

To complete the experiment connect a good, + or - 5 percent, 50-ohm dummy-load to the meter. At 1.9, 3.8 or 7 MHz you can check the quality of the dummy load with a DC ohmeter. The actual DC resistance will depend on how hot is the dummy load. It can probably be adjusted over an appreciable range just by varying its temperature.

If the meter indicates an SWR less than about 1.15 then again it provides the correct valuable information : The transmitter load is in the right ball park. (Over here, Euro-side, we say in the "right street".)

To calibrate the meter, to make it even more "right", there's a little preset resistor or capacitor inside the meter box. Twiddle it until a minimum value of SWR is indicated at 7 MHz when the dummy load is connected. Or if the user is accustomed to work mostly at higher frequencies then it can be twiddled at 21 MHz.

A meticulous amateur, proud of his shack and workmanship, may remove the redundant SWR scale graduations and paint in their place two coloured bands, green = good, red = bad, according to artistic preferences.

Incidentally, to accurately determine transmitter power output just use a diode+capacitor+DC voltmeter across the dummy load and calculate P = (V-squared) / 100 watts. At HF it will usually be found to be within +/- 10 percent of what a reputable transceiver manufacturer says it is. And it can then be forgotten about. A 10 percent difference in power corresponds to 1/15th of an S-unit.

Tam, I'm sure you're already familiar with the foregoing procedures. I describe them on these walls for the benefit of novices, CB-ers, etc., and anyone else who studiously reads through these interminable threads in the vain hope of learning anything from (Z-Zo)/(Z+Zo).

I have a guilty conscience - it was I who began the rho = 1+Sqrt(2) and rho = (Z-Zo) / (Z+Zo) threads. My excuse is that I was measuring and investigating values of rho greater than unity 10 years before Chipman issued his book in October 1968. But by then I had migrated to an entirely different field.

Reg, G4FGQ

1269. Ladder line questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 00:21:45 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <pufsmvgfkek5bm72sqajnlfhrivkelmfed@4ax.com>
Source record: 107832

Hey group,

I am trying to get away from adding unwanted capacitance to my antenna circuit so I tune it more effectively. I would like to do away with coax. This is a SWL antenna.

Will 300 ohm TV twin lead suffice as ladder line? Does this add any noise or capacitance?

thanks,

mike

1270. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 00:22:28 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E40C4.52A4B39F@sympatico.ca>
Source record: 107833

Richard Harrison wrote:
>
> Keith wrote:
> "Some of the authors you quote are not so convinced of their (waves)
> reality."
>
> Symbols merely represent reality but are important to the exchange of
> ideas just the same. The effects seen on transmission lines are reliably
> explained and predicted by wave action. In one of my physics classes
> over a half century ago, the prof asked another student a question about
> atoms. The reply was that the student had never been inside an atom.
> Neither the prof nor anyone else seemed impressed with the retention of
> the student, but the prof agreed that he had never been inside an atom
> either, but found atomic theory useful.
>
> Terman is as reliable as anyone I know of, and he says:
> "The voltage and current existing on a transmission line as given by
> Eqs. (4-6) can be conveniently exprerssed as the sum of the voltages and
> currents of two waves, one traveling toward the receiving or load end of
> the line, and is called the "incident wave" because it is incident upon
> the load. The second wave can be thought of as traveling from the load
> toward the generator end of the line; it is termed the "reflected wave",
> and is generated at the load by reflection of the incident wave."

I find nothing to argue with here. (And I do like the word
'convenient'.)

But do note that he is talking of VOLTAGE and CURRENT waves and that
these voltage and current waves can be summed to find the voltages
and currents on the line. In this passage he does not mention the
same for power. And with Johnson, it is with power that the weasel
words are used.

How does Terman first write of the power in these waves?

...Keith

> Terman has no qualms, it seems, but says "regarded as traveling". Those
> aren`t weasel words. Terman is more direct on page one in the opening
> sentance:
> "Electrical energy that has escaped into free space exists in the form
> of electromagnetic waves."
>
> How else could their energy be transferred at the speed of light?
>
> Best regards, Richard Harrison, KB5WZI

1271. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 00:45:32 UTC
From: kd1@sympatico.ca
Message-ID: <3F6E462C.D81B4ADA@sympatico.ca>
Source record: 107834

Richard Harrison wrote:
>
> Keith wrote:
> "---does the reader believe the markings on the scale and think that it
> is actually MEASURING the power in a forward and reverse wave?"
>
> One only must measure a quantity proportional to watts then interpret
> that accurately.

So true. But the quantities being measured are line volts and line amps
and neither is proportional to incident or reflected watts.

Much happens to the measured voltage and current before the result is
inaccurately interpreted as forward and reverse power.

...Keith

1272. feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 01:14:42 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <r2jsmvcbf3ikfjkflg67rh4kfq3b7p4vd0@4ax.com>
Source record: 107835

When researching the cost of high impedance coax as a feedline, it apears globs of coax induced capacitance seriously degrates the ability to tune the circuit. Under these conditions, resonating frequencies requires extremely low inductance values.

How do people get around this problem in a receive only situation?

thanks,

mike

1273. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 01:31:02 UTC
From: richardharrison@webtv.net
Message-ID: <27508-3F6E50D6-21@storefull-2317.public.lawson.webtv.net>
Source record: 107840

Keith wrote:
"How does Terman first write of the power in these waves?"

I don`t remember chapter and verse anymore. So, I can`t say where Terman first writes of power in these waves. On page 88 of Terman`s 1955 edition he says:
"At radio frequencies it is nearly always permissible to assume that omega L > > R, and omega C > > G. To the extent that it is true, one can rewrite Eqs. (4-5) and (4-7) as follows:
Zo = sq rt L/C

This means current is in-phase with voltage in the waves in both directions.

In-phase volts and amps are real power, not apparent power.

Best regards, Richard Harrison, KB5WZI

1274. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 01:33:19 UTC
From: Bill <brian@iquest.net>
Message-ID: <zjsbb.50459$Aq2.17094@newsread1.news.atl.earthlink.net>
Source record: 107837

Your Unix people told you wrong. Mail worms were invented back before
Outlook, in a primarily unix based internetwork.

"bright Indian programmers" do not exist. If you are going to count on that
craphole of a place to produce anything usable, then you have a hard wake up
coming. A nation without flush toilets is hardly technologically advanced
to write an OS of any merit...just think...those idiots have nuclear
weapons...probably aimed at themselves.

Mac...just what is Bill style?

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vmrftgoufl1ob2@corp.supernews.com...
> Dear Mr. Flint and group:
> I am told by knowledgeable UNIX people (another partitioning of the
> world) that the structure of UNIX is such that attacks can not be
> successful. I am told that there are only three ports into/outof UNIX
> modules and it is simple to guard them.
> The Bill ware OSs allow all sorts of back doors and side doors and
> over-the-transom ports.
> What I do not understand is why someone has not funded a set of
> bright Indian programmers to produce an OS that can execute Window
> programs without committing the errors made by Bill's people. There is
> a Unix based program that is able to execute some, well behaved Windows
> programs.
> I threaten my students with eternal haunting if they ever write a
> control program in Bill style. 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:APgbb.1421$Hd6.1108178@newssvr28.news.prodigy.com...
> >
> > "David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
> > news:ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net...
> > > In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee
> D.
> > > Flint" <deehays@qix.net> wrote:
> > >
> <snip>
> > >
> > > Persuade the universe to cease using unsafe operating system
> software,

> > > browsers, and e-mail programs coming from Redmond, WA ;-). UNIX,
> including
> > > the version now marketed by Apple, is pretty safe.
> > >
> > > David, ex-W8EZE, whose computers are happily MS-free except for safe
> 11
> > > year old versions of Word and Excel
> >
> > If everyone switched to UNIX, the solution would be short-lived as the
> virus
> > writers would then switch to attacking it. Right now, they simply get
> more
> > "bang for the buck" by attacking Windows and it doesn't give them much
> of a
> > thrill to also go after UNIX system users or Apple computer users.
> >
> > Dee D. Flint, N8UZE
> >
>

1275. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 01:47:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmsl54dnebi362@corp.supernews.com>
Source record: 107838

If your antenna is very short in terms of wavelength, then shunt capacitance will reduce the amount of received signal. Solutions include running the antenna wire directly to the receiver, using a preamp at the antenna, or using a short length of special high-impedance coax as feedline. The latter is what's commonly done with automotive AM radios.

If the antenna isn't very short, then "tuning" is done by means of a matching network, which can compensate for mismatched coax line and the impedance transformation it causes.

Roy Lewallen, W7EL

mike wrote:
> When researching the cost of high impedance coax as a feedline, it
> apears globs of coax induced capacitance seriously degrates the
> ability to tune the circuit. Under these conditions, resonating
> frequencies requires extremely low inductance values.
>
> How do people get around this problem in a receive only situation?
>
> thanks,
>
> mike

1276. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 01:49:04 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <s-Kdndz2qomGyPOiU-KYvA@comcast.com>
Source record: 107839

Reg,

I was merely agreeing with your comment about reading imaginary SWR on a nonexistent transmission line. I tried the same thing with the HF transmitter, which is connected to a Kenwood meter. Same results. In looking at the Kenwood schematic, it looks like in the absence of any current flow, it reverts to being a voltmeter, with both diodes getting the same drive. The thing reminds me of old HP analog voltmeters that always had a dbm scale. Of course, the dbms were nonsense, unless you were measuring across a 600 Ohm load.

Interesting about you looking at rho max = 1 +SQRT2 10 years before Chipman. That beats Adler, Fano, and Chu who had it in their 1960 book.

Tam/WB2TT
"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:bklemj$63b$1@titan.btinternet.com...
> "Tarmo Tammaru" wrote -
> > "Reg Edwards" wrote -
> > > It is possible to imagine the so-called SWR meter is telling you the
> > > imaginary value of the SWR on a non-existent transmission line. But
it's
> > > hardly of educational value when novices, even experienced engineers,
> are
> > > trying to understand what the reading really means. It's as confusing
> and
> > > as untruthful as Blair.
> > >
> > > Why don't we accept the simple fact that the meter tells us only
whether
> > > the transmitter is loaded with a resistance of a particular value or
> not.
> > > Which is no more nor less than what the instrument on the front panel
> > > of your transceiver is provided for.
> > >
> > > Then we can forget all about SWR, fwd and reflected power, until
needed
> > > on real ines. Change the name of the meter to TLI.
> > >
> ==================================
>
> > Amen to that. I turned down the power on my transmitter, and measured P
> > forward and P rev while feeding about 100 feet of unterminated 9913. I
> then
> > REMOVED the coax; i.e. there was nothing connected to the output side of

> the
> > meter. Still measured the same Pf and Pr. (Daiwa meter)
> >
> > Tam/WB2TT
>
> ==========
>
> Tam, what did I tell you ?
>
> Your meter twice indicated the correct valuable information : In neither
> case was your transmitter loaded with 50 ohms!
>
> To complete the experiment connect a good, + or - 5 percent, 50-ohm
> dummy-load to the meter. At 1.9, 3.8 or 7 MHz you can check the quality
of
> the dummy load with a DC ohmeter. The actual DC resistance will depend on
> how hot is the dummy load. It can probably be adjusted over an appreciable
> range just by varying its temperature.
>
> If the meter indicates an SWR less than about 1.15 then again it provides
> the correct valuable information : The transmitter load is in the right
> ball park. (Over here, Euro-side, we say in the "right street".)
>
> To calibrate the meter, to make it even more "right", there's a little
> preset resistor or capacitor inside the meter box. Twiddle it until a
> minimum value of SWR is indicated at 7 MHz when the dummy load is
connected.
> Or if the user is accustomed to work mostly at higher frequencies then it
> can be twiddled at 21 MHz.
>
> A meticulous amateur, proud of his shack and workmanship, may remove the
> redundant SWR scale graduations and paint in their place two coloured
bands,
> green = good, red = bad, according to artistic preferences.
>
> Incidentally, to accurately determine transmitter power output just use a
> diode+capacitor+DC voltmeter across the dummy load and calculate P =
> (V-squared) / 100 watts. At HF it will usually be found to be within +/-
10
> percent of what a reputable transceiver manufacturer says it is. And it
can
> then be forgotten about. A 10 percent difference in power corresponds to
> 1/15th of an S-unit.
>
> Tam, I'm sure you're already familiar with the foregoing procedures. I
> describe them on these walls for the benefit of novices, CB-ers, etc., and
> anyone else who studiously reads through these interminable threads in the
> vain hope of learning anything from (Z-Zo)/(Z+Zo).
>
> I have a guilty conscience - it was I who began the rho = 1+Sqrt(2) and

rho
> = (Z-Zo) / (Z+Zo) threads. My excuse is that I was measuring and
> investigating values of rho greater than unity 10 years before Chipman
> issued his book in October 1968. But by then I had migrated to an entirely
> different field.
> ----
> Reg, G4FGQ
>
>

1277. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:04:47 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309211804.a50de3@posting.google.com>
Source record: 107841

It's even easier than that. Using the _definition_ of reflection coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or zero). That's either a real short or a virtual short.

Cheers,
Tom

"David Robbins" <k1ttt@arrl.net> wrote in message news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...

> lets see...
>
> rho = (Z - Zo)/(Z + Zo)
> if rho = -1 then
>
> -1=(Z-Zo)/(Z+Zo)
> or
> -1*(Z+Zo)=(Z-Zo)
> or
> -Z - Zo = Z - Zo
> or
> -Z = Z
> the only value i know that satisfies that is zero.
> lets substitute it back in to be sure...
> -1=(0-(50+j50))/(0+(50+j50))
> -1=(-50-j50)/(50+j50)
> -1=-1(50+j50)/(50+j50)
> -1=-1 qed.

1278. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:13:24 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F6E5863.70D92CB6@gte.net>
Source record: 107842

mike wrote:

> When researching the cost of high impedance coax as a feedline, it
> apears globs of coax induced capacitance seriously degrates the
> ability to tune the circuit. Under these conditions, resonating
> frequencies requires extremely low inductance values.
>
> How do people get around this problem in a receive only situation?
>
> thanks,
>
> mike

Another solution is a step down Z converter at the short antenna's
base. Typically a gate input FET stage- provides a bit of gain, but more
importantly, lowers the impedance. Then the issue of IM must be dealt
with if it is a heavy RF environment.

Dale W4OP

1279. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:19:28 UTC
From: richardharrison@webtv.net
Message-ID: <15153-3F6E5C30-237@storefull-2312.public.lawson.webtv.net>
Source record: 107847

Keith wrote:
"But the quantities being measured are line volts and line amps and neither is proportional to incident or reflected watts."

Bird states:
"Where should the wattmeter be inserted? Again referring to the formulas, we see that the elements extract a voltage proportional to either Ef or Er, while the total E varies along an improperly terminated 50-ohm line, the component voltages do not. This is simply another way of saying that the energy in the forward wave remains the same from the source to the load, where some or all of it is reflected (unless the load is 50 ohms) and that reflected energy remains constant from the load back to the source. Our directional power meters can, therefore, be placed anywhere between the source and the load."

I don`t guarantee a perfect copy of Bird`s Technical Series extract. You should request your own copy from Bird.

Best regards, Richard Harrison, KB5WZI

1280. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:43:37 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <7h1smvo2k7aq1ifop8kv0insmp6glrmr70@4ax.com>
Source record: 107843

On Sun, 21 Sep 2003 12:28:16 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
>news:ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net...
>> In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee D.
>> Flint" <deehays@qix.net> wrote:
>>
>> > I've tried to trap them but the headers and senders, etc are all
>different.
>>

Waste of time. It *used* to work, but rarely will it now. Check the
IP, not the from address.

>> The "From:" lines are likely forged. Many such worms and viruses pick
>> recipients and purported senders randomly from the infected computer's

They also make them up, or combine several to make one.

>> Outlook or Outlook Express address list. If you want to see where the
>> message really is coming from, examine full headers carefully --
>> specifically, the "Received: from" lines

Look for the IP.

>>
>> > If you have a suggestion on how to stop them, please let us all in on
>it.
>>
>> Persuade the universe to cease using unsafe operating system software,
>> browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including
>> the version now marketed by Apple, is pretty safe.

Unfortunately this is not really the case.
There are no truly safe operating systems (and yes MS has a few more
problems than others), but the cases in point are not operating system
problems. They are mail and newsgroup reader problems and *nearly*
all can be prevented by properly configuring said programs. Turn off
the ability to read mail in HTML, don't let macros run, disable Java,
and above all don't open attachments until after verifying whoever
really sent it. This is particularly true if the thing came from some
one you know. How many times have you heard some one say, Oh, I don't
worry. I only open attachments from people I know. Now there is a
prime candidate for a virus.

MS operating systems are written for the masses. It depends on your definition of computer literate, but unless you make the definition very lenient there are few computer users who are computer literate.

In grad school I taught intro to Computer Science. It was one of those courses where we taught them to turn 'em on, insert a disk, run an app, save the date, and turn it off.

I had 195 students. 5 or so shouldn't have been in there as they knew as much as I did and I was working on my masters in CS. Unfortunately they fell into one of those cases where they had to take the course. Another 5 or so were never going to survive that simple goal of the class. The other 185 covered the spectrum in between. Oh...I had about 10 that could type.

I'm not defending windows...What I am doing is trying to show where we have gone wrong across the board and the unlikely prospect of it being fixed soon...if ever.

Windows was designed to be user friendly. Any one who has done much programming at all knows the more you work to make a "program" user friendly the more difficult it becomes for the programmer. The program becomes more complex. Sometimes much more complex and with each increase in complexity comes an increase in the likely hood of "side effects".

For those unfamiliar with the term, side effects are ... well...just that...They are unexpected operations, outputs, or even capabilities from a program, routine, or function that were not expected. Just like side effects from a medication, only in this case it gives your computer a case of diarrhea.

Windows was also designed to create a uniform environment for programmers that would also simplify program design...I.E. The DLL, or Dynamic Linked Library.

You can create a relatively small but capable program in Visual Basic, or Visual C++. However, compile it into a stand alone program that can be installed on other computers and it will become huge. It includes all the needed DLLs. A 32 K program can easily become 10 or 20 megs. However when you install it the program will only install DLLs that are newer than the ones on the computer. It will ask if you want to install a DLL if the DLL is older than the one currently on the computer. So that 32K program that turned into 9 megs may only add a 100K or so to some computers.

Outlook and Outlook Express make use of these integrated functions, or DLLs. Unfortunately they also come with the default settings

Which brings me to the main fault of windows. The one that most likely will never be cured. US...You, me, who ever is at the keyboard, that is where the main responsibility lies. We want HTML as it makes the netzines look nice. We want it so we can send professional looking letters and resumes even if it does have the capability of reporting

back to who ever sent you the unwanted e-mail. We want Java running. It does do some neat things. We want macros enabled so when we receive that database it will be displayed as the builder intended and we only have to fill in the blanks. Never mind that the macro can do anything on your computer that you can...probably more in most cases.

You can do all the education you want, but if the user wants to use those functions/capabilities then they are going to use them whether it opens their computer up to the whole wide world or not.

Virus checkers and spam botts are a necessity to keep track of many things. Some reputable companies seem to be including trojans and spy bots in their soft ware. That stuff lets them track your every move. I have no idea as to why they'd want to track mine, but... "SpyBot Search & Destroy" has found a number of them. In one year I received over 250 copies of viruses and worms. BTW, SpyBot, Search & Destroy is free and does a great job. The writer is just looking for donations.

So, were Windows to disappear tomorrow, we might get a brief respite from the viruses while the writers retrenched, but they would be back. The users, still looking for functionality above all else would soon be complaining about the security in the new OS, even though they had been taught the principals of safe computing.

>>
>> David, ex-W8EZE, whose computers are happily MS-free except for safe 11
>> year old versions of Word and Excel

In the computing world older is often not better. If word and excel can run macros when you receive them, or load a document then they are vulnerable. To top it off they can't read any of the documents from newer versions. Old versions of Netscape are particularly bad, but early Internet Explorer was no better. Being MS free is no guarantee of safety.

>
>If everyone switched to UNIX, the solution would be short-lived as the virus
>writers would then switch to attacking it. Right now, they simply get more
>"bang for the buck" by attacking Windows and it doesn't give them much of a
>thrill to also go after UNIX system users or Apple computer users.

Yup! I have to admit that Unix/Linux, and Apple might be a bit more work, but they are not immune. Once some one, or a group puts together the tools in a package the script kiddies take over and use them like an erector set.

Without going into details, Worms and viruses can be amazingly simple to write. I wrote a worm as an under grad student. It was only on paper. I gave it to my instructor and asked if we could try it on a virtual machine. After studying the thing for just a couple of minutes he said, I don't think we better try it. I gave him the paper and said "You keep it". The simplest being the macro viruses.

OTOH, some of these things are getting pretty sophisticated. They "call home" to see if there is an update to their code,or payload. They don't always behave the same. Now we have some that don't require user intervention if the default settings are such as to let them loose.

Still, the vast majority depend on the "idiot" at the keyboard. IF the user never opened the attachment without verification, never let some one trick them into installing a patch from MS, or some other company (those companies don't work that way), never deleted a file because the official looking e-mail told them to do so, never answered an e-mail asking them to update their account information, (particularly when they ask for the account name), and actually practiced safe computing the virus and worm problem would become a relatively small irritation.

BTW, I've set here and watched the firewall report probes of the ports. They would start, try a port, not get in, try the next port, and repeat until they had gone through the whole list, and then start over. It doesn't matter if you have one port, or 10,000. If you have one open that is all it takes.

Contrary to government figures as to computer literacy, I doubt any where near half the population could truly be called computer literate. When it comes to computer savvy, I doubt more than 5 to maybe 10% would qualify and I think 10% is really stretching it.
>
If 75 to 80% were really computer literate spam and viruses would not be any where near the present problem. It's part ignorance and part apathy...The old "It only happens to other people" syndrome. Kinda like the immortal teenager in his invincible SUV. I drove half way though one of those a couple of years back and shortened my Transam up nearly two feet. (My last thoughts before impact were: "Boy, I'll bet this is gonna hurt") Surprisingly I wasn't even sore the next day, but man was I punch for about a half an hour after the impact. I don't think a 6-pack would have that much effect.

An aside to security...Using signed documents...Verisign recently hijacked all the unused dot coms and a bunch of other extensions. Type in a non existent URL and see where you end up. They get paid for every so called click through. That means they get paid for every invalid address typed. As a warning...You end up with the prompt for a secure page and no graceful way to say no. IF you say <Yes> they make money. In windows that just means using the program manager to close the browser. And...Yes they are already getting sued.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>Dee D. Flint, N8UZE

1281. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:47:22 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <agosmvgn2shhimtonl0lf6eh59a1ehrmnu@4ax.com>
Source record: 107844

On Sun, 21 Sep 2003 10:13:26 -0600, mxcduffiex@xactcom.net wrote:

>On Sun, 21 Sep 2003 00:37:03 -0700, "Ed Price" <edprice@cox.net>
>wrote:
>
>> In other words, nothing factual, just "as far as I'm concerned." Thank you
>> for your rant.
>
>That was no rant, and pretty factual. Microsoft has left security
>hole after security hole. Further, almost none of this would happen
>if people would stop using Outlook and Outlook Express for mail. A

Outlook and OE are both capable of operating as text based if the user
would set the defaults properly. When configured so they are just as
resistant to attack as the other text based readers.

They are every bit as capable as Agent which I happen to be using
here as I prefer the way it handles newsgroups better than the other
two.

Roger Halstead (K8RI EN73 & ARRL Life Member)
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>good text based email and news program like Agent goes a long way
>toward preventing both accidental infection and spreading of the
>trash that currently pollutes the system so heavily. Eudora used to
>be good also, but I haven't used it in almost 10 years so it could
>have given in to the weaknesses by now.
>
>gm

1282. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 02:56:06 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <sposmv8i0j8kakmetvrfsp65uqqdsjnjrj@4ax.com>
Source record: 107845

On Sat, 20 Sep 2003 19:35:23 -0500, "RB" <rbigg@seii.net> wrote:

>The virus is in the original attachments and at the web site the text urges
>you to download. If you don't open the attachment, or download the
>"security patch", you won't get the virus. However, you will get floods of
>this kind of traffic. It's coming from infected computers that have your

That's why I keep changing my posting address. I use a valid one, but
it changes as soon as the spam starts to build.

>email address, and from your email address harvested from newsgroups, and
>even from some web sites you've gone to. I think the flooding will continue
>for awhile longer.
>
>Some ISPs neutralize the attachment, but the message comes on through with
>an empty attachment. Whatever, don't take a chance and open the attachment.
>
>If you haven't done it yet, mung your newsgroup email address so this won't
>happen in the future. Something like xxxxx@yyyy.nospam.net. That will keep
>you from getting flooded in the future.

Now that is one of my pet peeves. I always use a valid address,
although it changes from time to time. Every once in a while I
receive an e-mail off a newsgroup and almost invariably the sender
forgets to make the return valid. Those get treated just like spam.

Just go to one of the e-mail services and get a throwaway address. Use
it till it starts getting spam and viruses. Then cancel it and create
a new one. If you don't want to receive e-mail from the newsgroups
don't use a valid address and state so in your sig. The easiest is to
just make the address "don'treply@email or some such that indicates
you don't want to be bothered with e-mail answers.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>

1283. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 03:03:06 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <q9psmvsuo7gt9ga9ohlrrr1pkut3j3oouv@4ax.com>
Source record: 107846

On Sun, 21 Sep 2003 18:57:49 +0200, "Alexander Schewelew"
<dl1pbd@gmx.net> wrote:

>Virus/Worm - What is it?

Dam! That's scary.

If you are serious, (the following are a bit over simplified but) by definition a virus is a self replicating program that can be spread from computer to computer, usually via e-mail, e-mail attachments, and malicious code on internet sites.

A worm normally requires some kind of intervention to spread, hence most of the stuff going around is really a case of worms. Originally a worm would "eat" (use up) computer memory until the computer would cease functioning.

Not all viruses and worms are dangerous. Just as in the real world some are deadly and others are no more than a nuisance.

However due to the tremendous number of them on the loose, no one should be without a good virus checker, or firewall.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>73!,
>Alexander, DL1PBD
>

1284. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 03:42:16 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F6E6F94.2020603@get.lost>
Source record: 107849

Bill wrote:

> "bright Indian programmers" do not exist. If you are going to count on that
> craphole of a place to produce anything usable, then you have a hard wake up
> coming. A nation without flush toilets is hardly technologically advanced
> to write an OS of any merit...just think...those idiots have nuclear
> weapons...probably aimed at themselves.

Funny... some people would claim the same about trailer trash rednecks
like you.

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1285. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 03:45:09 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <2MKcnScOu-zS7fOiXTWJig@comcast.com>
Source record: 107850

Mike,

You seem to be talking about situations like old time AM car radios, where the feedline was really used as a shielded wire, and not a transmission line. They got away with it, because the feedline was very short, and added less than 100 PF of capacity.

When used as a transmission line, the line is terminated in, or at least the same order of magnitude impedance as the the coax. The coax has both capacitance, and inductance. So, if you connect a 50 Ohm antenna to 100 feet of RG58 coax, the impedance you see at the other end is 50 Ohms, and you don't have to worry about the fact that there is also 2800 PF of capacitance. A receiver input generally has a transformer, or other device that transforms the 50 Ohms to hundreds, or a few thousand Ohms. In connecting a transmission line to a parallel tuned LC circuit, you don't connect the line to the top of the LC. Rather you connect it to a tap near the bottom of the inductor, or you add a second winding to the inductor to make it into a transformer.

Tam/WB2TT

"mike" <intotheapex@yahoo.com> wrote in message
news:r2jsmvcbf3ikfjkflg67rh4kfq3b7p4vd0@4ax.com...
> When researching the cost of high impedance coax as a feedline, it
> apears globs of coax induced capacitance seriously degrates the
> ability to tune the circuit. Under these conditions, resonating
> frequencies requires extremely low inductance values.
>
> How do people get around this problem in a receive only situation?
>
> thanks,
>
> mike

1286. Re: Ladder line questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 04:24:27 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f6e7ac7_1@news1.prserv.net>
Source record: 107851

Mike:
What kind of receiver are you using? If it has any sensitivity at all, then it won't matter much about matching, as the local noise external level will exceed the receiver noise floor, even through a mismatched feed system.
Read all the posts to the recent "ten-tec v - beam " discussion for more insight. Roy and others discuss the difference between receive and transmitting antennas in that frame of reference.

--
Crazy George
Remove NO and SPAM from return address
"mike" <intotheapex@yahoo.com> wrote in message
news:pufsmvgfkek5bm72sqajnlfhrivkelmfed@4ax.com...
> Hey group,
>
> I am trying to get away from adding unwanted capacitance to my antenna
> circuit so I tune it more effectively. I would like to do away with
> coax. This is a SWL antenna.
>
> Will 300 ohm TV twin lead suffice as ladder line? Does this add any
> noise or capacitance?
>
> thanks,
>
> mike

1287. Re: Van Gorden Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 04:30:10 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <72tsmvglom2dodc2gqhgdglhfvdidffqdp@4ax.com>
Source record: 107852

On Sun, 21 Sep 2003 16:21:24 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>According to the AES catalog, it is rated 3 - 40 MHz. The Unadilla baluns,
>which go for about $25 , are rated down to 1.8 MHz.

I was afraid of that. I checked their on-line catalog and found the
balun, but no ratings.

Guess I'm going to have to order one...and I'd actually planned on
putting the thing up today (Sunday). That didn't happen and I'll be
lucky to get one by Tuesday.

I have several 75 meter slopers. that use the EB-1 Cal-AV labs
External Bead Balun (choke) and have worked very well. Unfortunately
one failed early this past summer. It appears to be the EB-1 as the
center conductor to wire shows about 27K and the ground to the other
side is open. A noise bridge shows open as well.

http://www.rogerhalstead.com/tower.htm
I'm going to *try* and orient the 160 fan dipole broadside NE/SW and
then reinstall the 1/2 wave center fed half wave sloper to the SW.
I may end up trying to shunt feed the tower (130 feet with TH-5 @
100 feet, 7 L C3i 6-meter Yagi at 115 feet, and stacked 12s on
2-meters and stacked 11s on 440 on a horizontal cross boom at 130 feet
-- vertically polarized), which makes for a lot of capacitive loading.
I could possibly go with an inverted-L, but there is so much *stuff*
hanging on the tower I don't know just how well that'd work.

Thanks for the info.

Roger (K8RI) Trying to get the antenna work finished before cold
weather.

>
>Tam/WB2TT
>"Roger Halstead" <newsgroups@rogerhalstead.com> wrote in message
>news:rgvrmv46vahbl1v86u40ctkq5aubqenj30@4ax.com...
>> I was laying out the wire to cut a 160 meter fan dipole when I
>> discovered I have no information on the balun I dug out of the drawer.
>> As it's a new balun I probably have the information sheet *somewhere*
>>
>> It's a Van Gorden Engineering Hi-Q 1:1 Balun.
>> I know they are relatively inexpensive, but what I need is the
>> frequency range and power handling capability.
>>
>> I've spent over an hour doing searches and aparently didn't hit the

>> right combination.
>>
>> Roger (K8RI)
>> Roger Halstead (K8RI EN73 & ARRL Life Member)
>> www.rogerhalstead.com
>> N833R World's oldest Debonair? (S# CD-2)
>

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1288. Re: Tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 04:38:42 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <0pusmvs02ea7njoq2nev0010pisp0n1lin@4ax.com>
Source record: 107853

On Sun, 21 Sep 2003 22:20:32 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>
>
>David Robbins wrote:
>
>> "Robert Daniel" <pagerman@worldnet.att.net> wrote in message
>> news:ahobb.153629$3o3.10921074@bgtnsc05-news.ops.worldnet.att.net...
>>
>>>A freind is setting up a tower (HDX-589 MDPL) from U S Tower in soil that
>>>appears to be all sand. Has anyone had experience in doing this. This is
>>
>> a
>>
>>>very heavy duty fold over and crank up tower. Anyone with thoughts or
>>>experience on this i would like to hear from you. I am gathering info for
>>>friend.
>>>
>>>Robert K5RGD
>>>
>>>
>>
>> you want him to contact a local engineer who can check the soil and design
>> the proper foundation.
>>
>>
>The base will be BIG, HEAVY [in the range of tons] and RE-BAR
>reinforced. As stated above, check with engineering.

I'm using a guyed system. The tower base weighs about 12,000# and each
guy anchor is a bit over 17,000# OTOH I do have a tremendous wind
load with lots of leverage.

I don't remember from the numbers if that is a 58 foot, or 89 foot
tower, but a fold over self supporting tower takes a *HUGE* chunk of
concrete in a big, deep hole. Add to that what ever antennas are
going up and you just add more concrete and steel. As a SWAG I'd bet
it'll take at least one truck load of concrete. (7 yards??)

Time to get out the wallet and as the other replies said, call an
engineer. This is not one of those TV towers stuck in the dirt
installations most of us use, or have used. <:-))

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com

N833R World's oldest Debonair? (S# CD-2)
>
>Deacon Dave, W1MCE

1289. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 04:46:36 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <j9vsmvcmi2tcjm1fknkgg18gols6ek7c2e@4ax.com>
Source record: 107854

On Sat, 20 Sep 2003 19:35:15 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"David Robbins" <k1ttt@arrl.net> wrote in message
>news:GrSdnQ4ag5f4OPGiU-KYvw@crocker.com...
>>
>> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
>> news:vmp8ou2ictcb81@corp.supernews.com...
>> > YES. MB worth. So many that E-mail drive was filled on Friday. Just
>> > received five in a five minute period.
>> > Not hard to trap, however they are quite a pain. Have yet to get
>> > ISP to block them.
>> > Good luck. Mac N8TT
>>
>> my isp is stopping the infected ones, which appears to be most of them..
>its
>> funny though, some get through with an empty attachment. there must be a
>> bug in the virus that occasionally attaches an empty file instead of
>itself.
>>
>
>Actually my ISP is blocking the actual virus/worms but then the message
>itself gets passed on to me with a statement from the ISP that if I want the
>file to contact the sender and arrange another means of getting it.
>However, that still is a huge number of emails in my box.
>
>I've tried to trap them but the headers and senders, etc are all different.
>If you have a suggestion on how to stop them, please let us all in on it.

I don't like filtering on content due to false positives, but as I
recall all these should have a statement about a message sent to you
contained a virus, or a message sent by you could not be delivered, or
something to that effect. Set up a filter for each one and create a
folder for each such as "bounced mail", "possible virus", or what
ever. Then just feed the things into those files. You should be able
to scan them at your leisure and if the filters actually get most of
the stuff with no false positives then you can just flush them.

Unfortunately some of the new virus checkers used by ISPs send out
generic messages and you darn near have to add each one to a filter.
I just keep changing my newsgroup mail address every few weeks and
invalidating the previous one. As I have my own domain I don't have
to worry about getting some ones old address by mistake. <:-))

Good Luck

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>Dee D. Flint, N8UZE

1290. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 05:10:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6e8606_3@corp.newsgroups.com>
Source record: 107855

kd1@sympatico.ca wrote:
> My interest is with highlighting the lack of generality of the
> reflected power model.

Every model, including yours, has limitations and should not be
misapplied.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1291. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 05:14:09 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bko63d$3sae4$5@ID-189073.news.uni-berlin.de>
Source record: 107641

Yep.... in one account I am getting something like 1200-1500 of the alleged "Microsoft" patch per day, and about 3 weeks ago I got nailed the same way with the Sobig:f virus. Since the release of these viruses, I now use the "webmail" mail servers before downloading any email through Outlook Express.

I haven't been affected by the viruses in regards to what they were designed directly to do, but affected by the time it takes to download email or going through the webmail service that my ISP offers. I am quite sure that I am not the only one and I am sure that these bogus emails are depleting free space on the email servers in general.

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6c96ed$1_1@corp.newsgroups.com...
> Is anyone else being deluged with Virus/Worm email messages?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1292. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 05:25:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6e89a6_3@corp.newsgroups.com>
Source record: 107856

kd1@sympatico.ca wrote:
> ... the quantities being measured are line volts and line amps
> and neither is proportional to incident or reflected watts.

line volts = Vfwd + Vref, line amps = Ifwd + Iref

load power = Vfwd*Ifwd - Vref*Iref at the load

> Much happens to the measured voltage and current before the result is
> inaccurately interpreted as forward and reverse power.

If you wade through the math you will see why it works for low-loss
feedlines.

Where is that example that proves your assertion that reflected waves
don't exist? How do standing waves occur when there are only forward-
traveling waves?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1293. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 06:19:08 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <9jJFnFCcRpb$EAZG@ifwtech.co.uk>
Source record: 107859

Cecil Moore wrote:
>kd1@sympatico.ca wrote:
>> My interest is with highlighting the lack of generality of the
>> reflected power model.
>
>Every model, including yours, has limitations and should not be
>misapplied.

But when there's an alternative model that works whenever yours does,
and still works when yours doesn't, I'll use that one thank you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1294. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 07:14:17 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <bjxbb.1159$La.535@fed1read02>
Source record: 107857

"Radio913" <radio913@aol.com> wrote in message
news:20030921164552.15782.00000242@mb-m13.aol.com...

SNIP

> >>All that said, I still think that a Bird 43 (and yes, a good load or
> >>attenuator string [once you get 60 dB or so on the attenuator string, an
> >>open-end reflection is quite minor]) is the best route for a ham.
>
>
> Yeah, someone suggested using long lengths of RG-58 (the lossier,
the
> better) to improve the return loss of a no-so-50 ohm dummy load.

SNIP

>
> Slick

Well, I wouldn't go quite that far. The "loss" of RG-58 is due to a
combination of loss in the transmission line and leakage of energy through
the relatively poor shielding. That radiated energy hanging around your test
bench is more than likely cause you new measurement errors.

Ed

1295. Re: G5IJ antenna: What is this?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 07:37:15 UTC
From: Bernhard Rhondin <bernhard_rhondin@hotmail.com>
Message-ID: <3F6EA6AB.E5D7A20F@hotmail.com>
Source record: 107858

In principle: Thank You for Your effort!

However, this much (or should I say: little) I found out on Internet for myself.
What is actually won by having a twin line radiator? Low feeding point Z? (is this really
an advantage?) Increased Earth Loss? (this is obviously NOT an advantage!).
A hoax? Or what? I do simply do not understand WHY! How can I make one for myself
and test it (or simulate in NEC4)?

BR

'Doc wrote:

> BR,
> This is the 'best' that I could find with a quick
> 'Google' search. (Spelling as I found it.)
>
> "Basically it is a twin line radiator driven by a
> toroidal transformer so as the two lines are fed
> in fase.
> This article was originally inspired by the
> "G5IJ
> Push-Push Twin Line antenna" in Radcom March
> 1996 - Technical Topics by Pat Hawker G3VA."
>
> Don't know as it will help much, but at least it's a start.
> 'Doc

1296. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 09:23:20 UTC
From: kd1@sympatico.ca
Message-ID: <3F6EBF88.CC7FDEAF@sympatico.ca>
Source record: 107860

Richard Harrison wrote:
>
> Keith wrote:
> "How does Terman first write of the power in these waves?"
>
> I don`t remember chapter and verse anymore. So, I can`t say where Terman
> first writes of power in these waves. On page 88 of Terman`s 1955
> edition he says:
> "At radio frequencies it is nearly always permissible to assume that
> omega L > > R, and omega C > > G. To the extent that it is true, one can
> rewrite Eqs. (4-5) and (4-7) as follows:
> Zo = sq rt L/C
>
> This means current is in-phase with voltage in the waves in both
> directions.
>
> In-phase volts and amps are real power, not apparent power.

Maybe. Sort of. Not necessarily.

I agree completely when the volts and amps are the measurable
resultant volts and amps.

But when the volts and amps are contributary terms to a
superposition solution, then, in general (using my definition
of general), multiplying them to produce watts is an
invalid operation since the watts terms can not be superposed
to obtain resultant watts.

It is, I suspect, for this reason that Johnson is fuzzy about
the power in forward and reverse waves; superposition, does
not, in general, apply for power.

The question is, was Terman similarly circumspect?

...Keith

1297. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 09:29:40 UTC
From: kd1@sympatico.ca
Message-ID: <3F6EC104.85AD5221@sympatico.ca>
Source record: 107861

Richard Harrison wrote:
>
> Keith wrote:
> "But the quantities being measured are line volts and line amps and
> neither is proportional to incident or reflected watts."
>
> Bird states:
> "Where should the wattmeter be inserted? Again referring to the
> formulas, we see that the elements extract a voltage proportional to
> either Ef or Er, while the total E varies along an improperly terminated
> 50-ohm line, the component voltages do not. This is simply another way
> of saying that the energy in the forward wave remains the same from the
> source to the load, where some or all of it is reflected (unless the
> load is 50 ohms) and that reflected energy remains constant from the
> load back to the source.

It is not surprising that they should write this, after all they do
mark their instruments in watts, so they likely believe it.

But is it correct?

> Our directional power meters can, therefore, be
> placed anywhere between the source and the load."

This part is true.

> I don`t guarantee a perfect copy of Bird`s Technical Series extract. You
> should request your own copy from Bird.

Since the whole question is about whether what Bird does is correct,
they hardly stand as someone who can resolve the question.

...Keith

1298. Re: LDG AT-11MP versus SGC-230?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 10:00:59 UTC
From: Norbert <pa7nrNNOSPAMMM@qsl.net>
Message-ID: <HLzbb.50013$tK5.5766861@zonnet-reader-1>
Source record: 107862

"Per Brix" <oz5abo(at)tdcadsl.dk> schreef in bericht
news:3f6dd66b$0$153$edfadb0f@dread11.news.tele.dk...
> Hi
>
> Planning on erecting a long wire antenna in my "restricted" garden. I am
> looking at these two ATU (or coupler...) but I can't make up my mind.
>
> Anyone having experiences with the two types of ATU?
>
> 73's, Per
>
>
Per,

The SGC-230 is meant for long wires that are end-fed and not for tuning coax fed antenna's. It's made for outdoor use near the feeding point of the antenna.

The AT-11MP is suitable for connecting coax fed antennas. End-fed wires are connected through a balun.It is made for connecting it close to the transceiver and not for outdoor use.

In both cases you need long ground radials to make the antenna radiate properly.

--
Norbert (PA7NR)
homepage: http://www.qsl.net/pa7nr/index.html

1299. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 10:01:28 UTC
From: kd1@sympatico.ca
Message-ID: <3F6EC878.CA6767C6@sympatico.ca>
Source record: 107864

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > ... the quantities being measured are line volts and line amps
> > and neither is proportional to incident or reflected watts.
>
> line volts = Vfwd + Vref, line amps = Ifwd + Iref
>
> load power = Vfwd*Ifwd - Vref*Iref at the load

Not with my math....

power = volts * amps
= (Vfwd + Vref) * (Ifwd + Iref)
= Vf*If + Vf*Ir + Vr*If + Vr*Ir

Seems you've lost a couple of terms in there.

This is why, in general (using my definition of general), superposition
does not hold for power. Those extra terms get in the way.

> > Much happens to the measured voltage and current before the result is
> > inaccurately interpreted as forward and reverse power.
>
> If you wade through the math you will see why it works for low-loss
> feedlines.

You have started to state this caveat.

Does this mean that forward and reverse waves only have power in
the special case of low-loss feedlines?

> Where is that example that proves your assertion that reflected waves
> don't exist? How do standing waves occur when there are only forward-
> traveling waves?

With my model, incident and reflected VOLTAGE waves and CURRENT waves
do exist. This is in common, I think, with most authors on the subject.
And this all works fine since superposition holds for voltage
and current.

What does not exist in general (using my definition of general) is
POWER in these incident and reflected voltage and current waves.
While a power term can be computed, and correct results will be
obtained in some special cases, in general (using my definition
of general), this is an invalid operation because superposition
does not hold for power.

This, I suspect, is the reason that at least one author has carefully chosen fuzzy words when describing the 'power' in the waves.

To recap. Everything with the incident and reflected wave model works as long as you stick to voltage and current waves. It is only when extended to include power (as done by Bird and others), that the model starts to deteriorate.

So to get the right answers in the general case (using my definition of general), compute your forward and reverse voltages and currents. Use superposition to derive the resultant voltages and currents at any point on the line and then use p(t) = v(t) * i(t) to compute the power, which you may then average if you desire.

In the special case of low loss RF, the shortcut of 'regarding' the waves as having power will produce an answer that is good enough. But remembering that you have taken a shortcut and by only 'regarding' the waves as having power, you will indicate an enhanced understanding of the subject.

...Keith

1300. Re: LDG AT-11MP versus SGC-230?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 10:08:53 UTC
From: Norbert <pa7nrNNOSPAMMM@qsl.net>
Message-ID: <RSzbb.50028$tK5.5767236@zonnet-reader-1>
Source record: 107863

"Per Brix" <oz5abo(at)tdcadsl.dk> schreef in bericht
news:3f6dd66b$0$153$edfadb0f@dread11.news.tele.dk...
> Hi
>
> Planning on erecting a long wire antenna in my "restricted" garden. I am
> looking at these two ATU (or coupler...) but I can't make up my mind.
>
> Anyone having experiences with the two types of ATU?
>
> 73's, Per
>
>

I would recommend the SGC-230 if you are using only a long wire. The SGC-230 isn't suffering from BALUN losses and you can tune almost any HF frequency, including the low bands.I have used the SGC-230 here from my balcony. Nowadays I use small magnetic loop antennas that are more suitable for my location and work excelent.
--
Norbert (PA7NR)
homepage: http://www.qsl.net/pa7nr/index.html

1301. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 10:41:12 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkmjk8rgr1@hercules.btinternet.com>
Source record: 107865

> This is in common, I think, with most authors on the subject.

==========

. . . . . and 1 million housewives can't be wrong!

1302. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 11:00:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmtli6qopoqk08@corp.supernews.com>
Source record: 107866

As far as I can tell, Terman avoids the topic entirely.

In previous discussions in this newsgroup where Terman has been quoted, I found that there were substantial changes made from one edition to another of his books. So it's probably important to say which edition you're quoting. I think it's safe to assume that changes were made in response to careful consideration of feedback from readers, so whenever there's a conflict, the later edition is hopefully more accurate.

That being said, I was fascinated by Chapter 4 in the Fourth Edition of his _Radio Engineering_, in the context of the discussion here.

First of all, he seems circumspect in assigning physical meaning even to traveling voltage and current waves. He presents two sets of equations for the voltage and current along a transmission line. Equations 4-10 a and b have the familiar exponential form of traveling waves. Equations 4-12 a and b are derived from them and presented in terms of hyperbolic functions. Of these, he says,

"Equations (4-12) and (4-10) are equivalent in every respect and simply represent alternative means of arranging the identical relationships. The hyperbolic form of the transmission-line solution is often found desirable when numerical values are to be calculated, since values of the functions cosh x and sinh x are available in chart form for both real and complex values of x. However, the exponential, or wave solution, of the transmission line represented by Eqs. (4-10) is particularly suitable for giving an understanding of the physical phenomena that occur in the transmission line and, when charts of complex hyperbolic functions are not available, this form of the transmission-line equations is about as convenient as any other for making numerical calculations.

"The relations expressed by Eqs. (4-10) are capable of a simple physical interpretation. Thus, it will be noted that the voltage and current that exist on the transmission line consist of two components. The first of these is a voltage . . . accompanied everywhere by a current that is equal to this voltage divided by the characteristic impedance Z0. This combination of voltage and current can be interpreted as a _wave train traveling toward the receiver_. The second component of the voltage and current distribution can be considered as a wave train traveling from the receiver toward the generator. The second wave train can be thought of as resulting from the reflection of the first wave train by the load impedance at the receiver end of the line. . ."

I couldn't help but notice the use of "can be interpreted as" and "can be thought of", instead of just "is". He does note later on in the

chapter that the velocity of these waves in a waveguide is always greater than the speed of light -- in fact approaching infinite speed as the frequency approaches cutoff (Eq. 4-53). This knowledge might be one reason for the apparent care with which he approaches the delicate task of associating physical reality with even the voltage and current waves.

Interestingly, he includes quite a discussion of directional couplers and how they work -- without a single mention of power or energy.

In the entire chapter, I found only four references to power or energy at all. In discussing waveguide attenuation, he speaks of calculating the power loss from the currents flowing on the waveguide walls and their RF resistivity. He's speaking only of the absolute or total current, not the currents of the forward and reverse waves individually. And when discussing the phase velocity in a waveguide, he points out that the energy in a wave guide (calculated from the total fields) flows at the group velocity, which of course is always less than the speed of light. So in a waveguide, the "power wave" folks have the added problem of the energy flowing more slowly than the supposed waves do. The third and fourth energy references were with regard to the Q of cavity resonators and radiation from holes or cracks.

I don't think I missed any references to power or energy waves in the transmission line chapter (Chapter 4, "Circuits with Distributed Constants"). If I did, I'd appreciate someone pointing out where the topic appears.

Roy Lewallen, W7EL

kd1@sympatico.ca wrote:
>
> Maybe. Sort of. Not necessarily.
>
> I agree completely when the volts and amps are the measurable
> resultant volts and amps.
>
> But when the volts and amps are contributary terms to a
> superposition solution, then, in general (using my definition
> of general), multiplying them to produce watts is an
> invalid operation since the watts terms can not be superposed
> to obtain resultant watts.
>
> It is, I suspect, for this reason that Johnson is fuzzy about
> the power in forward and reverse waves; superposition, does
> not, in general, apply for power.
>
> The question is, was Terman similarly circumspect?
>
> ...Keith

1303. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 11:03:12 UTC
From: kd1@sympatico.ca
Message-ID: <3F6ED6F0.CB6A92DC@sympatico.ca>
Source record: 107867

Reg Edwards wrote:
>
> > This is in common, I think, with most authors on the subject.
>
> ============================
>
> . . . . . and 1 million housewives can't be wrong!

Touche. I generally (using Cecil's definition of general) dislike
appeals to authority (or the masses), but occasionally let them
slip in when dealing with someone who does.

But knowing that you are watching, I will be more cautious in
the future.

...Keith

1304. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 11:05:44 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <3nsH2QCIetb$EA5I@ifwtech.co.uk>
Source record: 107769

Keith wrote:
[...]
>in general (using my definition of general)
[...]
>in general (using my definition of general)
[...]
>in general (using my definition
>of general)
[...]
>in the general case (using my definition
>of general)

You don't have to be defensive about this, Keith - you're on solid ground. In this discussion, where we're trying to be scientific, you are using the word in the correct *scientific* sense, meaning "in all cases."

Cecil is using it in a different and looser sense, meaning "in common cases."

"General" is just another of those words like "theory" where the scientific usage and regular conversational usage are almost completely opposite.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1305. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 11:25:57 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <9%Abb.3865$7W4.2521@nwrdny03.gnilink.net>
Source record: 107868

I was getting several hundred of these a day. I got the idea to take my email address out of my Chat group profiles, just in case some hacker software was 'harvesting' email addressesfrom these sites. When I removed my email address from the Yahoo Chat groups I was subscribed to, the spam seemed to stop dead in its tracks. All has been quiet for some time now.

Coincidence??

Joe
W3JDR

"Bob Miller" <bxmiller@texas.netNOSPAM> wrote in message news:q23umvkdu3tsv6126nm6ul9h95nvtgmnku@4ax.com...
> On Sat, 20 Sep 2003 18:42:36 -0000, "David Robbins" <k1ttt@arrl.net>
> wrote:
>
> >
> >"Steve" <steve_lyon@prodigy.net> wrote in message
> >news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
> >>
> >> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> >> news:3f6c96ed$1_1@corp.newsgroups.com...
> >> > Is anyone else being deluged with Virus/Worm email messages?
> >> > --
> >> > 73, Cecil http://www.qsl.net/w5dxp
> >> >
> >> Yes, 14 yesterday and 4 so far this morning.
> >>
> >>
> >you must not have many friends who have you in their address book... i got
> >about 1000 overnight last night and about 2500 the day before.
> >
>
> I only get about 3 or 4 emails a week from the spammers. Mostly about
> penile enlargement, for some reason.
>
> I recently changed my email address, and set my ISP email anti-spam
> filter to "light". That sure cut down on the email.
>
> I also have no firewall and no anti-virus protection, but the computer
> works fine, day after day, regardless of how much I get on the
> Internet.
>
> Bob

> k5qwg
>
>
>
>

1306. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 13:30:34 UTC
From: Ken Bessler <kg0wx@IHATESPAMyahoo.com>
Message-ID: <jgidnUtCIs3hZPOiU-KYvw@comcast.com>
Source record: 107770

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3F6E6F94.2020603@get.lost...
> Bill wrote:
>
> > "bright Indian programmers" do not exist. If you are going to count on
that
> > craphole of a place to produce anything usable, then you have a hard
wake up
> > coming. A nation without flush toilets is hardly technologically
advanced
> > to write an OS of any merit...just think...those idiots have nuclear
> > weapons...probably aimed at themselves.
>
>
> Funny... some people would claim the same about trailer trash rednecks
> like you.
>

Exactly! When was the last time you saw an Indian software
programmer on Jerry Springer?

1307. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 13:57:24 UTC
From: richardharrison@webtv.net
Message-ID: <28488-3F6EFFC4-435@storefull-2315.public.lawson.webtv.net>
Source record: 107772

Keith wrote:
"I agree completely when the volts and amps are the measurable resultant voolts and amps."

There is a big problem with resultant volts and amps. It is the resultant variation in amplitude which is position dependent.

The only average variation in forward and reflected powers is a decline with distance caused by line loss. Power flows at a constant average rate into, through, and out of a transmission line. Line loss causes decline in power along a lossy line.

The convenient way to get useful numbers is to separate energy by its direction of travel and to measure these. A directional coupler is needed and the Bird among others does this.

Best regards, Richard Harrison, KB5WZI

1308. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 14:01:56 UTC
From: jder8745@aol.com
Message-ID: <20030922100156.20786.00001450@mb-m21.aol.com>
Source record: 107771

Why does everyone always worry about the parallel capacitance of a TL? Why don't they worry about the series inductance? DUH!

73, Jack, K9CUN

1309. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 14:40:24 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <7j0umvoc77kafmnvn0uhbvsmq7fuag4ipv@4ax.com>
Source record: 107773

On Sun, 21 Sep 2003 23:45:09 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Mike,
>
>You seem to be talking about situations like old time AM car radios, where
>the feedline was really used as a shielded wire, and not a transmission
>line. They got away with it, because the feedline was very short, and added
>less than 100 PF of capacity.
>
>When used as a transmission line, the line is terminated in, or at least the
>same order of magnitude impedance as the the coax. The coax has both
>capacitance, and inductance. So, if you connect a 50 Ohm antenna to 100 feet
>of RG58 coax, the impedance you see at the other end is 50 Ohms, and you
>don't have to worry about the fact that there is also 2800 PF of
>capacitance. A receiver input generally has a transformer, or other device
>that transforms the 50 Ohms to hundreds, or a few thousand Ohms. In
>connecting a transmission line to a parallel tuned LC circuit, you don't
>connect the line to the top of the LC. Rather you connect it to a tap near
>the bottom of the inductor, or you add a second winding to the inductor to
>make it into a transformer.
>
>Tam/WB2TT

FYI - I am a newbie SWL

OK, that answers my question. I now see for a transmission line the
coax also has inductance value which balanance out the extra
capacitance added by the 50 foot run of RG58 itself.

I was only looking at the capacitance value and it was driving me
crazy to understand why this wouldnt make tuning the circuit nearly
impossibe. I thought I was dealing with thousands of pf.

I am using a homebrew PI network tuner at the receiver end of my Sony
portable.

To get rid of household noise I want to move from an outside random
wire fed directly to the tuner to a coax line feeding feeding the wire
into the house , then to the tuner.

The schematic of my tuner looks like this:

http://www.qsl.net/dl2lux/fish/fishpi_e.html

Eingang = entrance, Ausgang =exit, Masse = ground

After translating those German words I just realized my transmission line differs as it comes into the tuner and connects to the right side capacitor movable vanes which is connected to the inductor tap switch. So mine seems backwards in regards to the schematic. how much difference would this make?

Mike

1310. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 14:55:40 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <q23umvkdu3tsv6126nm6ul9h95nvtgmnku@4ax.com>
Source record: 107848

On Sat, 20 Sep 2003 18:42:36 -0000, "David Robbins" <k1ttt@arrl.net>
wrote:

>
>"Steve" <steve_lyon@prodigy.net> wrote in message
>news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
>>
>> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
>> news:3f6c96ed$1_1@corp.newsgroups.com...
>> > Is anyone else being deluged with Virus/Worm email messages?
>> > --
>> > 73, Cecil http://www.qsl.net/w5dxp
>> >
>> Yes, 14 yesterday and 4 so far this morning.
>>
>>
>you must not have many friends who have you in their address book... i got
>about 1000 overnight last night and about 2500 the day before.
>

I only get about 3 or 4 emails a week from the spammers. Mostly about
penile enlargement, for some reason.

I recently changed my email address, and set my ISP email anti-spam
filter to "light". That sure cut down on the email.

I also have no firewall and no anti-virus protection, but the computer
works fine, day after day, regardless of how much I get on the
Internet.

Bob
k5qwg

1311. PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:00:16 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0309220700.f99aebc@posting.google.com>
Source record: 107774
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Last semester, I designed and built the QROP Meter for my
graduate school independent study project. Thanks to those of you who
helped me with certain thorny issues, such as transformers and DC
amplification. Go to my web page at http://www.jasonhsu.com/ee.html
to learn how to build the instrument.

What makes my SWR/wattmeter different from the numerous versions
available from MFJ and the numerous homebrew designs out there?

1. Works from 200mW to 100W! You get the best of both worlds! MFJ
SWR/wattmeters don't work at QRP, and QRP SWR/wattmeters can't handle
100W. Tuning up at 1W instead of 100W reduces the QRM you cause by
20dB, or over 3 S units! You can also safely change the tuner's
inductance taps WHILE transmitting at 1W.
2. GOOD resolution at SWR values above 3 and even above 5! This can
be very handy at 160m and 80/75m.
3. 10-LED display for the SWR meter and another 10-LED display for
the wattmeter: No more squinting at cross-needle meters!
4. More accuracy at low power levels: Most SWR meters understate SWR
at low power levels due to the infamous diode drop loss. My design
compensates for this and allows accurate SWR measurements at QRP power
levels.

Let me know what you think, and feel free to contact me if you have
any questions or suggestions. If you decide to build the QROP Meter,
let me know how it goes.

Jason Hsu, AG4DG
usenet@@@@@jasonhsu.com

1312. Re: 3894500 Hz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:01:15 UTC
From: Radioman <radio@ptt.edu>
Message-ID: <3F6F0EBB.7ABBE182@ptt.edu>
Source record: 107775
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

BIG AL whined:
>
> IT BECAME MY PRIVATE FREQUENCY YEARS AGO. HO HO . STAY AWAY UNLESS INVITED
> PORKBUTT.

Explicitly stated in Part 95 & Part 97:

"No frequency shall be reserved for the exclusive use of any station."

Reread your rule book.

1313. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:03:24 UTC
From: Radioman <radio@ptt.edu>
Message-ID: <3F6F0F3C.5D8223C6@ptt.edu>
Source record: 107776
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
>
> Say no to drugs, kids.

His problem is a lack of drugs.

> -core_dump
>
> -----BEGIN GEEK CODE BLOCK-----
WHO CARES?
> ------END GEEK CODE BLOCK------

You must be a geek?
```

1314. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:04:12 UTC
From: Radioman <radio@ptt.edu>
Message-ID: <3F6F0F6C.283939B7@ptt.edu>
Source record: 107777
Cross-posted to: alt.ham-radio.dxing,alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> i think a new target frequency for cw just announced itself!

-.-. --.-

1315. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:09:09 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <er7NFFBVCxb$EA8W@ifwtech.co.uk>
Source record: 107781

Richard Harrison wrote:
>Keith wrote:
>"I agree completely when the volts and amps are the measurable resultant
>voolts and amps."
>
>There is a big problem with resultant volts and amps. It is the
>resultant variation in amplitude which is position dependent.
>
>The only average variation in forward and reflected powers is a decline
>with distance caused by line loss. Power flows at a constant average
>rate into, through, and out of a transmission line. Line loss causes
>decline in power along a lossy line.
>
>The convenient way to get useful numbers is to separate energy by its
>direction of travel and to measure these. A directional coupler is
>needed and the Bird among others does this.

I'm sorry to keep picking away at this one, but it seems to be
necessary...

The statement that a directional coupler can "separate energy by its
direction of travel" involves some unaware assumptions involving
transmission-line theory.

If we're trying to get that theory right, we have to avoid using it
unawarely in order to prove itself... because that way would let us
"prove" just about anything.

A directional coupler only senses the current (directionally) at a
particular location on the line, and the voltage between the two
conductors at that same location. The directional coupler tells us
NOTHING else. We have to be very literal-minded about that.

We cannot determine the reflection coefficient, the SWR, or what is
happening to the energy, without applying some flavor of
transmission-line theory. When the whole discussion is about getting
that theory right, we have to be very careful to avoid unawarely arguing
in circles.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1316. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:11:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f12f8$1_3@corp.newsgroups.com>
Source record: 107778

Ian White, G3SEK wrote:
> But when there's an alternative model that works whenever yours does,
> and still works when yours doesn't, I'll use that one thank you.

Do you use a calculator for 2 x 3 because you need one for
2.34 x 3.45? You are wasting your life if you use Maxwell's
equations for simple EM problems.

Work smarter, not harder!
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1317. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:14:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f13a7_3@corp.newsgroups.com>
Source record: 107779

kd1@sympatico.ca wrote:
>>In-phase volts and amps are real power, not apparent power.
>
> Maybe. Sort of. Not necessarily.

Please give us an example of coherent in-phase voltage and
current waves that didn't require power from a generator.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1318. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:36:12 UTC
From: Mike Painter <m.painter@att.net>
Message-ID: <MFEbb.149028$0v4.11056330@bgtnsc04-news.ops.worldnet.att.net>
Source record: 107780

"Ken Bessler" <kg0wx@IHATESPAMyahoo.com> wrote in message
news:jgidnUtCIs3hZPOiU-KYvw@comcast.com...
>
> "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> news:3F6E6F94.2020603@get.lost...
> > Bill wrote:
> >
> > > "bright Indian programmers" do not exist. If you are going to count
on
> that
> > > craphole of a place to produce anything usable, then you have a hard
> wake up
> > > coming. A nation without flush toilets is hardly technologically
> advanced
> > > to write an OS of any merit...just think...those idiots have nuclear
> > > weapons...probably aimed at themselves.
> >
> >
> > Funny... some people would claim the same about trailer trash rednecks
> > like you.

Next he'll point out that Chandrasekhar was not *really* Indian.
Admittedly he was not a programmer but was a fairly bright person.

1319. Re: 3894500 Hz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:51:35 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <r_Ebb.28$LJ5.3733@iad-read.news.verio.net>
Source record: 107784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Radioman" <radio@ptt.edu> wrote in message
news:3F6F0EBB.7ABBE182@ptt.edu...
>
>
> BIG AL whined:
> >
> > IT BECAME MY PRIVATE FREQUENCY YEARS AGO. HO HO . STAY AWAY UNLESS
INVITED
> > PORKBUTT.
>
>
> Explicitly stated in Part 95 & Part 97:
>
> "No frequency shall be reserved for the exclusive use of any station."
>
> Reread your rule book.

He would, but ass holes can't read! So, it won't happen! As I said, the only thing big on him is his mouth.. well maybe his ass too! The question begs again to be asked... a troll??? Nah... ASS HOLE.

1320. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:51:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f1c6a_3@corp.newsgroups.com>
Source record: 107783

kd1@sympatico.ca wrote:

> Cecil Moore wrote:
>
> power = volts * amps
> = (Vfwd + Vref) * (Ifwd + Iref)
> = Vf*If + Vf*Ir + Vr*If + Vr*Ir
>
> Seems you've lost a couple of terms in there.

As with any other math model, the negligible secondary terms
are dropped. If the phase angle above is close to 90 degrees,
two terms drop out. A Bird wattmeter assumes that two of the
phase angles are close to 90 degrees. If they are not, you are
using the wrong instrument for your measurements, a common problem.

> Does this mean that forward and reverse waves only have power in
> the special case of low-loss feedlines?

It means that if you use a 50 ohm Bird wattmeter in any environment
except a 50 ohm one, you are using the wrong instrument.

> With my model, incident and reflected VOLTAGE waves and CURRENT waves
> do exist. This is in common, I think, with most authors on the subject.
> And this all works fine since superposition holds for voltage
> and current.

It certainly doesn't work with your assertion that reflections don't
exist.

Your math model would have us believe that a power source pumps energy
into voltage and current waves only to have that energy disappear from
the universe for a time that is convenient for your math model. Of course,
that very energy is magically created once again at the load. We've heard
this bad magician's trick before. "Close your eyes while I make this
elephant disappear."

> To recap. Everything with the incident and reflected wave model
> works as long as you stick to voltage and current waves. It is only
> when extended to include power (as done by Bird and others), that
> the model starts to deteriorate.

For a resistive 50 ohm environment, the model does not deteriorate.
The Bird is designed for such an environment. There doesn't exist
any real-world instrument that will measure anything and everything.
Every real-world measuring instrument has limitations. If you attempt
to use a Bird in a 100-j100 ohm environment, that is your problem,

not Bird's.

> So to get the right answers in the general case (using my definition
> of general), compute your forward and reverse voltages and currents.
> Use superposition to derive the resultant voltages and currents at
> any point on the line and then use p(t) = v(t) * i(t) to compute
> the power, which you may then average if you desire.

We've already been down this road but here it is, once again. Consider a one second long lossless feedline with an SWR of 5.83:1 and a Z0-matched source of 100 watts. After steady-state is reached, the feedline contains 300 joules of energy which cannot stand still. A Bird wattmeter reads 200w forward and 100w reflected. Your power calculation gives 100 watts everywhere implying that there are only 100 joules in transit in the feedline. What happened to the other 200 joules pumped into the system by the source during the transient state? Hint: there is 100 joules in the reflected waves and 100 joules in the re-reflected waves. The Bird is correct.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1321. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 15:52:11 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bkn5rb$s9q$0@208.207.71.149>
Source record: 107782

J. McLaughlin wrote:

>Dear Mr. Flint and group:
> I am told by knowledgeable UNIX people (another partitioning of the
>world) that the structure of UNIX is such that attacks can not be
>successful. I am told that there are only three ports into/outof UNIX
>modules and it is simple to guard them.
> The Bill ware OSs allow all sorts of back doors and side doors and
>over-the-transom ports.
> What I do not understand is why someone has not funded a set of
>bright Indian programmers to produce an OS that can execute Window
>programs without committing the errors made by Bill's people.
>

Is is not correct to say that Windows was left vulnerable so that
other computers can deliberately enter and assess remote computers for
various reasons, such as determining whether or not the copy of the OS
in use had been properly :"registered" before issuing updates?

I'm not a programmer but it seems that might xerainly be a very good
reason.
In other words, all these security "holes" are perhaps not accidental.
When a virus writer takes advantage of one of them the "patch" issued
to "fix" it mught just be specific to that particular violation, instead
of permanently taking care of the problem.

I know that the Windows series is an extremely complex piece of work,
but the virii
issuers seem to have little trouble finding cracks that Bill's
programmers couldn't
anticipate..

Dick

1322. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:01:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ULZPtpCfzxb$EAeS@ifwtech.co.uk>
Source record: 107804

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>> But when there's an alternative model that works whenever yours does,
>>and still works when yours doesn't, I'll use that one thank you.
>
>Do you use a calculator for 2 x 3 because you need one for
>2.34 x 3.45? You are wasting your life if you use Maxwell's
>equations for simple EM problems.
>
>Work smarter, not harder!

The smart way is to use the tool that *always* works - especially when it's no harder to use.

It's not smart to use a tool that only works some of the time *and* has nothing extra to offer.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1323. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:02:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f1f02_3@corp.newsgroups.com>
Source record: 107788

Roy Lewallen wrote:
> I couldn't help but notice the use of "can be interpreted as" and "can
> be thought of", instead of just "is".

Since what "is" changes with human knowledge, most scientific people
avoid asserting absolutes. Quantum Electro Dynamics indicate that EM
fields do not even exist. Most of our present math models are probably
wrong/incomplete and will eventually be obsoleted. I'm sure Terman and
most other technical authors realized that fact of reality.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1324. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:04:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ia7umv8qkl0u9e2h1saujdi5n5n0f7n1si@4ax.com>
Source record: 107786

On Mon, 22 Sep 2003 14:40:24 GMT, mike <intotheapex@yahoo.com> wrote:

>So mine seems backwards in regards to the schematic. how much
>difference would this make?
>
>Mike

Hi Mike,

Machts nichts.

73's
Richard Clark, KB7QHC

1325. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:04:44 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6F1EAF.3050401@optonline.net>
Source record: 107785

Still waiting for the lawyer, but I just thought of something else:
Since it seems so many people (hams and others) don't find out about the
CC&Rs until it is too late (i.e., they were never disclosed, even at
closing), I wonder how many of the other property owners in this
subdivision even know about them.

-=-
Alan

On 09/21/03 09:43 am Alan Beagley put fingers to keyboard and launched
the following message into cyberspace:

> That would be nice if it were true, but I think that any other
> homeowner(s) in the subdivision could file suit if they had deep enough
> pockets.

1326. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:07:17 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6F1F48.7060209@optonline.net>
Source record: 107787

There never was a HOA in this subdivision (30 years old), and the
Covenant Restrictions give any or all of the lot owners the right to sue.

-=-
Alan

On 09/21/03 04:55 pm Zoran Brlecic put fingers to keyboard and launched
the following message into cyberspace:

. . . I think that any other
>> homeowner(s) in the subdivision could file suit if they had deep
>> enough pockets.

> I admit this is best left to lawyers, but generally CC&R's are passed on
> from the developer only to the HOA, not to the individual owners. Once
> the HOA dissolves, CC&R's are not binding and individuals have no legal
> ground to pursue the matters based on them.

1327. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:36:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dh7umvcvi7d1eqsf0nbpq2bghm0dikiei1@4ax.com>
Source record: 107789

On 22 Sep 2003 15:52:11 GMT, "Dick Carroll;" <dixie@townsqr.com>
wrote:
> Is is not correct to say that Windows was left vulnerable so that
>other computers can deliberately enter and assess remote computers for
>various reasons, such as determining whether or not the copy of the OS
>in use had been properly :"registered" before issuing updates?
>
> I'm not a programmer but it seems that might xerainly be a very good
>reason.
> In other words, all these security "holes" are perhaps not accidental.
>When a virus writer takes advantage of one of them the "patch" issued
>to "fix" it mught just be specific to that particular violation, instead
>of permanently taking care of the problem.
>
> I know that the Windows series is an extremely complex piece of work,
>but the virii
> issuers seem to have little trouble finding cracks that Bill's
>programmers couldn't
>anticipate..
>
>Dick
>

Hi Dick,

Your claim
> I'm not a programmer
Should have been the point where you stopped writing.

The security holes are not inadvertent mistakes that anyone could have
suffered in the face of such a monumental work as Windows. These
holes (and I am not talking about the current round of affairs, as
neither was J. McLaughlin) are deliberate design "features" that
Chairman Bill and MS claim to be what the user population clamor for.

In other words, insecure software is being deliberately constructed
and sold for the express purpose of satisfying Market issues. MS is
quite blunt in this admission, and aggressively so! Many years ago,
the computer community bewailed MS's determination to allow raw
sockets to be made available at the user level. As you are "not a
programmer" you probably never heard this debate, and yet it is part
and parcel to the features of insecure design. MS snubbed the
security experts (Not Invented Here syndrome) and went their own way -
the body count over those same years testify to it in the millions.
Unfortunately the income measures in the billions and security is

buried in the digits with the corpses of dead machines.

The feature called DCOM is so insecure, that it leads the way in current hacker fields of delight. DCOM is a patchwork quilt of an older Marketing concept called COM (which has been largely ignored by software professionals such that MS tried to "sex" it up by adding a "D" to make it "Distributed," yet another Market slide) which in turn was spun off from OLE. All of these have technical basis in implementation, but were designed in whole ignorance of security requirements. You have absolutely no need for DCOM, and yet as a service to you MS has deliberately left access to it on your machine open to anyone on the internet.

None of these issues are trivial. None of them require poking and prodding to discover or crack. None of them came without advanced warning (and one site has had fixes months in advance of MS). None of them were designed by accident, or through the misfortune of Windows being too complex to debug 100% faithfully. What is worse, MS even submitted a security patch in the last two weeks that did not work! Making allowances for them is generous in the extreme.

I note that you post from a revolving IP, such that if you had not, I could have connected to your machine to give you a demonstration of how open you are to attack. It involves a command built into NT that is designed EXPRESSLY to allow me to do this! I don't need hacker tools, just a DOS session and the command line interpreter will do the rest. If you ever consider moving up to townsqr's hi-speed connectivity, you better get these on-ramps to your system controlled!

73's
Richard Clark, KB7QHC

1328. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 16:55:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jb9umv8i5tup359hoc102lf2g4ej7bg4sm@4ax.com>
Source record: 107790

On Mon, 22 Sep 2003 16:09:09 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>I'm sorry to keep picking away at this one, but it seems to be
>necessary...
>
>The statement that a directional coupler can "separate energy by its
>direction of travel" involves some unaware assumptions involving
>transmission-line theory.
>
>If we're trying to get that theory right, we have to avoid using it
>unawarely in order to prove itself... because that way would let us
>"prove" just about anything.
>
>A directional coupler only senses the current (directionally) at a
>particular location on the line, and the voltage between the two
>conductors at that same location. The directional coupler tells us
>NOTHING else. We have to be very literal-minded about that.
>
>We cannot determine the reflection coefficient, the SWR, or what is
>happening to the energy, without applying some flavor of
>transmission-line theory. When the whole discussion is about getting
>that theory right, we have to be very careful to avoid unawarely arguing
>in circles.

Hi Ian,

It seems every time you come into conflict, you reject other's
statement as issues of circularity and confusion.

A Directional Coupler is principally a transmission line in itself, a
paired one in fact with controlled leakage between the two. There is
nothing inherently restrained in its operation that enforces this
curious complaint of
>A directional coupler only senses the current (directionally) at a
>particular location on the line, and the voltage between the two
>conductors at that same location. The directional coupler tells us
>NOTHING else. We have to be very literal-minded about that.
which as a statement means little beyond the obvious coupling that is
necessary. And to state that NOTHING else is told begs the question:
So What? Nothing else was implied, inferred or demanded, and you
offer nothing to illustrate just what it was you objected to. You
call them "unaware presumptions." WHAT presumptions are they?
Certainly not the same observation I quoted just half a dozen lines
above.

The Bird element is indeed a primitive implementation of a Directional Coupler. It even discards phase information (in fact, it is unavailable, but it would still be discarded through rectification and filtering). The Bird element constitutes a three port Directional Coupler where a four port coupler would return that phase information (if it were not then immediately discarded through the same rectification and filtering). The difference between what is available and what is not is a design choice enforced by the application of the instrument, not a shortfall of Directional Couplers as a class of device.

Directional Couplers are literal transmission line components and the heart and soul of network analyzers.

73's
Richard Clark, KB7QHC

1329. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 17:15:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v1bumvkptv268sbihce974aiiul55vlnlf@4ax.com>
Source record: 107791

On Mon, 22 Sep 2003 11:02:55 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Since what "is" changes with human knowledge, most scientific people
>avoid asserting absolutes.
...
>Most of our present math models are probably
>wrong/incomplete and will eventually be obsoleted.

Hi Cecil,

Like most of your debate, your statements are constructed from
specious logic.

Einstein having "changed" what "is" understood of gravity from
Newton's teachings does not invalidate Newton's work - unless of
course in Texas you are held to the ground simply because your
interpretation of QED proves earth sucks.

Simply put, you lack the meaningful discussion of just what error is
exhibited by any particular issue. Such is easily understood from
your poor recitation of Photonic equivalents when you cannot even
describe that phenomenon in its native terms.

73's
Richard Clark, KB7QHC

1330. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 17:17:25 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <9hbumv8nsb6lno3a5bnpt6ggr9kr7a2kt1@4ax.com>
Source record: 107792

On Mon, 22 Sep 2003 03:42:16 GMT, Zoran Brlecic <...WA7AA...@get.lost>
wrote:

>Bill wrote:
>
>> "bright Indian programmers" do not exist. If you are going to count on that
>> craphole of a place to produce anything usable, then you have a hard wake up
>> coming. A nation without flush toilets is hardly technologically advanced
>> to write an OS of any merit...just think...those idiots have nuclear
>> weapons...probably aimed at themselves.
>
>
>Funny... some people would claim the same about trailer trash rednecks
>like you.

He obviously does not work in the computer, or semiconductor industry,
or hasn't taken a math or science course at one of the major colleges
in the last 10 years. <:-))

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1331. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 17:20:53 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6F2F75.6720350C@uci.edu>
Source record: 107793

David Robbins wrote:
>
> "Steve" <steve_lyon@prodigy.net> wrote in message
> news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
> >
> > "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> > news:3f6c96ed$1_1@corp.newsgroups.com...
> > > Is anyone else being deluged with Virus/Worm email messages?
> > > --
> > > 73, Cecil http://www.qsl.net/w5dxp
> > >
> > Yes, 14 yesterday and 4 so far this morning.
> >
> >
> you must not have many friends who have you in their address book... i got
> about 1000 overnight last night and about 2500 the day before.

My guess is, they're getting addresses from newgroups.

ac6xg

1332. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 17:52:22 UTC
From: mikea@mikea.ath.cx
Message-ID: <bkncsm$t3j$1@puck.litech.org>
Source record: 107794

Jim Kelley <jwkelley@uci.edu> wrote:

> David Robbins wrote:
> >
> > "Steve" <steve_lyon@prodigy.net> wrote in message
> > news:9W0bb.4344$rP4.1607@newssvr33.news.prodigy.com...
> > >
> > > "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> > > news:3f6c96ed$1_1@corp.newsgroups.com...
> > > > Is anyone else being deluged with Virus/Worm email messages?
> > > > --
> > > > 73, Cecil http://www.qsl.net/w5dxp
> > > >
> > > Yes, 14 yesterday and 4 so far this morning.
> > >
> > >
> > you must not have many friends who have you in their address book... i got
> > about 1000 overnight last night and about 2500 the day before.

> My guess is, they're getting addresses from newgroups.

That has been confirmed.

--
"I cannot imagine what it's like to know nearly everything about
systems and have to deal, daily, with people who know nearly nothing
about systems. It's like being a cosmologist at an astrology
convention)...." -- James Lileks

1333. Antenna Barker & Willianson

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 17:54:28 UTC
From: "news.wanadoo.be" <wbac3361@wanadoo.be>
Message-ID: <bknd03$1ftuh$1@sinclair.be.wanadoo.com>
Source record: 107795

What's your opinion about the BWD-45 and 65 .
Thanks .

Emil ON4JA

1334. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:00:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rrdumvcmkr8utodk9frkcuv6no0266pp6j@4ax.com>
Source record: 107796

On Mon, 22 Sep 2003 17:52:22 +0000 (UTC), mikea@mikea.ath.cx (Mike Andrews) wrote:

>> My guess is, they're getting addresses from newgroups.
>
>That has been confirmed.

Hi Mike

How?

I've been a participant here for years with my address freely available. Not one hit from this virus, not even 30 emails during the entire period and only one (1) at the peak. Other correspondents here complain of 1000's in a single day, and 10MB mail storage being saturated.

Do you have a link to an authoritative site that offers evidence of your statement?

73's
Richard Clark, KB7QHC

1335. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:01:57 UTC
From: MD <ve3tmt@yahoo.ca>
Message-ID: <sOGbb.2342$qu4.204411@news20.bellglobal.com>
Source record: 107797
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"W7TI" <noway@nohow.com> wrote in message
news:j6ermvgs0q3mt67h82b4f4c0ia8httd2ef@4ax.com...
> On Sat, 20 Sep 2003 22:57:12 -0400, "Lou" <Spamfree@Spamfree.com> wrote:
>
> >Since when did it become a "private" frequency? The H.F. Frequencies used
> >for Ham operation are open to any one with the proper class of license to
> >use them. O
>
> ____
>
> Does the word "troll" have any meaning to you?
>
> He trolled, you bit, he's happy.
>
> --
> Bill, W7TI
>

Yup, It's so much easier to add him to the kill file.

1336. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:04:04 UTC
From: MD <ve3tmt@yahoo.ca>
Message-ID: <rQGbb.2343$qu4.204942@news20.bellglobal.com>
Source record: 107798
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"W7TI" <noway@nohow.com> wrote in message
news:j6ermvgs0q3mt67h82b4f4c0ia8httd2ef@4ax.com...
> On Sat, 20 Sep 2003 22:57:12 -0400, "Lou" <Spamfree@Spamfree.com> wrote:
>
> >Since when did it become a "private" frequency? The H.F. Frequencies used
> >for Ham operation are open to any one with the proper class of license to
> >use them. O
>
> ____
>
> Does the word "troll" have any meaning to you?
>
> He trolled, you bit, he's happy.
>
> --
> Bill, W7TI
>
Got to admit though Bill, it would be fun to back over him in a humvee!

1337. Re: screwdriver antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:06:42 UTC
From: MD <ve3tmt@yahoo.ca>
Message-ID: <WSGbb.2347$qu4.205368@news20.bellglobal.com>
Source record: 107799

"jwsmid" <jwsmid@home.nl> wrote in message
news:bkhg7c$2nu$1@news2.tilbu1.nb.home.nl...
> hi
>
> I want to buy a screwdriver antenna
> I lookt on the www and fount :High Sierra (HS-1800) and Hi-Q antennas
> (Hi-Q-4/80 RT)
> Which one is better.
>
> JW SMID (PE1RZM)
>
> The Netherlands
>
>
Go with a Tarheel, you won't regret it.

www.tarheel.com

1338. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:21:47 UTC
From: richardharrison@webtv.net
Message-ID: <20020-3F6F3DBB-374@storefull-2314.public.lawson.webtv.net>
Source record: 107806

Dr. Slick wrote:
"Do you use an SO-239 connector to type N for the input and output with a model 43?"

I have often used such adapters. When you use the meter in various systems you encounter many different connectors, so an assortment of popular adapters is convenient.

The model 43 is available with almost any connectors. It is also available with a quick change kit. I found it satisfactory to order the meter with type "N" connectors and use between-series adapters. This is not ideal, but it worked well enough for me. You need a bucket full of adapters to do as I did, but you need the adapters for other purposes too, if you are like me.

Best regards, Richard Harrison, KB5WZI

1339. Re: Ladder line questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:26:48 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <vmufn2q0t5l3fe@corp.supernews.com>
Source record: 107800

Ladder line is ok to use, with a few provisos. first, this is "balanced" feedline, as opposed to coax, which is an "unbalanced" type of feedline. using a balun for your antenna will undoubtedly improve performance with this feedline, and provide some matching. the ratio of the balun for impedance matching would depend on just what antenna you are using. Capacitance is not the problem here, in the general sense, and ladder line has considerably less of this than coax does. (coax has more inherent capacitance than ladder line simply because of its construction). Ladder line has the following advantage : even a long run of ladder line will have little loss, since loss in coaxial cable is primarily due to the distributed inductance and capacitance inherent in the coax construction, while ladder line does not exhibit this anywhere near as much. the primary "loss" factor in the ladder line is simply due to resistance, which is usually fairly low for any reasonble run length. Ladder line is not any more "noisy" than coax, since common mode noise that exists on both legs of the ladder line tends to "cancel out", since it is basically the same on both sides. 300 ohm TV coax is ok, but of course, some true 450 ohm ladder line (which you can buy in rolls from most ham outlets) will exhibit somewhat less loss due to resistance. Matching arrangements at the antenna (a good balun) will be far more effective than at the reciever end, using antenna tuners, but then, this is always a matter of choice.

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:3f6e7ac7_1@news1.prserv.net...
> Mike:
> What kind of receiver are you using? If it has any sensitivity at all,
then
> it won't matter much about matching, as the local noise external level
will
> exceed the receiver noise floor, even through a mismatched feed system.
> Read all the posts to the recent "ten-tec v - beam " discussion for more
> insight. Roy and others discuss the difference between receive and
> transmitting antennas in that frame of reference.
>
> --
> Crazy George
> Remove NO and SPAM from return address
> "mike" <intotheapex@yahoo.com> wrote in message
> news:pufsmvgfkek5bm72sqajnlfhrivkelmfed@4ax.com...
> > Hey group,
> >
> > I am trying to get away from adding unwanted capacitance to my antenna
> > circuit so I tune it more effectively. I would like to do away with
> > coax. This is a SWL antenna.

> >
> > Will 300 ohm TV twin lead suffice as ladder line? Does this add any
> > noise or capacitance?
> >
> > thanks,
> >
> > mike
>
>

1340. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:27:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmufpmmnb7fo2f@corp.supernews.com>
Source record: 107801

Richard seems to have a great deal of respect for Terman. So I suggest
that he read Terman's explanation of directional coupler operation in
Radio Engineering. In the Fourth Edition, at least, he does so without
a single mention of power, let alone "directional" power or "power waves".

Roy Lewallen, W7EL

Ian White, G3SEK wrote:
> Richard Harrison wrote:
>
>> Keith wrote:
>> "I agree completely when the volts and amps are the measurable resultant
>> voolts and amps."
>>
>> There is a big problem with resultant volts and amps. It is the
>> resultant variation in amplitude which is position dependent.
>>
>> The only average variation in forward and reflected powers is a decline
>> with distance caused by line loss. Power flows at a constant average
>> rate into, through, and out of a transmission line. Line loss causes
>> decline in power along a lossy line.
>>
>> The convenient way to get useful numbers is to separate energy by its
>> direction of travel and to measure these. A directional coupler is
>> needed and the Bird among others does this.
>
>
> I'm sorry to keep picking away at this one, but it seems to be necessary...
>
> The statement that a directional coupler can "separate energy by its
> direction of travel" involves some unaware assumptions involving
> transmission-line theory.
>
> If we're trying to get that theory right, we have to avoid using it
> unawarely in order to prove itself... because that way would let us
> "prove" just about anything.
>
> A directional coupler only senses the current (directionally) at a
> particular location on the line, and the voltage between the two
> conductors at that same location. The directional coupler tells us
> NOTHING else. We have to be very literal-minded about that.
>
> We cannot determine the reflection coefficient, the SWR, or what is
> happening to the energy, without applying some flavor of
> transmission-line theory. When the whole discussion is about getting

> that theory right, we have to be very careful to avoid unawarely arguing
> in circles.
>
>

1341. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:31:57 UTC
From: Zombie Wolf <zmbwf@acadia.net>
Message-ID: <vmug0lglioipaa@corp.supernews.com>
Source record: 107802

A capacitive antenna is not as bad as one might think, since it will be "broader" in the tuning sense (it will maintain a match over a broader frequency range) than an antenna that is inductive. An inductive antenna is rather narrow frequency-wise , and as the antenna gets longer, this becomes a real drawback. most antenna designs do not present enough "shunt" capacitance for this to be a serious consideration.

"Roy Lewallen" <w7el@eznec.com> wrote in message news:vmsl54dnebi362@corp.supernews.com...
> If your antenna is very short in terms of wavelength, then shunt
> capacitance will reduce the amount of received signal. Solutions include
> running the antenna wire directly to the receiver, using a preamp at the
> antenna, or using a short length of special high-impedance coax as
> feedline. The latter is what's commonly done with automotive AM radios.
>
> If the antenna isn't very short, then "tuning" is done by means of a
> matching network, which can compensate for mismatched coax line and the
> impedance transformation it causes.
>
> Roy Lewallen, W7EL
>
> mike wrote:
> > When researching the cost of high impedance coax as a feedline, it
> > apears globs of coax induced capacitance seriously degrates the
> > ability to tune the circuit. Under these conditions, resonating
> > frequencies requires extremely low inductance values.
> >
> > How do people get around this problem in a receive only situation?
> >
> > thanks,
> >
> > mike
>

1342. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:32:52 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309221032.e422c3e@posting.google.com>
Source record: 107803

Roger Halstead <newsgroups@rogerhalstead.com> wrote in message
>
> I would respectfully suggest that you upgrade to one of the later
> versions of Netscape. 3.1 is about as open to giving out your
> information as any produced.

I only use it to read mail. I don't browse with it. Besides, thats a
different issue than the micro viruses being discussed. P.S I have
newer versions of netscape. KInd of like playing cards. Take your
pick.
>

> It's a knee jerk reaction to blame the OS (which do have lots of holes
> in them), but in reality the blame for well over 90% of the problem
> comes directly from us...the users.

No, it's not a knee jerk reaction. The OS security problems I refer to
have nothing to do with the discussed macro viruses. They are
altogether different problems. Just as serious though. Probably more
so.

>
> The new ones are no worse than 98, or 98 SE.

They sure are no better. I would say worse....But, it's not really
important. I don't have any trouble with any of these worms, viruses,
etc. So anything I say can hardly be called a knee jerk reaction. I
have plenty of unmolested time to think about it. MK

1343. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:42:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vmugm16iurti21@corp.supernews.com>
Source record: 107805
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Nice project. People interested in learning more about the diode compensation circuit can find additional information in John Grebenkemper's article "The Tandem Match -- An Accurate Directional Wattmeter", QST, Jan, 1987, and a good deal more in my article "A Simple and Accurate QRP Directional Wattmeter" in February 1990 QST.. It turns out that you can reduce the diode drop to an arbitrarily low value by terminating it with an arbitrarily high resistance. But that's not the problem in detecting small signals. The problem is that the diode reverse leakage current becomes a bigger and bigger fraction of the forward current as the current gets smaller. That is, the diode becomes more and more like a resistor as the signal gets smaller and smaller. The problem, then, isn't a lack of forward conduction, but that the charge conducted into the load during the positive half cycle is sucked back out during the negative half cycle. The compensation circuit used in these two articles and in Jason's circuit only approximately match the RF conductivity characteristics of the diode, and the operating points of the diodes have to be carefully chosen to insure tracking with temperature changes as well as signal level.

Roy Lewallen, W7EL

Jason Hsu wrote:
> Last semester, I designed and built the QROP Meter for my
> graduate school independent study project. Thanks to those of you who
> helped me with certain thorny issues, such as transformers and DC
> amplification. Go to my web page at http://www.jasonhsu.com/ee.html
> to learn how to build the instrument.
>
> What makes my SWR/wattmeter different from the numerous versions
> available from MFJ and the numerous homebrew designs out there?
>
> 1. Works from 200mW to 100W! You get the best of both worlds! MFJ
> SWR/wattmeters don't work at QRP, and QRP SWR/wattmeters can't handle
> 100W. Tuning up at 1W instead of 100W reduces the QRM you cause by
> 20dB, or over 3 S units! You can also safely change the tuner's
> inductance taps WHILE transmitting at 1W.
> 2. GOOD resolution at SWR values above 3 and even above 5! This can
> be very handy at 160m and 80/75m.
> 3. 10-LED display for the SWR meter and another 10-LED display for
> the wattmeter: No more squinting at cross-needle meters!
> 4. More accuracy at low power levels: Most SWR meters understate SWR
> at low power levels due to the infamous diode drop loss. My design
> compensates for this and allows accurate SWR measurements at QRP power
> levels.

>
> Let me know what you think, and feel free to contact me if you have
> any questions or suggestions. If you decide to build the QROP Meter,
> let me know how it goes.
>
> Jason Hsu, AG4DG
> usenet@@@@@jasonhsu.com

1344. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:43:30 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6F42D2.62FE7E28@uci.edu>
Source record: 107810

If you're so sure about your 'invulnerability', why do you have seven email filters? Try turning them off and see what you get. ;-)

jk

Richard Clark wrote:
>
> On Mon, 22 Sep 2003 17:52:22 +0000 (UTC), mikea@mikea.ath.cx (Mike
> Andrews) wrote:
>
> >> My guess is, they're getting addresses from newgroups.
> > >
> > >That has been confirmed.
>
> Hi Mike
>
> How?
>
> I've been a participant here for years with my address freely
> available. Not one hit from this virus, not even 30 emails during the
> entire period and only one (1) at the peak. Other correspondents here
> complain of 1000's in a single day, and 10MB mail storage being
> saturated.
>
> Do you have a link to an authoritative site that offers evidence of
> your statement?
>
> 73's
> Richard Clark, KB7QHC

1345. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 18:58:59 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bkngpj$j1k$0@208.207.71.149>
Source record: 107807

Zoran Brlecic wrote:

> Alan Beagley wrote:
>
>> On 09/21/03 01:52 am Zoran Brlecic put fingers to keyboard and launched
>> the following message into cyberspace:
>>
>>>> If there ever was a Homeowners' Association, it has been defunct
>>>> for years.
>>>
>>>
>>
>>> Then you don't have to comply with the CC&R's at all, because there
>>> is no one to enforce them. Make sure it is 100% defunct, though.
>>
>>
>>
>> That would be nice if it were true, but I think that any other
>> homeowner(s) in the subdivision could file suit if they had deep
>> enough pockets.
>
>
> I admit this is best left to lawyers, but generally CC&R's are passed
> on from the developer only to the HOA, not to the individual owners.
> Once the HOA dissolves, CC&R's are not binding and individuals have no
> legal ground to pursue the matters based on them.
>

Seems that isn't a certainty. I've heard of long-defunct HOA's being
resurrected and resuming their "patrol". Then you *might* be able to
prevail on other grounds but that wouldn't keep you out of court with
all the legal expense involved.

1346. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:02:21 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <sqhumvg22tfnb2ri5qjuff596vnlunti4s@4ax.com>
Source record: 107808

On Mon, 22 Sep 2003 16:04:04 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>>So mine seems backwards in regards to the schematic. how much
>>difference would this make?
>>
>>Mike
>
>Hi Mike,
>
>Machts nichts.
>
>73's
>Richard Clark, KB7QHC

I guess that means it does not matter<grin>

mike

1347. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:08:18 UTC
From: Ken Bessler <kg0wx@IHATESPAMyahoo.com>
Message-ID: <INucnYOqPKw71fKiXTWJiw@comcast.com>
Source record: 107809

"Jim Kelley" <xxxxxxxxxx> wrote in message news:3F6F2F75.6720350C@uci.edu...
>
> > My guess is, they're getting addresses from newgroups.
>
> ac6xg

Hey Jim guess what - they just got yours because you give
it out when you post (although as you can see, I xx'ed it out).

.....D'oh!

73's

1348. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:14:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <iaiumvcb9re9pqtffbp9ek674s1fvd9d4i@4ax.com>
Source record: 107811

On Mon, 22 Sep 2003 19:02:21 GMT, mike <intotheapex@yahoo.com> wrote:

>On Mon, 22 Sep 2003 16:04:04 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>
>>>So mine seems backwards in regards to the schematic. how much
>>>difference would this make?
>>>
>>>Mike
>>
>>Hi Mike,
>>
>>Machts nichts.
>>
>>73's
>>Richard Clark, KB7QHC
>
>
>I guess that means it does not matter<grin>
>
>mike

Hi Mike,

In GI lingo (a variant of english) it is rendered Mox Nix (a popular euphemism in the military meaning just as you guessed). The "Stars and Stripes" (the Army's newspaper) used to carry a cartoon panel with the same name.

73's
Richard Clark, KB7QHC

1349. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:19:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eiiumvoseme1msu0cdg37obpsqen1fhml7@4ax.com>
Source record: 107812

On 22 Sep 2003 18:58:59 GMT, "Dick Carroll;" <dixie@townsqr.com>
wrote:
>> I admit this is best left to lawyers, but generally CC&R's are passed
>> on from the developer only to the HOA, not to the individual owners.
>> Once the HOA dissolves, CC&R's are not binding and individuals have no
>> legal ground to pursue the matters based on them.
>>
>
>Seems that isn't a certainty. I've heard of long-defunct HOA's being
>resurrected and resuming their "patrol". Then you *might* be able to
>prevail on other grounds but that wouldn't keep you out of court with
>all the legal expense involved.

Employing a legalism to an advantage may lay in claiming a "silent
easement." This is where you can seize property through "improvements
made" that go uncontested by others. But again, find a real estate
lawyer who may just mutter incomprehensibly at this plot.

73's
Richard Clark, KB7QHC

1350. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:38:13 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6F4FA5.872E3827@uci.edu>
Source record: 107814

Ken Bessler wrote:
>
> "Jim Kelley" <xxxxxxxxxx> wrote in message news:3F6F2F75.6720350C@uci.edu...
> >
> > > My guess is, they're getting addresses from newgroups.
> >
> > ac6xg
>
> Hey Jim guess what - they just got yours because you give
> it out when you post (although as you can see, I xx'ed it out).
>
> .....D'oh!
>
> 73's

You're such a clever guy, Ken. Thanks for xxx'ing it out for me!

Evidently you agree with me that they're not getting them from address books.

73, Jim AC6XG

1351. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:41:50 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6F507E.F75EDDB1@uci.edu>
Source record: 107816

You seem to have missed the point. The particular operating system you
happen to run has nothing to do with whether or not viruses are sent to
your email address.

73, Jim AC6XG

Richard Clark wrote:
>
> On Mon, 22 Sep 2003 11:43:30 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
> >If you're so sure about your 'invulnerability', why do you have seven
> >email filters? Try turning them off and see what you get. ;-)
> >
> >jk
>
> Hi Jim,
>
> I have, same old spam conforming to exactly what the filters were
> designed to weed out. I had to wait quite a while for any to come in.
>
> You think one filter would do it? Now there's dreaming in technicolor
> and surround sound.
>
> Among the 7, several cover 26 common explitives and variants of their
> spellings (using a unix style of expression to describe them such as
> X* where the star denotes 0 or more repetitions of the character X; I
> do the same thing with $*). This sure beats the MS method of hotmail
> security where you have to list every single person you trust (what a
> crock) if you want to keep out the universe of smut. Methinks their
> MSN butterfly is on the verge of intellectual extinction.
>
> Of the others, I reject mail not addressed to me (a no brainer - eh?).
>
> Agent would allow me to combine them all into one filter (a dream come
> true?), but why bother. Most programming errors are caused by logical
> statements that are so vast and cryptic that they are impossible to
> read coherently - like any of 600 postings made by Cecil. ;-)
>
> Anyway, I have been engaged in a series of emails since this last
> posting (with Mike) where he is averaging 1 hit a minute, and me none
> for this entire time. By his accounts, it is from newsgroup
> harvesting, and it would seem the majority of sufferers here picked up
> the infection somewhere else (not rraa). Of the dozen odd other
> groups I follow, this topic is alien to correspondents who show no

> signs of infection.
>
> So, Jim, how have you fared during the deluge?
>
> 73's
> Richard Clark, KB7QHC (with only 1 spam today)

1352. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 19:46:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a0jumvoohvnacqn0r1s45n84qs7uscn9gl@4ax.com>
Source record: 107813

On Mon, 22 Sep 2003 11:43:30 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>If you're so sure about your 'invulnerability', why do you have seven
>email filters? Try turning them off and see what you get. ;-)
>
>jk

Hi Jim,

I have, same old spam conforming to exactly what the filters were
designed to weed out. I had to wait quite a while for any to come in.

You think one filter would do it? Now there's dreaming in technicolor
and surround sound.

Among the 7, several cover 26 common explitives and variants of their
spellings (using a unix style of expression to describe them such as
X* where the star denotes 0 or more repetitions of the character X; I
do the same thing with $*). This sure beats the MS method of hotmail
security where you have to list every single person you trust (what a
crock) if you want to keep out the universe of smut. Methinks their
MSN butterfly is on the verge of intellectual extinction.

Of the others, I reject mail not addressed to me (a no brainer - eh?).

Agent would allow me to combine them all into one filter (a dream come
true?), but why bother. Most programming errors are caused by logical
statements that are so vast and cryptic that they are impossible to
read coherently - like any of 600 postings made by Cecil. ;-)

Anyway, I have been engaged in a series of emails since this last
posting (with Mike) where he is averaging 1 hit a minute, and me none
for this entire time. By his accounts, it is from newsgroup
harvesting, and it would seem the majority of sufferers here picked up
the infection somewhere else (not rraa). Of the dozen odd other
groups I follow, this topic is alien to correspondents who show no
signs of infection.

So, Jim, how have you fared during the deluge?

73's
Richard Clark, KB7QHC (with only 1 spam today)

1353. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:08:41 UTC
From: richardharrison@webtv.net
Message-ID: <27508-3F6F56C9-35@storefull-2317.public.lawson.webtv.net>
Source record: 107817

Ian, G3SEK wrote:
"A directional coupler only senses the current (directionally) at a particular location on the line, and the voltage between the conductors at that location."

Sure. Any place is as good as any other as the power flowing in each direction at that point is the same as at any other point save loss between two monitoring points which is usually not of consequence.

Does the Bird usually perform within its specifications? In my nexperience it does.

Does the reflected power read zero when the line is feeding a matched load? In my experience it does.

Does the Bird forward power read 50 watts when the r-f volts measure 50 across a 50-ohm dummy load? In my experience it does.

Does the thermoammeter read one amp when the Bird wattmeter reads 50-watts into the same dummy load? In my experience it does.

My experience is that the Bird reads correctly when the correct element is inserted.

Element operation is simple. Volt and amp samples are constructed to produce identical deflections of the wattmeter. When the element is positioned for forward watts, polarity of the samples is adding.

Transmission line theory tells you that a reflection causes a phase reversal in either the volts or the amps, but not both. This causes cancellation between the sample energies of the reflected wave when sampling the forward energy as above.

To measure the reflected wave while cancelling the forward wave energy samples, it is only necessary to reverse the polarity of one of the two samples. This is exactly what happens when the arrow on the element is turned 180-degrees.

Ian says he has a Bird wattmeter. Congratuletions! He has a good instrument if it is in good shape. I expect his experience has been satisfactory. I was telecommunications manager for a company with many technicians who were each eupplied a Bird wattmeter among their complement of instruments. Usually, the Bird was as reliable as their Simpson 260`s. And, those were troublerfree, given reasonable care.

Best regards, Richard Harrison, KB5WZI

1354. Antenna Pattern Shaping

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:09:54 UTC
From: Jim Thompson <Jim-T@golana-will-get-you.com>
Message-ID: <0llumv0nlr0u2f8f2sjcnbl2c4jlm8dsk6@4ax.com>
Source record: 107815
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

I have a 1086-1094MHz monopole (rubber-ducky) antenna mounted
(vertically/BNC connector thru circular ground-plane).

I would like to modify the ground plane so that it sees only signals
in a cone from 45ï¿½ above horizon and upwards.

I'm clueless in this antenna world.

How should I do this?

Thanks!

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1355. Re: Van Gorden Balun

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:28:22 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <jsicneQaDPPvxvKiU-KYiQ@comcast.com>
Source record: 107818

Why don't you try it without a balun first? You can always add it if you have too much feedline radiation. Unless a 160m dipole is 100 feet up in the air, it will be nondirectional anyhow.

Tam/WB2TT
"Roger Halstead" <newsgroups@rogerhalstead.com> wrote in message news:72tsmvglom2dodc2gqhgdglhfvdidffqdp@4ax.com...
> On Sun, 21 Sep 2003 16:21:24 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >According to the AES catalog, it is rated 3 - 40 MHz. The Unadilla baluns,
> >which go for about $25 , are rated down to 1.8 MHz.
>
> I was afraid of that. I checked their on-line catalog and found the
> balun, but no ratings.
>
> Guess I'm going to have to order one...and I'd actually planned on
> putting the thing up today (Sunday). That didn't happen and I'll be
> lucky to get one by Tuesday.
>
> I have several 75 meter slopers. that use the EB-1 Cal-AV labs
> External Bead Balun (choke) and have worked very well. Unfortunately
> one failed early this past summer. It appears to be the EB-1 as the
> center conductor to wire shows about 27K and the ground to the other
> side is open. A noise bridge shows open as well.
>
> http://www.rogerhalstead.com/tower.htm
> I'm going to *try* and orient the 160 fan dipole broadside NE/SW and
> then reinstall the 1/2 wave center fed half wave sloper to the SW.
> I may end up trying to shunt feed the tower (130 feet with TH-5 @
> 100 feet, 7 L C3i 6-meter Yagi at 115 feet, and stacked 12s on
> 2-meters and stacked 11s on 440 on a horizontal cross boom at 130 feet
> -- vertically polarized), which makes for a lot of capacitive loading.
> I could possibly go with an inverted-L, but there is so much *stuff*
> hanging on the tower I don't know just how well that'd work.
>
> Thanks for the info.
>
> Roger (K8RI) Trying to get the antenna work finished before cold
> weather.
>
> >
> >Tam/WB2TT

> >"Roger Halstead" <newsgroups@rogerhalstead.com> wrote in message
> >news:rgvrmv46vahbl1v86u40ctkq5aubqenj30@4ax.com...
> >> I was laying out the wire to cut a 160 meter fan dipole when I
> >> discovered I have no information on the balun I dug out of the drawer.
> >> As it's a new balun I probably have the information sheet *somewhere*
> >>
> >> It's a Van Gorden Engineering Hi-Q 1:1 Balun.
> >> I know they are relatively inexpensive, but what I need is the
> >> frequency range and power handling capability.
> >>
> >> I've spent over an hour doing searches and aparently didn't hit the
> >> right combination.
> >>
> >> Roger (K8RI)
> >> Roger Halstead (K8RI EN73 & ARRL Life Member)
> >> www.rogerhalstead.com
> >> N833R World's oldest Debonair? (S# CD-2)
> >
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

1356. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:44:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u4mumv0fe3lr08kh1e5hm1rssrt9ivietn@4ax.com>
Source record: 107619

On Mon, 22 Sep 2003 12:41:50 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>You seem to have missed the point. The particular operating system you
>happen to run has nothing to do with whether or not viruses are sent to
>your email address.
>
>73, Jim AC6XG

Hi Jim,

I rely on the evidence of testimony here. 80% of the correspondents
who are also sufferers are using IE/OE in some form of Windows (hard
to do it otherwise). The servers (at least mine at Comcast which have
been infected by Blaster and infected my outgoing mail) are MS
products. MS products and OS's contain documented and autopsied
problems that support such virus activity.

I also use MS products (but certainly not their lame internet
applications). I have never performed a security upgrade, but instead
have simply disabled those faulty modules that they circulate as
product enhancements. Tools for such activity may be found at:
http://grc.com/default.htm
which provides more news and resource than all the nonsense wishing
away nightmares.

In that page's update TODAY is the warning:
"Many security watchers believe that a new worm, not unlike
"MSBlast" which targeted the previous DCOM/RPC vulnerability, is
virtually inevitable."

How many here even comprehend what DCOM is? Are we to be treated to a
new chorus of whines about how the ghosts of the internet haunt them?
I've had this problem fixed (courtesy of the same site) for several
months. Have you taken precautions? (I note you failed to respond to
my query about how you've fared through this latest attack.)

I can say without fear of contradiction that particular operating
systems (MS) are obviously correlated through history and actuality.
I also host a server on a fixed IP (http://12.230.78.56/) that has
surfed through all these disasters and still winging right along
unfazed. It supports an uncrackable OS simply because my net log
reveals no one is looking for anything but MS code. The only thing
that will crash it will be the log filling up (but no one is going to
find an executable to run - too many clowns and not enough
ringmasters).

As to having missed the point, I offer that part of my message you missed reading:
>>Anyway, I have been engaged in a series of emails since this last
>>posting (with Mike) where he is averaging 1 hit a minute, and me none
>>for this entire time. By his accounts, it is from newsgroup
>>harvesting, and it would seem the majority of sufferers here picked up
>>the infection somewhere else (not rraa). Of the dozen odd other
>>groups I follow, this topic is alien to correspondents who show no
>>signs of infection.

These other users were also clearly (through header examination) MS users. They were clearly not sufferers. That, or the Darwinian mechanics thinned them out without chance for recovery (another MS commonality) to complain, warn, or join in chorus of whine.

73's
Richard Clark, KB7QHC

1357. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:54:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f6372$1_1@corp.newsgroups.com>
Source record: 107621

Ian White, G3SEK wrote:
> The smart way is to use the tool that *always* works - especially when
> it's no harder to use.
>
> It's not smart to use a tool that only works some of the time *and* has
> nothing extra to offer.

The something extra is simplicity. The equations for a small loop, for instance, are not the full equations but a simplified version. Virtually all of our often-used equations are simplified versions.

Every electronic instrument we use only works some of the time.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1358. Re: Antenna Pattern Shaping

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 20:56:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qunumvoco05vcidtmp72qraer0eh3b5nls@4ax.com>
Source record: 107620
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna

On Mon, 22 Sep 2003 13:09:54 -0700, Jim Thompson
<Jim-T@golana-will-get-you.com> wrote:

>I have a 1086-1094MHz monopole (rubber-ducky) antenna mounted
>(vertically/BNC connector thru circular ground-plane).
>
>I would like to modify the ground plane so that it sees only signals
>in a cone from 45ï¿½ above horizon and upwards.
>
>I'm clueless in this antenna world.
>
>How should I do this?
>
>Thanks!
>
> ...Jim Thompson

Hi Jim,

Leave ground alone and make the antenna longer. Roughly 7 cM is
quarterwave (probably the size of your current antenna). Or twice
that for a halfwave. You want to maintain an integral multiple of
either to make it at least one wavelength tall. If it is 7 cM, then
try 21 or 35 cM (using odd, integral multipliers). If it is 14 cM,
then try 28 or 42 cM (using even, integral multipliers).

The reason is that longer antennas become end-fire (that is, oriented
along their length instead of broadside). The odd/even distinction is
to maintain the expected load which repeats in these multipliers.

73's
Richard Clark, KB7QHC

1359. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 21:01:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f64f5_1@corp.newsgroups.com>
Source record: 107622

Richard Clark wrote:
> Simply put, you lack the meaningful discussion of just what error is
> exhibited by any particular issue.

I'm sure that everyone is familiar with the famous light-bending experiment
that proved Newtonian physics wrong and Einstein right. Also, prior to Einstein,
the laws of physics were incorrect with respect to the orbit of Mercury.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1360. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 21:07:06 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <cwJbb.39$LJ5.4087@iad-read.news.verio.net>
Source record: 107623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"MD" <ve3tmt@yahoo.ca> wrote in message
news:sOGbb.2342$qu4.204411@news20.bellglobal.com...
>
> "W7TI" <noway@nohow.com> wrote in message
> news:j6ermvgs0q3mt67h82b4f4c0ia8httd2ef@4ax.com...
> > On Sat, 20 Sep 2003 22:57:12 -0400, "Lou" <Spamfree@Spamfree.com> wrote:
> >
> > >Since when did it become a "private" frequency? The H.F. Frequencies
used
> > >for Ham operation are open to any one with the proper class of license
to
> > >use them. O
> >
> > ____
> >
> > Does the word "troll" have any meaning to you?
> >
> > He trolled, you bit, he's happy.
> >
> > --
> > Bill, W7TI
> >
>
> Yup, It's so much easier to add him to the kill file.
>

Yeah, I've got to also consider placing this joker in the kill file.
Certainly not worth the blood pressure rise.

1361. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 21:11:16 UTC
From: mikea@mikea.ath.cx
Message-ID: <bknohk$1df$4@puck.litech.org>
Source record: 107624

Walter Maxwell <w2du@iag.net> wrote:
> On Sat, 20 Sep 2003 19:01:51 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@btinternet.com> wrote:

> >> Is anyone else being deluged with Virus/Worm email messages?
> >> --
> >>==========
> > >
> > >Me too - 2000 per day.
> > >
> > >Terrorist attack or just another up-and-coming Bill Gates?
> > >
> > >G4FGQ, UK
> > >
> > >
> > Me too, 49 yesterday and 80 today.

So far today:

```
$ grep -i logging ljoe.txt | wc -l
1286
$ grep -i "\/dev\/null" ljoe.txt | wc -l
976
```

That's 976 worms out of 1286 mails accepted, total. That doesn't count the 54 that I bounced because I don't accept mail from the sender's domain, so it's 976 out of 1340 attempts. At about 150K per try. Rough on the other people on my cablemodem segment.

--
Mike Andrews, working on his ticket again.
mikea@mikea.ath.cx
Tired old sysadmin since 1964
WN5EGO back in 1963

1362. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 21:46:24 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <w+SWQvIw22b$EAJq@ifwtech.co.uk>
Source record: 107627

Richard Clark wrote:
>Hi Ian,
>
>It seems every time you come into conflict, you reject other's
>statement as issues of circularity and confusion.
>
Now that you mention it, that could indeed be a common factor at the root of this newsgroup's chronically unresolved arguments.

>A Directional Coupler is principally a transmission line in itself, a
>paired one in fact with controlled leakage between the two.

Some UHF/microwave directional couplers consist of a primary transmission line (the 'through' line) and a secondary transmission line for sampling; but not all directional couplers are of this type. Many types of directional coupler contain no kind of secondary transmission line. Some have a bridge configuration - for example the Bruene bridge and the resistor bridge.

At HF through VHF, even the Bird element is better analysed as an electrically small loop that samples V and I components from the main line, and not as a section of secondary transmission line. You only need to consider a Bird element as a secondary transmission line at frequencies where the loop dimensions are a significant fraction of a wavelength, so its distributed properties become important.

> There is
>nothing inherently restrained in its operation that enforces this
>curious complaint of
>>A directional coupler only senses the current (directionally) at a
>>particular location on the line, and the voltage between the two
>>conductors at that same location. The directional coupler tells us
>>NOTHING else. We have to be very literal-minded about that.
>which as a statement means little beyond the obvious coupling that is
>necessary. And to state that NOTHING else is told begs the question:
>So What? Nothing else was implied, inferred or demanded, and you
>offer nothing to illustrate just what it was you objected to.

It was all there, but you missed it. Possibly your mind was on your own reply.

> You
>call them "unaware presumptions." WHAT presumptions are they?

The presumption is that a directional coupler directly samples power, when in fact it doesn't. It samples voltage and current separately. The

sampled current is passed through a resistor to develop a second voltage, and then these two RF voltages are either added or subtracted. Finally the resultant RF voltage is detected.

Nowhere in this process is there anything that could be described as directionally sampling power. So any argument about transmission theory that calls upon that unfounded notion as part of its "evidence" is not going to get us anywhere useful.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1363. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 21:54:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aprumvkarucshmeni0j1c5giu3hlv0471u@4ax.com>
Source record: 107625

On Mon, 22 Sep 2003 16:01:21 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> Simply put, you lack the meaningful discussion of just what error is
>> exhibited by any particular issue.
>
>I'm sure that everyone is familiar with the famous light-bending experiment
>that proved Newtonian physics wrong and Einstein right. Also, prior to Einstein,
>the laws of physics were incorrect with respect to the orbit of Mercury.

Hi Cecil,

Einstein proved apples fall up? What a laugh.

Did Einstein prove
F <> M ï¿½ A ?

Einstein's observation
E = M ï¿½ Cï¿½
discounts your jejune platitudes completely.

And how different was Newton's gravity from Einstein's? Simply
exhibited by your failure to respond, shows you lack the meaningful
discussion of just what error is. Cecil, you remain the ever
unreliable correspondent.

73's
Richard Clark, KB7QHC

1364. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 22:01:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6f7326_7@corp.newsgroups.com>
Source record: 107626

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>I'm sure that everyone is familiar with the famous light-bending experiment
>>that proved Newtonian physics wrong and Einstein right. Also, prior to Einstein,
>>the laws of physics were incorrect with respect to the orbit of Mercury.
>
> Einstein proved apples fall up? What a laugh.

Richard, you really need to learn the difference between an exclusive statement
and an inclusive statement. All you need to ask yourself is, "Did Einstein
ever prove Newton to be wrong?" The answer is 'yes'.
--
73, Cecil http://www.qsl.net/w5dxp

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1365. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 22:05:56 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <I$PDAEKEJ3b$EA7Z@ifwtech.co.uk>
Source record: 107628

Richard Clark wrote:
>Einstein having "changed" what "is" understood of gravity from Newton's
>teachings does not invalidate Newton's work

I entirely agree, Richard! (Don't be too surprised :-)

By quantifying the errors in Newton's original 'laws', Einstein actually *confirmed* that Newtonian mechanics are valid for everyday situations. The only way Einstein could have found that out was by exploring beyond Newton, and then looking back.

That's exactly what we're trying to do with the present discussions about lines with reactive Zo. We're trying to quantify the errors in the formulae and definitions that we normally use, and we can only do that by exploring beyond them... very carefully.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1366. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 22:51:47 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <SO+ecsOD03b$EAf4@ifwtech.co.uk>
Source record: 107629

Richard Harrison wrote:

>Ian says he has a Bird wattmeter. Congratuletions! He has a good
>instrument if it is in good shape. I expect his experience has been
>satisfactory.

It has indeed, for all practical purposes.

But when we're constructing rigorous bench or thought-experiments to prove or disprove some aspect of transmission line theory, we have to remember that, in the very strictest sense, the Bird doesn't actually measure power.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1367. WTB: Commercial Buddipole System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 22:54:51 UTC
From: k4jp@webtv.net
Message-ID: <2874-3F6F7DBB-316@storefull-2351.public.lawson.webtv.net>
Source record: 107630

Must be in perfect working condition. With mast, tripod, coax and assembly chart. If you have one or know of anyone that is selling one, email at:

K4JDP@yahoo.com

73's,
K4JDP-John

1368. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 23:10:22 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F6F815E.DCC92E58@uci.edu>
Source record: 107631

Richard Clark wrote:
> (I note you failed to respond to
> my query about how you've fared through this latest attack.)

Oh. What do you think should be inferred from that?

> I can say without fear of contradiction that particular operating
> systems (MS) are obviously correlated through history and actuality.

But what I said was, a users operating system is not responsible for the emails sent to his email address. I didn't fear contradiction of that either. But here we are; arguing about it.

> too many clowns and not enough
> ringmasters).

:-) Isn't THAT the truth. :-) Must be overshoot from 'too many chiefs and not enough indians'.

> As to having missed the point, I offer that part of my message you
> missed reading:
> >>Anyway, I have been engaged in a series of emails since this last
> >>posting (with Mike) where he is averaging 1 hit a minute, and me none
> >>for this entire time. By his accounts, it is from newsgroup
> >>harvesting, and it would seem the majority of sufferers here picked up
> >>the infection somewhere else (not rraa). Of the dozen odd other
> >>groups I follow, this topic is alien to correspondents who show no
> >>signs of infection.

Those are the remarks I was referring to.

I run a firewall on my desktop system so I can see what's happening on both sides of the ethernet card. My system is not infected. FYI there's a free utility called stinger that can be used to scan for these worms. Nevertheless, the inbox on the unix system that handles my email has accumulated about 100 of these kind of messages a day since last Tuesday or so. I have my desktop system set to filter them.

But if you are trying to say that the author(s) of the viruses are specifically targeting users with a MS notation in their news header, then you may be right. But you didn't say that.

73, Jim AC6XG

1369. Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 23:54:31 UTC
From: wizard12342002@yahoo.com
Message-ID: <a3232cc0.0309221554.4f60e0f7@posting.google.com>
Source record: 107632

Hello,

I am a ham looking for a home. I found one that interests me, except that it is about 600 feet from high tension lines. I am trying to determine whether I should be concerned about this. There are three potential issues that I can think of:

1.) Possible excessive exposure to low-frequency magnetic fields.

2.) Even if there is no significant exposure, the resale value of the property may be affected if other buyers are concerned if/when I turn around to sell it.

3.) Radio noise. I would imagine that any arcing along the system would wreak havoc on my enjoyment of weak-signal dx.

Any and all comments appreciated.

-JJ

1370. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-22 23:59:44 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <cktumvs3j7cqhv5nb1930ol2tkeiftj3v5@4ax.com>
Source record: 107633

On Mon, 22 Sep 2003 16:36:51 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

<snip>
>Should have been the point where you stopped writing.
>
>The security holes are not inadvertent mistakes that anyone could have
>suffered in the face of such a monumental work as Windows. These
>holes (and I am not talking about the current round of affairs, as
>neither was J. McLaughlin) are deliberate design "features" that
>Chairman Bill and MS claim to be what the user population clamor for.
>
Richard, you reminded me of things I had long forgotten.
I've been around this stuff since before there was a Microsoft.
I purchased my own PC in 1979-1980. We called them PC even before IBM
was given the copyright...much like MS and DOS. <sigh>

>In other words, insecure software is being deliberately constructed
>and sold for the express purpose of satisfying Market issues. MS is
>quite blunt in this admission, and aggressively so! Many years ago,
>the computer community bewailed MS's determination to allow raw
>sockets to be made available at the user level. As you are "not a
>programmer" you probably never heard this debate, and yet it is part
>and parcel to the features of insecure design. MS snubbed the
>security experts (Not Invented Here syndrome) and went their own way -

Although I'm not an MS booster, I've had to use it to stay compatible
over the years. I do take exception to their ethics and lack there
of. OTOH, as much as I hate to admit it, I truly believe that had MS
not gone for the "Market" we wouldn't have the abilities we have
today. And...yes that can be taken two ways and both are correct.
<sigh>

>the body count over those same years testify to it in the millions.
>Unfortunately the income measures in the billions and security is
>buried in the digits with the corpses of dead machines.
>
>The feature called DCOM is so insecure, that it leads the way in
>current hacker fields of delight. DCOM is a patchwork quilt of an
>older Marketing concept called COM (which has been largely ignored by
>software professionals such that MS tried to "sex" it up by adding a
>"D" to make it "Distributed," yet another Market slide) which in turn
>was spun off from OLE. All of these have technical basis in
>implementation, but were designed in whole ignorance of security
>requirements. You have absolutely no need for DCOM, and yet as a

>service to you MS has deliberately left access to it on your machine
>open to anyone on the internet.
>
>None of these issues are trivial. None of them require poking and
>prodding to discover or crack. None of them came without advanced
>warning (and one site has had fixes months in advance of MS). None of
>them were designed by accident, or through the misfortune of Windows
>being too complex to debug 100% faithfully. What is worse, MS even
>submitted a security patch in the last two weeks that did not work!
>Making allowances for them is generous in the extreme.

I guess I'd have to be generous and say I doubt they released the
patch that didn't work on purpose...It's bad for their image.

>
>I note that you post from a revolving IP, such that if you had not, I
>could have connected to your machine to give you a demonstration of
>how open you are to attack. It involves a command built into NT that
>is designed EXPRESSLY to allow me to do this! I don't need hacker
>tools, just a DOS session and the command line interpreter will do the

A few years back, I was receiving an inordinate number of viruses
which more correctly were mostly worms. I'd take the IP and head for
what looked like the culprit in the above manner. I verified that was
the source and then sent them an e-mail, or looked up the phone number
and called. True, I didn't track all that many down, but I still
found a bunch and those e-mails had given me the machines address.
Back them dynamic IPs were the norm, not the static IPs on the
broadband of today. BTW, many of those systems would have been very
easy to log in as I was basically in the same position as any user
when they are at the boot up screen. OTOH, I had no desire to root
around in someone else's system and particularly if it most likely
had a virus.

I can't imagine going on the net with an MS system without a firewall,
virus checker, "cookie cruncher" and "SpyBot". I don't use MSs
firewall either and I avoid "Passport" like the plague.

IF MS would just set the defaults to off, it would be a big
improvement, but their market base wants all that stuff that opens
them to the whole wide world.

It's not just individuals who want that fancy stuff either.
My wife has used one of our computers for several years to keep a
large database for a pretty big organization. That database comes
with a complete set of macros and VB programming to make it user
friendly. I have the security features now set to prevent that stuff
from running automatically. If they want her volunteer time they are
going to have to create a stand alone program to use the database as
our system now strips that stuff off on receipt. Maybe it's overkill,
but I don't like the idea of a program having the ability to run
macros and VB when it is opened. Either is quite capable of doing any

operation on my computer that I can and probably no few that I don't even know about and my degree is in CS.

>rest. If you ever consider moving up to townsqr's hi-speed
>connectivity, you better get these on-ramps to your system controlled!

It's interesting to sit here was watch port probes repeatedly move through the list trying to find a way in. If I did not have a fire wall they'd be in on the first try.

One day I saw a familiar address as the source of the probes. I called my ISP and asked them to check out an IP that was probing my machine. There was a long pause and then the exclamation..."That's one of OUR IPs"! "Yah, I know...I think you guys have picked up a termite." To top it off I use multiple layers of isolation and they were still probing the one machine. Just the one, none of the others.

So, from the marketing standpoint the MS approach has been extremely successful, but a disaster from the security standpoint.

OTOH, had some other system such as LINUX, or UNIX been adapted to a user friendly GUI (I mean man-on-the-street friendly)

No system is completely invulnerable, but I wonder what the state of the art for users and security would be had a more secure route been followed? Would the industry have progressed as fast? would redirected energy from crackers eventually have created as much of a problem? Would we have near as many people capable of interacting world wide?

All hypothetical questions as there is really no way of answering "what ifs".

What we do know beyond the history is that the "ordinary" users are not truly computer literate and no amount of education and training is going to make them give up those fancy features that open their computers to the whole wide world and I don't mean internet.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>73's
>Richard Clark, KB7QHC

1371. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:30:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7u3vmv0du7ld5deqcl2jqngk5q6gd88ca4@4ax.com>
Source record: 107634

On Mon, 22 Sep 2003 22:46:24 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:
>> You
>>call them "unaware presumptions." WHAT presumptions are they?
>
>The presumption is that a directional coupler directly samples power,
>when in fact it doesn't. It samples voltage and current separately.

Hi Ian,

A Directional Coupler consists of two transmission lines.
Transmission Lines are the media through which B/H waves migrate
inexorably fixed together. The premise (which you alone bring as a
clouded presumption) that the Bruene bridge somehow works with
independence from this is simply a convenience in discussing its
operation, a convention of discussion at best and not a reality.

73's
Richard Clark, KB7QHC

1372. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:34:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <035vmv8b4kroogbbp1gqq8rcjqnklk9j5k@4ax.com>
Source record: 107635

On Mon, 22 Sep 2003 17:01:54 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Richard, you really need to learn the difference between an exclusive statement
>and an inclusive statement. All you need to ask yourself is, "Did Einstein
>ever prove Newton to be wrong?" The answer is 'yes'.

Hi Cecil,

Did Newton ever prove Einstein was wrong? The answer is yes there
too. So where does that leave either of them, and you. You standing
there flat-footed without context as usual.

73's
Richard Clark, KB7QHC

1373. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:44:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <295vmv0vbogvhoe9f18ljhl5dv67a4n05q@4ax.com>
Source record: 107636

On Mon, 22 Sep 2003 23:05:56 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:
>That's exactly what we're trying to do with the present discussions
>about lines with reactive Zo. We're trying to quantify the errors in the
>formulae and definitions that we normally use, and we can only do that
>by exploring beyond them... very carefully.

Hi Ian,

Too much is given to care, and too little is given to error.

It must have been months ago that this issue of a forced error was
revealed to occur in frequencies of absolutely no interest to the
Amateur for RF Power distribution.

From then on its been a simple ego struggle postured in high tea drama
to give some civil appearance to this tarted up "care." Given no one
has actually said anything original, nor different (and where news of
a virus eclipses this for technical discussion) it proves tedious
without mention of that same discussion of error that would illuminate
the sham in stark relief.

73's
Richard Clark, KB7QHC

1374. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:47:32 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <EKMbb.57802$Aq2.33774@newsread1.news.atl.earthlink.net>
Source record: 107637

"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0309221554.4f60e0f7@posting.google.com...
> Hello,
>
> I am a ham looking for a home. I found one that interests me, except
> that it is about 600 feet from high tension lines. I am trying to
> determine whether I should be concerned about this. There are three
> potential issues that I can think of:
>
> 1.) Possible excessive exposure to low-frequency magnetic fields.
>
> 2.) Even if there is no significant exposure, the resale value of the
> property may be affected if other buyers are concerned if/when I turn
> around to sell it.
>
> 3.) Radio noise. I would imagine that any arcing along the system
> would wreak havoc on my enjoyment of weak-signal dx.
>
> Any and all comments appreciated.
>
> -JJ

Right on track...plus add another one. If BPL (broadband over Power Lines)
is installed, you wont hear squat.

Dan/W4NTI

1375. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:48:27 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vmv64fhlj83nce@corp.supernews.com>
Source record: 107638

there exist no data to support 1
2 may be an issue anyway

3 can be an issue
drive by in the mobile and listen

just my 2cents
H.

"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0309221554.4f60e0f7@posting.google.com...
> Hello,
>
> I am a ham looking for a home. I found one that interests me, except
> that it is about 600 feet from high tension lines. I am trying to
> determine whether I should be concerned about this. There are three
> potential issues that I can think of:
>
> 1.) Possible excessive exposure to low-frequency magnetic fields.
>
> 2.) Even if there is no significant exposure, the resale value of the
> property may be affected if other buyers are concerned if/when I turn
> around to sell it.
>
> 3.) Radio noise. I would imagine that any arcing along the system
> would wreak havoc on my enjoyment of weak-signal dx.
>
> Any and all comments appreciated.
>
> -JJ

1376. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 00:57:08 UTC
From: Greg Courville <EngNOSPAMinuitor@Gee-Enginuity.com>
Message-ID: <vmv6j3kfrkpv64@corp.supernews.com>
Source record: 107639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

HICKORY, NC [UPDATE]: The FCC wrote General licensee John A. Abernethy, K4OKA, July 27, 1999, modifying his license to prohibit operation below 30 MHz for 180 days, effective immediately. Unless he appeals the action, Abernethy may not get back on HF until January 22, 2000. The FCC letter included a copy of a tape recording--supplied by complainants--of transmissions said to be of Abernethy's station on July 16. Hollingsworth's letter described the tape as "consisting of deliberate interference on 3.965 MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted that Abernethy had been warned about deliberate interference at the time his station was inspected last January. Abernethy has 30 days to protest the sanction. FCC personnel inspected Abernethy's station January 21 and 22 in the wake of what Hollingsworth called "longstanding complaints from other amateurs and from our field offices." In particular, he said, the FCC had received "numerous complaints" about profanity, obscenity, deliberate interference, and failure to properly identify. Other complaints to the FCC alleged that Abernethy had aired something called the "Porkbutt Song," the letter said, "for the purpose of harassment or deliberate interference." Hollingsworth said the FCC's High Frequency Direction Finding Center in Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA. The FCC letter also said the Commission had received complaints that Abernethy had used AM and upper sideband on 75 "for the purpose of interference" on or near 3894.5 kHz. Abernethy also was warned in the letter about over-power operation. Hollingsworth said that the FCC has no plans to start revocation proceedings against Abernethy "unless we have evidence of continued violations" of the type the FCC described in its July 27 letter. (For additional details, see "FCC Takes North Carolina Ham off HF for Six Months" elsewhere on the AWE news page.)

"BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
news:vmqshdfh78hr4b@corp.supernews.com...
> SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
>
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> >
> >
> > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > news:vmq5ars9c9i455@corp.supernews.com...
> > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS BIG
> ALS
> > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > >

> > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO
HO
> > >
> > >
> >
> > If I choose to talk on that frequency, I will, so long as I'm abiding by
> the
> > rules and regulations as they are spelled out. YOU or no one else, can
> tell
> > me to stay off. ASS WIPE.
> >
> > BIG AL.. the only thing big about you, is your mouth....
> >
> > Lou
> >
> >
>
>

1377. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:01:35 UTC
From: Roger Halstead <newsgroups@rogerhalstead.com>
Message-ID: <3p6vmvkdm12ii6hnq5jsnd0rntqm6m95o2@4ax.com>
Source record: 107640

>>
>> The new ones are no worse than 98, or 98 SE.
>
>They sure are no better. I would say worse....But, it's not really
>important. I don't have any trouble with any of these worms, viruses,
>etc. So anything I say can hardly be called a knee jerk reaction. I
>have plenty of unmolested time to think about it. MK

I run OE, Agent, Netscape, and Internet Explorer. Since 1996 I
haven't caught anything...yet. <crossed fingers>

Roger
Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1378. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:01:42 UTC
From: Dave Mohr <ka9nyn@ameritech.net>
Message-ID: <WXMbb.5919$ev2.2761289@newssrv26.news.prodigy.com>
Source record: 107642

Just to add another twist to this, the former Marine in Florida who was flying the U.S. flag, against the HOA rules (on a flagpole). He won the initial battle, but now the HOA has prevailed, on court costs, and his home is being siezed and auctioned to reimburse the HOA.

Hannity & Combs website has info on this.

"Alan Beagley" <abeagley@optonline.net> wrote in message news:3F6C3980.5010403@optonline.net...
> I am still waiting for the lawyer to review the CC&Rs for the property
> we are hoping to buy, but in the meantime . . .
>
> Does anybody have any knowledge or experience whether a tower is a
> "structure," as the term is used in CC&Rs? -- e.g., "No structure may
> be erected on any of the lots except for a single-family dwelling . . .
> [then come the size limitations}. No more than one outbuilding may be
> erected on any lot . . . [then come the size limitations}."
>
> The context suggests that "structure" means "building," but if it
> includes towers, then would it not also include the set-in-concrete
> basketball hoops that abound in the subdivision? Not to mention the
> amateur radio tower that is already there on another lot -- but I want
> to make sure that the owner isn't simply "getting away with it" because
> he has nice neighbors, whereas we might turn out to have not-so-nice ones.
>
> Alan AB2OS
>

1379. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:14:09 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <Q7Nbb.51$LJ5.4366@iad-read.news.verio.net>
Source record: 107643
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
news:vmv6j3kfrkpv64@corp.supernews.com...
> HICKORY, NC [UPDATE]: The FCC wrote General licensee John A. Abernethy,
> K4OKA, July 27, 1999, modifying his license to prohibit operation below 30
> MHz for 180 days, effective immediately. Unless he appeals the action,
> Abernethy may not get back on HF until January 22, 2000. The FCC letter
> included a copy of a tape recording--supplied by complainants--of
> transmissions said to be of Abernethy's station on July 16.
Hollingsworth's
> letter described the tape as "consisting of deliberate interference on
3.965
> MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted that
> Abernethy had been warned about deliberate interference at the time his
> station was inspected last January. Abernethy has 30 days to protest the
> sanction. FCC personnel inspected Abernethy's station January 21 and 22 in
> the wake of what Hollingsworth called "longstanding complaints from other
> amateurs and from our field offices." In particular, he said, the FCC had
> received "numerous complaints" about profanity, obscenity, deliberate
> interference, and failure to properly identify. Other complaints to the
FCC
> alleged that Abernethy had aired something called the "Porkbutt Song," the
> letter said, "for the purpose of harassment or deliberate interference."
> Hollingsworth said the FCC's High Frequency Direction Finding Center in
> Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA. The
FCC
> letter also said the Commission had received complaints that Abernethy had
> used AM and upper sideband on 75 "for the purpose of interference" on or
> near 3894.5 kHz. Abernethy also was warned in the letter about over-power
> operation. Hollingsworth said that the FCC has no plans to start
revocation
> proceedings against Abernethy "unless we have evidence of continued
> violations" of the type the FCC described in its July 27 letter. (For
> additional details, see "FCC Takes North Carolina Ham off HF for Six
Months"
> elsewhere on the AWE news page.)
>
>
> "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> news:vmqshdfh78hr4b@corp.supernews.com...
> > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> >
> >

> > "Lou" <Spamfree@Spamfree.com> wrote in message
> > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > >
> > >
> > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS
BIG
> > ALS
> > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > >
> > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG. HO
> HO
> > > >
> > > >
> > > If I choose to talk on that frequency, I will, so long as I'm abiding
by
> > the
> > > > rules and regulations as they are spelled out. YOU or no one else, can
> > tell
> > > > me to stay off. ASS WIPE.
> > > >
> > > > BIG AL.. the only thing big about you, is your mouth....
> > > >
> > > > Lou
> > > >

Well Ass hole AL, looks like you've had your ass reamed out once, trying for
seconds???? Something tells me, you're due for it.
Lou

1380. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:19:34 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F6FA0B2.1030804@optonline.net>
Source record: 107644

But, as I understand it, that subdivision had rules/covenants explicitly restricting flagpoles to ones mounted on the front of the house and banning freestanding ones.

-=-
Alan AB2OS

On 09/22/03 09:01 pm Dave Mohr put fingers to keyboard and launched the following message into cyberspace:

> Just to add another twist to this, the former Marine in Florida who was
> flying the U.S. flag, against the HOA rules (on a flagpole). He won the
> initial battle, but now the HOA has prevailed, on court costs, and his home
> is being siezed and auctioned to reimburse the HOA.

1381. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:22:31 UTC
From: Greg Courville <EngNOSPAMinuitor@Gee-Enginuity.com>
Message-ID: <vmv82dpbs0s270@corp.supernews.com>
Source record: 107645
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I wonder if FCC knows he's up to it again?
Maybe we should refer them to this NG...
I don't know if it's such a smart idea for him to brag about his illegal activities on a public newsgroup which is archived by servers everywhere for permanent storage. Especially when everybody knows exactly who he is.

73 de KG6SGY

"Lou" <Spamfree@Spamfree.com> wrote in message
news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
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> > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A. Abernethy,
> > K4OKA, July 27, 1999, modifying his license to prohibit operation below
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> > MHz for 180 days, effective immediately. Unless he appeals the action,
> > Abernethy may not get back on HF until January 22, 2000. The FCC letter
> > included a copy of a tape recording--supplied by complainants--of
> > transmissions said to be of Abernethy's station on July 16.
> Hollingsworth's
> > letter described the tape as "consisting of deliberate interference on
> 3.965
> > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted that
> > Abernethy had been warned about deliberate interference at the time his
> > station was inspected last January. Abernethy has 30 days to protest the
> > sanction. FCC personnel inspected Abernethy's station January 21 and 22
in
> > the wake of what Hollingsworth called "longstanding complaints from
other
> > amateurs and from our field offices." In particular, he said, the FCC
had
> > received "numerous complaints" about profanity, obscenity, deliberate
> > interference, and failure to properly identify. Other complaints to the
> FCC
> > alleged that Abernethy had aired something called the "Porkbutt Song,"
the
> > letter said, "for the purpose of harassment or deliberate interference."
> > Hollingsworth said the FCC's High Frequency Direction Finding Center in
> > Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA. The
> FCC
> > letter also said the Commission had received complaints that Abernethy
had
> > used AM and upper sideband on 75 "for the purpose of interference" on or

> > near 3894.5 kHz. Abernethy also was warned in the letter about
over-power
> > operation. Hollingsworth said that the FCC has no plans to start
> revocation
> > proceedings against Abernethy "unless we have evidence of continued
> > violations" of the type the FCC described in its July 27 letter. (For
> > additional details, see "FCC Takes North Carolina Ham off HF for Six
> Months"
> > elsewhere on the AWE news page.)
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> >
> > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
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> > > "Lou" <Spamfree@Spamfree.com> wrote in message
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> > > ALS
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HO
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> > > >
> > > > If I choose to talk on that frequency, I will, so long as I'm
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> > > > rules and regulations as they are spelled out. YOU or no one else,
can
> > > tell
> > > > me to stay off. ASS WIPE.
> > > >
> > > > BIG AL.. the only thing big about you, is your mouth....
> > > >
> > > > Lou
> > > >
>
> Well Ass hole AL, looks like you've had your ass reamed out once, trying
for
> seconds???? Something tells me, you're due for it.

> Lou
>
>

1382. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:28:04 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <UkNbb.52$LJ5.4418@iad-read.news.verio.net>
Source record: 107647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
news:vmv82dpbs0s270@corp.supernews.com...
> I wonder if FCC knows he's up to it again?
> Maybe we should refer them to this NG...
> I don't know if it's such a smart idea for him to brag about his illegal
> activities on a public newsgroup which is archived by servers everywhere
for
> permanent storage. Especially when everybody knows exactly who he is.
>
> 73 de KG6SGY
>

Well, he didn't claim to be "smart". So, I'm sure, in due time he'll be
busted again. Those who brag usually are begging to be caught or need severe
help! Matter of psychology.

Lou

1383. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:31:31 UTC
From: kd1@sympatico.ca
Message-ID: <3F6FA273.8B0F4D82@sympatico.ca>
Source record: 107648

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> >>In-phase volts and amps are real power, not apparent power.
> > >
> > > Maybe. Sort of. Not necessarily.
>
> Please give us an example of coherent in-phase voltage and
> current waves that didn't require power from a generator.

May I suggest that if you had read the posting to which I responded and the rest of my response you would have found exactly the example you are looking for: the forward voltage and current on a transmission line when a standing wave is present (and the reflected as well).

...Keith

1384. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:38:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r68vmv4mkm01h9e805i9th2gguuh19tfvf@4ax.com>
Source record: 107649

On Mon, 22 Sep 2003 16:10:22 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>I run a firewall on my desktop system so I can see what's happening on
>both sides of the ethernet card. My system is not infected. FYI
>there's a free utility called stinger that can be used to scan for these
>worms. Nevertheless, the inbox on the unix system that handles my email
>has accumulated about 100 of these kind of messages a day since last
>Tuesday or so. I have my desktop system set to filter them.
>
http://grc.com/default.htm
has offered a port scanner for years. Also a Trojan Horse detector.

>But if you are trying to say that the author(s) of the viruses are
>specifically targeting users with a MS notation in their news header,
>then you may be right. But you didn't say that.
>
>73, Jim AC6XG

Hi Jim,

I find it somewhat beyond the bounds of belief that some one
individual, or consortium of individuals are sitting at home and
directing attacks at selected accounts. The only vector of success is
found in an OS that supports this for them.

Look at who's complaining of massive attacks, and with the exception
of Mike, whose posting activity is highly correlatable, and the rest,
who are not; then those who are not are highly correlatable to what
they commonly use. The evidence is overwhelmingly MS oriented, and
not through force of numbers simply because MS dominates the market.

For a simple example of that contradiction is my own situation. I run
Win2000 and I do not use MS internet software. For this entire day
I've gotten 5 emails from folks reading my comments and two that went
to the trash can for transgressing my filters. It is quite obvious to
me that suggestions that the newsgroups are being harvested is not
applicable to this one (rraa), nor the dozen odd others I participate
in. I can easily imagine it may be confined to a few newsgroups, and
through those few, the stream cascades by virtue of poor security
management by those naive enough to use MS software and just let
things ride.

This conflagration would die of lack of combustibles otherwise. This
is classic symptomatology.

73's
Richard Clark, KB7QHC

1385. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 01:51:55 UTC
From: radio913@aol.com
Message-ID: <20030922215155.16371.00000018@mb-m15.aol.com>
Source record: 107650

You never measured the incident voltage. And you refused to measure the
end of the inductor, with the capacitor removed (even with the 15 pF, it should
tell us something about Vi).

>>
>> This may be true, but are you saying that a capacitor can reflect an
>> RMS voltage wave that is greater than the one that charges it?
>
>Yes indeed. Resonant circuits achieve this with ease.
>
>...Keith
>

Absolutely incorrect! If capacitance is defined as Coulombs/Volt, then
how are you getting more coulombs than you put in? Remember, i said Root Mean
Square voltage.

How does a capacitor reflect more power than you feed it?

It's almost time for me to cut out of this discussion, if you still don't
understand me.

Slick

1386. Rogues' Gallery - new additions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 02:43:55 UTC
From: wrightsaerials@aol.com.co
Message-ID: <20030922224355.23297.00000032@mb-m14.aol.com>
Source record: 107651

Roll up! Roll up!

The webmistress has recently doubled the size of our Rogues' Gallery. It's mad, it's bad, and it's really rather sad, but all these pictures were taken this year and they all show diabolical aerial and dish installations that someone has paid good money for.

Invaluable for those contemplating a visit by the local installer - at least you'll know what to look out for.

A good laugh for those of us in the trade who do it right.

http://www.wrightsaerials.tv/roguesgalleryview.html

Bill
History teaches us that men and nations behave wisely once they have exhausted all other alternatives.
Abba Eban, The Times, 1970.

1387. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:11:09 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <qjcvmvo8n1vgbn1li5cql2ia0sf1fdle3e@4ax.com>
Source record: 107652

Ok, I guess I have a handle on things now.
I am a newbie SWL still in learning mode.

To properly match the impedance of coax I must use a matching
transformer (sometimes 'incorrectly' called a longwire balun).

Guess I will have to take a look at the ICE 180, MLB, UMB...etc.

So with the tranformer my PI network tuner should resonate better (?)

I plan to keep using it regardless given its recently added back to
back voltage limiting diodes between input and ground and a static
bleed off resistor for DC to ground.

This is what I have going now and it has reduced noise.

I am running a 12 guage wire from the ground banana plug of my antenna
tuner to a copper wire brade that connects my TV antenna to a ground
rod. This composes one end of my coax ground to eliminate common mode
currents.

The other end is where the coax meets my 13 meter random wire hung on
a wooden fence.

Lacking a proper ground rod, I soldered a short length of 12 guage
wire from the coax sheild to the bottom of a diced up coat hanger (16
inches in length) and stripped away the 12 guage wire sheild for the
length of the hanger segment (exposing the copper). This I plunged
into the resonably moist soil under a lylac tree.

Hodge podge for sure. But I'm on a budget till my new job starts next
week.

Thanks for all the help,

Mike

1388. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:23:42 UTC
From: Tim <tthomps@no-spam-please.erols.com>
Message-ID: <bkoebr$i78$1@bob.news.rcn.net>
Source record: 107653

jj wrote in message ...
>Hello,
>
>I am a ham looking for a home. I found one that interests me, except
>that it is about 600 feet from high tension lines. I am trying to
>determine whether I should be concerned about this. There are three
>potential issues that I can think of:
>
>1.) Possible excessive exposure to low-frequency magnetic fields.
>
>2.) Even if there is no significant exposure, the resale value of the
>property may be affected if other buyers are concerned if/when I turn
>around to sell it.
>
>3.) Radio noise. I would imagine that any arcing along the system
>would wreak havoc on my enjoyment of weak-signal dx.
>
>Any and all comments appreciated.
>
>-JJ

JJ,

I have high tension towers about 250 feet behind my house. I use 100 watts into an all band dipole on HF. I've lived here for 17 years, and my neighbor is in her late eighties and has lived here since the early 60's. I'm not sure what the signs are of exposure to low-frequency magnetic fields are, but she remains a delightful lady.

With regards to 2.), real estate around here is selling like crazy. A friend of mine bought some property very close to power lines about 20 years ago, and sold it for a 400% profit about 5 years later. I wouldn't have purchased it in the first place, but he made out very well!

As far as 3.) goes, I've worked New Zealand, the South Pacific, South America, Asia, and Europe from my QTH in Maryland. No problems with QRM from the power lines interfering with contacts.

I think the best thing to do is to go out and see what the quality of the reception is as other folks have suggested.

Tim

1389. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:31:51 UTC
From: Tom Brown <n4tab@earthlink.net.invalid.remove>
Message-ID: <H8Pbb.58847$Aq2.14124@newsread1.news.atl.earthlink.net>
Source record: 107654

mike wrote:
> Ok, I guess I have a handle on things now.
> I am a newbie SWL still in learning mode.
>
> To properly match the impedance of coax I must use a matching
> transformer (sometimes 'incorrectly' called a longwire balun).
>
> Guess I will have to take a look at the ICE 180, MLB, UMB...etc.
>
> So with the tranformer my PI network tuner should resonate better (?)
>
> I plan to keep using it regardless given its recently added back to
> back voltage limiting diodes between input and ground and a static
> bleed off resistor for DC to ground.
>
> This is what I have going now and it has reduced noise.
>
> I am running a 12 guage wire from the ground banana plug of my antenna
> tuner to a copper wire brade that connects my TV antenna to a ground
> rod. This composes one end of my coax ground to eliminate common mode
> currents.
>
>
> The other end is where the coax meets my 13 meter random wire hung on
> a wooden fence.
>
> Lacking a proper ground rod, I soldered a short length of 12 guage
> wire from the coax sheild to the bottom of a diced up coat hanger (16
> inches in length) and stripped away the 12 guage wire sheild for the
> length of the hanger segment (exposing the copper). This I plunged
> into the resonably moist soil under a lylac tree.
>
> Hodge podge for sure. But I'm on a budget till my new job starts next
> week.
>
> Thanks for all the help,
>
> Mike
~~~~~~~~~~~~

Sounds like *me* in 1954. Not ideal, but a toe-hold into tomorrow.
Build on this and continue asking.

If the noise was reduced, you're on the right track.
~~~~~~~~~~~~

Tom N4TAB

1390. Re: Rogues' Gallery - new additions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:46:54 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <WmPbb.8791$a16.3294@lakeread01>
Source record: 107655

Good stuff. I enjoyed the stories also.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"Bill" <wrightsaerials@aol.com.co> wrote in message
news:20030922224355.23297.00000032@mb-m14.aol.com...
> Roll up! Roll up!
>
> The webmistress has recently doubled the size of our Rogues' Gallery.
It's
> mad, it's bad, and it's really rather sad, but all these pictures were
taken
> this year and they all show diabolical aerial and dish installations that
> someone has paid good money for.
>
> Invaluable for those contemplating a visit by the local installer - at
least
> you'll know what to look out for.
>
> A good laugh for those of us in the trade who do it right.
>
> http://www.wrightsaerials.tv/roguesgalleryview.html
>
> Bill
> History teaches us that men and nations behave wisely once they have
exhausted
> all other alternatives.
> Abba Eban, The Times, 1970.

1391. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:48:02 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <SnPbb.129916$mp.65734@rwcrnsc51.ops.asp.att.net>
Source record: 107656

Make your own transformer. Go here: www.kc7nod.20m.com

"mike" <intotheapex@yahoo.com> wrote in message
news:qjcvmvo8n1vgbn1li5cql2ia0sf1fdle3e@4ax.com...
> Ok, I guess I have a handle on things now.
> I am a newbie SWL still in learning mode.
>
> To properly match the impedance of coax I must use a matching
> transformer (sometimes 'incorrectly' called a longwire balun).
>
> Guess I will have to take a look at the ICE 180, MLB, UMB...etc.
>
> So with the tranformer my PI network tuner should resonate better (?)
>
> I plan to keep using it regardless given its recently added back to
> back voltage limiting diodes between input and ground and a static
> bleed off resistor for DC to ground.
>
> This is what I have going now and it has reduced noise.
>
> I am running a 12 guage wire from the ground banana plug of my antenna
> tuner to a copper wire brade that connects my TV antenna to a ground
> rod. This composes one end of my coax ground to eliminate common mode
> currents.
>
>
> The other end is where the coax meets my 13 meter random wire hung on
> a wooden fence.
>
> Lacking a proper ground rod, I soldered a short length of 12 guage
> wire from the coax sheild to the bottom of a diced up coat hanger (16
> inches in length) and stripped away the 12 guage wire sheild for the
> length of the hanger segment (exposing the copper). This I plunged
> into the resonably moist soil under a lylac tree.
>
> Hodge podge for sure. But I'm on a budget till my new job starts next
> week.
>
> Thanks for all the help,
>
> Mike

1392. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:49:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6fc496_1@corp.newsgroups.com>
Source record: 107657

Richard Clark wrote:
> On Mon, 22 Sep 2003 17:01:54 -0500, Cecil Moore
> <Cecil.A.Moore@ieee.org> wrote:
>
>>Richard, you really need to learn the difference between an exclusive statement
>>and an inclusive statement. All you need to ask yourself is, "Did Einstein
>>ever prove Newton to be wrong?" The answer is 'yes'.
>
> Did Newton ever prove Einstein was wrong? The answer is yes there
> too.

I'll take your word for that being true. So what? The argument was
whether Einstein ever proved Newton to be wrong. He did.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1393. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:53:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6fc59d$1_1@corp.newsgroups.com>
Source record: 107658

kd1@sympatico.ca wrote:
> May I suggest that if you had read the posting to which I
> responded and the rest of my response you would have found
> exactly the example you are looking for: the forward
> voltage and current on a transmission line when a standing
> wave is present (and the reflected as well).

How did the standing wave get there in the first place? *POWER*
from the generator. You simply cannot have standing waves without
a power source, a forward wave, and a reflected wave.

You are asking us to completely ignore the cause of standing waves.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1394. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 03:55:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6fc615_1@corp.newsgroups.com>
Source record: 107659

Richard Clark wrote:
> Look at who's complaining of massive attacks, and with the exception
> of Mike, whose posting activity is highly correlatable, and the rest,
> who are not; then those who are not are highly correlatable to what
> they commonly use. The evidence is overwhelmingly MS oriented, and
> not through force of numbers simply because MS dominates the market.

I suspect that if I were running an Apple, my inbox would be just as full.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1395. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 04:00:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f6fc745_1@corp.newsgroups.com>
Source record: 107660

Radio913 wrote:
> How does a capacitor reflect more power than you feed it?

With an inductor in the circuit, the voltage on a capacitor can
be greater than the source voltage. Consider the following series
resonant circuit. What are the voltages on the cap and coil at
resonance?

100W source========1wl feedline===cap===50 ohm===coil
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1396. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 04:21:09 UTC
From: "Dick Carroll;" <dixie@townsqr.com>
Message-ID: <bkohnlqvo0@208.206.142.83>
Source record: 107661

Richard Clark wrote:

>
>> I'm not a programmer
>>
>>
>Should have been the point where you stopped writing.
>
>

Why golly, Rich, I was downright proud of myself for deducing that one doesn't *need* to
be a programmer to conclude without doubt the origin of all these "security holes" that are
so frequerntly "found" and for which "fixes" or "patches" are issued that ostensibly take
THAT particular threat out of circulation.....until next time. So much of the official explanation
is geared to make it appear at least inadvertant, but that wasn't so difficult to see through.

When one goes to MS update website they warn up front that if your Windoze version isn't "registered", which they obviously check through one of the deliberate security holes, then you get nothing from Microsoft, no matter what you paid them for your OS. Not my kind of deal. I stopped registering anything long ago. Nothing, ever again.

I normally get NO connect refusals, now I'm getting lots of them, indicating the ISP is busy with all the wormy emails.

In any event, thanks for the confirmation below, and the detailed explanation. Interesting stuff.
I see where Bill G has stacked up another $3 bil since this time last year. Meanwhile, come one come all, buy his newest offerings and come that much further under his control.

>The security holes are not inadvertent mistakes that anyone could have
>suffered in the face of such a monumental work as Windows. These
>holes (and I am not talking about the current round of affairs, as
>neither was J. McLaughlin) are deliberate design "features" that
>Chairman Bill and MS claim to be what the user population clamor for.
>
>In other words, insecure software is being deliberately constructed
>and sold for the express purpose of satisfying Market issues. MS is
>quite blunt in this admission, and aggressively so! Many years ago,
>the computer community bewailed MS's determination to allow raw

>sockets to be made available at the user level. As you are "not a
>programmer" you probably never heard this debate, and yet it is part
>and parcel to the features of insecure design. MS snubbed the
>security experts (Not Invented Here syndrome) and went their own way -
>the body count over those same years testify to it in the millions.
>Unfortunately the income measures in the billions and security is
>buried in the digits with the corpses of dead machines.
>
>The feature called DCOM is so insecure, that it leads the way in
>current hacker fields of delight. DCOM is a patchwork quilt of an
>older Marketing concept called COM (which has been largely ignored by
>software professionals such that MS tried to "sex" it up by adding a
>"D" to make it "Distributed," yet another Market slide) which in turn
>was spun off from OLE. All of these have technical basis in
>implementation, but were designed in whole ignorance of security
>requirements. You have absolutely no need for DCOM, and yet as a
>service to you MS has deliberately left access to it on your machine
>open to anyone on the internet.
>
>

Yes, I already downloaded the programs you mentioned earlier in this
thread and will replace Zonealarm and Norton with them. I'm pretty sure
the worm made it into my machine since I had a session of "Virtual
memory rsources running low, Windows is assigning additional memory"
then Netscape 4.7 would crash. This running XP (came on the machine from
the OEM).
. *No* Explorer nor Outlook incvolved whatever.

I recognized very early on that an attack was underway when I had 96
various "bounced mail"
messages in my mailbox in the morning a couple days ago, so not only did
I not open any attachments, I didn't open a single email message whose
source I wasn't absolutely sure of.
I went to my ISP website and remotely deleted many more of the same from
the server-I'm still doing that-
And still I got hooked. I'm Running Zonealarm and Norton, though not
with the latest definitions.
Time for a change.

I have a couple versions of Linux on the shelf but really I have no
stomach for starting over again, -by most accounts I've read, the hard
way, so I'll try it your way first..
So I'm now using Netscape 7.1 and cleaned out the worm with tools
found on the web.

>None of these issues are trivial. None of them require poking and
>prodding to discover or crack. None of them came without advanced
>warning (and one site has had fixes months in advance of MS). None of
>them were designed by accident, or through the misfortune of Windows
>being too complex to debug 100% faithfully. What is worse, MS even

>submitted a security patch in the last two weeks that did not work!
>Making allowances for them is generous in the extreme.
>
>I note that you post from a revolving IP, such that if you had not, I
>could have connected to your machine to give you a demonstration of
>how open you are to attack. It involves a command built into NT that
>is designed EXPRESSLY to allow me to do this! I don't need hacker
>tools, just a DOS session and the command line interpreter will do the
>rest. If you ever consider moving up to townsqr's hi-speed
>connectivity, you better get these on-ramps to your system controlled!
>
>

You confirm what I deduced without computer science training. Must
really be pervasive .
I'm strictly dialup and never leave it online unattended, so with a
little upgrade courtesy your recommendations maybe I'll dodge the next
round. Tnx.

73, Dick W0EX

1397. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 05:49:42 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bkpe23$4conv$2@ID-189073.news.uni-berlin.de>
Source record: 107733

I can prove it.... gimme an email address to forward all the ones I am
getting!

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rrdumvcmkr8utodk9frkcuv6no0266pp6j@4ax.com...
> On Mon, 22 Sep 2003 17:52:22 +0000 (UTC), mikea@mikea.ath.cx (Mike
> Andrews) wrote:
>
> >> My guess is, they're getting addresses from newgroups.
> > >
> > >That has been confirmed.
>
> Hi Mike
>
> How?
>
> I've been a participant here for years with my address freely
> available. Not one hit from this virus, not even 30 emails during the
> entire period and only one (1) at the peak. Other correspondents here
> complain of 1000's in a single day, and 10MB mail storage being
> saturated.
>
> Do you have a link to an authoritative site that offers evidence of
> your statement?
>
> 73's
> Richard Clark, KB7QHC

1398. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 05:50:23 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <9fnvmvgjiqkk60gfbd105ae7ts9fjv1bju@4ax.com>
Source record: 107662

On Tue, 23 Sep 2003 03:48:02 GMT, "CW" <clinton.magers@comcast.net>
wrote:

>Make your own transformer. Go here: www.kc7nod.20m.com

Nice pics.

As for the static protection diodes. Yes, I am seeing images of local
broadcasters scattered as far as 1khz from the known frequecies.
I thought it may have been my antenna. Hmmm....might rethink the
diodes. They are 1N914 as specified.

I suspose the resistor I have across the lead in to ground should
reduce static buildup.

Did I turn my tuner into a crystal radio..<grin>

mike

1399. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 05:53:46 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bkpe24$4conv$3@ID-189073.news.uni-berlin.de>
Source record: 107734

Hey Mike,

In my case, the virus email bombing that I am getting has not affected my in regards to being infected, but it definitely has slowed everything down. It is taking forever to use my ISP's webmail email browser (in order to not download the infected emails) to load up, when there is 200-1,000 messages in the email box.

I am quite sure I am not the only one getting this happening to them as well, that are on the same ISP. Must definitely be overloading the mail server my guess would have to be.

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
"Mike Andrews" <mikea@mikea.ath.cx> wrote in message
news:bknohk$1df$4@puck.litech.org...
> Walter Maxwell <w2du@iag.net> wrote:
> > On Sat, 20 Sep 2003 19:01:51 +0000 (UTC), "Reg Edwards"
> > <g4fgq.regp@btinternet.com> wrote:
>
> > >> Is anyone else being deluged with Virus/Worm email messages?
> > >> --
> > >>================================
> > >
> > >Me too - 2000 per day.
> > >
> > >Terrorist attack or just another up-and-coming Bill Gates?
> > >
> > >G4FGQ, UK
> > >
> > >
> > Me too, 49 yesterday and 80 today.
>
> So far today:
>
> $ grep -i logging ljoe.txt | wc -l
> 1286
> $ grep -i "\/dev\/null" ljoe.txt | wc -l
> 976
>
> That's 976 worms out of 1286 mails accepted, total. That doesn't count
> the 54 that I bounced because I don't accept mail from the sender's

> domain, so it's 976 out of 1340 attempts. At about 150K per try. Rough
> on the other people on my cablemodem segment.
>
> --
> Mike Andrews, working on his ticket again.
> mikea@mikea.ath.cx
> Tired old sysadmin since 1964
> WN5EGO back in 1963

1400. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 06:14:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <85pvmv4ogvd9geq3qkku35n7funjdtqvs7@4ax.com>
Source record: 107663

On Mon, 22 Sep 2003 22:49:22 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>So what?

Hi Cecil,

Exactly, you don't have a clue by how much do you?

73's
Richard Clark, KB7QHC

1401. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 06:24:12 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <b0t8ioAMc+b$EANd@ifwtech.co.uk>
Source record: 107664

Richard Clark wrote:
>On Mon, 22 Sep 2003 22:46:24 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.co.uk> wrote:
>>> You
>>>call them "unaware presumptions." WHAT presumptions are they?
>>
>>The presumption is that a directional coupler directly samples power,
>>when in fact it doesn't. It samples voltage and current separately.
>
>Hi Ian,
>
>A Directional Coupler consists of two transmission lines.

You say that after cutting out all the examples that I gave of
directional couplers that don't.

>Transmission Lines are the media through which B/H waves migrate
>inexorably fixed together. The premise (which you alone bring as a
>clouded presumption) that the Bruene bridge somehow works with
>independence from this is simply a convenience in discussing its
>operation, a convention of discussion at best and not a reality.

The waves migrate along the *main* transmission line - and obviously
every directional coupler has to contain one of those. But many do not
contain any secondary transmission line, in any realistic physical sense
of that term.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

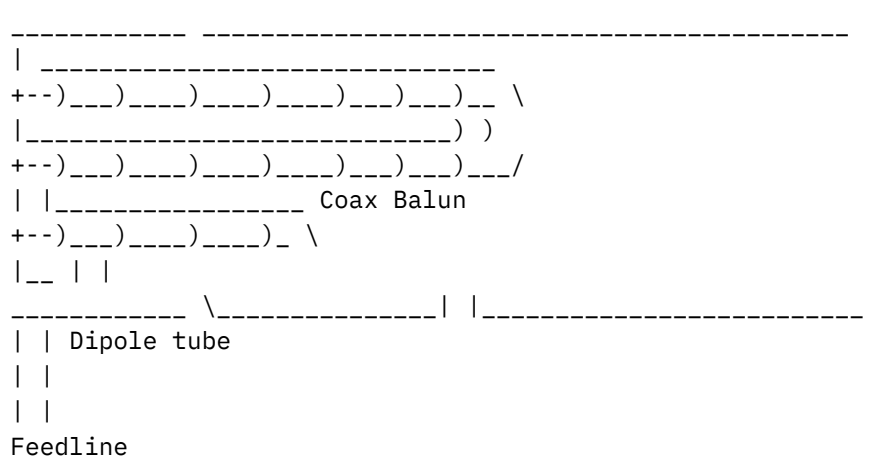
1402. Coax balun inside OFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 06:45:05 UTC
From: ea3fya@hotmail.com
Message-ID: <805eacce.0309222245.1037361b@posting.google.com>
Source record: 107665

When making an off-center fed dipole made of Cu or Al tube, can you ground it at the center and pass the transmission line on the inside of it? The idea would be to place the feedpoint at 80% in order to get 200 ohms and then use a 4:1 coax balun to get a perfect match to 50 ohms and also have it all DC grounded.

What I doubt is whether, the transmission line on the inside of it would also produce a transmission line effect, like a two layer coax, and alter the dipole.

It should be something like this:



Do you think this could work?

Thanks

EA3FYA - Toni

1403. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 07:13:53 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3F6FF2B1.FC14ABE4@rickfrazier.com>
Source record: 107666
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason:

Ok for the QRP to barefoot operator, but what about someone that at least occasionally uses an amplifier?

I've got a couple of swr/wattmeters (two meters) that provide everything I need, though they are a bit difficult to read at QRP levels. Autek WM-1 is one of them and currently available, and the other is a SignalCrafter 30 (may not be full name and model, but also not available any more). Both have ranges for 20w, 200w and 2000w full scale, and show average or peak readings. They tend to match one another pretty well, especially considering the WM-1 is less than a year old and the other is probably 20 years old....

Will your meter be able to perform as well? I've found that most LED based metering circuits are horribly inaccurate compared to a needle based meter....

On the other hand, I'd love to see a new meter available, particularly one that would work from qrp levels all the way up to legal limits.... while providing both SWR and Power metering. I really really dislike dual needle interpreted displays.

Thanks
--Rick AH7H

Jason Hsu wrote:

> Last semester, I designed and built the QROP Meter for my
> graduate school independent study project. Thanks to those of you who
> helped me with certain thorny issues, such as transformers and DC
> amplification. Go to my web page at http://www.jasonhsu.com/ee.html
> to learn how to build the instrument.
>
> What makes my SWR/wattmeter different from the numerous versions
> available from MFJ and the numerous homebrew designs out there?
>
> 1. Works from 200mW to 100W! You get the best of both worlds! MFJ
> SWR/wattmeters don't work at QRP, and QRP SWR/wattmeters can't handle
> 100W. Tuning up at 1W instead of 100W reduces the QRM you cause by
> 20dB, or over 3 S units! You can also safely change the tuner's
> inductance taps WHILE transmitting at 1W.
> 2. GOOD resolution at SWR values above 3 and even above 5! This can
> be very handy at 160m and 80/75m.
> 3. 10-LED display for the SWR meter and another 10-LED display for

> the wattmeter: No more squinting at cross-needle meters!
> 4. More accuracy at low power levels: Most SWR meters understate SWR
> at low power levels due to the infamous diode drop loss. My design
> compensates for this and allows accurate SWR measurements at QRP power
> levels.
>
> Let me know what you think, and feel free to contact me if you have
> any questions or suggestions. If you decide to build the QROP Meter,
> let me know how it goes.
>
> Jason Hsu, AG4DG
> usenet@@@@@jasonhsu.com

1404. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 08:14:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fkvvmvchiqsg099jjk8582u2gfo54dpess@4ax.com>
Source record: 107667

On Tue, 23 Sep 2003 07:24:12 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>Richard Clark wrote:
>>Hi Ian,
>>
>>A Directional Coupler consists of two transmission lines.
>
>You say that after cutting out all the examples that I gave of
>directional couplers that don't.

There is NO material difference offered in your original to merit its
inclusion in the first place.
>
>>Transmission Lines are the media through which B/H waves migrate
>>inexorably fixed together. The premise (which you alone bring as a
>>clouded presumption) that the Bruene bridge somehow works with
>>independence from this is simply a convenience in discussing its
>>operation, a convention of discussion at best and not a reality.
>
>The waves migrate along the *main* transmission line - and obviously
>every directional coupler has to contain one of those. But many do not
>contain any secondary transmission line, in any realistic physical sense
>of that term.

Ian, you exhibit a whole lack of experience into the matter. There
are more such examples of Directional Couplers that fit the most
precise definition of transmission line than not. Those that do not
(your Bruene bridges) are simply lumped equivalents that still
maintain classic formalisms that observe all the strictures of wave
mechanics. That they can be described by simpler metaphors does not
diminish either their utility, nor their intellectual purity.

Your rejections of their application are preposterous examples of
pedagogical minutia.

73's
Richard Clark, KB7QHC

1405. Car antenna plans: Help wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 08:21:01 UTC
From: Bernard B&#65533;lisle <belisleb@webnet.qc.ca>
Message-ID: <2TWbb.3904$f7.299938@localhost>
Source record: 107731

As I have many loudspeakers magnets, I would like to build a 2 meter antenna that I would install on my car trunk. At home I made a J-pole and it work wonderfully. Maybe there is on the net such plan for a very effective antenna like the J-pole. I would appreciate any information about this project. 73

Bernard

--
www.electrovent.com

1406. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 09:09:07 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309230109.5f3d594@posting.google.com>
Source record: 107668

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f6fc745_1@corp.newsgroups.com>...
> Radio913 wrote:
> > How does a capacitor reflect more power than you feed it?
>
> With an inductor in the circuit, the voltage on a capacitor can
> be greater than the source voltage. Consider the following series
> resonant circuit. What are the voltages on the cap and coil at
> resonance?
>
> 100W source========1wl feedline===cap===50 ohm===coil

Is that a 50 ohm resistor? And where is the ground?

Could you re-draw this, Cecil?

I was hoping Keith would measure the end of the inductor with the cap
removed, so we could get an idea of the incident voltage wave.

Slick

1407. Re: Recommend a Used Bird Wattmeter 50-150 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 09:16:15 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0309230116.50dddd36@posting.google.com>
Source record: 107719

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<ri4smvo74nqn7e9qqa97sa346jt33lokhh@4ax.com>...
>
> If you waited a year instead of 3 months, the Bird that was out of
> whack would still be out of whack, but probably at the same level.
> You could say pretty much the same for 20 years later (barring smoke
> curling up at hot connectors). Repeatability is accurate only when
> you've calibrated it.

Then it sounds like you could re-calibrate after 3 months, and not
have to worry about it for a while.

Slick

1408. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 10:15:42 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <yr6GVpAO1Bc$EAh4@ifwtech.co.uk>
Source record: 107729

Richard Clark wrote of:
> preposterous examples of pedagogical minutia.

Eschew sesquipedalianism!

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1409. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 10:27:42 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkp76u$o1b$1@hercules.btinternet.com>
Source record: 107720

Newton may not have been EXACTLY right but he had a damned near-enough practical approximation.

Much better than a rough-and-ready Bird.

1410. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 10:31:21 UTC
From: kd1@sympatico.ca
Message-ID: <3F7020F9.5FD061F1@sympatico.ca>
Source record: 107721

Radio913 wrote:
>
> You never measured the incident voltage. And you refused to measure the
> end of the inductor, with the capacitor removed (even with the 15 pF, it should
> tell us something about Vi).

I have done my lab work and produced results consistent with
classic rho.

You have not accepted my results, possibly because they are
inconsistent with your world view.

It is now your turn to hit the lab. You will, barring error,
obtain results consistent with mine. You will be able to
measure any parameter you wish, even do other experiments,
and you will find the results are always consistent with
classic, not revised rho.

The benefit of going to the lab is all yours. You will
learn how it works. Alternatively, perhaps, you will demonstrate
that classic rho is all wrong and revised rho rules. In this
case, if YOU have done the lab work, YOU will get (and deserve)
all the glory of a major revision to transmission line theory.

If I went back to the lab you are unlikely to accept any new
results from me any more than you have accepted those to date.
Sometimes seeing is believing.

......On the other hand, perhaps you can convince me.

Predict what the measurement will be and what it will mean.
Tell me how you did the prediction. And allow some error
bounds. Say we assume the probe is between 15 and 30 pf.

Then we'll see.

> >> This may be true, but are you saying that a capacitor can reflect an
> >> RMS voltage wave that is greater than the one that charges it?
> >
> >Yes indeed. Resonant circuits achieve this with ease.
> >
> >...Keith
>
> Absolutely incorrect! If capacitance is defined as Coulombs/Volt, then
> how are you getting more coulombs than you put in? Remember, i said Root Mean
> Square voltage.
>

> How does a capacitor reflect more power than you feed it?
>
> It's almost time for me to cut out of this discussion, if you still don't
> understand me.

I can only suggest that you go to the lab. Given your statements
above, there is a great opportunity for hands on learning here.

...Keith

1411. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:03:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f702a3f_1@corp.newsgroups.com>
Source record: 107723

Dr. Slick wrote:

> Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f6fc745_1@corp.newsgroups.com>...
>
>>Radio913 wrote:
>>
>>>How does a capacitor reflect more power than you feed it?
>>
>>With an inductor in the circuit, the voltage on a capacitor can
>>be greater than the source voltage. Consider the following series
>>resonant circuit. What are the voltages on the cap and coil at
>>resonance?
>>
>>100W source========1wl feedline===cap===50 ohm===coil
>
> Is that a 50 ohm resistor? And where is the ground?

Yes, a 50 ohm resistor. No ground, it is a balanced system. Note
the two parallel wires.

> Could you re-draw this, Cecil?

Sigh ...

```
+------1WL feedline--(-j500)--+
| |
100W source (50+j0)
| |
+------1WL feedline--(+j500)--+
```

--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1412. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:03:41 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vn0a4ebr54n2ed@corp.supernews.com>
Source record: 107722

Cecil
At least with a Mac the viruses wouldn't be able to do anything were you
foolish enough to open one of the attachments!
It got to about 1000/day and I had to change my email addresses but they've
already found one of my new addresses.
Random number spam bots I tell ya.
Intentional QRM!!
73
H.
NQ5H

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f6fc615_1@corp.newsgroups.com...
> Richard Clark wrote:
> > Look at who's complaining of massive attacks, and with the exception
> > of Mike, whose posting activity is highly correlatable, and the rest,
> > who are not; then those who are not are highly correlatable to what
> > they commonly use. The evidence is overwhelmingly MS oriented, and
> > not through force of numbers simply because MS dominates the market.
>
> I suspect that if I were running an Apple, my inbox would be just as full.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1413. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:04:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f702aad_1@corp.newsgroups.com>
Source record: 107724

Reg Edwards wrote:
> Newton may not have been EXACTLY right but he had a damned near-enough
> practical approximation.

What was his approximation for the orbit of Mercury? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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1414. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:13:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f702cbc_1@corp.newsgroups.com>
Source record: 107725

kd1@sympatico.ca wrote:

> power = volts * amps
> = (Vfwd + Vref) * (Ifwd + Iref)
> = Vf*If + Vf*Ir + Vr*If + Vr*Ir
>
> Seems you've lost a couple of terms in there.
>
> This is why, in general (using my definition of general), superposition
> does not hold for power. Those extra terms get in the way.

I suspect that Vf*Ir and Vr*If have absolutely no physical existence.
Light waves traveling in opposite directions have no effect on each
other. Why should RF EM waves traveling in opposite directions have
any effect on each other?
--
73, Cecil http://www.qsl.net/w5dxp

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1415. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:18:37 UTC
From: kd1@sympatico.ca
Message-ID: <3F702C0D.1E7B71ED@sympatico.ca>
Source record: 107727

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > May I suggest that if you had read the posting to which I
> > responded and the rest of my response you would have found
> > exactly the example you are looking for: the forward
> > voltage and current on a transmission line when a standing
> > wave is present (and the reflected as well).
>
> How did the standing wave get there in the first place? *POWER*
> from the generator. You simply cannot have standing waves without
> a power source, a forward wave, and a reflected wave.
>
> You are asking us to completely ignore the cause of standing waves.

It is not obvious to me how you extrapolate my postings to these
outrageous assertions.

For sure there is power from the generator. It is needed to charge
the line and to provide whatever power is consumed in the load
and line losses.

When a standing wave is present, for sure there is a forward
and reflected voltage and current wave. After all it is called
a voltage standing wave.

But these voltage and current forward and reflected waves do not
have power. They are exactly the same as the voltages computed
using superposition in circuit analysis, they are superposed in
exactly the same way to find the resultant voltage, and it is
illegal, except in special cases, to assume that these constituent
voltage terms represent power.

May I suggest, for clearer understanding, that just for a few
moments (say 30 minutes), you set aside RF and consider how
a line is charged by a step function. Do the voltage and
current reflection diagrams. And then consider the energy
flow just in front and just following the voltage step
as it propagates down the line and back and down and back...

Take the time to do this for the following cases...
- matched generator
- line terminated in Z0
- line open
- line shorted

After the line has charged consider what happens when the generator voltage is set back to 0.

Do it all again for a mismatched generator.

Then for a charged open termination line, consider what happens when a load of Z0 is applied. And then when the load is removed.

For each of these cases determine how the voltage fronts propagate, the energy flow in front of and following the step, the resulting energy distribution on the line and whether this energy is stored in the capacitance or inductance or H field or E field.

Because of the step function excitation, none of these computations are difficult.

With this example it is easy to see when energy is flowing and when it is not, and contrast this to the energy flows computed using the forward and reflected voltages.

Well maybe the above is more than 30 minutes, but there is much to be learned from a thorough understanding of the behaviour with this simple excitation.

Now replace step excitation with sinusoidal; the principles are the same, but the computations are more complex and the resulting voltage and energy distributions on the line are more interesting. But the fundamentals are the same.

The above thought experiment was the one that made clear to me the fallacy of assigning power to the forward and reflected voltage waves.

So there is some risk for you doing this thought experiment; the results may conflict with some of your deeply held beliefs. It is a risk worth taking.

...Keith

1416. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:25:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f702f66$1_1@corp.newsgroups.com>
Source record: 107726

H. Adam Stevens, NQ5H wrote:

> Cecil
> At least with a Mac the viruses wouldn't be able to do anything were you
> foolish enough to open one of the attachments!

I'm running Netscape 7.1 with virus-scan/firewall. Most of my
email is routed through the IEEE forwarding server which removes
virtually all viruses and worms. Unfortunately, they send me what's
left of the message along with another message telling me what
they did. I would be happier if they didn't waste bandwidth
telling me about it.
--
73, Cecil http://www.qsl.net/w5dxp

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1417. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:30:14 UTC
From: kd1@sympatico.ca
Message-ID: <3F702EC6.4F9CCD77@sympatico.ca>
Source record: 107730

"Ian White, G3SEK" wrote:
>
> Keith wrote:
> [...]
> >in general (using my definition of general)
> [...]
> >in general (using my definition of general)
> [...]
> >in general (using my definition
> >of general)
> [...]
> >in the general case (using my definition
> >of general)
>
> You don't have to be defensive about this, Keith - you're on solid
> ground. In this discussion, where we're trying to be scientific, you are
> using the word in the correct *scientific* sense, meaning "in all
> cases."
>
> Cecil is using it in a different and looser sense, meaning "in common
> cases."
>
> "General" is just another of those words like "theory" where the
> scientific usage and regular conversational usage are almost completely
> opposite.

Yes, indeed, 'general' is one of those words with multiple mutually
inconsistent meanings. My dictionary gives seven definitions for the
adjective form and they alternate between meanings which 'include
all' and those which 'include most'.

...Keith

1418. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 11:40:03 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vn0c8kkg78dd3b@corp.supernews.com>
Source record: 107728

So the spammers win anyway by clogging up the system and wasting our time.
H.
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f702f66$1_1@corp.newsgroups.com...
> H. Adam Stevens, NQ5H wrote:
>
> > Cecil
> > At least with a Mac the viruses wouldn't be able to do anything were you
> > foolish enough to open one of the attachments!
>
> I'm running Netscape 7.1 with virus-scan/firewall. Most of my
> email is routed through the IEEE forwarding server which removes
> virtually all viruses and worms. Unfortunately, they send me what's
> left of the message along with another message telling me what
> they did. I would be happier if they didn't waste bandwidth
> telling me about it.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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1419. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 12:14:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f703b0a$1_1@corp.newsgroups.com>
Source record: 107732

kd1@sympatico.ca wrote:
> But these voltage and current forward and reflected waves do not
> have power.

The source puts out power. If that energy doesn't go into the
forward and reflected waves, where does it go?

I am not going to do any of your thought experiments until you stop
ignoring the questions I previously asked you about mine.

100W source---one second long 291.4 ohm lossless line----50 ohm load

During steady-state, the transmission line contains 300 joules that
have not made it to the load. Where did that 300 joules go?
--
73, Cecil http://www.qsl.net/w5dxp

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1420. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 12:15:20 UTC
From: kd1@sympatico.ca
Message-ID: <3F703958.A887B85@sympatico.ca>
Source record: 107737

Cecil More wrote:
>
> kd1@sympatico.ca wrote:
>
> > Cecil Moore wrote:
> >
> > power = volts * amps
> > = (Vfwd + Vref) * (Ifwd + Iref)
> > = Vf*If + Vf*Ir + Vr*If + Vr*Ir
> >
> > Seems you've lost a couple of terms in there.
>
> As with any other math model, the negligible secondary terms
> are dropped. If the phase angle above is close to 90 degrees,
> two terms drop out. A Bird wattmeter assumes that two of the
> phase angles are close to 90 degrees. If they are not, you are
> using the wrong instrument for your measurements, a common problem.

So again, it works in the specific, but not in the general case.

> > Does this mean that forward and reverse waves only have power in
> > the special case of low-loss feedlines?
>
> It means that if you use a 50 ohm Bird wattmeter in any environment
> except a 50 ohm one, you are using the wrong instrument.

The answer appears orthogonal to the question.

> > With my model, incident and reflected VOLTAGE waves and CURRENT waves
> > do exist. This is in common, I think, with most authors on the subject.
> > And this all works fine since superposition holds for voltage
> > and current.
>
> It certainly doesn't work with your assertion that reflections don't
> exist.

Go back 3 sentences and re-read "reflected VOLTAGE waves and CURRENT
waves
do exist". I think you were quoting from something I wrote.

> Your math model would have us believe that a power source pumps energy
> into voltage and current waves only to have that energy disappear from
> the universe for a time that is convenient for your math model. Of course,
> that very energy is magically created once again at the load. We've heard
> this bad magician's trick before. "Close your eyes while I make this
> elephant disappear."

I am unsure how you extrapolate this from my writings.

> > To recap. Everything with the incident and reflected wave model
> > works as long as you stick to voltage and current waves. It is only
> > when extended to include power (as done by Bird and others), that
> > the model starts to deteriorate.
>
> For a resistive 50 ohm environment, the model does not deteriorate.
> The Bird is designed for such an environment. There doesn't exist
> any real-world instrument that will measure anything and everything.
> Every real-world measuring instrument has limitations. If you attempt
> to use a Bird in a 100-j100 ohm environment, that is your problem,
> not Bird's.

So you are agreed: The reflected POWER model does not work in general.

> > So to get the right answers in the general case (using my definition
> > of general), compute your forward and reverse voltages and currents.
> > Use superposition to derive the resultant voltages and currents at
> > any point on the line and then use p(t) = v(t) * i(t) to compute
> > the power, which you may then average if you desire.
>
> We've already been down this road but here it is, once again. Consider
> a one second long lossless feedline with an SWR of 5.83:1 and a Z0-matched
> source of 100 watts. After steady-state is reached, the feedline contains
> 300 joules of energy which cannot stand still. A Bird wattmeter reads 200w
> forward and 100w reflected. Your power calculation gives 100 watts everywhere
> implying that there are only 100 joules in transit in the feedline.

No. You have made an incorrect implication. 100 watts flowing says
nothing about how much energy is stored.

> What
> happened to the other 200 joules pumped into the system by the source during
> the transient state? Hint: there is 100 joules in the reflected waves and 100
> joules in the re-reflected waves. The Bird is correct.

Your experiment appears to be incompletely or incorrectly specified.
If the source is Z0 matched to the transmission line, how did you
get a re-reflected wave at the source?

...Keith

1421. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 12:25:09 UTC
From: arm@helix.nih.gov
Message-ID: <FYWbb.232$Er.28440@mencken.net.nih.gov>
Source record: 107735
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jason,
The circuit looks very useful. The layout of the LEDs is not
very typical, which makes it a bit unnatural to use. That is
easy to change. Can you provide some inside photographs
to show how you did the circuit layout?

I am not sure why people even use SWR as a measurement for
reflected power. Perhaps it provides a nice mathematic
simplification, but it is a very quirky and unnatural scale
for human operators: 1) it does not go to zero, 2) it is
hard to read/write/and even say, 3) without a forward
reading, a SWR of 1:1 could simply indicate no forward
power, and the useful range ends at 3. What is needed
is a scale that based on a 2-dimentional vector. For
example, magnitude and angle of a vector that is formed
from an X-axis of forward power and a y-axis of reflected
power. The difficulty is mostly converting this to
a graphical representation. An array of 100 LEDs is
not very practical (10 x 10), but perhaps a tiny LCD
is. A small LCD and microprocessor could be cheaper
and easier to read than cross needles.

Andy
WA3LTJ

Jason Hsu (jason_hsu@my-deja.com) wrote:
: Last semester, I designed and built the QROP Meter for my
: graduate school independent study project. Thanks to those of you who
: helped me with certain thorny issues, such as transformers and DC
: amplification. Go to my web page at http://www.jasonhsu.com/ee.html
: to learn how to build the instrument.
:
: What makes my SWR/wattmeter different from the numerous versions
: available from MFJ and the numerous homebrew designs out there?
:
: 1. Works from 200mW to 100W! You get the best of both worlds! MFJ
: SWR/wattmeters don't work at QRP, and QRP SWR/wattmeters can't handle
: 100W. Tuning up at 1W instead of 100W reduces the QRM you cause by
: 20dB, or over 3 S units! You can also safely change the tuner's
: inductance taps WHILE transmitting at 1W.
: 2. GOOD resolution at SWR values above 3 and even above 5! This can
: be very handy at 160m and 80/75m.
: 3. 10-LED display for the SWR meter and another 10-LED display for
: the wattmeter: No more squinting at cross-needle meters!

: 4. More accuracy at low power levels: Most SWR meters understate SWR
: at low power levels due to the infamous diode drop loss. My design
: compensates for this and allows accurate SWR measurements at QRP power
: levels.
:
: Let me know what you think, and feel free to contact me if you have
: any questions or suggestions. If you decide to build the QROP Meter,
: let me know how it goes.
:
: Jason Hsu, AG4DG
: usenet@@@@@jasonhsu.com

1422. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 12:26:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkpe5tigk1@sparta.btinternet.com>
Source record: 107736

> > Newton may not have been EXACTLY right but he had a damned near-enough
> > practical approximation.
>
> What was his approximation for the orbit of Mercury? :-)

==========

In MY thermometer mercury does not rotate - it just goes up and down.
According to Bush it's something to do with apple trees.

Reg

1423. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 12:37:47 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vn0fks328hkfa9@corp.supernews.com>
Source record: 107738

My old email address was getting to be useless so I killed it and made up
two new ones.
Presumably this post shows the ARRL remailer which goes to one of the new
email addresses.
One of the addresses has not been used.
They found it.
Linux anyone?
73
H.
"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:bkpe24$4conv$3@ID-189073.news.uni-berlin.de...
> Hey Mike,
>
> In my case, the virus email bombing that I am getting has not affected my
in
> regards to being infected, but it definitely has slowed everything down.
It
> is taking forever to use my ISP's webmail email browser (in order to not
> download the infected emails) to load up, when there is 200-1,000 messages
> in the email box.
>
> I am quite sure I am not the only one getting this happening to them as
> well, that are on the same ISP. Must definitely be overloading the mail
> server my guess would have to be.
>
>
>
> --
> Ryan, KC8PMX
> FF1-FF2-MFR-(pending NREMT-B!)
> --. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
> .. --. .... - . .-. ...
> "Mike Andrews" <mikea@mikea.ath.cx> wrote in message
> news:bknohk$1df$4@puck.litech.org...
> > Walter Maxwell <w2du@iag.net> wrote:
> > > On Sat, 20 Sep 2003 19:01:51 +0000 (UTC), "Reg Edwards"
> > > <g4fgq.regp@btinternet.com> wrote:
> >
> > > >> Is anyone else being deluged with Virus/Worm email messages?
> > > >> --
> > > >==========
> > > >
> > > >Me too - 2000 per day.
> > > >

> > > >Terrorist attack or just another up-and-coming Bill Gates?
> > > >
> > > >G4FGQ, UK
> > > >
> > > >
> > > Me too, 49 yesterday and 80 today.
> >
> > So far today:
> >
> > $ grep -i logging ljoe.txt | wc -l
> > 1286
> > $ grep -i "\/dev\/null" ljoe.txt | wc -l
> > 976
> >
> > That's 976 worms out of 1286 mails accepted, total. That doesn't count
> > the 54 that I bounced because I don't accept mail from the sender's
> > domain, so it's 976 out of 1340 attempts. At about 150K per try. Rough
> > on the other people on my cablemodem segment.
> >
> > --
> > Mike Andrews, working on his ticket again.
> > mikea@mikea.ath.cx
> > Tired old sysadmin since 1964
> > WN5EGO back in 1963
>
>

1424. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 13:06:27 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5ah0nvsfnbbhm17oh432is5c5tbiajgjh6@4ax.com>
Source record: 107646

On 22 Sep 2003 16:54:31 -0700, wizard12342002@yahoo.com (jj) wrote:

>Hello,
>
>I am a ham looking for a home. I found one that interests me, except
>that it is about 600 feet from high tension lines. I am trying to
>determine whether I should be concerned about this. There are three
>potential issues that I can think of:
>
>1.) Possible excessive exposure to low-frequency magnetic fields.
>
>2.) Even if there is no significant exposure, the resale value of the
>property may be affected if other buyers are concerned if/when I turn
>around to sell it.
>
>3.) Radio noise. I would imagine that any arcing along the system
>would wreak havoc on my enjoyment of weak-signal dx.
>
>Any and all comments appreciated.
>
>-JJ

When you say "high tension" lines I'm not sure whether you're talking about power lines on 50-foot wood poles or the bigger lines on massive metal towers -- but you can always temp. rig your transceiver to your car battery, drive to the neighborhood, throw a long wire out the window, and listen on your favorite bands for buzz & hash.

Or, maybe you could get the real estate agent to let you bring a rig to the house, assuming it's empty.

Personally, I'm surrounded by above ground power lines, and there's a 50,000 watt AM station with a 4-tower antenna within a mile, but it's a reasonably quiet location.

Bob
k5qwg

1425. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 13:13:58 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vn0hoqldtofi2d@corp.supernews.com>
Source record: 107739

Your perceptions, even though discounted here, could be your buyers reality
when you sell!
Remember: location, location, location.
Buy it only after you've checked for RFI, can't find as good a deal
elsewhere and are prepared to suffer any latent consequences!
Regards
hank wd5jfr
"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0309221554.4f60e0f7@posting.google.com...
> Hello,
>
> I am a ham looking for a home. I found one that interests me, except
> that it is about 600 feet from high tension lines. I am trying to
> determine whether I should be concerned about this. There are three
> potential issues that I can think of:
>
> 1.) Possible excessive exposure to low-frequency magnetic fields.
>
> 2.) Even if there is no significant exposure, the resale value of the
> property may be affected if other buyers are concerned if/when I turn
> around to sell it.
>
> 3.) Radio noise. I would imagine that any arcing along the system
> would wreak havoc on my enjoyment of weak-signal dx.
>
> Any and all comments appreciated.
>
> -JJ

1426. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 13:39:18 UTC
From: fazamy@aol.com
Message-ID: <20030923093918.16347.00000058@mb-m15.aol.com>
Source record: 107740

Especially if you have youngsters, you ought to stay out of that neighborhood.
The jury is still out on the correlation between power lines and various
cancers. For health considerations alone, look for a safe setting.
I suggest you research the studies on this subject.

73 & good luck
KB2AMY
Evan

1427. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 13:55:07 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <ElYbb.6873$Ms2.916@fed1read03>
Source record: 107744

Can't address the first two but for number 3.
I had a home a coupla hundred feet away from hi tension towers and it was a nightmare plus.

I was not a ham when we moved in but I noticed lines across the TV video on the lower channels all the time
and buzz in the TV audio. Annoying but not unusual in the days of rooftop TV antennas.

It got and very severe when the insulators got damp. In fact at times during the night one could see a blue arc discharge across the insulators.

When I got my ham ticket, I found S9+10 dB of noise was typical on the 160, 80, 40m bands (unusable for the most part)

Less noise up the spectrum but awful at times. Later when a got a small triband beam, I would rotate the antenna 90 degrees away from the power lines to reduce the noise and hope some of my signal got to Europe -- hi hi.

The power company would wash down the lines on occasion when I squawked, but the noise would soon return.

When we moved to a new noise free (underground utilities) location, couldn't believe the difference.

Take a portable SWL receiver and check the noise at various frequencies and areas of the location.

But the noise could be in a "quiet period' i.e., clean and dry insulators.

I will never again move in anywhere near these spectrum blasters.

--
73 from The Spurious Noise

"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0309221554.4f60e0f7@posting.google.com...
> Hello,
>
> I am a ham looking for a home. I found one that interests me, except
> that it is about 600 feet from high tension lines. I am trying to
> determine whether I should be concerned about this. There are three
> potential issues that I can think of:
>
> 1.) Possible excessive exposure to low-frequency magnetic fields.
>
> 2.) Even if there is no significant exposure, the resale value of the

> property may be affected if other buyers are concerned if/when I turn
> around to sell it.
>
> 3.) Radio noise. I would imagine that any arcing along the system
> would wreak havoc on my enjoyment of weak-signal dx.
>
> Any and all comments appreciated.
>
> -JJ

1428. 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 13:59:49 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20030923095949.17660.00000048@mb-m16.aol.com>
Source record: 107743

I have a 10m dipole in the attic connected to my ic718. Is it possible to tune it to 20m using the mfj 901b that I have? Does the dipole need to be 20m length and then tuned down or can tuners tune to a resonance higher than that of the existing dipole. I do not have a balun on it. On 10m I have an SWR of 1:1

Thanks
73
G. Doughty
KI4BBL

1429. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 14:25:17 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F7058DF.8080900@optonline.net>
Source record: 107745

My late first wife and I lived (in Australia) on a narrow street with
11KV power lines across the street. She died of breast cancer at age 46.
I know that one instance does not prove anything, but I am trying to
stay as far away as possible from power lines as we look for a new home.
(Yet trying to find a place with underground utilities and no CC&Rs
seems impossible.)

In the UK magazine "Electronics and Wireless World" (or whatever it is
called these days) ten years or so ago an article claimed that the
confusing research data did not take into account the different
frequencies used in different countries (60Hz vs. 50Hz) and that the
different frequencies have different effects (but I no longer recall
which was supposed to be worse -- or maybe neither was "worse" than the
other, simply different).

-=-
Alan AB2OS

On 09/23/03 09:39 am FAZAMY put fingers to keyboard and launched the
following message into cyberspace:

> Especially if you have youngsters, you ought to stay out of that neighborhood.
> The jury is still out on the correlation between power lines and various
> cancers. For health considerations alone, look for a safe setting.
> I suggest you research the studies on this subject.

1430. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 14:25:28 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bkpl4oehf1@hercules.btinternet.com>
Source record: 107746

And then consider the energy
> flow just in front and just following the voltage step
> as it propagates down the line and back and down and back...
>
=======================

Kelvin had trouble with voltage steps when trying to predict signalling speed on the first Atlantic telegraph cable. They went ahead, chartered the Great Eastern steamship, steamed West and laid the thing anyway. Shortly afterwards it broke. Kelvin was created a Lord for his un-finished services and had a bridge named after him.

But it was indeed a difficult problem in that day and age. Twenty years later, hard-of-hearing Heaviside invented a brand new branch of mathematics, the Operational Calculus, to solve that particular, and a great number of other problems. For HIS services to mankind, as a revolutionary, he was derided by the pompous Establishment whose members resorted only to plagiarised text books. Heaviside only had a Layer named after him.

To their own credit, it was American communications engineers who eventually acknowledged his genius. But then, Americans always did have sympathetic feelings towards revolutionaries.

What amazes me is the amount of trouble some modern American engineers still appear to suffer from on the subject of propagation of an electric current along a pair of wires. Wires have been around a long time now.

Instead of thinking in terms of frequency and waves why not do as Oliver did and try time and waveshape. It worked for him. Exactly what, where and when is being reflected becomes clear.

And if anybody enjoys playing with numbers just replace 'j-omega' with 's'
(It was 'p' when I first played with it.)

Incidentally, the concept of wire-gauges originated in my home city, Birmingham, England. Faraday was familiar with it. It was internationally known as the BWG. The Americans, just to be different, changed theirs to AWG. Now (nearly) everybody has gone metric. ;o)

Reg, G4FGQ

1431. Antenna Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:01:16 UTC
From: Christian Rogne <christian@NOSPAMrogne.ws>
Message-ID: <bfZbb.32187$Hb.491812@news4.e.nsc.no>
Source record: 107747

I do have a 3 element 3 bands beam.

I think it's a HyGain antenna. The traps are 43mm in diameter, and it's marked with HyGain 57010.

The Beta match are straight, no bends on it.

Anyone who have a clue ?

Christian Rogne

1432. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:08:33 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <abo0nvkrmap6cl0m8jcaa6o3nbi09eqfg4@4ax.com>
Source record: 107748

On Tue, 23 Sep 2003 05:50:23 GMT, mike <intotheapex@yahoo.com> wrote:

>On Tue, 23 Sep 2003 03:48:02 GMT, "CW" <clinton.magers@comcast.net>
>wrote:
>
>>Make your own transformer. Go here: www.kc7nod.20m.com
>
>Nice pics.
>
>As for the static protection diodes. Yes, I am seeing images of local
>broadcasters scattered as far as 1khz from the known frequecies.
>I thought it may have been my antenna. Hmmm....might rethink the
>diodes. They are 1N914 as specified.
>
>I suspose the resistor I have across the lead in to ground should
>reduce static buildup.
>
>Did I turn my tuner into a crystal radio..<grin>
>
>mike

After thinking about this a little more. What if my current impedance mismatch between my antenna and transmission line is actually causing reflections which are noticed by me as images on other frequencies?

Might a signal coming in on 3200 khz echo end to end back to 2300 khz?

This seems probable and the diodes may not be causing it at after all.

mike

1433. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:19:57 UTC
From: richardharrison@webtv.net
Message-ID: <10231-3F70649D-436@storefull-2313.public.lawson.webtv.net>
Source record: 107751

Reg, G4FGQ wrote:
"Instead of thinking in terms of frequency and waves why not do as
Oliver did and try time and waveshape?"

The digital revolution is well underway and Reg has the right idea.
Radio is the domain of frequency and waves however. Terman`s first
words: "Electrical energy that has escaped into free space exists in the
form of electromagnetic waves." are still true.

Step functions lost interest with the demise of telegraph, but ones and
zeros are back bigger than ever.

Best regards, Richard Harrison, KB5WZI

1434. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:26:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pgp0nvsv6htr2v9j8cr0r13ef5ctrk20sb@4ax.com>
Source record: 107749

On Tue, 23 Sep 2003 11:15:42 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>Eschew sesquipedalianism!
>
Gesundheit.

1435. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:31:17 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0309230731.366bc91b@posting.google.com>
Source record: 107750
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Rick Frazier <rick@rickfrazier.com> wrote in message
news:<3F6FF2B1.FC14ABE4@rickfrazier.com>...
>
> Ok for the QRP to barefoot operator, but what about someone that at least
> occasionally uses an amplifier?
>
The only thing I can think of is using more turns in the transformers
and thus lowering the coupling ratio. This would increase the QRO
capability but at the expense of QRP capability. I designed the QROP
Meter to just barely handle 200W so it could easily handle 100W. It's
not designed to be used with an amplifier. I don't have an amplifier,
so 1500W capability was not a priority for me.

The closest thing to what you are looking for is the Tandem Match
Directional Wattmeter project that Roy alluded to. It's available in
the _ARRL Antenna Book_. In fact, I got the idea of separating the RF
and DC grounds from the Tandem Match Directional Wattmeter. You'll
also notice my QROP Meter and a few of the homebrew SWR/wattmeter
designs out there have similarities to the Tandem project, such as the
directional coupler design and the noninverting logarithmic op amp.

Believe it or not, I wanted even more QRP capability (like 1mW instead
of 200mW) than my project actually delivers. However, I found several
constraints:
1. Op amps have offset voltages, and these constrain the accuracy of
low-power measurements. Chopper amps have extremely low offset
voltages, but giving them a 10V input while the power supply is turned
off destroys them.
2. The active rectifier has limited accuracy. It's fine in dealing
with 100mV, but it would be useless in rectifying 10mV.
3. The LM3914 chip has limited accuracy. The internal comparator
amplifiers have a few mV of offset voltages.

> I've got a couple of swr/wattmeters (two meters) that provide everything I
> need, though they are a bit difficult to read at QRP levels. Autek WM-1
> is one of them and currently available, and the other is a SignalCrafter
> 30 (may not be full name and model, but also not available any more).
> Both have ranges for 20w, 200w and 2000w full scale, and show average or
> peak readings. They tend to match one another pretty well, especially
> considering the WM-1 is less than a year old and the other is probably 20
> years old....
>
> Will your meter be able to perform as well? I've found that most LED
> based metering circuits are horribly inaccurate compared to a needle based

> meter....
>
My QROP Meter needs to have diode pairs that are properly matched, and
the proper resistance value for the noninverting logarithmic op amp
will vary from one unit to another. If you don't bother to properly
match the diodes or if you don't select the right resistance value,
the instrument will be just as crude as the conventional products
manufactured by MFJ and other companies. Of course, the need to
customize every single unit would kill the manufacturability, and this
would explain why the products on the market are so crude.

> On the other hand, I'd love to see a new meter available, particularly one
> that would work from qrp levels all the way up to legal limits.... while
> providing both SWR and Power metering. I really really dislike dual
> needle interpreted displays.
>
That's even MORE ambitious than my QROP Meter. I'm sure this
QRP-to-1500W instrument could be designed and built, but it would be
MUCH more complicated and expensive than my device. I'm not sure the
market would bear the cost of such a device, which may cost $1000 for
all I know. I highly doubt that even my QROP Meter has a viable
market. Also remember that the QRP-to-1500W device would have to
compete with antenna analyzers, which are only around $300 and show
FAR more detail than an SWR meter. True, you can't transmit 100W
(much less 1500W) into an antenna analyzer, but antenna analyzers
allow you to tune up without emitting a single mW from your
transmitter.

Jason Hsu, AG4DG
usenet@@@@@jasonhsu.com

1436. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:54:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f706e83$1_4@corp.newsgroups.com>
Source record: 107752

kd1@sympatico.ca wrote:
> So again, it works in the specific, but not in the general case.

Uh Keith, *NO* instrument works in the general case. Can you
measure gamma rays with your RF voltmeter?

> The answer appears orthogonal to the question.

Nope, you are always free to misuse and abuse any instrument,
including a Bird wattmeter.

> Go back 3 sentences and re-read "reflected VOLTAGE waves and CURRENT
> waves do exist". I think you were quoting from something I wrote.

Yes, I was and it is good to see you have changed your mind on that
one. Now all you have to do is convince us that reflected voltage
waves along with their accompanying E-fields and reflected current
waves along with their accompanying H-fields do not result in
(E x H) = power. Can you prove that the E-fields and H-fields in
a reflected wave are not orthogonal?

> I am unsure how you extrapolate this from my writings.

It's easy. During steady-state for a Z0-matched system, the transmission
line with an SWR of 5.83:1 contains three times as much energy as is being
delivered by the source to the load. If the reflected and re-reflected waves
contain no energy, exactly where is that extra energy located? It cannot
stand still.

> So you are agreed: The reflected POWER model does not work in general.

As long as resonance effects are taken into account, the reflected power
model works in general. Your Vf*Ir and Vr*If terms don't exist which can
be proven by a laser experiment.

> No. You have made an incorrect implication. 100 watts flowing says
> nothing about how much energy is stored.

Oh yes it does!!! Given the SWR is 5.83:1, three times as much energy as
a 100 watt source will supply, is stored in the transmission line. If
you hadn't ignored my earlier one-second long transmission line thought
experiment, you would know that by now.

> Your experiment appears to be incompletely or incorrectly specified.
> If the source is Z0 matched to the transmission line, how did you
> get a re-reflected wave at the source?

That's what Z0-matches do - re-reflect all the reflected power back
toward the load. That's how antenna tuners work. Given the SWR, one
can easily calculate exactly how much extra energy exists in an even
multiple of lossless half-wavelengths. (An even number of half-wavelengths
avoids calculus).
--
73, Cecil http://www.qsl.net/w5dxp

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1437. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 15:56:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f706f1d$1_4@corp.newsgroups.com>
Source record: 107753

H. Adam Stevens, NQ5H wrote:
> Presumably this post shows the ARRL remailer which goes to one of the new
> email addresses.

Does the ARRL remailer check for viruses/worms?
--
73, Cecil http://www.qsl.net/w5dxp

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1438. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:00:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f706ff7_4@corp.newsgroups.com>
Source record: 107754

G. Doughty wrote:
> I have a 10m dipole in the attic connected to my ic718. Is it possible to tune
> it to 20m using the mfj 901b that I have? Does the dipole need to be 20m
> length and then tuned down or can tuners tune to a resonance higher than that
> of the existing dipole. I do not have a balun on it. On 10m I have an SWR of
> 1:1

You have a problem. Extend the dipole to 33ft and use it on 20m-10m by
feeding it with ladder-line. Use a 1:1 choke/balun between the tuner
and the ladder-line.

I have a 33ft rotatable dipole fed with 300 ohm window-line. It works
very well on all bands between 20m and 10m.
--
73, Cecil http://www.qsl.net/w5dxp

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1439. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:05:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f707132$1_4@corp.newsgroups.com>
Source record: 107755

Bill VanAlstyne wrote:
> Well, went back to the books and restudied the section on common-mode
> currents on feed lines, and it appears that such currents are only caused
> when a balanced driven element is fed with an unbalanced feeder. Since (if I
> understand it correctly) the gamma match excites the driven element only on
> one side, there is no way for the antenna to couple common-mode currents
> into the feed line.

If you bring the coax feedline off parallel to one of the driven elements,
it will certainly couple common-mode currents into the feedline.
--
73, Cecil http://www.qsl.net/w5dxp

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1440. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:08:19 UTC
From: richardharrison@webtv.net
Message-ID: <10231-3F706FF3-454@storefull-2313.public.lawson.webtv.net>
Source record: 107757

J.J. wrote:
"Possible excessive exposure to low-frequency magnetic fields."

Where does the stronger magnetic field come from, a high-voltage circuit 600 ft away, or a low-voltage circuit a foot or less away?

"Radio noise."

Underground electrical service to your home may help eliminate noise entry, so might powerline filters.

Best regards, Richard Harrison, KB5WZI

1441. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:15:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70737d$1_4@corp.newsgroups.com>
Source record: 107758

Richard Clark wrote:
>>>What is the V/I for a 1 degree rise?

Same as before, Richard, dissipative. This is a binary measurement.
The possible values are dissipative and non-dissipative.
--
73, Cecil http://www.qsl.net/w5dxp

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1442. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:17:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ves0nvsjs4gop1tf1vos6hsd1fddqkl6sc@4ax.com>
Source record: 107756

On Tue, 23 Sep 2003 10:54:20 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Uh Keith, *NO* instrument works in the general case. Can you
>measure gamma rays with your RF voltmeter?

>>On Tue, 10 Jun 2003 18:47:32 -0500, W5DXP <Cecil.A.Moore@ieee.org>
>>wrote:
>>
>>>Richard Clark wrote:
>>>> Do you measure V/I with a thermometer?
>>>
>>>One certainly can. If there's no temperature rise, the resistance
>>>value is dissipationless.
>>
>>Hi Cecil,
>>
>>What is the V/I for a 1 degree rise?
>>
>>73's
>>Richard Clark, KB7QHC

1443. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:27:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ois0nv8aapqrgg15v673af534bsvismdqo@4ax.com>
Source record: 107759

On Tue, 23 Sep 2003 15:08:33 GMT, mike <intotheapex@yahoo.com> wrote:

>What if my current impedance
>mismatch between my antenna and transmission line is actually causing
>reflections which are noticed by me as images on other frequencies?

Hi Mike,

You must push the current through a non-linear device to force it to another frequency. This is why a diode is used to extract the voice/music frequencies from the Radio frequencies. It may be described as a rectifier (works just as well there too), but you will note that all such diodes are followed by filters that remove the separated frequencies (too much filtering and all you get is flashlight DC power which will push the speaker cone to the wall and hold it there). The filter smooths the RF cycles into the AF average waveform. Of course you can skip the filter altogether and let the dynamic mass of your eardrum do the same filtering instead (you won't be able to hear the RF because your eardrum can't move that fast, same reason why the speaker is so lame above 8 - 16 KHz). The sound will be crappy, but still recognizable.

In general, when mixing is suspected (and not deliberate), it is usually forced by corrosion products in antenna structures. Corrosion products produce primitive non-linear interfaces (old time rectifiers).

73's
Richard Clark, KB7QHC

1444. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 16:59:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b9t0nv8mg7mrdemjd8a6q4c9fhusfs5jo8@4ax.com>
Source record: 107760
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 23 Sep 2003 08:31:17 -0700, jason_hsu@my-deja.com (Jason Hsu)
wrote:

>Believe it or not, I wanted even more QRP capability (like 1mW instead
>of 200mW) than my project actually delivers. However, I found several
>constraints:
>1. Op amps have offset voltages, and these constrain the accuracy of
>low-power measurements. Chopper amps have extremely low offset
>voltages, but giving them a 10V input while the power supply is turned
>off destroys them.
>2. The active rectifier has limited accuracy. It's fine in dealing
>with 100mV, but it would be useless in rectifying 10mV.
>3. The LM3914 chip has limited accuracy. The internal comparator
>amplifiers have a few mV of offset voltages.
>

Hi Jason,

1. Op Amps have offset voltage compensation circuits (either
internal, or you can access 50 years of literature on how to do it
externally). Your choice for a self-destructing chopper amp is your
own problem, not an inherent failure of the class of device. Again,
there are 50 years of literature on how to build your own if the
devices your limit yourself to are either a. too expensive, or b. too
fragile.

2. Active rectifiers having limited accuracy is strictly a problem of
GBWP. Choose a crappy one, and you fulfill your nightmare. For HF,
you should be using one with at least 1GHz. Your problem then becomes
one of selecting an amp that is stable at unity gain (or at least
stable at the gain you choose/need). Complaints about not being able
to handle 10mV signals only suggest you need an amplifying buffer
before the detector. With a little leg work (researching that same 50
years worth of application design), a second diode, and feed back, you
could linearize the power/SWR meter too.

3. LM3914 should be designed with the usual offset compensation if
that is a problem. However, even with a few mV out of 10V, the
dynamic range is considerably greater than your instrument's range.
Your problem is one of scaling your signal (it shows in the other
complaints). Dynamic range, 20 log (10V/10mV), borders on 60dB where
accuracy would tend to go to hell at the low end. You show only 30dB
of dynamic range, 10 log (200W/200mW). You are not using the full
potential of the device.

Compensation circuits can run from simple to complex. If you have zero compensation, you are abandoning your fate. Reading National Semiconductor product literature would be a simple approach to a great deal of variety of design:
http://cache.national.com/ds/LM/LM3914.pdf

73's
Richard Clark, KB7QHC

1445. Re: Question re High Tension Lines

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:09:48 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <w7%bb.555531$Ho3.96270@sccrnsc03>
Source record: 107761

I lived for 38 years within 100 meters of three sets of high tension lines on the NE power grid. 68KV to 105 KV is the range of voltages.

1) There is no credible scientific data to confirm any effects from low freq magnetic field. Right now you are standing in a 0.5 gauss field.

2) When I sold my house it went for 20K more than the agents appraised value.

3) The lines were 'quiet' for almost 100% of the time. I suspect that I had 'line noise' for less than 3 weeks out of 38 years. The noise was quickly removed by New ENGLAND ELECTRIC with days of it occurrence.

DD, W1MCE

jj wrote:
> Hello,
>
> I am a ham looking for a home. I found one that interests me, except
> that it is about 600 feet from high tension lines. I am trying to
> determine whether I should be concerned about this. There are three
> potential issues that I can think of:
>
> 1.) Possible excessive exposure to low-frequency magnetic fields.
>
> 2.) Even if there is no significant exposure, the resale value of the
> property may be affected if other buyers are concerned if/when I turn
> around to sell it.
>
> 3.) Radio noise. I would imagine that any arcing along the system
> would wreak havoc on my enjoyment of weak-signal dx.
>
> Any and all comments appreciated.
>
> -JJ

1446. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:13:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1kv0nvk1abumvcbs44sfo098k5dnvtqbst@4ax.com>
Source record: 107762

On Tue, 23 Sep 2003 11:15:35 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>>>>What is the V/I for a 1 degree rise?
>
>Same as before, Richard, dissipative. This is a binary measurement.
>The possible values are dissipative and non-dissipative.

Hi Cecil,

Binary hmmm? So you say you experience 1 V/I for a 1 degree rise? Or
is it 0 V/I for a 1 degree rise? Curious sort of general
instrumentation you have there. What is the name of this superb
instrument of yours?

73's
Richard Clark, KB7QHC

1447. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:29:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7084e2_3@corp.newsgroups.com>
Source record: 107763

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>Same as before, Richard, dissipative. This is a binary measurement.
>>The possible values are dissipative and non-dissipative.
>
> Curious sort of general
> instrumentation you have there. What is the name of this superb
> instrument of yours?

Did you ever grab the top of a 75m hamstick coil right after
transmitting? That coil is dissipative.
--
73, Cecil http://www.qsl.net/w5dxp

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1448. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:36:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <km01nvo7croqlh03pqkrhdqb9no77gjcr5@4ax.com>
Source record: 107764

On 23 Sep 2003 13:59:49 GMT, nightowls627@aol.comnojunk (G. Doughty)
wrote:

>I have a 10m dipole in the attic connected to my ic718. Is it possible to tune
>it to 20m using the mfj 901b that I have? Does the dipole need to be 20m
>length and then tuned down or can tuners tune to a resonance higher than that
>of the existing dipole. I do not have a balun on it. On 10m I have an SWR of
>1:1
>
>Thanks
>73
>G. Doughty
>KI4BBL

Hi OM,

You would have a harder time tuning a 20M dipole to 10M. But, really,
why don't you simply try? Transmitter limited (no 20M)?

The issue of to BalUn or to not to, depends on do you suffer from not
doing it? Seems not, or you would have said so.

More wire, less wire, BalUn or no; changes are unlikely to be
observable in your day-to-day activities. If you really want a 20M
dipole in the attic (and it fits reasonably well) simply add it in
parallel (use the same drive point connections) to the one already
there (you may even be able to get rid of the tuner). 6 inches
separation between them out 10 feet and beyond will do just fine. No
Rocket surgery is required.

73's
Richard Clark, KB7QHC

1449. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:40:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4811nvkbjtfr7ethk50skkvlc0ah4qtkjn@4ax.com>
Source record: 107765

On Tue, 23 Sep 2003 12:29:46 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Did you ever grab the top of a 75m hamstick coil right after
>transmitting? That coil is dissipative.

Hi Cecil,

So this general instrument you use is your hand? Lest we forget:
>On Tue, 23 Sep 2003 10:54:20 -0500, Cecil Moore <Cecil.A.Moore@ieee.org> wrote:
>>Uh Keith, *NO* instrument works in the general case.

Keep your hands to yourself. ;-)

73's
Richard Clark, KB7QHC

1450. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 17:53:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn125arcmhr934@corp.supernews.com>
Source record: 107766

There are a lot of TDR and oscilloscope users out there to contradict that.

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> Step functions lost interest with the demise of telegraph, but ones and
> zeros are back bigger than ever.
>
> Best regards, Richard Harrison, KB5WZI
>

1451. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 18:10:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn135g841c6f77@corp.supernews.com>
Source record: 107767

No. Reflections are linear phenomena, so they don't generate signals on any new frequencies, or convert the frequencies of signals.

Diodes, on the other hand, are nonlinear devices which can do that. They can create harmonics from existing signals, and they can mix signals together to produce signals on frequencies that equal the sum and difference of various multiples of the signals being mixed. Likewise, a strong signal or signals can drive a poorly-designed receiver front end into a nonlinear region for the same effect.

It's easy to test for the diodes. Find a suspected mixing product, and see if it goes away when you disconnect the diodes. To check your receiver front end, put an attenuator between the antenna and the receiver. A 500 ohm potentiometer should be adequate for the test. As you increase the attenuation, receiver mixing products will drop in amplitude more quickly than valid signals. At some amount of attenuation, you should hear only valid signals.

Roy Lewallen, W7EL

mike wrote:
>
> After thinking about this a little more. What if my current impedance
> mismatch between my antenna and transmission line is actually causing
> reflections which are noticed by me as images on other frequencies?
>
> Might a signal coming in on 3200 khz echo end to end back to 2300 khz?
>
> This seems probable and the diodes may not be causing it at after all.
>
> mike

1452. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 18:16:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dq21nvslbmhfsbs6drpsm084uc96cn8sth@4ax.com>
Source record: 107768

On Tue, 23 Sep 2003 12:29:46 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>Did you ever grab the top of a 75m hamstick coil right after
>transmitting? That coil is dissipative.

Hi Cecil,

On even more reflection, your hand is an abysmal binary general
instrument. Take your own test above.

What was the V/I? You don't know.
What was the temperature? You don't know.
Could you measure 1W dissipation? You don't know.
Could you determine 1 Ohm? You don't know.
Could you determine 1ï¿½? You don't know.

How accurate could you if you deny these above? (Binary measures are
either totally wrong or half-assed right.)

What was the V/I to within 5ppm? You don't know.
How about to within 50%? You still don't know.

Step outside (without recourse to weather report or thermometer) and
touch a sun exposed wall of your home. What temperature is it to
within 1ï¿½? How much error did your hand introduce in cooling/warming
it up/down? You haven't a clue.

No wonder you reject general instrumentation application, you make
miserable choices. You cannot even offer quantitative evidence,
merely the Zen of "oooh that's hot," and you don't even suggest that.

How long before you ride your bike to the library anyway? Waiting for
a hot/cool/just-right day? Call ahead to see if "Goldilocks" is not
already checked out before leaving.

73's
Richard Clark, KB7QHC

1453. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 19:15:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f709d9d_7@corp.newsgroups.com>
Source record: 107670

Richard Clark wrote:
> You would have a harder time tuning a 20M dipole to 10M.

Why? An odd number of quarter-wavelengths of ladder-line will
result in a near-perfect match.
--
73, Cecil http://www.qsl.net/w5dxp

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1454. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 19:16:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f709de5$1_7@corp.newsgroups.com>
Source record: 107671

Richard Clark wrote:
> So this general instrument you use is your hand?

Yep, hands are generally quite useful.
--
73, Cecil http://www.qsl.net/w5dxp

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1455. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 19:22:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f709f57$1_7@corp.newsgroups.com>
Source record: 107672

Richard Clark wrote:
> On even more reflection, your hand is an abysmal binary general
> instrument.

You are perfectly free to live your life in the no-hands mode.
Myself, I find them generally quite useful for binary decisions.
All one needs is a trigger threshold.
--
73, Cecil http://www.qsl.net/w5dxp

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1456. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:07:23 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <34GdnWjFreKbNe2iU-KYuA@comcast.com>
Source record: 107673

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f706ff7_4@corp.newsgroups.com...
>.............................
> I have a 33ft rotatable dipole fed with 300 ohm window-line. It works
> very well on all bands between 20m and 10m.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Cecil,
Why didn't ypu use a 15 or 17 m dipole and get away from the impedance
extremes?

BTW, Parallel dipoles work great, I had 40, 17, and 12 m on the same
feedline and SWR at resonance was better than 1.5 on all three bands.

Tam/WB2TT

1457. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:10:55 UTC
From: Roger <blizzard@lycos.com>
Message-ID: <3f70a8d0.894834@140.99.99.130>
Source record: 107675

On Mon, 22 Sep 2003 16:36:51 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>I note that you post from a revolving IP, such that if you had not, I
>could have connected to your machine to give you a demonstration of
>how open you are to attack. It involves a command built into NT that
>is designed EXPRESSLY to allow me to do this! I don't need hacker
>tools, just a DOS session and the command line interpreter will do the
>rest. If you ever consider moving up to townsqr's hi-speed
>connectivity, you better get these on-ramps to your system controlled!
>
>73's
>Richard Clark, KB7QHC

I have a static IP address, would you care to prove how open to attack
my system is?

1458. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:11:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3t91nv8isl90m9t1a7mnv5dq9isk513mgn@4ax.com>
Source record: 107674

On Tue, 23 Sep 2003 14:22:39 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> On even more reflection, your hand is an abysmal binary general
>> instrument.
>
>You are perfectly free to live your life in the no-hands mode.
>Myself, I find them generally quite useful for binary decisions.
>All one needs is a trigger threshold.

Hi Cecil,

And you haven't the faintest idea what that threshold is except for "ouch." Given your tender sensibility, one might be convinced by you that a glass standing in the shade would boil water. "Might."

I take it by your lack of other response you couldn't summon up a simple measure of temperature, power, resistance, much less their accuracy with your instrument. How much power in 10 OuchWatts?

73's
Richard Clark, KB7QHC

1459. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:31:00 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net>
Source record: 107676
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Lou" <Spamfree@Spamfree.com> wrote in message
news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
> news:vmv6j3kfrkpv64@corp.supernews.com...
> > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A. Abernethy,
> > K4OKA, July 27, 1999, modifying his license to prohibit operation below
30
> > MHz for 180 days, effective immediately. Unless he appeals the action,
> > Abernethy may not get back on HF until January 22, 2000. The FCC letter
> > included a copy of a tape recording--supplied by complainants--of
> > transmissions said to be of Abernethy's station on July 16.
> Hollingsworth's
> > letter described the tape as "consisting of deliberate interference on
> 3.965
> > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted that
> > Abernethy had been warned about deliberate interference at the time his
> > station was inspected last January. Abernethy has 30 days to protest the
> > sanction. FCC personnel inspected Abernethy's station January 21 and 22
in
> > the wake of what Hollingsworth called "longstanding complaints from
other
> > amateurs and from our field offices." In particular, he said, the FCC
had
> > received "numerous complaints" about profanity, obscenity, deliberate
> > interference, and failure to properly identify. Other complaints to the
> FCC
> > alleged that Abernethy had aired something called the "Porkbutt Song,"
the
> > letter said, "for the purpose of harassment or deliberate interference."
> > Hollingsworth said the FCC's High Frequency Direction Finding Center in
> > Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA. The
> FCC
> > letter also said the Commission had received complaints that Abernethy
had
> > used AM and upper sideband on 75 "for the purpose of interference" on or
> > near 3894.5 kHz. Abernethy also was warned in the letter about
over-power
> > operation. Hollingsworth said that the FCC has no plans to start
> revocation
> > proceedings against Abernethy "unless we have evidence of continued
> > violations" of the type the FCC described in its July 27 letter. (For
> > additional details, see "FCC Takes North Carolina Ham off HF for Six

> Months"
> > elsewhere on the AWE news page.)
> >
> >
> > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> > news:vmqshdfh78hr4b@corp.supernews.com...
> > > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> > >
> > >
> > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > >
> > > >
> > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5. THATS
> BIG
> > > ALS
> > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > >
> > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT SONG.
HO
> > HO
> > > > >
> > > > >
> > > >
> > > > If I choose to talk on that frequency, I will, so long as I'm
abiding
> by
> > > the
> > > > rules and regulations as they are spelled out. YOU or no one else,
can
> > > tell
> > > > me to stay off. ASS WIPE.
> > > >
> > > > BIG AL.. the only thing big about you, is your mouth....
> > > >
> > > > Lou
> > > >
>
> Well Ass hole AL, looks like you've had your ass reamed out once, trying
for
> seconds???? Something tells me, you're due for it.
> Lou
>
>

Once? Boy are you out of touch.

Dan/W4NTI

1460. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:37:30 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vn1boarkh1i96d@corp.supernews.com>
Source record: 107677

I don't know, it may pass 'em right through, like bad food,
but at least the email address at my ISP isn't being openly broadcast on
usenet.
73
H.
"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f706f1d$1_4@corp.newsgroups.com...
> H. Adam Stevens, NQ5H wrote:
> > Presumably this post shows the ARRL remailer which goes to one of the
new
> > email addresses.
>
> Does the ARRL remailer check for viruses/worms?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1461. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 20:58:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9uc1nvsif23ud3r7nqtfrl71hr2ups72tp@4ax.com>
Source record: 107678

On Tue, 23 Sep 2003 20:10:55 GMT, Roger <blizzard@lycos.com> wrote:
>I have a static IP address, would you care to prove how open to attack
>my system is?

Hi Roger,

It is not apparent in your headers.

73's
Richard Clark, KB7QHC

1462. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 21:16:25 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bkqd7b$ij5$1@nic.grnet.gr>
Source record: 107679

```
| "Richard Clark" wrote:
| ...
| http://grc.com/default.htm
| ...

Useful, indeed!

pez
SV7BAX
```

1463. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 21:46:49 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <xb3cb.87$LJ5.6464@iad-read.news.verio.net>
Source record: 107680
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net...
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> > "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
> > news:vmv6j3kfrkpv64@corp.supernews.com...
> > > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A.
Abernethy,
> > > K4OKA, July 27, 1999, modifying his license to prohibit operation
below
> 30
> > > MHz for 180 days, effective immediately. Unless he appeals the action,
> > > Abernethy may not get back on HF until January 22, 2000. The FCC
letter
> > > included a copy of a tape recording--supplied by complainants--of
> > > transmissions said to be of Abernethy's station on July 16.
> > Hollingsworth's
> > > letter described the tape as "consisting of deliberate interference on
> > 3.965
> > > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted
that
> > > Abernethy had been warned about deliberate interference at the time
his
> > > station was inspected last January. Abernethy has 30 days to protest
the
> > > sanction. FCC personnel inspected Abernethy's station January 21 and
22
> in
> > > the wake of what Hollingsworth called "longstanding complaints from
> other
> > > amateurs and from our field offices." In particular, he said, the FCC
> had
> > > received "numerous complaints" about profanity, obscenity, deliberate
> > > interference, and failure to properly identify. Other complaints to
the
> > FCC
> > > alleged that Abernethy had aired something called the "Porkbutt Song,"
> the
> > > letter said, "for the purpose of harassment or deliberate
interference."
> > > Hollingsworth said the FCC's High Frequency Direction Finding Center

in
> > > Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA.
The
> > FCC
> > > letter also said the Commission had received complaints that Abernethy
> had
> > > used AM and upper sideband on 75 "for the purpose of interference" on
or
> > > near 3894.5 kHz. Abernethy also was warned in the letter about
> over-power
> > > operation. Hollingsworth said that the FCC has no plans to start
> > revocation
> > > proceedings against Abernethy "unless we have evidence of continued
> > > violations" of the type the FCC described in its July 27 letter. (For
> > > additional details, see "FCC Takes North Carolina Ham off HF for Six
> > Months"
> > > elsewhere on the AWE news page.)
> > >
> > >
> > > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> > > news:vmqshdfh78hr4b@corp.supernews.com...
> > > > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> > > >
> > > >
> > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > > >
> > > > >
> > > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5.
THATS
> > BIG
> > > > ALS
> > > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > > >
> > > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT
SONG.
> HO
> > > HO
> > > > > >
> > > > > >
> > > > > If I choose to talk on that frequency, I will, so long as I'm
> abiding
> > by
> > > > the
> > > > > rules and regulations as they are spelled out. YOU or no one else,
> can
> > > > tell

> > > > > me to stay off. ASS WIPE.
> > > > >
> > > > > BIG AL.. the only thing big about you, is your mouth....
> > > > >
> > > > > Lou
> > > > >
> >
> > Well Ass hole AL, looks like you've had your ass reamed out once, trying
> for
> > seconds???? Something tells me, you're due for it.
> > Lou
> >
> >
>
> Once? Boy are you out of touch.
>
> Dan/W4NTI
>
Not sure how the thread made it past my kill file, but to respond to your comment, I only went with what I was told and seen for myself as witnessed above.. IF there was more than one incident mentioned, then I didn't notice in my speed read of the article.
But, if it's been more than once, then maybe it's time they show him they're done playing games.
Lou

1464. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 21:54:16 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309231354.5335ad6b@posting.google.com>
Source record: 107681

"Bill VanAlstyne" <w5wvo@cybermesa.net> wrote in message
news:<bkfc18fhb1@reader2.nmix.net>...
> Well, went back to the books and restudied the section on common-mode
> currents on feed lines, and it appears that such currents are only caused
> when a balanced driven element is fed with an unbalanced feeder. Since (if I
> understand it correctly) the gamma match excites the driven element only on
> one side, there is no way for the antenna to couple common-mode currents
> into the feed line.
>
> That said, I'm not sure I really understand how the gamma match works and
> whether it represents a significant compromise. The Antenna Book doesn't go
> into a great deal of detail about the gamma match, treating it basically as
> a "subset" of the T-match. This, coupled with the fact that many amateurs
> I've talked with unequivocally trash the gamma as a poor matching system
> that should not be used where there is any choice, makes me want a better
> understanding of this whole field.
>
> So, the questions:
>
> 1) Is the gamma match inherently inferior to a balanced matching system?

Probably so to a degree, but I don't think it's enough to worry about
unless you have a specific problem with common mode currents. You have
to remember, the balanced T match has to be converted to the
unbalanced coax also. If not done properly, it could have problems
also. Most use coax baluns on those. To me, the higher the freq, the
more I would probably want to use a T over a gamma. On HF, where it's
really not that critical, I find gamma matches to be just fine here.
My 2 and 6 meter beams both use gamma matches, and I've never really
had any problems. But if I did, a choke at the feedpoint should clean
it up. As far as the gamma being a poor device that should not be
used, thats hogwash. 1000's have used those things with good results.
But this is not to say there aren't better methods to use. As far as
radiation from the element, as long as you have no common mode current
problems with either device, the end result is the same. MK

1465. LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 21:55:06 UTC
From: Thirty-eight ninety-four point five <"Thirty-eight ninety-four point five"@Thirty-eight>
Message-ID: <vn1g9pltrcjba2@corp.supernews.com>
Source record: 107682
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER BOY

I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH

"Lou" <Spamfree@Spamfree.com> wrote in message
news:xb3cb.87$LJ5.6464@iad-read.news.verio.net...
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net...
> >
> > "Lou" <Spamfree@Spamfree.com> wrote in message
> > news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> > > "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
> > > news:vmv6j3kfrkpv64@corp.supernews.com...
> > > > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A.
> Abernethy,
> > > > K4OKA, July 27, 1999, modifying his license to prohibit operation
> below
> > 30
> > > > MHz for 180 days, effective immediately. Unless he appeals the
action,
> > > > Abernethy may not get back on HF until January 22, 2000. The FCC
> letter
> > > > included a copy of a tape recording--supplied by complainants--of
> > > > transmissions said to be of Abernethy's station on July 16.
> > > Hollingsworth's
> > > > letter described the tape as "consisting of deliberate interference
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> > > 3.965
> > > > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted
> that
> > > > Abernethy had been warned about deliberate interference at the time
> his
> > > > station was inspected last January. Abernethy has 30 days to protest
> the
> > > > sanction. FCC personnel inspected Abernethy's station January 21 and
> 22
> > in
> > > > the wake of what Hollingsworth called "longstanding complaints from
> > other
> > > > amateurs and from our field offices." In particular, he said, the
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> > > > received "numerous complaints" about profanity, obscenity,

deliberate
> > > > interference, and failure to properly identify. Other complaints to
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> > > FCC
> > > > alleged that Abernethy had aired something called the "Porkbutt
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> > > > letter said, "for the purpose of harassment or deliberate
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> > > > Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA.
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Abernethy
> > had
> > > > used AM and upper sideband on 75 "for the purpose of interference"
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> or
> > > > near 3894.5 kHz. Abernethy also was warned in the letter about
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> > > > operation. Hollingsworth said that the FCC has no plans to start
> > > revocation
> > > > proceedings against Abernethy "unless we have evidence of continued
> > > > violations" of the type the FCC described in its July 27 letter.
(For
> > > > additional details, see "FCC Takes North Carolina Ham off HF for Six
> > > Months"
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> > > > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
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> > > > >
> > > > >
> > > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > > > >
> > > > > >
> > > > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
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> THATS
> > > BIG
> > > > > ALS
> > > > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > > > >
> > > > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT

> SONG.
> > HO
> > > > HO
> > > > > > >
> > > > > > >
> > > > > >
> > > > > > If I choose to talk on that frequency, I will, so long as I'm
> > abiding
> > > by
> > > > > the
> > > > > > rules and regulations as they are spelled out. YOU or no one
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> > can
> > > > > > tell
> > > > > > me to stay off. ASS WIPE.
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> > > > > > BIG AL.. the only thing big about you, is your mouth....
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> > > > > > Lou
> > > > > >
> > >
> > > Well Ass hole AL, looks like you've had your ass reamed out once,
trying
> > for
> > > seconds???? Something tells me, you're due for it.
> > > Lou
> > >
> > >
> >
> > Once? Boy are you out of touch.
> >
> > Dan/W4NTI
> >
> Not sure how the thread made it past my kill file, but to respond to your
> comment, I only went with what I was told and seen for myself as witnessed
> above.. IF there was more than one incident mentioned, then I didn't
notice
> in my speed read of the article.
> But, if it's been more than once, then maybe it's time they show him
they're
> done playing games.
> Lou
>
>

1466. Re: LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:02:53 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <Aq3cb.88$LJ5.6549@iad-read.news.verio.net>
Source record: 107683
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
five@Thirty-eight ninety-four point five> wrote in message
news:vn1g9pltrcjba2@corp.supernews.com...
> LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER BOY
>
> I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH
>

KISS MY ASS!

I will do as I please so long as I'm within the law... YOU have not got
enough ASS OR BALLS to stop me, because I WILL see to it, that you are
tracked and prosecuted AGAIN - DICK HEAD. END OF DISCUSSION.

Lou

1467. Re: LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:04:51 UTC
From: Thirty-eight ninety-four point five <"Thirty-eight ninety-four point five"@Thirty-eight>
Message-ID: <vn1gs2p0fbj27d@corp.supernews.com>
Source record: 107684
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

hO Ho

"Lou" <Spamfree@Spamfree.com> wrote in message
news:Aq3cb.88$LJ5.6549@iad-read.news.verio.net...
> "Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
> five@Thirty-eight ninety-four point five> wrote in message
> news:vn1g9pltrcjba2@corp.supernews.com...
> > LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER BOY
> >
> > I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH
> >
>
> KISS MY ASS!
>
> I will do as I please so long as I'm within the law... YOU have not got
> enough ASS OR BALLS to stop me, because I WILL see to it, that you are
> tracked and prosecuted AGAIN - DICK HEAD. END OF DISCUSSION.
>
> Lou
>
>
>

1468. Re: LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:08:50 UTC
From: Thirty-eight ninety-four point five <"Thirty-eight ninety-four point five"@Thirty-eight>
Message-ID: <vn1h3hqp1sqjbc@corp.supernews.com>
Source record: 107685
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

SEVEN TONITE. I'LL RUN YOU OFF BOY.

"Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
five@Thirty-eight ninety-four point five> wrote in message
news:vn1gs2p0fbj27d@corp.supernews.com...
> hO Ho
>
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:Aq3cb.88$LJ5.6549@iad-read.news.verio.net...
> > "Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
> > five@Thirty-eight ninety-four point five> wrote in message
> > news:vn1g9pltrcjba2@corp.supernews.com...
> > > LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER
BOY
> > >
> > > I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH
> > >
> >
> > KISS MY ASS!
> >
> > I will do as I please so long as I'm within the law... YOU have not got
> > enough ASS OR BALLS to stop me, because I WILL see to it, that you are
> > tracked and prosecuted AGAIN - DICK HEAD. END OF DISCUSSION.
> >
> > Lou
> >
> >
> >
>
>

1469. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:33:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70cc15$1_7@corp.newsgroups.com>
Source record: 107686

Tarmo Tammaru wrote:
> Why didn't ypu use a 15 or 17 m dipole and get away from the impedance
> extremes?

The impedance extremes don't bother me. A 50 ohm antenna gives an SWR of 9:1 with 450 ohm ladder-line. An 4050 ohm antenna gives an SWR of 9:1 with 450 ohm ladder-line. The impedance at a current maximum point is the same 50 ohms for both of those antennas.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1470. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:35:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70cc9e_7@corp.newsgroups.com>
Source record: 107687

Richard Clark wrote:
> I take it by your lack of other response you couldn't summon up a
> simple measure of temperature, ...

If you, as a father, ever felt the brow of your child, you can tell
his/her body temperature within a couple of degrees.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1471. Re: Folded monopole w/ Al sailboat mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 22:58:58 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f70d181_1@news1.prserv.net>
Source record: 107688

That configuration is no better than shunt feeding the mast near the bottom,
and is a lot more complicated mechanically, particularly keeping the wire
straight and parallel to the mast. Put a stainless hose clamp around it
about a foot from the bottom, feed it through a tuner there and see what it
does. Replace the tuner with a fixed network(s) when satisfied.

--
Crazy George
Remove NO and SPAM from return address
"Albert P. Belle Isle" <belleisl@CerberusSystems.com> wrote in message
news:f8dsmv0q6oq359qkvmdvvn7n0ogqgqlidc@4ax.com...
> It would seem that a 40+ foot aluminum mast with a grounded bottom
> just calls out for a wire from its top, parallel to it, down to a
> deck-level feedpoint with a tuner.
>
> Does anyone have any experience trying to do this? Was it any better
> than the typical weakening of your backstay with insulators? (I have a
> B&R rig, so I don't even have a backstay, anyway.)
>
>
> Good listening,
> Al
> ==
> Location: 42N39, 71W09 (Near Boston, MA)
> HF Antennas: 65ft TFD, 45ft T2FD, 28ft vertical, 65ft doublet
> HF Receivers: Ten-Tec RX340, RX320, Harris R2368, Cubic R3030A
> Decoders: Code300-32, Universal M-8000, PK-232MBX/DSP
> ==

1472. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:16:43 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309231516.42319b6d@posting.google.com>
Source record: 107689

"Bill VanAlstyne" <w5wvo@cybermesa.net> wrote in message
>
> Comments, please...
>
> Bill / W5WVO

I might add...To me, the importance of using a better matching device would depend on how long and how many elements, and also the freq. Naturally, if I'm on VHF or UHF with a 15 el yagi, the pattern is tight, and suppression of the common mode currents is fairly critical to accurate steering and a good clean pattern. So I'd want to use the T most likely.
But for smaller 3-4-5 element yagi's, I hardly see it worth the bother. The patterns are fairly broad, and it's not a big deal to have a small amount of current on the line. In practice, I hardly seem to notice any problems at all here, but some do. Adding a choke of some type will clean that up if needed.
HF? Again, hardly worth the bother. To me anyway...Add a choke if you want to sleep better at night. Actually, my present tri-bander has a 50 ohm feedpoint, and only needs a choke or 1:1 balun. I just wind a coax choke. MK

1473. Re: LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:31:51 UTC
From: Greg Courville <EngNOSPAMinuitor@Gee-Enginuity.com>
Message-ID: <vn1lv8ail1dl4c@corp.supernews.com>
Source record: 107690
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

You know, it IS possible that this is a different person just trying to
cause trouble.
I'm gonna traceroute his IP and see whereabouts he is...

-KG6SGY

"Lou" <Spamfree@Spamfree.com> wrote in message
news:Aq3cb.88$LJ5.6549@iad-read.news.verio.net...
> "Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
> five@Thirty-eight ninety-four point five> wrote in message
> news:vn1g9pltrcjba2@corp.supernews.com...
> > LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER BOY
> >
> > I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH
> >
>
> KISS MY ASS!
>
> I will do as I please so long as I'm within the law... YOU have not got
> enough ASS OR BALLS to stop me, because I WILL see to it, that you are
> tracked and prosecuted AGAIN - DICK HEAD. END OF DISCUSSION.
>
> Lou
>
>
>

1474. Re: PROJECT: next generation SWR/wattmeter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:33:49 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0309231533.655b6775@posting.google.com>
Source record: 107691
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<b9t0nv8mg7mrdemjd8a6q4c9fhusfs5jo8@4ax.com>...
>
> 1. Op Amps have offset voltage compensation circuits (either
> internal, or you can access 50 years of literature on how to do it
> externally). Your choice for a self-destructing chopper amp is your
> own problem, not an inherent failure of the class of device. Again,
> there are 50 years of literature on how to build your own if the
> devices your limit yourself to are either a. too expensive, or b. too
> fragile.
>
I am aware that some op amps have offset voltage compensation
circuits, but they require adjusting a potentiometer. I don't like
potentiometers and prefer to design a circuit to avoid the need for
one. There probably are better solutions than the active rectifier
design I went with, but they would have been more complicated.

> 2. Active rectifiers having limited accuracy is strictly a problem of
> GBWP. Choose a crappy one, and you fulfill your nightmare. For HF,
> you should be using one with at least 1GHz. Your problem then becomes
> one of selecting an amp that is stable at unity gain (or at least
> stable at the gain you choose/need). Complaints about not being able
> to handle 10mV signals only suggest you need an amplifying buffer
> before the detector. With a little leg work (researching that same 50
> years worth of application design), a second diode, and feed back, you
> could linearize the power/SWR meter too.
>
I had originally thought of using RF amplifiers in my design, but RF
amplifiers are not available in DIP format. So I switched to
rectifying the RF with Ge diodes and then using a noninverting
logarithmic op amp to compensate for the diode drop loss. The
experience also taught me to be less reliant on PSPICE in the future.
Just try to model an LM324 with the negative power supply grounded.
An LM324 doesn't need that negative power supply in real life, but it
does in PSPICE.

> 3. LM3914 should be designed with the usual offset compensation if
> that is a problem. However, even with a few mV out of 10V, the
> dynamic range is considerably greater than your instrument's range.
> Your problem is one of scaling your signal (it shows in the other
> complaints). Dynamic range, 20 log (10V/10mV), borders on 60dB where
> accuracy would tend to go to hell at the low end. You show only 30dB
> of dynamic range, 10 log (200W/200mW). You are not using the full
> potential of the device.

>
In the original version, I had 2 LM3914 amplifiers cascaded for 20 LEDs for the SWR display. When I wasn't transmitting, several of the LEDs would often come on, presumably because of the near-zero voltages on the low, signal, and high voltage ports. The instrument also didn't have the accuracy needed to justify 20 LEDs, and a 7-inch by 3-inch face does not have enough room for 40 LEDs.

You can always try to improve on my QROP Meter, just as my QROP Meter idea was inspired by my dissatisfaction with conventional SWR/wattmeters and the numerous homebrew designs I had looked at. And yes, I obtained many of my ideas from other people's designs. I found an LED-based SWR meter for VHF in the ARRL's archived articles. The noninverting logarithmic op amp to compensate for the diode drop loss and the directional coupler for sampling forward and reflected voltages came from several homebrew projects on the net plus the ARRL Antenna Book's Tandem Wattmeter project.

Jason Hsu, AG4DG
usenet@@@jasonhsu.com

1475. Re: LOU

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:33:50 UTC
From: B I G A L <"B I G A L"@B>
Message-ID: <vn1m2uofkmf2b8@corp.supernews.com>
Source record: 107692
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

CALL THE FCC CALL THE FCC

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
news:vn1lv8ail1dl4c@corp.supernews.com...
> You know, it IS possible that this is a different person just trying to
> cause trouble.
> I'm gonna traceroute his IP and see whereabouts he is...
>
> -KG6SGY
>
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:Aq3cb.88$LJ5.6549@iad-read.news.verio.net...
> > "Thirty-eight ninety-four point five" <Thirty-eight ninety-four point
> > five@Thirty-eight ninety-four point five> wrote in message
> > news:vn1g9pltrcjba2@corp.supernews.com...
> > > LOU YOU WILL NOT OPERATE ON THIRTY-EIGHT NINETY-FOUR POINT FIVE EVER
BOY
> > >
> > > I OWN THAT ONE CAUSE I HAVE A BIG ONE OH OH
> > >
> >
> > KISS MY ASS!
> >
> > I will do as I please so long as I'm within the law... YOU have not got
> > enough ASS OR BALLS to stop me, because I WILL see to it, that you are
> > tracked and prosecuted AGAIN - DICK HEAD. END OF DISCUSSION.
> >
> > Lou
> >
> >
> >
>
>

1476. Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:41:28 UTC
From: Greg Courville <EngNOSPAMinuitor@Gee-Enginuity.com>
Message-ID: <vn1mh7gl0j7b9d@corp.supernews.com>
Source record: 107693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

As most of you know, there is a troll on these boards claiming to be K40KA. I'm still trying to figure out whether this guy is just trying to be annoying. If he is actually doing what he said he is, we can go to the FCC, so I'd like to find out if he's actually on the air. Not owning any HF equipment, I can't do much my self. If somebody could listen in when he says he'll be transmitting...

73 de KG6SGY

1477. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:43:13 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <IU4cb.2991$ai7.362@newsread1.news.atl.earthlink.net>
Source record: 107694
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Lou" <Spamfree@Spamfree.com> wrote in message
news:xb3cb.87$LJ5.6464@iad-read.news.verio.net...
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net...
> >
> > "Lou" <Spamfree@Spamfree.com> wrote in message
> > news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> > > "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
> > > news:vmv6j3kfrkpv64@corp.supernews.com...
> > > > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A.
> Abernethy,
> > > > K4OKA, July 27, 1999, modifying his license to prohibit operation
> below
> > 30
> > > > MHz for 180 days, effective immediately. Unless he appeals the
action,
> > > > Abernethy may not get back on HF until January 22, 2000. The FCC
> letter
> > > > included a copy of a tape recording--supplied by complainants--of
> > > > transmissions said to be of Abernethy's station on July 16.
> > > Hollingsworth's
> > > > letter described the tape as "consisting of deliberate interference
on
> > > 3.965
> > > > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted
> that
> > > > Abernethy had been warned about deliberate interference at the time
> his
> > > > station was inspected last January. Abernethy has 30 days to protest
> the
> > > > sanction. FCC personnel inspected Abernethy's station January 21 and
> 22
> > in
> > > > the wake of what Hollingsworth called "longstanding complaints from
> > other
> > > > amateurs and from our field offices." In particular, he said, the
FCC
> > had
> > > > received "numerous complaints" about profanity, obscenity,
deliberate
> > > > interference, and failure to properly identify. Other complaints to
> the

> > > FCC
> > > > alleged that Abernethy had aired something called the "Porkbutt
Song,"
> > the
> > > > letter said, "for the purpose of harassment or deliberate
> interference."
> > > > Hollingsworth said the FCC's High Frequency Direction Finding Center
> in
> > > > Maryland tracked the transmissions of the "Porkbutt Song" to K4OKA.
> The
> > > FCC
> > > > letter also said the Commission had received complaints that
Abernethy
> > had
> > > > used AM and upper sideband on 75 "for the purpose of interference"
on
> or
> > > > near 3894.5 kHz. Abernethy also was warned in the letter about
> > over-power
> > > > operation. Hollingsworth said that the FCC has no plans to start
> > > revocation
> > > > proceedings against Abernethy "unless we have evidence of continued
> > > > violations" of the type the FCC described in its July 27 letter.
(For
> > > > additional details, see "FCC Takes North Carolina Ham off HF for Six
> > > Months"
> > > > elsewhere on the AWE news page.)
> > > >
> > > >
> > > > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> > > > news:vmqshdfh78hr4b@corp.supernews.com...
> > > > > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> > > > >
> > > > >
> > > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > > > >
> > > > > >
> > > > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > > > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5.
> THATS
> > > BIG
> > > > > ALS
> > > > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > > > >
> > > > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT
> SONG.
> > HO
> > > > > HO

> > > > > > >
> > > > > > > >
> > > > > > >
> > > > > > > If I choose to talk on that frequency, I will, so long as I'm
> > abiding
> > > by
> > > > > the
> > > > > > > rules and regulations as they are spelled out. YOU or no one
else,
> > can
> > > > > > tell
> > > > > > > me to stay off. ASS WIPE.
> > > > > > >
> > > > > > > BIG AL.. the only thing big about you, is your mouth....
> > > > > > >
> > > > > > > Lou
> > > > > > >
> > >
> > > Well Ass hole AL, looks like you've had your ass reamed out once,
trying
> > for
> > > seconds???? Something tells me, you're due for it.
> > > Lou
> > >
> > >
> >
> > Once? Boy are you out of touch.
> >
> > Dan/W4NTI
> >
> Not sure how the thread made it past my kill file, but to respond to your
> comment, I only went with what I was told and seen for myself as witnessed
> above.. IF there was more than one incident mentioned, then I didn't
notice
> in my speed read of the article.
> But, if it's been more than once, then maybe it's time they show him
they're
> done playing games.
> Lou
>
>

Well first off, the reference violation above is long done with. He spent his time in radio prison and returned to the HF bands. He has basically learned his lesson, this time. And has been a decent operator for several years now.

What I was refering to was he was removed from the radio voluntarily in lieu of being fined a big chunk of bux back in the 70s. He stayed off the air for years. Returned as KJ4JX and began his crap again. He later got his original call back under the vanity system.

He has been a QRMer for many years. BUT as stated above has finally seen the light.

This crap you see here from "BIG AL" is BS.. And same for the "3894.5" crap. Its just a troll.

But I wanted to set the record straight.

Dan/W4NTI

1478. Re: Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-23 23:46:44 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <EX4cb.3005$ai7.2406@newsread1.news.atl.earthlink.net>
Source record: 107695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
news:vn1mh7gl0j7b9d@corp.supernews.com...
> As most of you know, there is a troll on these boards claiming to be
K40KA.
> I'm still trying to figure out whether this guy is just trying to be
> annoying. If he is actually doing what he said he is, we can go to the
FCC,
> so I'd like to find out if he's actually on the air. Not owning any HF
> equipment, I can't do much my self. If somebody could listen in when he
says
> he'll be transmitting...
>
>
> 73 de KG6SGY
>
>

It'd s troll. Big AL gets on occasionaly on 3894.5 and talks with whats left of his "Abernathy Radio Group". Without his Henry 8K of course.

So don't worry about it.

Dan/W4NTI

1479. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:01:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pnm1nv478nil3g5cuvha9mpfsig46a00h1@4ax.com>
Source record: 107696

On Tue, 23 Sep 2003 17:35:50 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> I take it by your lack of other response you couldn't summon up a
>> simple measure of temperature, ...
>
>If you, as a father, ever felt the brow of your child, you can tell
>his/her body temperature within a couple of degrees.

Hi Cecil,

A couple of degrees? Another way of saying you don't know.

Step outside, and touch the side of the house illuminated by the sun
and tell me within a couple of degrees what its temperature is. You
don't have a clue.

All of this means that you are long on wind when it comes to claims,
and short on real facts when it comes to application. Just like your
gusting on about light (like the sun) and wholly lost in the woods
when asked how much power (like the temperature asked here). You
couldn't even guess without fear of embarrassment.

Want to jack up the pressure? How many Watts in that same area where
your hand feels the heat against the sun drenched wall? You claim you
can do it with your hand and a 75m hamstick coil (just a claim - and
pretty inspecific at that), but have failed repeatedly to divulge the
exact same ability with the sun against your own house.

To this point the best you have to offer in the Texan sun is that it
is out:
0 - maybe not
1 - maybe so

If this is the best of your generalization (a binary shrug of the
shoulders), you certainly could achieve a leap of success in dropping
your poor standard equipment.

73's
Richard Clark, KB7QHC

1480. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:02:33 UTC
From: radio913@aol.com
Message-ID: <20030923200233.03046.00000066@mb-m17.aol.com>
Source record: 107697

>I have done my lab work and produced results consistent with
>classic rho.
>

But Classic rho didn't tell us the incident voltage. Also, the crux of your argument was that rho= -1 should be a short, which it is not for complex Zo.

>
>The benefit of going to the lab is all yours. You will
>learn how it works. Alternatively, perhaps, you will demonstrate
>that classic rho is all wrong and revised rho rules. In this
>case, if YOU have done the lab work, YOU will get (and deserve)
>all the glory of a major revision to transmission line theory.

This is not a revision. This is already in the published material.

And i have plenty of lab experience, thank you very much.

>
>If I went back to the lab you are unlikely to accept any new
>results from me any more than you have accepted those to date.
>Sometimes seeing is believing.
>

Right. And you probably won't accept any new data from me.

>>
>> This may be true, but are you saying that a capacitor can reflect an
>> RMS voltage wave that is greater than the one that charges it?
>
>Yes indeed. Resonant circuits achieve this with ease.
>
>...Keith
>

Absolutely incorrect! If capacitance is defined as Coulombs/Volt, then how are you getting more coulombs than you put in? Remember, i said Root Mean Square voltage.

How does a capacitor reflect more power than you feed it?

It's almost time for me to cut out of this discussion, if you still don't understand me.

Slick

1481. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:05:35 UTC
From: radio913@aol.com
Message-ID: <20030923200535.03046.00000067@mb-m17.aol.com>
Source record: 107698

It's NOT very easy to tell that your two diagrams are the same, Cecil!

At any rate, at resonance, the reactances should cancel out, and the 50 ohms should be left.

Slick

1482. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:13:25 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <Fk5cb.558654$Ho3.97905@sccrnsc03>
Source record: 107699

I was going to make a comment but Roy covered it.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vn135g841c6f77@corp.supernews.com...
> No. Reflections are linear phenomena, so they don't generate signals on
> any new frequencies, or convert the frequencies of signals.
>
> Diodes, on the other hand, are nonlinear devices which can do that. They
> can create harmonics from existing signals, and they can mix signals
> together to produce signals on frequencies that equal the sum and
> difference of various multiples of the signals being mixed. Likewise, a
> strong signal or signals can drive a poorly-designed receiver front end
> into a nonlinear region for the same effect.
>
> It's easy to test for the diodes. Find a suspected mixing product, and
> see if it goes away when you disconnect the diodes. To check your
> receiver front end, put an attenuator between the antenna and the
> receiver. A 500 ohm potentiometer should be adequate for the test. As
> you increase the attenuation, receiver mixing products will drop in
> amplitude more quickly than valid signals. At some amount of
> attenuation, you should hear only valid signals.
>
> Roy Lewallen, W7EL
>
> mike wrote:
> >
> > After thinking about this a little more. What if my current impedance
> > mismatch between my antenna and transmission line is actually causing
> > reflections which are noticed by me as images on other frequencies?
> >
> > Might a signal coming in on 3200 khz echo end to end back to 2300 khz?
> >
> > This seems probable and the diodes may not be causing it at after all.
> >
> > mike
>

1483. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:14:15 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F70E1D7.25EED82C@cwis.net>
Source record: 107700

Cecil,
He didn't say he was using ladder line. Then again,
he didn't say what he was using for a feed line. I'd
be willing to bet it's coax, though...
'Doc

1484. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:27:44 UTC
From: Lou <Spamfree@Spamfree.com>
Message-ID: <oy5cb.91$LJ5.6549@iad-read.news.verio.net>
Source record: 107701
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:lU4cb.2991$ai7.362@newsread1.news.atl.earthlink.net...

<A whole bunch of stuff snipped>

>
>
> Well first off, the reference violation above is long done with. He
spent
> his time in radio prison and returned to the HF bands. He has basically
> learned his lesson, this time. And has been a decent operator for
several
> years now.
>
> What I was refering to was he was removed from the radio voluntarily in
lieu
> of being fined a big chunk of bux back in the 70s. He stayed off the air
> for years. Returned as KJ4JX and began his crap again. He later got his
> original call back under the vanity system.
>
> He has been a QRMer for many years. BUT as stated above has finally seen
> the light.
>
> This crap you see here from "BIG AL" is BS.. And same for the "3894.5"
crap.
> Its just a troll.
>
> But I wanted to set the record straight.
>
> Dan/W4NTI
>

Well, whatever.. I'm kill filing everything and anything that comes across
about this after this response. If need be, remove the news group as well. I
won't miss it for a while. But I'm not going to get caught up in this
childish bull shit any more than I've already been suckered into doing..
Yeah, I DO fail once in a while! Lou

1485. LOU DONT GO. ITS FUN SLAPPING YOU AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:35:01 UTC
From: B I G A L <"B I G A L"@B>
Message-ID: <vn1plom0ib5h02@corp.supernews.com>
Source record: 107702
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

BYE BYE BOY. SEE YOU LATER BOY. COME TO MY FREQ AND I'LL RUN YOU OFF THERE
TO.

B I G A L

"Lou" <Spamfree@Spamfree.com> wrote in message
news:oy5cb.91$LJ5.6549@iad-read.news.verio.net...
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:lU4cb.2991$ai7.362@newsread1.news.atl.earthlink.net...
>
> <A whole bunch of stuff snipped>
>
> >
> >
> > Well first off, the reference violation above is long done with. He
> spent
> > his time in radio prison and returned to the HF bands. He has basically
> > learned his lesson, this time. And has been a decent operator for
> several
> > years now.
> >
> > What I was refering to was he was removed from the radio voluntarily in
> lieu
> > of being fined a big chunk of bux back in the 70s. He stayed off the
air
> > for years. Returned as KJ4JX and began his crap again. He later got
his
> > original call back under the vanity system.
> >
> > He has been a QRMer for many years. BUT as stated above has finally
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> > the light.
> >
> > This crap you see here from "BIG AL" is BS.. And same for the "3894.5"
> crap.
> > Its just a troll.
> >
> > But I wanted to set the record straight.
> >
> > Dan/W4NTI
> >
>
> Well, whatever.. I'm kill filing everything and anything that comes across

> about this after this response. If need be, remove the news group as well.
I
> won't miss it for a while. But I'm not going to get caught up in this
> childish bull shit any more than I've already been suckered into doing..
> Yeah, I DO fail once in a while! Lou
>
>
>

1486. Re: NYC, NNJ Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 00:55:42 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030923205542.29806.00000089@mb-m10.aol.com>
Source record: 107703

>I never again spent a whole day at Oktoberfest...
>But Yuri I have a question for you...
>How do you reconcile Spaten with Dr. Atkin's way to live?
--
>Peter K1PO [Oktoberfest survivor!]
>Indialantic By-the-Sea, FL.
>

Nice an colorfull description of the real thing in Munich!
The closest thing I have been to is bunch of the Oktoberfests in
Kitchener-Waterloo in Ontario, whole week.
We are trying to provide some quality food - dinner and Spaten Bier in an
evening, without parade etc.
I thought it would be good oportunity for some antenna gurus to get together,
tell few lies, stretch few dBs and rotate few heads. Last year we had two
tables of hams, so we hope to grow.
Anyone from NYC, NNJ or EPA interested, please check
www.K3BU.us for poster and directions.
Email me with reservations at K3BU@aol.com by Oct. 4th.

Dr. Atkins allowed to sin here and there if there is no light version
available.

73
Yuri, K3BU

1487. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 01:02:18 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <u26cb.3048$iT4.2225875@news1.news.adelphia.net>
Source record: 107704

Dee D. Flint wrote:

> "David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
> news:ryeburn-2009031337540001@bni030qny8kc.bc.hsia.telus.net...
>
>>In article <TZ1bb.1250$Hd6.960347@newssvr28.news.prodigy.com>, "Dee D.
>>Flint" <deehays@qix.net> wrote:
>>
>>
>>>I've tried to trap them but the headers and senders, etc are all
>
> different.
>
>>The "From:" lines are likely forged. Many such worms and viruses pick
>>recipients and purported senders randomly from the infected computer's
>>Outlook or Outlook Express address list. If you want to see where the
>>message really is coming from, examine full headers carefully --
>>specifically, the "Received: from" lines.
>>
>>
>>>If you have a suggestion on how to stop them, please let us all in on
>
> it.
>
>>Persuade the universe to cease using unsafe operating system software,
>>browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including
>>the version now marketed by Apple, is pretty safe.
>>
>>David, ex-W8EZE, whose computers are happily MS-free except for safe 11
>>year old versions of Word and Excel
>
>
> If everyone switched to UNIX, the solution would be short-lived as the virus
> writers would then switch to attacking it. Right now, they simply get more
> "bang for the buck" by attacking Windows and it doesn't give them much of a
> thrill to also go after UNIX system users or Apple computer users.

You have touched on the answer, Dee.

What computer and software manufacturers have done that is a fatal flaw
in their systems is insist that "EVERYTHING HAS TO BE THE SAME" I
remember the abuse that I took from PC users because I was running an
Amiga for so many years. Installed User Base, PC Compatibility and other
mantras were tossed at me and others who dared to use "non-standard"
computers like the Amiga and the Mac.

But here we are undergoing attack after attack because of what. 95 percent of us are using the same platform, the same OS and the same software. We are going through an computer analog (heh heh) of the Irish potato famine.

I do like to draw a parallel between the agricultural monoculture and computer monoculture. Only grow one crop, and you're vulnerable.

Whether MS likes it or not, one big step toward a cure (besides them writing incredibly poor software) is for there to be several different types of email software. This software is not to be crippled by all the features that they try to add, with every feature seems to come a new vulnerability. Especially things like IE and Outlook coupling up mailing addys.

I personally use only the MS products that I absolutely have to, and will not use their mailing system. I use Netscape for mail, and it works okay. If Netscape were to somehow become the big mail program - which will never happen - I'll switch to something else.

But the majority of PC users are unwilling to believe this sort of rationale, as they scramble daily to update their Virus definitions, an other stunts that don't really work too well.

After all, there has to be a virus that infect a computer before there can be a definition for it.

- Mike KB3EIA -

1488. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 01:19:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70f2ee$1_7@corp.newsgroups.com>
Source record: 107705

Richard Clark wrote:
> All of this means that you are long on wind when it comes to claims, ...

What is it that you think I have claimed?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1489. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 01:28:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70f503_7@corp.newsgroups.com>
Source record: 107706

Radio913 wrote:

> It's NOT very easy to tell that your two diagrams are the same, Cecil!
>
> At any rate, at resonance, the reactances should cancel out, and the 50 ohms
> should be left.

Is the voltage across the capacitor higher than the source voltage?
Is the reactive power on the capacitor higher than the source power?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1490. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 01:29:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f70f54b$1_7@corp.newsgroups.com>
Source record: 107707

'Doc wrote:
> Cecil,
> He didn't say he was using ladder line. Then again,
> he didn't say what he was using for a feed line. I'd
> be willing to bet it's coax, though...

Me too. That's why I suggested he switch to ladder-line if he is
not already using it.
--
73, Cecil http://www.qsl.net/w5dxp

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1491. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 02:00:04 UTC
From: Floyd Davidson <floyd@barrow.com>
Message-ID: <878yof6j4r.fld@barrow.com>
Source record: 107708

Mike Coslo <mcoslo@adelphia.net> wrote:
>Dee D. Flint wrote:
>> "David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote:
>>>"Dee D. Flint" <deehays@qix.net> wrote:
>>>
>>>>If you have a suggestion on how to stop them, please let us all in on
>>>>it.
>>
>>>Persuade the universe to cease using unsafe operating system software,
>>>browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including
>>>the version now marketed by Apple, is pretty safe.
>>>
>>>David, ex-W8EZE, whose computers are happily MS-free except for safe 11
>>>year old versions of Word and Excel
>>
>>
>> If everyone switched to UNIX, the solution would be short-lived as the virus
>> writers would then switch to attacking it. Right now, they simply get more
>> "bang for the buck" by attacking Windows and it doesn't give them much of a
>> thrill to also go after UNIX system users or Apple computer users.
>
> You have touched on the answer, Dee.

David is the one who touched on it. The answer *is* to use an
OS designed to be secure. Microsoft products are not, while
virtually all of the current unix systems are. Some unixes (the
ones with open source code, which does not include Apple) do
have higher potential for good security than others.

The "bang for the buck" argument is proof of it too. If you
want a *bang*, then shutdown the *entire* Internet, not just
some percentage of the hosts connected to it. The fact is
that from the start the Internet itself ran on unix. That is
less true today, but it is still true enough that if one could
write a virus to knock out unix, one could just shut the
Internet off for days.

But, of course, it can't be done (or that is exactly what they
would be doing).

--
Floyd L. Davidson <http://web.newsguy.com/floyd_davidson>
Ukpeagvik (Barrow, Alaska) floyd@barrow.com

1492. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 02:03:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s9u1nvglqtvq50bpr0t1o99065s00iuhfi@4ax.com>
Source record: 107709

On Tue, 23 Sep 2003 20:19:18 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> All of this means that you are long on wind when it comes to claims, ...
>
>What is it that you think I have claimed?

Hi Cecil,

Well you've never claimed to have any sort of attention span.

>>On Tue, 10 Jun 2003 18:47:32 -0500, W5DXP <Cecil.A.Moore@ieee.org>
>>wrote:
>>
>>>Richard Clark wrote:
>>>> Do you measure V/I with a thermometer?
>>>
>>>One certainly can. If there's no temperature rise, the resistance
>>>value is dissipationless.
>>
>>Hi Cecil,
>>
>>What is the V/I for a 1 degree rise?
>>
>>73's
>>Richard Clark, KB7QHC

I suppose if you gust on enough, there is no temperature rise in your
mind. Talk about air cooled resistors. You can keep your hands in
your pockets.

73's
Richard Clark, KB7QHC

1493. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 02:08:59 UTC
From: Greg Courville <EngNOSPAMinuitor@Gee-Enginuity.com>
Message-ID: <vn1v5ud4v57a02@corp.supernews.com>
Source record: 107711
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Yeah, if you look at some of the other Big-Al threads you'll see that we've decided he's not for real.
Now we're trying to get him for violations of Supernews's policy. Write to abuse@supernews.com and attach segments of his posts. Maybe then he'll have to post directly...

-KG6SGY

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message news:lU4cb.2991$ai7.362@newsread1.news.atl.earthlink.net...
>
> "Lou" <Spamfree@Spamfree.com> wrote in message
> news:xb3cb.87$LJ5.6464@iad-read.news.verio.net...
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net...
> > >
> > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> > > > "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
> > > > news:vmv6j3kfrkpv64@corp.supernews.com...
> > > > > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A.
> > Abernethy,
> > > > > K4OKA, July 27, 1999, modifying his license to prohibit operation
> > below
> > > > 30
> > > > > MHz for 180 days, effective immediately. Unless he appeals the
> action,
> > > > > Abernethy may not get back on HF until January 22, 2000. The FCC
> > letter
> > > > > included a copy of a tape recording--supplied by complainants--of
> > > > > transmissions said to be of Abernethy's station on July 16.
> > > > Hollingsworth's
> > > > > letter described the tape as "consisting of deliberate interference
> on
> > > > 3.965
> > > > > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH, noted
> > that
> > > > > Abernethy had been warned about deliberate interference at the time
> > his

> > > > > station was inspected last January. Abernethy has 30 days to
protest
> > the
> > > > > sanction. FCC personnel inspected Abernethy's station January 21
and
> > 22
> > > in
> > > > > the wake of what Hollingsworth called "longstanding complaints
from
> > > other
> > > > > amateurs and from our field offices." In particular, he said, the
> FCC
> > > had
> > > > > received "numerous complaints" about profanity, obscenity,
> deliberate
> > > > > interference, and failure to properly identify. Other complaints
to
> > the
> > > > FCC
> > > > > alleged that Abernethy had aired something called the "Porkbutt
> Song,"
> > > the
> > > > > letter said, "for the purpose of harassment or deliberate
> > interference."
> > > > > Hollingsworth said the FCC's High Frequency Direction Finding
Center
> > in
> > > > > Maryland tracked the transmissions of the "Porkbutt Song" to
K4OKA.
> > The
> > > > FCC
> > > > > letter also said the Commission had received complaints that
> Abernethy
> > > had
> > > > > used AM and upper sideband on 75 "for the purpose of interference"
> on
> > or
> > > > > near 3894.5 kHz. Abernethy also was warned in the letter about
> > > over-power
> > > > > operation. Hollingsworth said that the FCC has no plans to start
> > > > revocation
> > > > > proceedings against Abernethy "unless we have evidence of
continued
> > > > > violations" of the type the FCC described in its July 27 letter.
> (For
> > > > > additional details, see "FCC Takes North Carolina Ham off HF for
Six
> > > > Months"
> > > > > elsewhere on the AWE news page.)
> > > > >

> > > > >
> > > > > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> > > > > news:vmqshdfh78hr4b@corp.supernews.com...
> > > > > > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> > > > > > >
> > > > > > >
> > > > > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > > > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > > > > > >
> > > > > > > >
> > > > > > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > > > > > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > > > > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF 3.894.5.
> > THATS
> > > > > BIG
> > > > > > ALS
> > > > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > > > > >
> > > > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE PORKBUTT
> > SONG.
> > > > HO
> > > > > HO
> > > > > > >
> > > > > > >
> > > > > > > If I choose to talk on that frequency, I will, so long as I'm
> > > abiding
> > > > > by
> > > > > > the
> > > > > > > rules and regulations as they are spelled out. YOU or no one
> else,
> > > can
> > > > > > tell
> > > > > > > me to stay off. ASS WIPE.
> > > > > > >
> > > > > > > BIG AL.. the only thing big about you, is your mouth....
> > > > > > >
> > > > > > > Lou
> > > > > > >
> > > >
> > > > Well Ass hole AL, looks like you've had your ass reamed out once,
> trying
> > > for
> > > > > seconds???? Something tells me, you're due for it.
> > > > > Lou
> > > >
> > > >
> > >
> > > Once? Boy are you out of touch.
> > >

> > > Dan/W4NTI
> > >
> > Not sure how the thread made it past my kill file, but to respond to
your
> > comment, I only went with what I was told and seen for myself as
witnessed
> > above.. IF there was more than one incident mentioned, then I didn't
> notice
> > in my speed read of the article.
> > But, if it's been more than once, then maybe it's time they show him
> they're
> > done playing games.
> > Lou
> >
> >
>
> Well first off, the reference violation above is long done with. He
spent
> his time in radio prison and returned to the HF bands. He has basically
> learned his lesson, this time. And has been a decent operator for
several
> years now.
>
> What I was refering to was he was removed from the radio voluntarily in
lieu
> of being fined a big chunk of bux back in the 70s. He stayed off the air
> for years. Returned as KJ4JX and began his crap again. He later got his
> original call back under the vanity system.
>
> He has been a QRMer for many years. BUT as stated above has finally seen
> the light.
>
> This crap you see here from "BIG AL" is BS.. And same for the "3894.5"
crap.
> Its just a troll.
>
> But I wanted to set the record straight.
>
> Dan/W4NTI
>
>

1494. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:13:16 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bkr24c$4fl$0@208.206.142.79>
Source record: 107712

Mike Coslo wrote:
> I use Netscape for mail, and it works
> okay. If Netscape were to somehow become the big mail program - which
> will never happen - I'll switch to something else.
>

Mike I also use Netscape, and have for the entire time I've been on the net. And I thought I'd never catch one of the Outlook/IE bugs because of that.... but-

When I turned on the computer this morning and fired up Netscape 7.1 I soon learned that there was NOTHING whatever remaining of any of my settings, stored email, usenet subscribed groups, address book, bookmarks-- it was ALL gone! Right to the bare Netscape installation itself.

So I fired up Stinger which I had on the hard drive and scanned the entire system, and turned up the Nachi worm virus in two separate locations. Stinger (from Mcafee) cleanmed it out, and I ran Stinger again just to make sure.

After that I took this opportunity to install a ner 120 GB I picked up last month and another 256 MB of RAM, and started anew with a completely new software system, relegating the old 20 GB to slave status.
AND, I'm pleased that I provoked Richard Clark into telling his secrets of avoidance, as I had dounloaded and am now running DCOM to disable that particular gaping hole. Still using Zonealarm for a firewall but think I'll try his recommendation there, also.

If any of this was really simple there'd be no money in it! :-)

> But the majority of PC users are unwilling to believe this sort of
> rationale, as they scramble daily to update their Virus definitions, an
> other stunts that don't really work too well.

Well, I've kept Norton in slush funds over the years but had'nt got around to springing for this year's version yet, and now I don't plan to. Turns out by some reports that Norton wouldn't have stopped the SWEN worm anyway. I have no clue about the NACHI thing that I somehow picked up. I NEVER ran either OE nor Outlook, never opened even one attachment, never even opened a suspicious email message, but it grabbed me anyway.

Beats me.

>
> After all, there has to be a virus that infect a computer before
> there can be a definition for it.

>

Not to sound conspiratorial, but there'd be a real recession among the antivirus folks if someone should do a good job of spreading a real cure for all this, and everyone had the success at avoidance that Rich Clark has had. I'm working my way in that direction.

73, Dick W0EX

1495. Scantenna and TV satellite dish on same antenna tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:13:47 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309231913.4114b4ed@posting.google.com>
Source record: 107713

Does anybody have any experience with putting a scanner antenna and
their TV satellite dish on the same antenna?

I want to know if there will be any interference issues.

Thanks.

1496. Extension cord "whip"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:22:28 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <U58cb.1843$eB.1482@twister.southeast.rr.com>
Source record: 107714

I plan to use a 3 conductor white AC extension cord running along the eaves of my house instead of the regular whip that came with my screwdriver antenna. (There will be some slack to allow for coil movement). The idea is to disguise the antenna (the base will be hidden). Plus this will give me more length - probably about 25 ft. I will connect all 3 wires together at the bottom, but plan to leave them unconnected at the top. Or should I connect them? Any disadvantages?

Thanks,

Ron, W4TQT

1497. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:42:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f711480$1_5@corp.newsgroups.com>
Source record: 107716

Richard Clark wrote:
> I suppose if you gust on enough, there is no temperature rise in your
> mind.

My mind remains at a fairly constant 99.2 degrees F. Somewhere in my
pile of junk is a device that measures the temperature of an IC. The
last time I used it was last century on a 4:1 voltage balun in AZ.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1498. Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:43:52 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f711443_3@news1.prserv.net>
Source record: 107715

Since no one else has posted this:

http://www.rohnnet.com and click on "Press Releases", then
click on the September 16, 2003 entry.

Hope no one needs parts for a while.

--
Crazy George
Remove NO and SPAM from return address

1499. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 03:58:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f711824$1_5@corp.newsgroups.com>
Source record: 107717

Bob Miller wrote:
> Cecil, I have a 44-foot dipole with 42 feet of ladder line -- I can
> tune it for 30m-10m easily with my tuner. I can't get it to tune on
> 40m, though. If I shorten the ladder line to 33 feet, or lengthen it
> to 99 feet, would that give me a near-perfect match on what is a 3/8
> wave dipole for 40m?

Nope, it wouldn't, Bob, because the SWR is too high. EZNEC says a 44'
dipole fed with 450 ohm ladder-line will have a current maximum feedpoint
resistance of about 10 ohms. I define "near-perfect" as a feedpoint resistance
of 25-100 ohms giving a 50 ohm SWR of less than 2:1. However, you can
probably match that 10 ohms with your tuner.

In general, to use the variable ladder-line length approach that I use,
a dipole needs to be at least 1/2WL on the lowest frequency of operation.
For dipoles shorter than 1/2WL, as the dipole is made shorter, the resistance
goes down and the reactance goes up, causing the resistance at a current
maximum point to go lower and lower with increasing SWR.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1500. Re: Reflections on rrap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 05:04:29 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bks56j$5715v$7@ID-189073.news.uni-berlin.de>
Source record: 107575
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

> Well, that's pretty sad. I guess you're overlooking the fact that a
person's
> online "personality" can be quite different than what one would experience
> in person, since the written word, particularly in a virtually immediate
forum
> such as Usenet, is, indeed, quite impersonal by nature. Moreover, your
> expression of a lack of desire to meet with certain members of this forum
> could cause all the rest, even those not included on your list, to not
wish
> to meet with you.

All we are here is merely a typeset or font! Until I either talk to the person in person, on the phone or over the air, all of these people here are merely fictional characters in my book. No way to really prove it is even them posting for that matter, and I take most negative comments with a grain of salt in that matter. To me it is purely entertainment, with the rare, occasional educational value to it.

>
> I would jump at any chance to meet any and all of the regulars in this
> newsgroup, for no better reason than to see what they are really like in
> person. I think that even Len Anderson could prove to be a quite affable
> chap, given a chance to get to know him better. I may be wrong, but
> at least I'm willing to take that chance. I would like to think that
given
> the opportunity, your curiosity would ultimately get the upper hand over
> your stated objections. If not, one could quite legitimately call your
> character into question, at a level far deeper than anything ever said
> in this forum.
>

I would agree as well, because after sitting down and actually chatting with all of these people, we might actually find out that some of these people are not really as bad as we think. At least we then could say we actually "have gotten to know" each other and not just see them for the way in which they communicate here, which may not necessarily be the way they are in person. Can you imagine that even Brucie might actually be a decent person in real life? Hell, anything is possible.

I had another idea, of which I thought would be cool..... Since we all need to practice on message handling/sending, I think it would be cool to get some type of message traffic going with RRAP people as the participants. The only problem I have is, with sending message traffic, everything I have learned from "old school" hams is that you MUST have a phone number included

with the message traffic. I personally do not wish to have my number go through the system which now is a cellphone number, as opposed to a landline number. Am I wrong in my information that within a messagegram that you MUST include a phone number????

If I am not wrong, anyone feel like sharing traffic ?? Send your interest and contact info that you wish to use to my email address of kc8pmxNO JUNK OR SPAM@diamondcs.net (remove the NO JUNK OR SPAM to reply.) I definitely can always use the practice, and what the hell, it might actually be fun!

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...

1501. Re: Extension cord "whip"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 05:24:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <57a2nv4n1sees7g9gjglt6i4ok72lra8u2@4ax.com>
Source record: 107718

On Wed, 24 Sep 2003 03:22:28 GMT, Ron <rmrippy@hotmail.com> wrote:

>I plan to use a 3 conductor white AC extension cord running along the eaves of
>my house instead of the regular whip that came with my screwdriver antenna.
>(There will be some slack to allow for coil movement). The idea is to disguise
>the antenna (the base will be hidden). Plus this will give me more length -
>probably about 25 ft. I will connect all 3 wires together at the bottom, but
>plan to leave them unconnected at the top. Or should I connect them? Any
>disadvantages?
>
>Thanks,
>
>Ron, W4TQT

Hi Ron,

As odd as it may sound, you may end up with too much wire for the
screwdriver. But it certainly is worth a try and simple enough to
change.

As an alternative, split the wire and connect half to the shell side
of the screwdriver (or maybe a third to a quarter). You need to
replace the missing car chassis as counterpoise (or let the feedline
do that through Common Mode).

1 wire, 2 or 3 are not going to make much difference, and you would
gain on the invisibility side of things by going with a single
conductor.

73's
Richard Clark, KB7QHC

1502. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 05:57:06 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <gac2nvsdu56hvsjq686utosf0mgpak56vr@4ax.com>
Source record: 107669

On 23 Sep 2003 13:59:49 GMT, nightowls627@aol.comnojunk (G. Doughty)
wrote:

>I have a 10m dipole in the attic connected to my ic718. Is it possible to tune
>it to 20m using the mfj 901b that I have? Does the dipole need to be 20m
>length and then tuned down

Yes. Make the dipole twice as long, and then, with your tuner, you'll
be able to get a good swr from 20 meters through 10.

Bob
K5qwg

> or can tuners tune to a resonance higher than that
>of the existing dipole.

Cebik says a dipole needs to be at least 3/8 wavelength long on its
lowest frequency. I find 1/2 wavelength works a lot better.

> I do not have a balun on it. On 10m I have an SWR of
>1:1
>
>Thanks
>73
>G. Doughty
>KI4BBL

1503. Re: Scantenna and TV satellite dish on same antenna tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 06:25:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7138D7.8D1FC30B@cwis.net>
Source record: 107569

Walter,
Keep the scanner antenna from in front of the dish.
Other than that, shouldn't be any problems at all.
'Doc

PS - I doubt if the scanner antenna being in front of
dish will make any difference, but why take the chance?

1504. Re: 3.894.5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 09:25:05 UTC
From: B I G A L <"B I G A L"@B>
Message-ID: <vn2ongovmmqva8@corp.supernews.com>
Source record: 107570
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

WOULD YOU LIKE SOME CHEESE TO GO WITH THAT WHINE BOY.

HO HO

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message
news:vn1v5ud4v57a02@corp.supernews.com...
> Yeah, if you look at some of the other Big-Al threads you'll see that
we've
> decided he's not for real.
> Now we're trying to get him for violations of Supernews's policy. Write to
> abuse@supernews.com and attach segments of his posts. Maybe then he'll
have
> to post directly...
>
> -KG6SGY
>
>
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:lU4cb.2991$ai7.362@newsread1.news.atl.earthlink.net...
> >
> > "Lou" <Spamfree@Spamfree.com> wrote in message
> > news:xb3cb.87$LJ5.6464@iad-read.news.verio.net...
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > news:842cb.2349$ai7.1102@newsread1.news.atl.earthlink.net...
> > > >
> > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > news:Q7Nbb.51$LJ5.4366@iad-read.news.verio.net...
> > > > > "Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in
> message
> > > > > news:vmv6j3kfrkpv64@corp.supernews.com...
> > > > > > HICKORY, NC [UPDATE]: The FCC wrote General licensee John A.
> > > Abernethy,
> > > > > > K4OKA, July 27, 1999, modifying his license to prohibit
operation
> > > below
> > > > > 30
> > > > > > MHz for 180 days, effective immediately. Unless he appeals the
> > action,
> > > > > > Abernethy may not get back on HF until January 22, 2000. The FCC
> > > letter
> > > > > > included a copy of a tape recording--supplied by

complainants--of
> > > > > > transmissions said to be of Abernethy's station on July 16.
> > > > > Hollingsworth's
> > > > > > letter described the tape as "consisting of deliberate
> interference
> > on
> > > > > > 3.965
> > > > > > MHz." In the letter, FCC Attorney Riley Hollingsworth, K4ZDH,
> noted
> > > that
> > > > > > Abernethy had been warned about deliberate interference at the
> time
> > > his
> > > > > > station was inspected last January. Abernethy has 30 days to
> protest
> > > the
> > > > > > sanction. FCC personnel inspected Abernethy's station January 21
> and
> > > 22
> > > > > in
> > > > > > the wake of what Hollingsworth called "longstanding complaints
> from
> > > > other
> > > > > > amateurs and from our field offices." In particular, he said,
the
> > FCC
> > > > had
> > > > > > received "numerous complaints" about profanity, obscenity,
> > deliberate
> > > > > > interference, and failure to properly identify. Other complaints
> to
> > > the
> > > > > > FCC
> > > > > > alleged that Abernethy had aired something called the "Porkbutt
> > Song,"
> > > > the
> > > > > > letter said, "for the purpose of harassment or deliberate
> > > interference."
> > > > > > Hollingsworth said the FCC's High Frequency Direction Finding
> Center
> > > in
> > > > > > Maryland tracked the transmissions of the "Porkbutt Song" to
> K4OKA.
> > > The
> > > > > > FCC
> > > > > > letter also said the Commission had received complaints that
> > Abernethy
> > > > had
> > > > > > used AM and upper sideband on 75 "for the purpose of
interference"

> > on
> > > or
> > > > > > near 3894.5 kHz. Abernethy also was warned in the letter about
> > > > over-power
> > > > > > operation. Hollingsworth said that the FCC has no plans to start
> > > > > revocation
> > > > > > proceedings against Abernethy "unless we have evidence of
> continued
> > > > > > violations" of the type the FCC described in its July 27 letter.
> > (For
> > > > > > additional details, see "FCC Takes North Carolina Ham off HF for
> Six
> > > > > Months"
> > > > > > elsewhere on the AWE news page.)
> > > > > >
> > > > > >
> > > > > > "BIG AL" <imafuckingwindbag@porkbutt.net> wrote in message
> > > > > > news:vmqshdfh78hr4b@corp.supernews.com...
> > > > > > > SHOW UP ON MY FREQUENCY AND I WILL RUN YOU OFF. HO HO
> > > > > > >
> > > > > > >
> > > > > > > "Lou" <Spamfree@Spamfree.com> wrote in message
> > > > > > > news:iO8bb.13$LJ5.2273@iad-read.news.verio.net...
> > > > > > > >
> > > > > > > >
> > > > > > > > "BIG AL" <imafuckingwindbag@bigalk4oka.net> wrote in message
> > > > > > > > news:vmq5ars9c9i455@corp.supernews.com...
> > > > > > > > > HO HO. SELL YOUR GEAR I DONT CARE. JUST STAY OFF OF
3.894.5.
> > > THATS
> > > > > > BIG
> > > > > > > > ALS
> > > > > > > > > FREQUENCY. HO HO. I'LL BE TAKING OVER 3.898 NEXT. HO HO
> > > > > > > >
> > > > > > > > AY YI YI IT'S THE PORKBUTT SONG. AY YI YI IT'S THE
PORKBUTT
> > > SONG.
> > > > > HO
> > > > > > > HO
> > > > > > > >
> > > > > > > >
> > > > > > > >
> > > > > > > > If I choose to talk on that frequency, I will, so long as
I'm
> > > > abiding
> > > > > > by
> > > > > > > > the
> > > > > > > > > rules and regulations as they are spelled out. YOU or no one
> > else,
> > > > > can

> > > > > > > tell
> > > > > > > > > me to stay off. ASS WIPE.
> > > > > > > > >
> > > > > > > > > BIG AL.. the only thing big about you, is your mouth....
> > > > > > > > >
> > > > > > > > > Lou
> > > > > > > > >
> > > > > >
> > > > > > Well Ass hole AL, looks like you've had your ass reamed out once,
> > trying
> > > > > > for
> > > > > > seconds???? Something tells me, you're due for it.
> > > > > > Lou
> > > > > >
> > > > > >
> > > > >
> > > > > Once? Boy are you out of touch.
> > > > >
> > > > > Dan/W4NTI
> > > > >
> > > Not sure how the thread made it past my kill file, but to respond to
> your
> > > comment, I only went with what I was told and seen for myself as
> witnessed
> > > above.. IF there was more than one incident mentioned, then I didn't
> > notice
> > > in my speed read of the article.
> > > But, if it's been more than once, then maybe it's time they show him
> > they're
> > > done playing games.
> > > Lou
> > >
> > >
> >
> > Well first off, the reference violation above is long done with. He
> spent
> > his time in radio prison and returned to the HF bands. He has basically
> > learned his lesson, this time. And has been a decent operator for
> several
> > years now.
> >
> > What I was refering to was he was removed from the radio voluntarily in
> lieu
> > of being fined a big chunk of bux back in the 70s. He stayed off the
air
> > for years. Returned as KJ4JX and began his crap again. He later got
his
> > original call back under the vanity system.
> >
> > He has been a QRMer for many years. BUT as stated above has finally

seen
> > the light.
> >
> > This crap you see here from "BIG AL" is BS.. And same for the "3894.5"
> crap.
> > Its just a troll.
> >
> > But I wanted to set the record straight.
> >
> > Dan/W4NTI
> >
> >
>
>

1505. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 10:42:38 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309240242.1bb90b08@posting.google.com>
Source record: 107572

Roger Halstead <newsgroups@rogerhalstead.com> wrote in message \

> They are mail and newsgroup reader problems and *nearly*
> all can be prevented by properly configuring said programs. Turn off
> the ability to read mail in HTML, don't let macros run, disable Java,
> and above all don't open attachments until after verifying whoever
> really sent it. This is particularly true if the thing came from some
> one you know. How many times have you heard some one say, Oh, I don't
> worry. I only open attachments from people I know. Now there is a
> prime candidate for a virus.
>
> MS operating systems are written for the masses. It depends on your
> definition of computer literate, but unless you make the definition
> very lenient there are few computer users who are computer literate.

Thats the exact problem as I see it. The *average* e-mail user, who has little on the ball as far as puters is left to the wolves because MS installs all that stuff with all the options wide open. And unless you go and read all the docs to learn how to turn it off, the average user will not even be aware that they are at risk. And you know how many probably read the docs....Yep, about 4.27%...If MS gave a real hoot about protecting peoples security, they would install with it all turned off, and instruct the user to turn on features as or if needed. But nooooooo......The average users first instruction on the problem, or feature that led to the problem, is after they are cleaning out a macro virus. And with a virus like sobigf, you could go for months without knowing you had it , unless someone finally tells you. The sent emails are forged with someone in the address book, or whatever. Then, hummmmm, they finally learn about attachement problems, etc..
It's kind of the same way with the "ports" that MS likes to leave wide open with a default install. The average user won't have a clue his box is wide open. Well, Maybe if he stumbles across Gibson research or whatever...
A good majority of the outlook virus problem victims are e-mail readers that could give a hoot about puter OS's, outlook or whatever. They plug it in, and dial up. MS doesn't do them any favors by leaving them wide open to attack, and not even telling them about it in a noticable manner. There are worms out now that need no e-mail connection. They are planting them through open ports I think. I don't keep up with all the "new" OS problems much. I only worry about the one I'm running at the time. MK

1506. Re: Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 11:25:39 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F710FC8.60608@optonline.net>
Source record: 107573

Filing for Chapter 11 is an appeal to the court to "Keep our creditors
off our back while we straighten out this mess". It should mean that
they can keep going when they otherwise would not be able to.

-=-
Alan AB2OS

On 09/24/03 03:43 am Crazy George put fingers to keyboard and launched
the following message into cyberspace:

> Since no one else has posted this:
>
> http://www.rohnnet.com and click on "Press Releases", then
> click on the September 16, 2003 entry.
>
> Hope no one needs parts for a while.

1507. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 12:37:37 UTC
From: Roger <blizzard@lycos.com>
Message-ID: <3f718fbc.1596358@140.99.99.130>
Source record: 107574

On Tue, 23 Sep 2003 20:58:45 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 23 Sep 2003 20:10:55 GMT, Roger <blizzard@lycos.com> wrote:
>>I have a static IP address, would you care to prove how open to attack
>>my system is?
>
>Hi Roger,
>
>It is not apparent in your headers.
>
>73's
>Richard Clark, KB7QHC

I know, I would have to give it to you. I don't think its quite as
easy as you say to "hack" into an NT system, unless the person that
set up has no idea what their doing.

1508. Re: Scantenna and TV satellite dish on same antenna tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 13:14:50 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0309240514.b0d6ab4@posting.google.com>
Source record: 107576

I had forgot to mention that the dish would be going up on an antenna tower that would be high enough to clear the trees..

so both would be clear of each other, but still on the same tower.

thanks.

1509. Re: Extension cord "whip"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 13:23:51 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <HVgcb.1944$eB.1233@twister.southeast.rr.com>
Source record: 107577

Richard Clark wrote:

> On Wed, 24 Sep 2003 03:22:28 GMT, Ron <rmrippy@hotmail.com> wrote:
>
>
>>I plan to use a 3 conductor white AC extension cord running along the eaves of
>>my house instead of the regular whip that came with my screwdriver antenna.
>>(There will be some slack to allow for coil movement). The idea is to disguise
>>the antenna (the base will be hidden). Plus this will give me more length -
>>probably about 25 ft. I will connect all 3 wires together at the bottom, but
>>plan to leave them unconnected at the top. Or should I connect them? Any
>>disadvantages?
>>
>>Thanks,
>>
>>Ron, W4TQT
>
>
> Hi Ron,
>
> As odd as it may sound, you may end up with too much wire for the
> screwdriver. But it certainly is worth a try and simple enough to
> change.
>
> As an alternative, split the wire and connect half to the shell side
> of the screwdriver (or maybe a third to a quarter). You need to
> replace the missing car chassis as counterpoise (or let the feedline
> do that through Common Mode).

I am using the radial system consisting of 8 X 10 ft wires that came with the
antena.
>
> 1 wire, 2 or 3 are not going to make much difference, and you would
> gain on the invisibility side of things by going with a single
> conductor.

Wouldn't using all 3 wires give me the effect of a larger diameter wire which
would result in a broader tuning antenna?

Ron
> > 73's
> Richard Clark, KB7QHC

1510. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 13:46:14 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <9m73nvs1asb2anp16u13ma4cih81airh5q@4ax.com>
Source record: 107710

On Tue, 23 Sep 2003 14:15:17 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> You would have a harder time tuning a 20M dipole to 10M.
>
>Why? An odd number of quarter-wavelengths of ladder-line will
>result in a near-perfect match.

Cecil, I have a 44-foot dipole with 42 feet of ladder line -- I can tune it for 30m-10m easily with my tuner. I can't get it to tune on 40m, though. If I shorten the ladder line to 33 feet, or lengthen it to 99 feet, would that give me a near-perfect match on what is a 3/8 wave dipole for 40m?

Tnx,

Bob
k5qwg

1511. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 14:27:08 UTC
From: richardharrison@webtv.net
Message-ID: <23982-3F71A9BC-24@storefull-2312.public.lawson.webtv.net>
Source record: 107579

Roy, WtEL wrote:
"There are a lot of TDR and oscilloscope users out there to contradict that." (Step functions lost interest with the demise of telegraph, but ones and zeros are back bigger than ever.)

Lord Kelvin, William Thomson suggested in the 19th century that life may have arrived here from outer space. He died in 1907. Do you suppose he was using TDR with an oscilloscope to determine subsea cable faults?

Best regards, Richard Harrison, KB5WZI

1512. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 15:25:59 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bksdj0$6e4$1@reader2.nmix.net>
Source record: 107580

Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0309231516.42319b6d@posting.google.com...
> I might add...To me, the importance of using a better matching device
> would depend on how long and how many elements, and also the freq.

This is an excellent point. I hadn't considered that the REAL-WORLD impact of common-mode currents would depend on frequency and desired antenna pattern.

My yagi is kind of on the borderline of the examples you mention, being a fairly long-boom (18') 5-el yagi for 50 MHz. But front-to-rear is important to me, as well as keeping the side lobes under control, so I've opted to install a Radio Works line isolator (characterized to include 6M) at the feedpoint of the gamma match, in preference to a simple coax air choke. This should go up this afternoon, and we'll see how much difference it makes (if any).

Bill / W5WVO

1513. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 15:36:40 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bkse6r$p82$1@reader2.nmix.net>
Source record: 107581

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0309231354.5335ad6b@posting.google.com...

> ...As far as the gamma being a poor device that should not be
> used, thats hogwash. 1000's have used those things with good results.

Here's a couple questions about gamma match construction:

1) Commercial gamma matches typically employ a gamma rod and integral coaxial capacitor, constructed of two coaxially mating pieces of tubing/rod separated by a piece of dielectric tubing. Do you know of any reference that gives a formula for computing the capacitance of such a coaxial capacitor?

2) Antenna modeling programs like YO by K6STI require a specification for the diameter of the gamma rod. But due to the coaxial capacitor construction, I'm not sure what diameter is actually being called for. Do modeling programs typically assume a coaxial capacitor integral to the gamma rod, or do they assume a molded capacitor between the feedpoint and a monolithic gamma rod?

Bill / W5WVO

1514. Re: Gamma match: Inherently inferior to balanced match systems?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 15:57:26 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <F9jcb.564836$Ho3.103358@sccrnsc03>
Source record: 107582

Bill VanAlstyne wrote:
> "Mark Keith" <nm5k@wt.net> wrote in message
> news:25eb70d7.0309231354.5335ad6b@posting.google.com...
>
>
>>>...As far as the gamma being a poor device that should not be
>>used, thats hogwash. 1000's have used those things with good results.
>
>
> Here's a couple questions about gamma match construction:
>
> 1) Commercial gamma matches typically employ a gamma rod and integral
> coaxial capacitor, constructed of two coaxially mating pieces of tubing/rod
> separated by a piece of dielectric tubing. Do you know of any reference that
> gives a formula for computing the capacitance of such a coaxial capacitor?

Reference = "Reference Data for RAdio Engineers", Fourth Edition, ITT,
1956, page 134.

[SNIP] C = (7.36 * Er)/(log(b/a))
where: C = pf/ft
Er = Relative permittivity
b = major radius
a = minor radius

>
> 2) Antenna modeling programs like YO by K6STI require a specification for
> the diameter of the gamma rod. But due to the coaxial capacitor
> construction, I'm not sure what diameter is actually being called for. Do
> modeling programs typically assume a coaxial capacitor integral to the gamma
> rod, or do they assume a molded capacitor between the feedpoint and a
> monolithic gamma rod?
>
> Bill / W5WVO
>
>

1515. Re: Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 16:05:16 UTC
From: James <jimbo@nospam.com>
Message-ID: <3F71C0B7.51F96EC0@nospam.com>
Source record: 107583

Correct Allan,

Rohn has sold off some of its tower lines along with tooling so parts
should not be
a problem, similar to automotive markets, plenty of companies make bolts
and rivits,
along with other parts.

Alan wrote:

> Filing for Chapter 11 is an appeal to the court to "Keep our creditors
> off our back while we straighten out this mess". It should mean that
> they can keep going when they otherwise would not be able to.
>
> -=-
> Alan AB2OS
>
> On 09/24/03 03:43 am Crazy George put fingers to keyboard and launched
> the following message into cyberspace:
>
> > Since no one else has posted this:
> >
> > http://www.rohnnet.com and click on "Press Releases", then
> > click on the September 16, 2003 entry.
> >
> > Hope no one needs parts for a while.

1516. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 16:30:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lih3nv0n6cfkjeii924mdl8noq50uh62am@4ax.com>
Source record: 107584

On Wed, 24 Sep 2003 12:37:37 GMT, Roger <blizzard@lycos.com> wrote:

>On Tue, 23 Sep 2003 20:58:45 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>On Tue, 23 Sep 2003 20:10:55 GMT, Roger <blizzard@lycos.com> wrote:
>>>I have a static IP address, would you care to prove how open to attack
>>>my system is?
>>
>>Hi Roger,
>>
>>It is not apparent in your headers.
>>
>>73's
>>Richard Clark, KB7QHC
>
>I know, I would have to give it to you. I don't think its quite as
>easy as you say to "hack" into an NT system, unless the person that
>set up has no idea what their doing.

Hi Roger,

So why ask in the first place?

73's
Richard Clark, KB7QHC

1517. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 16:45:38 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <nai3nvc6nfvfsun1qgssvrnpn5ni7h55ov@4ax.com>
Source record: 107585

On Sun, 17 Aug 2003 17:14:21 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sun, 17 Aug 2003 13:56:11 GMT, tad danley <nospam@atsbcglobal.net>
>wrote:
>
>>Roy Lewallen wrote:
>>
>>>
>>> I've tried to point out on this thread that although the feedpoint
>>> impedance is an impedance with the units of ohms, and the impedance of a
>>> plane wave in free space also has the units of ohms, they're not the
>>> same thing.
>>
>>
>>This may not be a good analogy, but Specific Impulse of rocket motors
>>helps me to remember that the 'units' of something have to be considered
>>in the context of what is being measured. Specific impulse is a measure
>>of the performance of a rocket motor. It measures the thrust obtained
>>from a single kilogram of propellant burned in one second. The 'units'
>>of Specific Impulse are seconds, but we're not measuring 'time'.
>>
>>73,
>
>Hi Tad,
>
>Your point is well taken. ALL physical phenomenon can be expressed
>through a chain of conversions in the MKS system of units. When
>someone tells you that their terminology is inconsistent between
>disciplines (as such offered in this and other threads); it must then
>be amenable to reduction to MKS terms or one of the two conflicting
>expressions is invalid.
>
>That is to say to the specific matter about the usage of "ohms:"
>Here, the unit of ohm must be reduced to Meters, Kilograms, and
>Seconds for both usages (electrical and radiative). At that point,
>both will have a common basis for comparison and if in fact their
>reduced terms are identical, then their common usage is also
>identical.
>
>One simple example is with the measurement of body weight on the
>bathroom scale (a torsion or compression device) as opposed to the
>weight measured on the doctor's scale (a beam balance). Let's say
>before you go to the doctor's, you weigh yourself in around 165

>pounds. When you arrive at the doctor's, his scale says you weigh
>around 75 kilograms.
>
>Let's remove this same scenario to the moon (you live in one of those
>futuristic 1990's colonies forecast by the space race back in the
>60's). Before you went to the doctor's you weighed in around 33
>pounds. When you arrive at the doctor's, his scale says you weigh
>around 75 kilograms.
>
>Here we find the expression "pounds" suffers what appears to be the
>same plight of "ohms" in that the determination of a value is
>inconsistent. You may also note constants of proportionality on earth
>and the moon. These constants when expressed as a ratio also describe
>the significant differences between the earth and the moon.
>
>The problem is that the term "weight" has a hidden association to the
>constant of Gravity. The expression Gram is one of Mass, not weight.
>The expression pound is not an expression of Mass unless you expand it
>to include the term for the particular constant of Gravity. Mass is
>constant in the Newtonian Universe, and weight is not.
>
>If you were to have reduced the pounds to the MKS system both times,
>you would have found it consistent both times (here on earth, and on
>the moon).

Apparently you are claiming that pounds are not units of mass.

Where did you learn that?

Being the skeptic that I am, how can I convince myself that that is
true? Is there some textbook, or something from some national
standards agency, that would help me verify this?

Gene Nygaard

1518. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 16:46:46 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <gdi3nv887eupk9mnpsdcskh69nctvdt49n@4ax.com>
Source record: 107586

On Sun, 17 Aug 2003 13:56:11 GMT, tad danley <nospam@atsbcglobal.net>
wrote:

>Roy Lewallen wrote:
>
>>
>> I've tried to point out on this thread that although the feedpoint
>> impedance is an impedance with the units of ohms, and the impedance of a
>> plane wave in free space also has the units of ohms, they're not the
>> same thing.
>
>
>This may not be a good analogy, but Specific Impulse of rocket motors
>helps me to remember that the 'units' of something have to be considered
>in the context of what is being measured. Specific impulse is a measure
>of the performance of a rocket motor. It measures the thrust obtained
>from a single kilogram of propellant burned in one second. The 'units'
>of Specific Impulse are seconds, but we're not measuring 'time'.

It is a bad analogy--for the simple fact that in SI, the proper units
of specific impulse are newton seconds per kilogram (Nï¿½s/kg), or the
equivalent meters per second (m/s).

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1519. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 16:55:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6nh3nv41r4rfsk8lq94c4irupfni470b66@4ax.com>
Source record: 107587

On Wed, 24 Sep 2003 15:53:56 GMT, Ken <WA0SBU@yahoo.com> wrote:

>
>Richard;
> Your statement is in reference to systems that have been infected by a
>virus or worm. The O/S has nothing to do with who the virus's are sent to.
> I set up several e-mail accounts on yahoo and posted to several groups.
>I did pick a subject that would generate responses, after 7 or 8 hours the
>e-mail accounts were filled with messages with the virus attachments. I
>don't use Microsoft products, So I don't know how Outlook handles replies
>to usenet posts. That is, if it treats it as an E-mail address and adds it
>to an address book. Although its possible that the subject I picked could
>have upset a few enough to intentionally send me an E-mail with a attached
>virus, I would tend to think that its based on address books.
> I have set several more accounts up on Yahoo, trying to narrow down
>which groups seem most prone to generating virus e-mails.
>
>Ken

Hi Ken,

Yours is simply the same chorus before you: "It ain't about MS."

You then snap the rug from under yourself (how do you do that?) by
saying virus (what does a virus infect except an OS?).

It is the height of denial to portray these attacks as coming from an
individual sitting in the bedroom sending emails, or a group of
closeted individuals pushing send buttons. That traffic would be
snuffed so fast where MS would have sheriffs at their door in a
millisecond.

A virus by definition infects the OS. There are many out there built
into the backbone of the internet. Some are router only OS's, others
are Linux machines, Unix machines, Sun Machines, and certainly MS
machines. Does it take Rocket Surgery to diagnose that of those, one
OS source (fill in the blank) in particular has been announcing
security failures in their designs (and I am not talking about the
ubiquitous OE/IE problems so many snuggle up to as it nibbles into
their tender flesh) 2 a week? This is up from an average of once a
week for at least two years. If the backbone escaped attack (and it
is certainly more geared for following events than users are); it
follows someone ELSE's machine has become infected and is acting in
part of a conspiracy to accomplish this work through proxy.

Guess what they have as an OS? Care to wager it is an unprotected system that has been requiring patches on a weekly basis for years?

All of this is classic symptomatology of recent attacks and hardly a novel concept drug up from the deep recesses of my paranoia.

There are two classes of MS users. Those who are infected but live through its effects without obvious harm (except for lost bandwidth capacity they blame on "general conditions"). A century ago they would go by the name Typhoid Mary. Then there are those who are infected but are being hammered by the virus AND spreading infection. There is a third and fourth class that barely wiggle the digits: the lucky and the smart.

Eventually, through Darwinian thinning, the smart population will become dominant, but only if they can crawl over the mountains of corpses that litter the -ahem- netscape.

73's
Richard Clark, KB7QHC

1520. Re: Extension cord "whip"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:04:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <18j3nv4vtukid5eftfhlgq3t72id7ko5rl@4ax.com>
Source record: 107588

On Wed, 24 Sep 2003 13:23:51 GMT, Ron <rmrippy@hotmail.com> wrote:

>
>Wouldn't using all 3 wires give me the effect of a larger diameter wire which
>would result in a broader tuning antenna?
>
>Ron

Hi Ron,

Sure, but you have a tuner don't you? If it was short and fat, yes,
it would lower the load on re-tuning, but you've gone for long and
thin. 3 wires in a bundle is not very broadening until you get into
high HF (and barely there). You have to remember that all things
explained about antennas eventually are boiled down to a simple
relationship between wavelength and physical dimension; this includes
how "thick" an antenna might be considered. An example of this:
http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm

73's
Richard Clark, KB7QHC

1521. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:06:39 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309240906.2c60ca31@posting.google.com>
Source record: 107589

I trust we can all agree that the definition of rho is rho=Vr/Vf, and
I trust we can all agree that on a TEM line, the net voltage
Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
chose to use to find rho at a load from the load impedance, Zload, and
the line characteristic impedance, Zo, better work out right for a
short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
does NOT work for that simple case, unless Zo*=Zo. But
"rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
something similar for an open circuit load. Note that rho=-1 for a
short circuit load, and rho=+1 for an open circuit load, independent
of line impedance.

Cheers,
Tom

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
> It's even easier than that. Using the _definition_ of reflection
> coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
> line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
> zero). That's either a real short or a virtual short.
>
> Cheers,
> Tom
>
> "David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
>
> > lets see...
> >
> > rho = (Z - Zo)/(Z + Zo)
> > if rho = -1 then
> >
> > -1=(Z-Zo)/(Z+Zo)
> > or
> > -1*(Z+Zo)=(Z-Zo)
> > or
> > -Z - Zo = Z - Zo
> > or
> > -Z = Z
> > the only value i know that satisfies that is zero.
> > lets substitute it back in to be sure...
> > -1=(0-(50+j50))/(0+(50+j50))
> > -1=(-50-j50)/(50+j50)

> > -1=-1(50+j50)/(50+j50)
> > -1=-1 qed.

1522. Re: Rho = (Zload-Zo*)/(Zload+Zo), for complex Zo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:19:21 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0309240919.2158614f@posting.google.com>
Source record: 107590

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f711480$1_5@corp.newsgroups.com>...
> Richard Clark wrote:
> > I suppose if you gust on enough, there is no temperature rise in your
> > mind.
>
> My mind remains at a fairly constant 99.2 degrees F. Somewhere in my
> pile of junk is a device that measures the temperature of an IC. The
> last time I used it was last century on a 4:1 voltage balun in AZ.

Wow Cecil, yours was the only posting on this thread on Sunday
which is considerably down from the last months massive offerings.
Is it possible that all is now known about this subject?
Is it a case of saying the same things over and over again
is exhausting all. I must admit that I understand little if
anything about the subject but I must say I am pleased that the
group has returned to the mundane subject of antennas even tho
some may regard it as dumbing down the subject. Hopefully this
subject is so now well understood your paper will be accepted
by somebody and the subject can then be barred for all time
by the ARRL.
Have a happy day
Art

1523. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:23:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <18k3nvo3r8q22j40fdat3gsip4s1m2bmvp@4ax.com>
Source record: 107591

On Wed, 24 Sep 2003 16:45:38 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>
>Apparently you are claiming that pounds are not units of mass.
>
>Where did you learn that?
>
>Being the skeptic that I am, how can I convince myself that that is
>true? Is there some textbook, or something from some national
>standards agency, that would help me verify this?
>
>Gene Nygaard

Hi Gene,

Exactly. Perhaps you should re-consider the simple illustration of
difference that I offered in the post you responded to.

Does the weight you measure on a bathroom scale change from the earth
to the moon because your mass changed too? Jenny Craig would have an
armada of shuttles warming up in Florida to a steady trade if that
were true.

However, you do ask for a reference and acknowledge the NIST as a
reputable source (many here ignore this commonplace):
http://physics.nist.gov/PhysRefData/contents-constants.html

The link:
http://physics.nist.gov/cuu/Units/units.html
is quite specific to the matter.

One of the supreme ironies comes in the form of the unstated
conditional. In your regard, it is pounds is intimately tied to the
gravitational constant (mass and G). In other regards SWR is
intimately tied to the source Z (always equal to the transmission line
characteristic Z, unless stated otherwise).

73's
Richard Clark, KB7QHC

1524. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:35:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <iBkcb.568264$o%2.253779@sccrnsc02>
Source record: 107592

Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
... the net current is zero (i.e. at an open circuit). Therefore Ir =
-If, and rho is a -1.

Comment?

Tom Bruhns wrote:

> I trust we can all agree that the definition of rho is rho=Vr/Vf, and
> I trust we can all agree that on a TEM line, the net voltage
> Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> chose to use to find rho at a load from the load impedance, Zload, and
> the line characteristic impedance, Zo, better work out right for a
> short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> does NOT work for that simple case, unless Zo*=Zo. But
> "rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> something similar for an open circuit load. Note that rho=-1 for a
> short circuit load, and rho=+1 for an open circuit load, independent
> of line impedance.
>
> Cheers,
> Tom
>
> k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
>
>>It's even easier than that. Using the _definition_ of reflection
>>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
>>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
>>zero). That's either a real short or a virtual short.
>>
>>Cheers,
>>Tom
>>
>>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
>>
>>
>>>lets see...
>>>
>>>rho = (Z - Zo)/(Z + Zo)
>>>if rho = -1 then
>>>
>>>-1=(Z-Zo)/(Z+Zo)

>>>or
>>>-1*(Z+Zo)=(Z-Zo)
>>>or
>>>-Z - Zo = Z - Zo
>>>or
>>>-Z = Z
>>>the only value i know that satisfies that is zero.
>>>lets substitute it back in to be sure...
>>>-1=(0-(50+j50))/(0+(50+j50))
>>>-1=(-50-j50)/(50+j50)
>>>-1=-1(50+j50)/(50+j50)
>>>-1=-1 qed.

1525. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:41:18 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <2Hkcb.564671$YN5.398200@sccrnsc01>
Source record: 107593

I weigh approximately 40# on the moon!!! Too skinny for my height 5"9".

I better stay here. But my doctor wants me to loose 40#. Something's
wrong. I need a Twinkie!!

DD

Richard Clark wrote:

> On Wed, 24 Sep 2003 16:45:38 GMT, Gene Nygaard <gnygaard@nccray.com>
> wrote:
>
>
>>Apparently you are claiming that pounds are not units of mass.
>>
>>Where did you learn that?
>>
>>Being the skeptic that I am, how can I convince myself that that is
>>true? Is there some textbook, or something from some national
>>standards agency, that would help me verify this?
>>
>>Gene Nygaard
>
>
> Hi Gene,
>
> Exactly. Perhaps you should re-consider the simple illustration of
> difference that I offered in the post you responded to.
>
> Does the weight you measure on a bathroom scale change from the earth
> to the moon because your mass changed too? Jenny Craig would have an
> armada of shuttles warming up in Florida to a steady trade if that
> were true.
>
> However, you do ask for a reference and acknowledge the NIST as a
> reputable source (many here ignore this commonplace):
> http://physics.nist.gov/PhysRefData/contents-constants.html
>
> The link:
> http://physics.nist.gov/cuu/Units/units.html
> is quite specific to the matter.
>
> One of the supreme ironies comes in the form of the unstated
> conditional. In your regard, it is pounds is intimately tied to the
> gravitational constant (mass and G). In other regards SWR is

> intimately tied to the source Z (always equal to the transmission line
> characteristic Z, unless stated otherwise).
>
> 73's
> Richard Clark, KB7QHC

1526. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 17:58:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fim3nvcoa2t1je2g1tkvrm6n6dilhhu228@4ax.com>
Source record: 107594

On Wed, 24 Sep 2003 17:41:18 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>I weigh approximately 40# on the moon!!! Too skinny for my height 5"9".
>
>I better stay here. But my doctor wants me to loose 40#. Something's
>wrong. I need a Twinkie!!
>
>DD

Hi OM,

If you huff down a package of Ex-Lax you would take care of the
doctor's advice with a lot of "loose" weight. (Language is fun ;-)

73's
Richard Clark, KB7QHC

1527. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 18:17:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn3nt7fjmguh00@corp.supernews.com>
Source record: 107595

Should work fine, as long as you can keep the water out of it. People using larger coax with similar construction have reported it to be near impossible to keep water out. And if water gets in, the loss will go _way_ up.

Roy Lewallen, W7EL

Ken wrote:
> I was given a 1,000 foot spool of RG-62 and was trying to think of a use
> for it. I'd like to put up a 1/4 40 meter vertical and feed it through
> parallel runs of RG-62. Has anyone ever done this? I have the antenna,
> coax and radial wire, so I don't plan on buying anything else.
>
> Ken

1528. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 18:22:24 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <mon3nvobunomsi1m6jt8s4d9if3idd1c7v@4ax.com>
Source record: 107596

On Wed, 24 Sep 2003 17:23:12 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 24 Sep 2003 16:45:38 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>
>>
>>Apparently you are claiming that pounds are not units of mass.
>>
>>Where did you learn that?
>>
>>Being the skeptic that I am, how can I convince myself that that is
>>true? Is there some textbook, or something from some national
>>standards agency, that would help me verify this?
>>
>>Gene Nygaard
>
>Hi Gene,
>
>Exactly. Perhaps you should re-consider the simple illustration of
>difference that I offered in the post you responded to.
>
>Does the weight you measure on a bathroom scale change from the earth
>to the moon because your mass changed too? Jenny Craig would have an
>armada of shuttles warming up in Florida to a steady trade if that
>were true.

So what happens when you get serious about your weight and go to the
doctors office or the gym and weigh yourself on one of those platform
type beam balances?

Would your pounds be different on the moon? By how much?

>However, you do ask for a reference and acknowledge the NIST as a
>reputable source (many here ignore this commonplace):
>http://physics.nist.gov/PhysRefData/contents-constants.html

There is absolutely nothing about pounds on this page. So don't be
bullshitting us.

>The link:
>
>is quite specific to the matter.

Not a link directly on the page above; maybe on one of the links
there.

There is absolutely nothing about pounds on this page either. You are
still bullshittiing.

>One of the supreme ironies comes in the form of the unstated
>conditional. In your regard, it is pounds is intimately tied to the
>gravitational constant (mass and G).

They are? I asked you for some citation proving that pounds are not
units of mass. You have not done so.

--
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/
"It's not the things you don't know
what gets you into trouble.

"It's the things you do know
that just ain't so."
Will Rogers

1529. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 19:54:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <36t3nv4vdii8mh8bv7qk3bip3nugd4kcjl@4ax.com>
Source record: 107597

On Wed, 24 Sep 2003 18:22:24 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>On Wed, 24 Sep 2003 17:23:12 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>On Wed, 24 Sep 2003 16:45:38 GMT, Gene Nygaard <gnygaard@nccray.com>
>>wrote:
>>
>So what happens when you get serious about your weight and go to the
>doctors office or the gym and weigh yourself on one of those platform
>type beam balances?
>
>Would your pounds be different on the moon? By how much?

A balance, by implicit definition again, consists of comparing two
masses under the influence of Gravity. Given it is a bridge, in a
sense, the constant of Gravity is discarded from both sides and mass
is compared only. It is a convenience of earthly expectations (and a
defunct system of measurement) that the scale is marked in pounds.
>
>>However, you do ask for a reference and acknowledge the NIST as a
>>reputable source (many here ignore this commonplace):
>>http://physics.nist.gov/PhysRefData/contents-constants.html
>
>There is absolutely nothing about pounds on this page. So don't be
>bullshitting us.

That is the whole point. You don't see pounds there for mass do you?
That's because pounds are not a unit of mass. They are a unit of
weight which is NOT a constant throughout the universe (nor on earth
for that matter).
>
>>The link:
>>
>>is quite specific to the matter.
>
>Not a link directly on the page above; maybe on one of the links
>there.
>
>There is absolutely nothing about pounds on this page either. You are
>still bullshittiing.

Have you tried loosing weight?

>>One of the supreme ironies comes in the form of the unstated
>>conditional. In your regard, it is pounds is intimately tied to the
>>gravitational constant (mass and G).
>
>They are? I asked you for some citation proving that pounds are not
>units of mass. You have not done so.

Uh-huh. In equal measure, I couldn't "prove" that sparrows' tongues are also "not" units of mass. Well, there are many here who's minds I cannot change, you simply have to go to the end of that line. ;-)

73's
Richard Clark, KB7QHC

1530. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 20:10:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn3uhhsutqshf5@corp.supernews.com>
Source record: 107598

In that case, I have yet another caution. A tupperware container will become brittle from exposure to the sun, and crack. How long this takes depends on the intensity of the sun. Here in Oregon's Willamette Valley, it'll last a couple of years or so. I'll bet one wouldn't last six months in Denver.

I'm right now in the process of accumulating parts to rebuild my antenna switch box, formerly housed in plastic containers, into an ammo box.

You might be able to seal the cable end adequately with RTV. I'll bet some of the folks who've used Belden 9913 (similar construction to RG-62) have some suggestions. It's been discussed from time to time on this newsgroup, so a google search on 9913 in this group would bring you more information.

Roy Lewallen, W7EL

Ken wrote:
> Roy Lewallen wrote:
>
>
>>Should work fine, as long as you can keep the water out of it. People
>>using larger coax with similar construction have reported it to be near
>>impossible to keep water out. And if water gets in, the loss will go
>>_way_ up.
>>
>>Roy Lewallen, W7EL
>
>
> Thanks Roy, I planned on using a small tupperware container at the antenna
> end.
>

1531. Re: Extension cord "whip"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 20:10:20 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <MSmcb.2057$eB.1898@twister.southeast.rr.com>
Source record: 107600

Richard Clark wrote:

> On Wed, 24 Sep 2003 13:23:51 GMT, Ron <rmrippy@hotmail.com> wrote:
>
>
>>Wouldn't using all 3 wires give me the effect of a larger diameter wire which
>>would result in a broader tuning antenna?
>>
>>Ron
>
>
> Hi Ron,
>
> Sure, but you have a tuner don't you? If it was short and fat, yes,
> it would lower the load on re-tuning, but you've gone for long and
> thin. 3 wires in a bundle is not very broadening until you get into
> high HF (and barely there). You have to remember that all things
> explained about antennas eventually are boiled down to a simple
> relationship between wavelength and physical dimension; this includes
> how "thick" an antenna might be considered. An example of this:
> http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
>
> 73's
> Richard Clark, KB7QHC

Richard,

Yes I have a tuner, but I prefer a broad resonance curve. I compared two regular whips, one thin and the other maybe 3 times as thick. The thicker one seemed to have a broader tuning characteristic and required less length to resonate at a given frequency.

Anyway, since there are three wires in the cord, I thought I might as well use them. Three wires may not be be much better than one, but at least they shouldn't be worse. The extension cord is the round type and looks more like an AC cord than an antenna. That's why I am using it.

73, Ron W4TQT

1532. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 20:15:51 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <72u3nvg9m1ansotivaa0jqpgu5lj5jvnng@4ax.com>
Source record: 107599

On Wed, 24 Sep 2003 19:54:06 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 24 Sep 2003 18:22:24 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>
>>On Wed, 24 Sep 2003 17:23:12 GMT, Richard Clark <kb7qhc@comcast.net>
>>wrote:
>>
>>>On Wed, 24 Sep 2003 16:45:38 GMT, Gene Nygaard <gnygaard@nccray.com>
>>>wrote:
>>>
>>>So what happens when you get serious about your weight and go to the
>>>doctors office or the gym and weigh yourself on one of those platform
>>>type beam balances?
>>
>>Would your pounds be different on the moon? By how much?
>
>A balance, by implicit definition again, consists of comparing two
>masses under the influence of Gravity. Given it is a bridge, in a
>sense, the constant of Gravity is discarded from both sides and mass
>is compared only. It is a convenience of earthly expectations (and a
>defunct system of measurement) that the scale is marked in pounds.

The matter of convenience is in the other direction, stupid; we're
willing to substitute cheapness for accuracy in what we want to
measure on those unreliable bathroom scales. They aren't any more
accurate for measuring force than they are for measuring mass on
Earth; haven't you ever weighed yourself on your mother's scale or
somewhere else and found it differed from yours at home by several
pounds? Do you automatically assume you've gained or lost that much
weight.

>>>However, you do ask for a reference and acknowledge the NIST as a
>>>reputable source (many here ignore this commonplace):
>>>http://physics.nist.gov/PhysRefData/contents-constants.html
>>
>>There is absolutely nothing about pounds on this page. So don't be
>>bullshitting us.
>
>That is the whole point. You don't see pounds there for mass do you?

I don't see pounds as units of mass because this page just lists units
in the International System of Units.
http://w0rli.home.att.net/youare.swf

Show me something from NIST saying that pounds are not units of mass.
Or from some textbook.

>That's because pounds are not a unit of mass. They are a unit of
>weight which is NOT a constant throughout the universe (nor on earth
>for that matter).

Just your say-so? That's the best you can do?

>>>The link:
>>>
>>>is quite specific to the matter.
>>
>>Not a link directly on the page above; maybe on one of the links
>>there.
>>
>>There is absolutely nothing about pounds on this page either. You are
>>still bullshittiing.
>
>Have you tried loosing weight?

To quote a sge (you know who he is) in this newsgroup:

If you huff down a package of Ex-Lax you would take
care of the doctor's advice with a lot of "loose" weight.
(Language is fun ;-)

>>>One of the supreme ironies comes in the form of the unstated
>>>conditional. In your regard, it is pounds is intimately tied to the
>>>gravitational constant (mass and G).
>>
>>They are? I asked you for some citation proving that pounds are not
>>units of mass. You have not done so.
>
>Uh-huh. In equal measure, I couldn't "prove" that sparrows' tongues
>are also "not" units of mass. Well, there are many here who's minds I
>cannot change, you simply have to go to the end of that line. ;-)

I can, OTOH, prove that pounds are indeed units of mass.

That will prove that you are flat-out wrong in your claim that they
are not.

Just for practice, consider the troy system of weights. Unlike their
avoirdupois cousins, and unlike grams and kilograms, the troy units of
weight have never spawned units of force of the same name. They are
always units of mass; a troy ounce is exactly 31.1034768 grams, by
definition. There is not and never has been any troy pound force or
troy ounce force.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1533. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 20:29:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pkt3nv81g8bf7s9krva1u0cgvp17o47r4c@4ax.com>
Source record: 107601

On Wed, 24 Sep 2003 18:30:16 GMT, Ken <WA0SBU@yahoo.com> wrote:

>Richard Clark wrote:
>
>Richard;
> Hope you don't mind if I respond to each part of your post?

Not if you don't object to my clipping extraneous material here.
>
>> Yours is simply the same chorus before you: "It ain't about MS."
>
>Really? Where did I say that? I don't even use Microcrap, why would I
>defend them?

I cannot speak to your motivation. I can respond to its appearance
however.

>"The O/S has nothing to do with who the virus's are sent to:"
>Which it TRUE!

Perhaps so, but hardly a subject that merits discussion unless this is
a recovery group where we all talk about feelings.

>I don't use windows and have a bunch of e-mails with virus's in them.

Well, do they present an issue vis-a-vis the virus, or simply the
quantity of mail clogging things in general? You don't offer much to
separate what issue you are responding to.

>I think you miss read what I was saying, or maybe I didn't make myself
>clear. Your system doesn't have to be infected to receive a bunch of
>E-mails with the virus. Everyone was complaining about the number of virus
>e-mails they were receiving. That doesn't mean that their system is
>infected. It does mean that an infected Microsoft system sent them. Is
>that better?

Perhaps. I see nothing to consider except to observe that those who
have suffered are likely candidates for spreading the same contagion.
You implicitly offer you are not one to be part of that vector, but
again you've offered nothing in that regard to distinguish what it is
that brings you forward.

I am reacting to those who think that all danger is external (the
fuzzy warm feeling that if there are miscreants mining newsgroups for
names and addresses, then our sufferers are not part of the problem);
nothing could be further from the truth.

> Didn't mean to upset you Richard, it sounded like you wanted to discuss
>where the list of e-mail address's were coming from that had virus's sent
>to them. Do you repond to all posts in such a manner? My first post to
>you and respond like I have been arguing with you for the past 2 weeks. I
>doubt that you even bothered to read the rest of my post after you saw the
>O/S part of it.

And yet you have nothing to offer about where they came from. Every post made is an act of personal choice. If you choose my observations as an issue, I respond to that. If you choose
>where the list of e-mail address's were coming from that had virus's sent
>to them.
then you would have offered that in your post. You did not. I cannot respond (or actually I hesitate) to my projections of what I think you want. Others here do that quite well - generally that is very unsatisfactory dialog (being one-sided and all).

I have offered both points of view throughout this thread, you have not responded to where I presented the discussion of news group mining. Again that is a personal choice of yours for which I am not in a position to dictate.

You presume I want to discuss where the address's are coming from. Actually no, I have no interest in that at all. It would seem even fewer of the complainants here do either. I observed earlier that rraa does not appear to have been mined for any list. I also observed that if newsgroups were being mined, then those sufferers apparently became part of the contagion somewhere else, or through some other activity. Absolutely no one has stepped forward to enumerate their other activities (public health goes down the crapper in such times if other activities reveal the vector).

To this point, today, I have received only 7 emails, all of which triggered the usual porn filtering mechanism. That is fairly typical for my public exposure here, and I participate in a dozen odd other groups to notice that discussion of this virus is a wholly alien subject. This, to me, suggests that the premise of newsgroup mining is so much looking under the bed for monsters. I have corresponded with one here who posts to one technical group that is heavily trafficked by potential miscreants (or so is my presumption by his description) and I would speculate, yes, any open address in that group (especially if you respond to those with an attitude) is a target of opportunity.

But just what does a target offer? A new vector of infection, and if that target is practicing anti-viral lifestyles, that presents a fairly limited contagion that barely rises above sniffle.

Just one not practicing an anti-viral lifestyle has, through MS products, the capacity to spread infection like a firestorm. Hence, it doesn't really matter where the address's are found, there are 30000 different groups that need only offer a thousandth of a percent hit rate to cascade into millions.

73's
Richard Clark, KB7QHC

1534. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 21:04:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5904nv0k3dumuv7j60hnq34rtc7tgbu2mf@4ax.com>
Source record: 107602

On Wed, 24 Sep 2003 20:15:51 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>>A balance, by implicit definition again, consists of comparing two
>>masses under the influence of Gravity. Given it is a bridge, in a
>>sense, the constant of Gravity is discarded from both sides and mass
>>is compared only. It is a convenience of earthly expectations (and a
>>defunct system of measurement) that the scale is marked in pounds.
>
>The matter of convenience is in the other direction, stupid; we're
>willing to substitute cheapness for accuracy in what we want to
>measure on those unreliable bathroom scales. They aren't any more
>accurate for measuring force than they are for measuring mass on
>Earth; haven't you ever weighed yourself on your mother's scale or
>somewhere else and found it differed from yours at home by several
>pounds? Do you automatically assume you've gained or lost that much
>weight.

I've nowhere introduced the topic of accuracy. It has nothing to do
with your original query. Weight and mass can both be measured to
considerable accuracy. It all depends on method and standards.

A bathroom scale is not a balance. A balance has a scale (the marks
along which the balance weights are moved and the markings upon those
same weights).
>
>>>>However, you do ask for a reference and acknowledge the NIST as a
>>>>reputable source (many here ignore this commonplace):
>>>>http://physics.nist.gov/PhysRefData/contents-constants.html
>>>
>>>There is absolutely nothing about pounds on this page. So don't be
>>>bullshitting us.
>>
>>That is the whole point. You don't see pounds there for mass do you?
>
>I don't see pounds as units of mass because this page just lists units
>in the International System of Units.

Exactly.

>Show me something from NIST saying that pounds are not units of mass.
>Or from some textbook.
>
>>That's because pounds are not a unit of mass. They are a unit of
>>weight which is NOT a constant throughout the universe (nor on earth
>>for that matter).

>
>Just your say-so? That's the best you can do?

I am a trained Metrologist. I have measured mass traceable to the
NIST. I have done this in four different Primary and Secondary
Standards Labs. I was the head Metrologist of two of them.

>>Have you tried loosing weight?
>
>To quote a sge (you know who he is) in this newsgroup:
>
> If you huff down a package of Ex-Lax you would take
> care of the doctor's advice with a lot of "loose" weight.
> (Language is fun ;-)

I suppose that is an affirmative.

>I can, OTOH, prove that pounds are indeed units of mass.

By a reference found at the NIST? I think you would have done that by
now if you could.

>That will prove that you are flat-out wrong in your claim that they
>are not.

Well, I have seen a lot of math tossed over the transom here. But if
we are to work by your own standard, cite an NIST reference.

>Just for practice, consider the troy system of weights. Unlike their
>avoirdupois cousins, and unlike grams and kilograms, the troy units of
>weight have never spawned units of force of the same name. They are
>always units of mass; a troy ounce is exactly 31.1034768 grams, by
>definition. There is not and never has been any troy pound force or
>troy ounce force.
>

Hi Gene,

Sounds like you proved a pound is not mass.

The pages I offered provide a meaningful quote:
"The 3d CGPM (1901), in a declaration intended to end the
ambiguity in popular usage concerning the word "weight," confirmed
that:
The kilogram is the unit of mass..."

Any other usage of "weight" in regard to the sensation of the action
of Gravity upon an amount of mass is outdated by more than a century
of understanding and convention.

73's
Richard Clark, KB7QHC

1535. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 21:32:54 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f720f39_1@news1.prserv.net>
Source record: 107603

Roy:

You will find that a yellow Prestone anti-freeze bottle will last at least 5 years, and likely 10. We get plenty of UV here in S. Texas, and I have found them to have the highest survivability of any plastic except Lexan. My 160 meter tuner is in one, as I didn't want to use a small coil or a large metallic enclosure. I use 2, cut the top off of one and invert it, and then use the inverted bottom from another as a press fit closure. No fasteners needed, although I usually put a couple 6-32 screws through the resulting double flange for good measure. The old red bottles were equally as good, but now hard to find.

And for Ken, the best way to seal the end of that psuedo air line is some of the shrink tubing with the filler adhesive inside. Then point the sealed end DOWN.
--
Crazy George
Remove NO and SPAM from return address
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vn3uhhsutqshf5@corp.supernews.com...
> In that case, I have yet another caution. A tupperware container will
> become brittle from exposure to the sun, and crack. How long this takes
> depends on the intensity of the sun. Here in Oregon's Willamette Valley,
> it'll last a couple of years or so. I'll bet one wouldn't last six
> months in Denver.
>
> I'm right now in the process of accumulating parts to rebuild my antenna
> switch box, formerly housed in plastic containers, into an ammo box.
>
> You might be able to seal the cable end adequately with RTV. I'll bet
> some of the folks who've used Belden 9913 (similar construction to
> RG-62) have some suggestions. It's been discussed from time to time on
> this newsgroup, so a google search on 9913 in this group would bring you
> more information.
>
> Roy Lewallen, W7EL
>
> Ken wrote:
> > Roy Lewallen wrote:
> >
> >
> > >>Should work fine, as long as you can keep the water out of it. People
> > >>using larger coax with similar construction have reported it to be near
> > >>impossible to keep water out. And if water gets in, the loss will go
> > >>_way_ up.

> >>
> >>Roy Lewallen, W7EL
> >
> >
> > Thanks Roy, I planned on using a small tupperware container at the
antenna
> > end.
> >
>

1536. high sierra antennas help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 21:55:03 UTC
From: STEVE TROOK <STROOK@optonline.net>
Message-ID: <Xoocb.6270$XF.2707575@news4.srv.hcvlny.cv.net>
Source record: 107604

Can anyone give me any feedback on High Sierra base antennas??? especially the El Dorado and Sequoia...

thx....73's Steve...

1537. Re: high sierra antennas help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-24 23:20:03 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <CEpcb.13952$Ms2.6657@fed1read03>
Source record: 107605

Have you looked at URL:
http://www.eham.net/reviews/products/12

eHam Reviews

--
73 From the Spurious Noise ';';;';x":.,";"'

"STEVE TROOK" <STROOK@optonline.net> wrote in message
news:Xoocb.6270$XF.2707575@news4.srv.hcvlny.cv.net...
> Can anyone give me any feedback on High Sierra base antennas??? especially
> the El Dorado and Sequoia...
>
>
> thx....73's Steve...
>
>

1538. High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:07:06 UTC
From: Donnie <"look me up"@qrz.com>
Message-ID: <p7c4nvs38budnplir8o09olorjqgpijdpc@4ax.com>
Source record: 107606

Have a new ham that his property is backed up to a high voltage power line right of way, He is
thinking about installing a tower in the yard but is wondering what effect or line noise would be
present with the tower in line of sight to the power lines. comments welcome..

Donnie (N4JZH)

''Behold how good and well brethren dwell together in unity''

1539. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:27:21 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <JDqcb.14384$Ms2.4203@fed1read03>
Source record: 107607

I had a home a coupla hundred feet away from hi tension towers and it was a nightmare plus.

I was not a ham when we moved in but I noticed lines across the TV video on the lower channels all the time
and buzz in the TV audio. Annoying but not unusual in the days of rooftop TV antennas.

It got and very severe when the insulators got damp. In fact at times during the night one could see a blue arc discharge across the insulators.

When I got my ham ticket, I found S9+10 dB of noise was typical on the 160, 80, 40m bands (unusable for the most part)

Less noise up the spectrum but awful at times. Later when a got a small triband beam, I would rotate the antenna 90 degrees away from the power lines to reduce the noise and hope some of my signal got to Europe -- hi hi.

The power company would wash down the lines on occasion when I squawked, but the noise would soon return.

When we moved to a new noise free (underground utilities) location, couldn't believe the difference.

Take a portable SWL receiver and check the noise at various frequencies and areas of the location.

But the noise could be in a "quiet period' i.e., clean and dry insulators.

But a Caveat -- your noise may vary -- others reported no problem.

For me I will never again move in anywhere near these spectrum blasters.

--
73 from The Spurious Noise

"Donnie" <look me up @ qrz.com> wrote in message
news:p7c4nvs38budnplir8o09olorjqgpijdpc@4ax.com...
> Have a new ham that his property is backed up to a high voltage power line right of way, He is
> thinking about installing a tower in the yard but is wondering what effect or line noise would be
> present with the tower in line of sight to the power lines. comments welcome..
> Donnie (N4JZH)
>

1540. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:31:50 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F723776.2BD06B2C@cwis.net>
Source record: 107608

Donnie,
There's really no way of telling before hand. The simplest thing to do would be to measure the noise level with some kind of receiver, then figure there will be some increase with a higher antenna. Basically, whatever he has now will be the minimum of what he will have with the tower. More than likely there won't be much, if any, increase in noise, especially on VHF/UHF (line if sight).
'Doc

1541. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:34:06 UTC
From: Donnie <"look me up"@qrz.com>
Message-ID: <ksd4nvor15kjlhpt5eo2l0ulpc8iji9g85@4ax.com>
Source record: 107609

On Wed, 24 Sep 2003 17:27:21 -0700, "Spurious Noise" <HDA@zilch.com> wrote:

>I had a home a coupla hundred feet away from hi tension towers and it was a
>nightmare plus.
>
>I was not a ham when we moved in but I noticed lines across the TV video on
>the lower channels all the time
>and buzz in the TV audio. Annoying but not unusual in the days of rooftop TV
>antennas.
>
>It got and very severe when the insulators got damp. In fact at times during
>the night one could see a blue arc discharge across the insulators.
>
>When I got my ham ticket, I found S9+10 dB of noise was typical on the 160,
>80, 40m bands (unusable for the most part)
>
>Less noise up the spectrum but awful at times. Later when a got a small
>triband beam, I would rotate the antenna 90 degrees away from the power
>lines to reduce the noise and hope some of my signal got to Europe -- hi hi.
>
>The power company would wash down the lines on occasion when I squawked, but
>the noise would soon return.
>
>When we moved to a new noise free (underground utilities) location, couldn't
>believe the difference.
>
>Take a portable SWL receiver and check the noise at various frequencies and
>areas of the location.
>
>But the noise could be in a "quiet period' i.e., clean and dry insulators.
>
>But a Caveat -- your noise may vary -- others reported no problem.
>
>For me I will never again move in anywhere near these spectrum blasters.
Thanks for the reply, I live 500ft away and at times it is noisy, he is about 150 to 200ft
from the
lines. more comments please...

Donnie (N4JZH)

''Behold how good and well brethren dwell together in unity''

1542. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:35:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <afd4nvcc6doefav7g7tvkq90oi2ga10qgj@4ax.com>
Source record: 107610

On Thu, 25 Sep 2003 00:21:53 GMT, Ken <WA0SBU@yahoo.com> wrote:

>Richard Clark wrote:
>
>Richard;
> Sorry, I didn't mean to come across like I did. Can I blame it on a
>bad day at work? I had scanned through the messages and thought I had seen
>were you had an idea where the E-mail addresses came from. Thats why I
>wrote to you with what I had found out, looking for your input and ideas.
>If I knew more about how outlooks address book work, I think I have a
>pretty good idea where the address's are coming from.
>
>I apologize for the way I acted toward you
>
>Ken

Hi Ken,

I took no slight. Further, I did, as you described, hit you like this was going on between us for two weeks - just my nature. Some forgive me, others don't, the rest don't care as long as it makes for good theater.

There's every chance they (the names and addresses) are mined off the newsgroup participants. These things have to start somewhere. However, what feeds them is what I am interested in (being potential fodder), and when simple maintenance can snuff a bug, and many would rather suffer through it without dignity - then I don't offer much sympathy and tea.

To this point in time today, only 10 trash canned items. I don't expect it is anything more than luck that there are these few as it has nothing to do with being hit, but rather by who threw the blow (actually the why).

73's
Richard Clark, KB7QHC

1543. Re: Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:46:40 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <QVqcb.334086$2x.98434@rwcrnsc52.ops.asp.att.net>
Source record: 107611

Chapter 11: Please allow us to screw the other guy so it doesn't hurt us.
"Alan Beagley" <abeagley@optonline.net> wrote in message
news:3F710FC8.60608@optonline.net...
> Filing for Chapter 11 is an appeal to the court to "Keep our creditors
> off our back while we straighten out this mess". It should mean that
> they can keep going when they otherwise would not be able to.
>
> -=-
> Alan AB2OS
>
>
> On 09/24/03 03:43 am Crazy George put fingers to keyboard and launched
> the following message into cyberspace:
>
> > Since no one else has posted this:
> >
> > http://www.rohnnet.com and click on "Press Releases", then
> > click on the September 16, 2003 entry.
> >
> > Hope no one needs parts for a while.
>

1544. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 00:56:22 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <W2rcb.425673$Oz4.220294@rwcrnsc54>
Source record: 107612

I think you have your answer. If you have problems and he lives even closer,
could it be better?
"Donnie" <look me up @ qrz.com> wrote in message
news:ksd4nvor15kjlhpt5eo2l0ulpc8iji9g85@4ax.com...
> On Wed, 24 Sep 2003 17:27:21 -0700, "Spurious Noise" <HDA@zilch.com>
wrote:
>
> >I had a home a coupla hundred feet away from hi tension towers and it was
a
> >nightmare plus.
> >
> >I was not a ham when we moved in but I noticed lines across the TV video
on
> >the lower channels all the time
> >and buzz in the TV audio. Annoying but not unusual in the days of rooftop
TV
> >antennas.
> >
> >It got and very severe when the insulators got damp. In fact at times
during
> >the night one could see a blue arc discharge across the insulators.
> >
> >When I got my ham ticket, I found S9+10 dB of noise was typical on the
160,
> >80, 40m bands (unusable for the most part)
> >
> >Less noise up the spectrum but awful at times. Later when a got a small
> >triband beam, I would rotate the antenna 90 degrees away from the power
> >lines to reduce the noise and hope some of my signal got to Europe -- hi
hi.
> >
> >The power company would wash down the lines on occasion when I squawked,
but
> >the noise would soon return.
> >
> >When we moved to a new noise free (underground utilities) location,
couldn't
> >believe the difference.
> >
> >Take a portable SWL receiver and check the noise at various frequencies
and
> >areas of the location.
> >
> >But the noise could be in a "quiet period' i.e., clean and dry

insulators.
> >
> >But a Caveat -- your noise may vary -- others reported no problem.
> >
> >For me I will never again move in anywhere near these spectrum blasters.
> Thanks for the reply, I live 500ft away and at times it is noisy, he is
about 150 to 200ft from the
> lines. more comments please...
>
>
>
>
> Donnie (N4JZH)
>
> ''Behold how good and well brethren dwell together in unity''

1545. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 01:16:33 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Rlrcb.334219$2x.98693@rwcrnsc52.ops.asp.att.net>
Source record: 107613

Gene Nygaard wrote:

[SNIP]

>
> Apparently you are claiming that pounds are not units of mass.
>
> Where did you learn that?

Well, I learned that a Pound is a unit of Force.
Well, I learned that a Slug [pound mass] is Pound*acceleration.
Well, I learned that mass is pound*sec^2/foot.

Where did I learn this? What's my source? Physics 101, University Physics, Sears and Zemansky, Addison-Wesley Publishing, 1956, Chapter 6, page 94.

I hope tou don't need another reference?

Now, what's your real problem? What are you trying to say?

Dave, W1MCE

>
> Being the skeptic that I am, how can I convince myself that that is
> true? Is there some textbook, or something from some national
> standards agency, that would help me verify this?
>
> Gene Nygaard

1546. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 01:24:22 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <atrcb.426927$cF.131792@rwcrnsc53>
Source record: 107614

I lived and operated HF for 38 years within 100 meters of 3 sets of HV lines from 66KV to 110KV on the New England Power Grid in Danvers, Massachusetts, 01923, 10 Bow Street. My next door neighbor was the Right of Way. My 80/75 meter doublet was parallel to the lines [maximum coupling] and noise was a non issue. I looked out the window and Voila! Power Lines!!

In 38 years of HF operation the only problem was one cracked insulator, corona, that was promptly replaced by NE Electric.

Moral, considering the negative response, noise is not a problem on maintained lines!

Deacon Dave, W1MCE
+ + +

Donnie wrote:

> Have a new ham that his property is backed up to a high voltage power line right of way, He is
> thinking about installing a tower in the yard but is wondering what effect or line noise would be
> present with the tower in line of sight to the power lines. comments welcome..
>
>
>
>
>
> Donnie (N4JZH)
>
> ''Behold how good and well brethren dwell together in unity''

1547. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 01:27:41 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <aig4nv4gthp5pm3m4k3833ae9jnubg3m69@4ax.com>
Source record: 107615

On Thu, 25 Sep 2003 01:16:33 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>
>
>Gene Nygaard wrote:
>
>[SNIP]
>
>>
>> Apparently you are claiming that pounds are not units of mass.
>>
>> Where did you learn that?
>
>Well, I learned that a Pound is a unit of Force.
>Well, I learned that a Slug [pound mass] is Pound*acceleration.
>Well, I learned that mass is pound*sec^2/foot.
>
>Where did I learn this? What's my source? Physics 101, University
>Physics, Sears and Zemansky, Addison-Wesley Publishing, 1956, Chapter 6,
>page 94.
>
>I hope tou don't need another reference?
>
>Now, what's your real problem? What are you trying to say?

Can you quote it to me, specifically where it says that pounds are not units of mass? I'll bet you just misunderstood what it said. I have the 1970 edition of Sears and Zemansky myself, so I'm betting that if anything, what it actually says is clearer in that older edition than it is in the 1970 edition.

Pounds force do exist, of course. What I'm asking you to show me is not that, but rather that pounds are not units of mass.

Sears and Zemansky didn't lie about this in 1956. They might have been dishonest and deceptive about it, not concerned enough about the possibility that fools like you would misinterpret what they said or actually encouraging such misinterpretation. But they didn't lie about it. Some textbooks today might actually lie about it (or, alternatively, their authors are too poorly educated to know any better--take your choice).

Gene Nygaard

>Dave, W1MCE
>
>
>>
>> Being the skeptic that I am, how can I convince myself that that is
>> true? Is there some textbook, or something from some national
>> standards agency, that would help me verify this?
>>
>> Gene Nygaard

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1548. Re: 10m dipole and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 02:05:17 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <39j4nv4lomako4io20sk0gc70ohurhorpp@4ax.com>
Source record: 107578

On Tue, 23 Sep 2003 22:58:03 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>
>In general, to use the variable ladder-line length approach that I use,
>a dipole needs to be at least 1/2WL on the lowest frequency of operation.
>For dipoles shorter than 1/2WL, as the dipole is made shorter, the resistance
>goes down and the reactance goes up, causing the resistance at a current
>maximum point to go lower and lower with increasing SWR.

Thanks, it just sounds like I need to make the antenna longer :-)

Bob
k5qwg

1549. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 02:28:41 UTC
From: abeagley@optonline.net
Message-ID: <50e32e0b.0309241828.6d34bcd9@posting.google.com>
Source record: 107616

Talked to the lawyer (an ARRL Volunteer Counsel) today. He said nobody had ever asked the question before, but, without doing $1000 worth of research (which still would provide no definitive answer), he was of the opinion that in this context "structure" refers only to buildings, as it usually does. Else even fences would be prohibited too, as well as basketball hoops.

-=-
Alan AB2OS

Alan Beagley <abeagley@optonline.net> wrote in message news:<3F6C3980.5010403@optonline.net>...
> I am still waiting for the lawyer to review the CC&Rs for the property
> we are hoping to buy, but in the meantime . . .
>
> Does anybody have any knowledge or experience whether a tower is a
> "structure," as the term is used in CC&Rs? -- e.g., "No structure may
> be erected on any of the lots except for a single-family dwelling . . .
> [then come the size limitations}. No more than one outbuilding may be
> erected on any lot . . . [then come the size limitations}."
>
> The context suggests that "structure" means "building," but if it
> includes towers, then would it not also include the set-in-concrete
> basketball hoops that abound in the subdivision? Not to mention the
> amateur radio tower that is already there on another lot -- but I want
> to make sure that the owner isn't simply "getting away with it" because
> he has nice neighbors, whereas we might turn out to have not-so-nice ones.

1550. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 03:25:36 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309241925.5bfb9801@posting.google.com>
Source record: 107617

Hi Dave (and lurkers),

Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
If+Ir. You have to be careful about directions, and be careful to
define things and stick with those definitions. I usually use
Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
physical direction along the line, and then of course
rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
should be clear. Anyway, rho=+1 at a point of zero net current,
either way you define the current direction, and rho=-1 at a point of
zero net voltage. No Smith chart, and no Zo, needed to figure that
out.

Cheers,
Tom

Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
> Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
> ... the net current is zero (i.e. at an open circuit). Therefore Ir =
> -If, and rho is a -1.
>
> Comment?
>
> Tom Bruhns wrote:
>
> > I trust we can all agree that the definition of rho is rho=Vr/Vf, and
> > I trust we can all agree that on a TEM line, the net voltage
> > Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> > then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> > chose to use to find rho at a load from the load impedance, Zload, and
> > the line characteristic impedance, Zo, better work out right for a
> > short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> > does NOT work for that simple case, unless Zo*=Zo. But
> > "rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> > something similar for an open circuit load. Note that rho=-1 for a
> > short circuit load, and rho=+1 for an open circuit load, independent
> > of line impedance.
> >
> > Cheers,
> > Tom
> >
> > k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
> >

> >>It's even easier than that. Using the _definition_ of reflection
> >>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
> >>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
> >>zero). That's either a real short or a virtual short.
> >>
> >>Cheers,
> >>Tom
> >>
> >>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
> >>
> >>
> >>>lets see...
> >>>
> >>>rho = (Z - Zo)/(Z + Zo)
> >>>if rho = -1 then
> >>>
> >>>-1=(Z-Zo)/(Z+Zo)
> >>>or
> >>>-1*(Z+Zo)=(Z-Zo)
> >>>or
> >>>-Z - Zo = Z - Zo
> >>>or
> >>>-Z = Z
> >>>the only value i know that satisfies that is zero.
> >>>lets substitute it back in to be sure...
> >>>-1=(0-(50+j50))/(0+(50+j50))
> >>>-1=(-50-j50)/(50+j50)
> >>>-1=-1(50+j50)/(50+j50)
> >>>-1=-1 qed.

1551. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 03:41:10 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <hgk4nvk69v0kecl4seuhj6pshdei5e1bm9@4ax.com>
Source record: 107618

On Wed, 24 Sep 2003 21:04:11 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 24 Sep 2003 20:15:51 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>
>
>>>A balance, by implicit definition again, consists of comparing two
>>>masses under the influence of Gravity. Given it is a bridge, in a
>>>sense, the constant of Gravity is discarded from both sides and mass
>>>is compared only. It is a convenience of earthly expectations (and a
>>>defunct system of measurement) that the scale is marked in pounds.
>>
>>The matter of convenience is in the other direction, stupid; we're
>>willing to substitute cheapness for accuracy in what we want to
>>measure on those unreliable bathroom scales. They aren't any more
>>accurate for measuring force than they are for measuring mass on
>>Earth; haven't you ever weighed yourself on your mother's scale or
>>somewhere else and found it differed from yours at home by several
>>pounds? Do you automatically assume you've gained or lost that much
>>weight.
>
>I've nowhere introduced the topic of accuracy. It has nothing to do
>with your original query. Weight and mass can both be measured to
>considerable accuracy. It all depends on method and standards.

And mass can be measured with much more accuracy than force can, but
that is entirely irrelevant to the point I was making.

Your claim was that the mass-measuring balances are, for a matter of
convenience, marked in units of force called pounds. I say that it is
in fact the other way around, that the cheap force-measuring spring
scales are marked in units of mass, which is indeed what we want to
measure. The kilograms used throughout the world, including most
hospitals in the U.S., for human body weight are indeed the proper SI
units for this quantity. The pounds used for this purpose are the
ones legally defined as 0.45359237 kg. Except, of course, for some
science teachers and some physics books written recently by authors so
miseducated (not uneducated, but actually mistaught) that they believe
pounds are not units of mass.

American Society for Testing and Materials, Standard for Metric
Practice, E 380-79, ASTM 1979.

3.4.1.2 Considerable confusion exists in the use
of the term weight as a quantity to mean either

force or mass. In commercial and everyday use,
the term weight nearly always means mass; thus,
when one speaks of a person's weight, the
quantity referred to is mass. . . .
Because of the dual use of the term weight as a
quantity, this term should be avoided in technical
practice except under circumstances in which its
meaning is completely clear. When the term is
used, it is important to know whether mass or
force is intended and to use SI units properly as
described in 3.4.1.1, by using kilograms for mass
or newtons for force.

This ASTM E 380 and a separate ANSI/IEEE Standard have now been
combined into a joint standard SI 10. I don't know if it says exactly
the same thing; but I am certain it doesn't say anything directly
contrary to this.

Of course, NIST also tells us the same thing. I'll get to that below.

>A bathroom scale is not a balance. A balance has a scale (the marks
>along which the balance weights are moved and the markings upon those
>same weights).
>>
>>>>>However, you do ask for a reference and acknowledge the NIST as a
>>>>>reputable source (many here ignore this commonplace):
>>>>>http://physics.nist.gov/PhysRefData/contents-constants.html
>>>>
>>>>There is absolutely nothing about pounds on this page. So don't be
>>>>bullshitting us.
>>>
>>>That is the whole point. You don't see pounds there for mass do you?
>>
>>I don't see pounds as units of mass because this page just lists units
>>in the International System of Units.
>
>Exactly.

So why were you offering it as evidence that pounds are not units of
mass? Do you think I'm that stupid, that you can pull the wool over
my eyes so easily? Guess again.

>>Show me something from NIST saying that pounds are not units of mass.
>>Or from some textbook.
>>
>>>That's because pounds are not a unit of mass. They are a unit of
>>>weight which is NOT a constant throughout the universe (nor on earth
>>>for that matter).
>>
>>Just your say-so? That's the best you can do?
>
>I am a trained Metrologist. I have measured mass traceable to the

>NIST. I have done this in four different Primary and Secondary
>Standards Labs. I was the head Metrologist of two of them.

Wow! This is even better than I dreamed of. A genuine Capital-Letter Metrologist. Of course, it's also pretty sad, as most people will understand if they stick with me for the rest of this message.

I'm sure that as a Metrologist, you are well aware of one particular subset of English units, used only in calculations, which is a coherent, gravitational foot-pound-second system in which the derived unit of mass is a slug, equal to 1 lbfï¿½sï¿½/ft. One of several such subsystems, of course.

But if you are really a capital-letter Metrologist, and an old fart on top of it (that system with the slugs was never used in physics textbooks before 1940, and even a couple of decades later I learned the system I'm about to describe first, before learning the one with slugs--and you must be at least close to my age, and a genuine expert on weights and measures on top of it all), you'll have a damn hard time convincing me, or anyone else, that you are also not aware of a much older coherent foot-pound-second system of mechanical units, the absolute fps system in which the derived unit of force is the poundal, the force which will accelerate the base unit of mass in this system at a rate of one foot per second squared.

Now, fill in the blank, please: The BASE UNIT OF MASS in this oldest English system of mechanical units is the _____. Hint: it is the "p" in this fps system.

BTW, while the gravitational fps system of units enjoyed a brief heyday in science in North America, outside of North America the absolute fps system with poundals remained the system of choice for doing calculations in English units.

You probably also know that both of these limited use, coherent systems of units are, like SI, coherent systems of units. That means that in neither of these do we have any pints or gallons of any sort, not U.S. liquid, not U.S. dry, and not imperial. Nor are there any Btu, nor horsepower, in either system. Not only that, but there are no ounces (neither avoirdupois nor troy, nor U.S. nor imperial fluid ounces), no tons (neither long nor short, neither force nor mass), and no miles or inches (and thus no pounds force per square inch either).

Of course none of our ordinary measurements are made in the context of any of these specialized systems of mechanical units which serve as calculation aids. The fact that many of the we use are not part of these systems is one bit of evidence of that fact. That fact that nobody ever measures (as opposed to calculating from other measurements) mass in slugs is another. The fact that we can generally choose any of several different systems of units to use in our calculations, with no change in difficulty, is still another piece in the puzzle.

Let's look at what the English physicists William Thomson (for whom the SI unit of temperature is named) and Peter Guthrie Tate had to say about this way back in 1879, Treatise on natural philosophy, 1879, reprinted as Principles of mechanics and dynamics, quoted by Jim Carr in Apr 1998 on newsgroups alt.sci.physics, sci.engr, sci.physics.

"By taking the gravity of a constant mass for the unit of force it makes the unit of force greater in high than in low latitudes. In reality, standards of weight are masses, not forces. They are employed primarily in commerce for the purpose of measuring out a definite quantity of matter; not an amount of matter which shall be attracted to the earth with a given force."

<... description of merchant using spring scale to defraud or be defrauded depending on latitude, etc ... Jim Carr>

"It is therefore very much simpler and better to take the imperial pound ... as the unit of mass, and to derive from it, according to Newton's definition above, the unit of force."

Then you might also know what "weights" means in the English versions of the international bodies charged with keeping our international standards:

CGPM General Conference on Weights and Measures
CIPM International Committee for Weights and Measures
BIPM International Bureau of Weights and Measures

In the introduction to their SI brochure (available at http://www.bipm.fr), the BIPM tells us for the first half-century of their existence, their only responsibility was keeping the standards for length and for mass. Take a wild guess which of those two corresponds to "weights" in these names.

>>I can, OTOH, prove that pounds are indeed units of mass.
>
>By a reference found at the NIST? I think you would have done that by
>now if you could.

Cocky little bastard, aren't you!

Just making clear that you accept the fact that doing so would prove you wrong, before I do it.

I have already done so, of course, without referring to NIST, with that description of the absolute fps system above.

But before we get to wandering around NIST's website, let's do a little primary source research, and find the definition which NIST considers controlling. For that we need to look to NIST's predecessor, the National Bureau of Standards, and to the law of the land.

Earlier in the 20th century, Congress had had the sense to delegate the authority to make these definitions to the experts in the field who know what they are doing, and had given the predecessor of NBS this authority. This was officially implemented in 1959 by official regulatory action by NBS, made official with its publication in the Federal Register of 1 July 1959.

This redefinition of the pound was done in accordance with an agreement reached among the national standards laboratories of several of the most advanced nations in the world, not back in the Dark Ages but in the middle of the 20th century, two years after Sputnik and the year before the International System of Units was introduced. The old U.S. definition, which had been a slightly different exact fraction of a kilogram for the 66 years before then, was replaced by the new international definition as 1 lb = 0.45359237 kg.

You can read the current U.S. law (this Federal Register Notice), as well as a discussion of the earlier U.S. law and of the international agreement, at one of these web sites (same document both places):
http://www.ngs.noaa.gov/PUBS_LIB/FedRegister/FRdoc59-5442.pdf
http://gssp.wva.net/html.common/refine.pdf

Of course, the same definition is was also adopted in Canada, in the U.K., in South Africa, in Australia, and in New Zealand, the other parties to this international agreement. It is also used all around the world, and was adopted by statute or regulation in some other countries not a party to the original agreement, such as Ireland.

Now, let's get to the NIST web site. You obviously didn't follow the links you provided to get to the right place. Start with the one you recommended
http://physics.nist.gov/cuu/Units/units.html
click on Return to Units Home Page which takes you back up one level to
http://physics.nist.gov/cuu/Units/index.html
click on Bibliography: Online publications and citations to go to
http://physics.nist.gov/cuu/Units/bibliography.html
Go down to NIST Special Publication 811 and first of all, order yourself a free printed copy of this document. You need it. Then look at it in the online version, either in .html or in .pdf, whichever you prefer. I'll use the html version to give some links to specific parts of it below; I also have the printed version, and I have the .pdf version right on my computer.

I already know what you think of NIST. In another message, you told us that "NIST describes all this at the links offered
and they do not equivocate nor banter terms casually. For any Professional Engineer, they carry the force of law as the only authoritative source for definition. "

This is NIST's official _Guide for the Use of the International System of Units (SI)_, by Dr. Barry N. Taylor, reviewed and approved by both the director of NIST and by his boss, the Secretary of Commerce. It

is cited as an authority not only by many of the national standards agencies around the world, but also by the BIPM itself.

First, a word about Dr. Barry N. Taylor. He is not only a professional metrologist with a Ph.D. in physics, but he has also served on both the Consultative Committe on Units which advises the CGPM (still on that, I think), and on the SUNAMCO Commission (Commission on Symbols, Units, Nomenclature, Atomic Masses and Fundamental Constants) of the International Union of Pure and Applied Physics (IUPAP).

In other words, for the benefit of anyone else reading this, if Richard Clark is a "Metrologist" then Dr. Barry Taylor must be a "METROLOGIST" because even capitalizing all the letters won't adequately show the difference between the two, especially when it comes to expertise in the particular subfield related to teh definitions of units of measure.

First, before we get to the pounds, let's digress a little bit and finish up that loose end I left above.
http://physics.nist.gov/Pubs/SP811/sec08.html

Thus the SI unit of the quantity weight used in this
sense is the kilogram (kg) and the verb "to weigh" means
"to determine the mass of" or "to have a mass of".

Examples: the child's weight is 23 kg

The same is true for pounds, of course. Units of mass in this context, as the term is used in physiology and medicine, and in sports--the reasons we normally weigh ourselves.

There's more to the explanation in section 8.3, including a good discussion of the force definition of weight often used in physics and engineering. This section concludes with the excellent advice that

whenever the word 'weight' is used, it should be
made clear which meaning is intended.

Now, let's go to the extensive list of conversion factors found in Appendix B to SP 811.
http://physics.nist.gov/Pubs/SP811/appenB8.html#P

To convert from to Multiply by

pound (avoirdupois) (lb) 23 kilogram (kg) 4.535 924 E-01
pound (troy or apothecary) (lb) kilogram (kg) 3.732 417 E-01

[The 23 is a reference to a footnote in the printed and pdf versions, a note on a separate page in html]
http://physics.nist.gov/Pubs/SP811/footnotes.html#f23

23 The exact conversion factor is 4.535 923 7 E-01. All units
in Sec. B.8 and Sec. B.9 that contain the pound refer to

the avoirdupois pound.

This unit, of course, is not defined by this publication. This is just the legal definition made by NBS in 1959.

Also, take a look at another section of American Society for Testing and Materials, Standard for Metric Practice, E 380-79, ASTM 1979.

3.4.1.4 The use of the same name for units of force and mass causes confusion. When the non-SI units are used, a distinction should be made between force and mass, for example, lbf to denote force in gravimetric engineering units and lb for mass.

As you can see above, this sensible rule is also followed by NIST. It is also followed by NPL, the U.K. national standards laboratory. It is the older unit, the one more often used, and the one more likely to be used by those who care least about the distinction, which gets to use the original, unadorned symbol "lb"; it is the recent bastardization, the less often used unit, and the one more likely to be used by those who care most about the distinction, that must be distinguished by using a different symbol, "lbf" instead.

>>That will prove that you are flat-out wrong in your claim that they
>>are not.
>
>Well, I have seen a lot of math tossed over the transom here. But if
>we are to work by your own standard, cite an NIST reference.
>
>>Just for practice, consider the troy system of weights. Unlike their
>>avoirdupois cousins, and unlike grams and kilograms, the troy units of
>>weight have never spawned units of force of the same name. They are
>>always units of mass; a troy ounce is exactly 31.1034768 grams, by
>>definition. There is not and never has been any troy pound force or
>>troy ounce force.
>>
>
>Hi Gene,
>
>Sounds like you proved a pound is not mass.

No. You just proved that you are hopelessly ignorant when you get outside your fields and start discussing things such as linguistics, history, or the law.

>The pages I offered provide a meaningful quote:
> "The 3d CGPM (1901), in a declaration intended to end the
> ambiguity in popular usage concerning the word "weight," confirmed
> that:
> The kilogram is the unit of mass..."

One of the most confusing and impossible to understand resolutions any political body has ever passed. You will note that NIST places no

emphasis on this whatsoever.

Yes, even then there were evidently enough scientists so utterly confused as to think that the standards they were keeping were standards of force rather than the standards of mass which they always had been. As were the old standards for pounds, naturally. Of course, by that time, we in the United States has already abandoned our independent standards for pounds, and we already defined them as an exact fraction of a kilogram. So where does that lead you?

But of course, you are making a big mistake you think that this particular resolution meant that we couldn't use kilograms force. In fact, it was just the opposite--this very same resolution endorsed the use of grams force and kilograms force by adopting a standard acceleration of gravity, which is not a concept of physics but rather of metrology, something which serves no purpose other than defining units of force in terms of units of mass. Kilograms force had never been well-defined units before then. Neither had pounds force, of course--and what's more, even today pounds force don't have an official definition. The de facto standard, never officially adopted by any national or international standards agency, nor by any professional organization, is probably to use the same standard acceleration of gravity which is official for defining grams force and pounds force, namely 980.665 cm/sï¿½ in the units used in that 1901 resolution, before mks systems had come into use, at a time when neither slugs nor newtons had ever been used for the units they are now.

Now go back to that Bibliography page on NIST and download NIST Special Publication 330, which includes the unofficial English version of this resolution, or at least the salient parts of it. http://physics.nist.gov/cuu/Units/bibliography.html

Then pay special attention to the footnote added by NIST, found on page 17 in the document's own pagination (I don't know the page number in the pdf format):

[dagger] USA Editor's note: In the USA, ambiguity exists in the use of the term weight as a quantity to mean either force or mass. In science and technology this declaration [CGPM (1901)] is usually followed, with the newton the SI unit of force and thus weight. In commercial and everyday use, weight is often used in the sense of mass for which the SI unit is the kilogram.

>Any other usage of "weight" in regard to the sensation of the action
>of Gravity upon an amount of mass is outdated by more than a century
>of understanding and convention.

You said weight is a force. This resolution clearly said that weight is not a force, but merely something "in the nature of a force," whatever the hell that is supposed to mean.

But fortunately, in any case, nobody was ever damn fool enough to give the 1901 CGPM any say-so on what "weight" means for the "net weight" of my bag of sugar, or for the troy weight of a bar of gold or platinum. That's outside their authority.

That resolution isn't seriously offered as proof of any change in meaning of the word. In fact, I doubt that the 1901 CGPM ever intended to change the meaning of the word--they wrongly thought that they were merely stating existing definitions.

"Outdated by more than a century of understanding and convention"? Nonsense. Go back and read that section 8.3 of NIST Special Publication 811 again. That's 1995--hardly a century ago.

Need more. Here's 1989, in the still-effective official National Standard of Canada, CAN/CSA-Z234.1-89 Canadian Metric Practice Guide:

5.7.3 Considerable confusion exists in the use of the term "weight." In commercial and everyday use, the term "weight" nearly always means mass. In science and technology, "weight" has primarily meant a force due to gravity. In scientific and technical work, the term "weight" should be replaced by the term "mass" or "force," depending on the application.

5.7.4 The use of the verb "to weigh" meaning "to determine the mass of," e.g., "I weighed this object and determined its mass to be 5 kg," is correct.

Note that "nearly always" is much stronger than "primarily"; they even got that part right. Note further the difference usage for the noun forms in 5.7.3 and the verb forms in 5.7.4; for the former, the meaning is context-specific, but for the latter that definition is unqualifiedly called "correct" (which does not, of course, say anything one way or the other about the use of the verb to mean to determine the force due to gravity, which is also correct).

Need more. Here's 2003, on the web pages on the National Physical Laboratory (NPL), the official national standards agency of the United Kingdom of Great Britain and Northern Ireland:

NPL FAQ
http://www.npl.co.uk/force/faqs/forcemassdiffs.html

Weight
In the trading of goods, weight is taken to mean the same as mass, and is measured in kilograms. Scientifically however, it is normal to state that the weight of a body is the gravitational force acting on it and hence it should be measured in newtons, and this force depends on the local acceleration due to gravity. To add to the confusion, a

weight (or weightpiece) is a calibrated mass normally
made from a dense metal, and weighing is generally
defined as a process for determining the mass of an
object.

So, unfortunately, weight has three meanings and care
should always be taken to appreciate which one is
meant in a particular context.

Note that they are talking about DIFFERENT MEANINGS of the word "weight." Just as NIST does. Just as ASTM does. Just as the Canadian Standard for Metric Practice does. Just as any good dictionary does.

That, of course, is how the word weight entered the English language over 1000 years ago, meaning the quantity measured with a balance. A quantity which you yourself explained so lucidly to be mass, not the force due to gravity. Of course, when those tribesmen in what is now England were looking for a word to use to measure how much stuff they have, when they buy and sell goods, they didn't make any mistake when they invented this word "weight" for that purpose, did they? They couldn't have used "mass" for this quantity instead, unless they had happened to choose those phonemes for the word they invented. Mass didn't have this meaning until more than 750 years later, when some obscure translator translated Newton's major work into English after Newton's death. Or do you think it was a mistake that these heathens didn't figure out the God-given word they were supposed to invent for this purpose?

There is no error when we use the very same word, with the very same meaning, for the very same purposes today. We have a prior claim to this word by 3/4 of a millennium over the physicists who recently borrowed it and often use it with a somewhat different meaning. Sometimes we borrow the physicists meaning, sometimes we use the original meaning. But like all the experts tell you, because of these ambiguities, you should just avoid using the term "weight" in a technical context--and if you do use it, make damn sure your meaning is clear.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/
Gentlemen of the jury, Chicolini here may look like an idiot,
and sound like an idiot, but don't let that fool you: He
really is an idiot.
Groucho Marx

1552. Re: Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 03:41:41 UTC
From: B I G A L <"B I G A L"@B>
Message-ID: <vn2pn6ba8g56a7@corp.supernews.com>
Source record: 107571
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

GREG WHEN YOU BECOME A REAL HAM NOT A TECH GET BACK WITH US. WE MAY LET YOU SAY A WORD NOW AND THEN. AY YI YI AY Y I YI GREG IS ONLY A TECH AY YI YI AY YI YI GREG CANT EVEN USE HF.

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message news:vn1mh7gl0j7b9d@corp.supernews.com...
> As most of you know, there is a troll on these boards claiming to be K40KA.
> I'm still trying to figure out whether this guy is just trying to be
> annoying. If he is actually doing what he said he is, we can go to the FCC,
> so I'd like to find out if he's actually on the air. Not owning any HF
> equipment, I can't do much my self. If somebody could listen in when he says
> he'll be transmitting...
>
>
> 73 de KG6SGY
>
>

1553. Re: Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 03:59:34 UTC
From: w3hy@aol.com
Message-ID: <20030924235934.23321.00000102@mb-m14.aol.com>
Source record: 107519

>It'd s troll. Big AL gets on occasionaly ...

Oh...gee, I thought it was Bi Gal...

1554. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 04:14:00 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f73031d_1@news1.prserv.net>
Source record: 107533

Dave:

What you say was absolutely true. Until electric utility deregulation. The bean counters have taken over the utilities, and getting repairs is now worse than pulling teeth. Lines are not maintained any longer until they pose an imminent public safety threat. Ask Riley Hollingsworth or Ed Hare if you don't want to believe me. Unfortunately, your experience is more the exception than the rule anyway. Also, read the following article: <http://www.spectrum.ieee.org/WEBONLY/special/aug03/black03.html>, where you will find First Energy mentioned. Tom Rauch, W8JI is preparing to file suit against them, as their lines are noisy, literally falling down, and they refuse to repair them. So, please don't mislead the newbies with stories about the golden past. It is gone, unfortunately.
BTW, my credentials can be found at:
<http://www.arrl.org/tis/info/HTML/power_line_handbook/>.

73,
W5VPQ
--
Crazy George
Remove NO and SPAM from return address
"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:atrcb.426927$cF.131792@rwcrnsc53...
> I lived and operated HF for 38 years within 100 meters of 3 sets of HV
> lines from 66KV to 110KV on the New England Power Grid in Danvers,
> Massachusetts, 01923, 10 Bow Street. My next door neighbor was the Right
> of Way. My 80/75 meter doublet was parallel to the lines [maximum
> coupling] and noise was a non issue. I looked out the window and Voila!
> Power Lines!!
>
> In 38 years of HF operation the only problem was one cracked insulator,
> corona, that was promptly replaced by NE Electric.
>
> Moral, considering the negative response, noise is not a problem on
> maintained lines!
>
> Deacon Dave, W1MCE
> + + +
>
>
> Donnie wrote:
>
> > Have a new ham that his property is backed up to a high voltage power
line right of way, He is
> > thinking about installing a tower in the yard but is wondering what

effect or line noise would be
> > present with the tower in line of sight to the power lines. comments
welcome..
> >
> >
> >
> >
> >
> > Donnie (N4JZH)
> >
> > ''Behold how good and well brethren dwell together in unity''
>

1555. Re: Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 04:38:03 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309242038.45054e77@posting.google.com>
Source record: 107520
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Greg Courville" <EngNOSPAMinuitor@Gee-Enginuity.com> wrote in message news:<vn1mh7gl0j7b9d@corp.supernews.com>...
> As most of you know, there is a troll on these boards claiming to be K40KA.
> I'm still trying to figure out whether this guy is just trying to be
> annoying. If he is actually doing what he said he is, we can go to the FCC,
> so I'd like to find out if he's actually on the air. Not owning any HF
> equipment, I can't do much my self. If somebody could listen in when he says
> he'll be transmitting...
>
>
> 73 de KG6SGY

The *real* Big Al is dead. Has been for a few years. He was quite a character. MK

1556. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 06:44:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn53nn20rkul32@corp.supernews.com>
Source record: 107521

Thanks for the tip. That's a good low-cost solution, and anything lasting 5-10 years there should last nearly a lifetime here. I've also found that you can get plastic electrical boxes intended for outdoor use at reasonable cost at home supply stores. They'd be a good choice if something sturdier is needed, and they should put up with the sun ok. Some plastics are definitely much better than others, and a lot of 'em don't last long at all.

Roy Lewallen, W7EL

Crazy George wrote:
> Roy:
>
> You will find that a yellow Prestone anti-freeze bottle will last at least 5
> years, and likely 10. We get plenty of UV here in S. Texas, and I have
> found them to have the highest survivability of any plastic except Lexan.
> My 160 meter tuner is in one, as I didn't want to use a small coil or a
> large metallic enclosure. I use 2, cut the top off of one and invert it,
> and then use the inverted bottom from another as a press fit closure. No
> fasteners needed, although I usually put a couple 6-32 screws through the
> resulting double flange for good measure. The old red bottles were equally
> as good, but now hard to find.
>
>
> And for Ken, the best way to seal the end of that psuedo air line is some of
> the shrink tubing with the filler adhesive inside. Then point the sealed
> end DOWN.
> --
> Crazy George

1557. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 07:14:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ql45nvs7uqvvktlgpr7m85menvkrtm7iog@4ax.com>
Source record: 107522

On Thu, 25 Sep 2003 03:41:10 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>Do you think I'm that stupid, that you can pull the wool over
>my eyes so easily?

Hi Gene,

As I pointed out earlier, your feelings belong at the end of the line
with the rest whose minds I cannot change.

73's
Richard Clark, KB7QHC

1558. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 08:08:10 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <s475nvc2k83t42qres37s5e3sdo0sn31no@4ax.com>
Source record: 107523

On 24 Sep 2003 19:28:41 -0700, abeagley@optonline.net (Alan) wrote:

>Talked to the lawyer (an ARRL Volunteer Counsel) today. He said nobody
>had ever asked the question before, but, without doing $1000 worth of
>research (which still would provide no definitive answer), he was of
>the opinion that in this context "structure" refers only to buildings,
>as it usually does. Else even fences would be prohibited too, as well
>as basketball hoops.

It depends on the context in which it was used. In our township a tower is defined as a structure, *BUT* there are towers and there are towers. The tower is a structure and any tower *over 80 feet requires a permit, must meet engineering safety requirements (they accepted the ROHN catalog, and must meet setback requirements.
http://www.rogerhalstead.com/tower.htm

Lightweight TV towers or shorter ham towers are a subset of structure that is not regulated except for the set back rules. Here you could put up a ham tower of ROHN 45 G or one of the big crank up towers without even needing a permit as long as the tower is not over 80 feet in height. (from ground level to top and won't land on your neighbor's property if it falls over)

However the *tower* is the structure, never mind that there is heavy steel masting that extends 30 feet above the top of the tower with 6 antennas on it.. They count only the supporting tower height. However the tower installation must be engineered to withstand the wind loads from all that *stuff* on top.

I can speak only for my specific circumstances, but fences are defined as ...well...fences. Yah, it is a structure and as such fences are regulated and may be no more than a certain height and must be some specific distance back from the lot line. Basket ball hoops are not defined as structures, but only accessories, or external attachments which are actually prohibited by some CC&Rs

IOW, it doesn't matter even what the rest of us have had to do, it depends on your specific circumstances, CC&Rs if any, zoning, and the Home Owners Association.

Remember that although there is federal pre-emption, set back rules and safety take precedence. My lot is 200 feet on a side, so with the tower mounted in the center of the lot I can go no more than 100 feet without permission from my neighbors. Setback just means, if it falls over it lands on my property and that is an acceptable pre-emption.

BTW, the "neighborhood lightening rod" took a hit at 4:53:41 Wednesday
afternoon according to my UPS monitor. Other than that every thing is
still working and was up and running when the strike occurred.

I haven't been up on top to take a look at things, but I'm trying to
finish up the winterizing of the antennas system before the weather
gets bad. That included letting the center mast down, replacing the
jumpers from the top of the tower to the arrays, repairing the center
support on the C3i 7L 6-meter Yagi, and then putting it all back up.
The mast alone weighs close to 300#. I use a 25 foot SS come along to
raise and lower the mast which anchors in two ROHN 3" thrust bearings
with the Big Boy Rotor mounted about 20 feet down in the tower.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>-=-
>Alan AB2OS
>
>
>Alan Beagley <abeagley@optonline.net> wrote in message
news:<3F6C3980.5010403@optonline.net>...
>> I am still waiting for the lawyer to review the CC&Rs for the property
>> we are hoping to buy, but in the meantime . . .
>>
>> Does anybody have any knowledge or experience whether a tower is a
>> "structure," as the term is used in CC&Rs? -- e.g., "No structure may
>> be erected on any of the lots except for a single-family dwelling . . .
>> [then come the size limitations}. No more than one outbuilding may be
>> erected on any lot . . . [then come the size limitations}."
>>
>> The context suggests that "structure" means "building," but if it
>> includes towers, then would it not also include the set-in-concrete
>> basketball hoops that abound in the subdivision? Not to mention the
>> amateur radio tower that is already there on another lot -- but I want
>> to make sure that the owner isn't simply "getting away with it" because
>> he has nice neighbors, whereas we might turn out to have not-so-nice ones.

1559. Re: Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 09:16:41 UTC
From: the_kink@hotmail.com
Message-ID: <63a92900.0309250116.1761d3a@posting.google.com>
Source record: 107524

"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3f711443_3@news1.prserv.net>...
> Since no one else has posted this:
>
> http://www.rohnnet.com and click on "Press Releases", then
> click on the September 16, 2003 entry.
>
> Hope no one needs parts for a while.

I don't see "Press Releases" there at all.

Can someone post the complete url. I'd like to read it.

1560. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 10:33:31 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vn5h433lk57o00@corp.supernews.com>
Source record: 107525

I have created email addresses that have never been exposed to the net or the web.
The ones using regular words get hit sooner and more frequently that the ones using random alphanumeric characters.

Can you say ViralSpamBot?
But.....
What I want to know is......
.....why?

Is life THAT boring?

73
H.

1561. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 10:45:29 UTC
From: kd1@sympatico.ca
Message-ID: <3F72C749.DA17D384@sympatico.ca>
Source record: 107526

Gene Nygaard wrote:
>
> Apparently you are claiming that pounds are not units of mass.
>
> Where did you learn that?
>
> Being the skeptic that I am, how can I convince myself that that is
> true? Is there some textbook, or something from some national
> standards agency, that would help me verify this?
>
> Gene Nygaard

Nice web page you have on the subject, but I suspect it is not quite so cut and dried as you make out.

I have a strong recollection (from many years ago) of being taught that pounds where force. Going to google with 'pound mass force' yields some modern university teaching material which says the same. My ancient thermo text uses lbf and lbm throughout to eliminate confusion.

There seems to be little doubt that today the pound is defined in terms of the kilogram so is clearly a unit of mass.

But usage of the pound seems to be less consistent. Consider pounds per square inch or foot-pounds; in each of these the pound is a unit of force.

I expect the definition of pound will be argued for some years to come.

Let's just all go metric. The only really confusing measure there seems to be the definition of the litre.

...Keith

1562. Re: Anybody actually heard "BIG AL" on the air?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 11:29:37 UTC
From: B i g A l <"B i g A l"@B>
Message-ID: <vn5kifi2lo50d9@corp.supernews.com>
Source record: 107527
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0309242038.45054e77@posting.google.com...
>
> The *real* Big Al is dead. Has been for a few years. He was quite a
character. MK

WOW. SORRY TO HEAR THAT IM DEAD. MAYBE IM A GHOST IN HAM HEAVEN. LET ME
PINCH MYSELF. OUCH. NO IM STILL HERE. COME TO 3894.5LSB AND FIND OUT FOR
YOURSELF BOY.

HO HO

1563. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 12:13:47 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <%ZAcb.573863$YN5.410586@sccrnsc01>
Source record: 107528

Gene, thanks for the compliment in calling the Program Chief Engineer
of the USAF MX [Peacekeeper] Re-Entry System/Re-Entry Vehicle a fool.

It says a lot about you. I forgive you.

Dave, W1MCE
+ + +

Gene Nygaard wrote:
> not concerned enough about the possibility that fools like you

1564. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 12:36:32 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <stl5nv4c5l4bmu9bguk0q8goua72arqr9e@4ax.com>
Source record: 107529

On Thu, 25 Sep 2003 06:45:29 -0400, kd1@sympatico.ca wrote:

>Gene Nygaard wrote:
>>
>> Apparently you are claiming that pounds are not units of mass.
>>
>> Where did you learn that?
>>
>> Being the skeptic that I am, how can I convince myself that that is
>> true? Is there some textbook, or something from some national
>> standards agency, that would help me verify this?
>>
>> Gene Nygaard
>
>Nice web page you have on the subject, but I suspect it is not
>quite so cut and dried as you make out.

It is. I never claimed that pounds force aren't used also.

>I have a strong recollection (from many years ago) of being
>taught that pounds where force. Going to google with 'pound
>mass force' yields some modern university teaching material
>which says the same. My ancient thermo text uses lbf and lbm
>throughout to eliminate confusion.

But that isn't what our resident Capital-M Metrologist was telling us.
He claimed flatout that pounds are not units of mass.

Furthermore, he also set the ground rules that I could prove him wrong
from the NIST web pages. Yet even though I have indeed done not only
that, and with a dozen other reasons and citations as well, he remains
recalcitrant in his erroneous ways.

Richard Clark is a big windbag, of no substance whatsoever. But much
worse than that is the fact that he has absolutely no integrity.

Yes, some do use lbm and lbf. Or some other variation. I remember
one textbook using p for pounds force and lb for pounds mass.

Here's the way the British physicist who named the slug put in, in the
little treatise in which he introduced this unit to the world:

In the interests of clear teaching, the convention
(which I am glad to see has been adopted in America)
has been adhered to throughout, of using the word
ï¿½pound' when a force is meant, and ï¿½lb.' when a mass
is meant, and I have ventured to give the name of a

ï¿½slug to the British Engineer's Unit of Mass, i.e. to the
mass in which an acceleration of one foot-per-sec.-
per-sec. is produced by a force of one pound.

It's easy to see why that convention didn't go very far. People would naturally like to have both a spelled out word and a symbol for both pounds. He also says, another source showing that Richard Clark is an incompetent metrologist (and if is also a professional engineer, guilty of malpractice by his own words because he doesn't follow NIST's definitions):

British Absolute Unit of Torque. Since in the British
absolute system, in which the lb. is chosen as the unit
of mass, the foot as unit of length, and the second as
unit of time, the unit of force is the poundal, it is
reasonable and is agreed that the British absolute
unit of torque shall be that of a poundal acting at a
distance of 1 foot, or (what is the same thing, as regards
turning) a couple of which the force is one poundal and
the arm one foot. This we shall call a poundal-foot,
thereby distinguishing it from the foot-poundal, which
is the British absolute unit of work.

A.M. Worthington, Dynamics of Rotation: An Elementary Introduction of Rigid Dynamics, London, New York, Bombay, Calcutta, and Madras: Longmans, Green, and Co., 1920

As I pointed out to Richard Clark, however, according to the modern rules, it is the pound force which must be distinguished from pounds in their original and still most common meaning as units of mass. The ones using pounds mass (the unit much more often used by those who care least about the distinction--witness the thousands of items in every grocery store and hardware store in America measured in pounds) are the ones who can get away with using the original "lb" symbol.

>There seems to be little doubt that today the pound is
>defined in terms of the kilogram so is clearly a unit of
>mass.

I can't understand how so many science teachers, and even textbook authors in the past decade or so, can remain oblivious to this simple fact.

>But usage of the pound seems to be less consistent. Consider
>pounds per square inch or foot-pounds; in each of these
>the pound is a unit of force.

Yes, and for all those items in our stores, the pound is a unit of mass. For density in pounds per cubic foot or pounds per gallon or pounds per cubic yard (civil engineers) or pounds per cubic inch (mechanical engineers), pounds are units of mass. For defining a British thermal unit, how much water? Certainly not an amount that exerts a certain amount of force. By the same token, the pounds in

the denominator are units of mass if you say the latent heat of fusion of water is 80 Btu/lb, or if you express specific heat capacity in units of Btu/(lbï¿½ï¿½F).

Of course, we also have kilograms as units of force when you see the thrust of jet or rocket engines expressed in kilograms, or pressure gauges in kg/cmï¿½, or torque wrenches in "meter kilograms" rather than newton meters (still readily available; I have one). The only difference is that these uses are decreasing. That's because the metric system is still fully supported and updated, and kilograms force are not part of its modern version, the International System of Units (SI). The English units, OTOH, are like obsolete versions of software--still often usable for the purposes the user wants, but eventually you may have to upgrade if you want to communicate with the rest of the world. Nobody is ever going to bother to tell us to stop using pounds force, without telling us to stop using pounds as units of mass as well.

>
>I expect the definition of pound will be argued for some
>years to come.
>
>Let's just all go metric. The only really confusing measure
>there seems to be the definition of the litre.

The litre, of course, is not part of SI. While its definition was confusing around the time I first learned this, when it was different from a cubic decimeter, that changed in 1964 when the CGPM redefined it, restoring the definition as exactly 1 dm^3, and said that under that definition it would be acceptable for use with SI, something that hadn't been true for the first four years of the existence of SI.

No. You have the mole, which shares its name with the pound mole and the kilogram mole, both still used. Guess nobody has the political will to rename it the loschmitt.

For other non-SI units, of course, the calorie is the absolute worse, with several different flavors in each of two major groupings, differing from each other by a factor of a thousand.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1565. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 12:47:53 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <cpo5nv09mdc0hbs139gstsjvgeia8kfvif@4ax.com>
Source record: 107530

On Thu, 25 Sep 2003 12:13:47 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Gene, thanks for the compliment in calling the Program Chief Engineer
> of the USAF MX [Peacekeeper] Re-Entry System/Re-Entry Vehicle a fool.
>
>It says a lot about you. I forgive you.

Gee, if I'd known you were so important, I'd really have taken you to
task for being too damn stupid to understand what you read in Sears
and Zemansky!

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1566. Re: High Voltage Lines....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 13:55:47 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <AtOdnRJ9A5dsbu-iU-KYvg@comcast.com>
Source record: 107532

Donnie,

You will get some indication by putting your car radio on AM, and driving around in the area.

Tam/WB2TT
"Donnie" <look me up @ qrz.com> wrote in message news:p7c4nvs38budnplir8o09olorjqgpijdpc@4ax.com...
> Have a new ham that his property is backed up to a high voltage power line right of way, He is
> thinking about installing a tower in the yard but is wondering what effect or line noise would be
> present with the tower in line of sight to the power lines. comments welcome..
>
>
>
>
>
> Donnie (N4JZH)
>
> ''Behold how good and well brethren dwell together in unity''

1567. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 15:20:45 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <t216nvcll44rfflf121ubcpki3749pntrr@4ax.com>
Source record: 107534

On Thu, 25 Sep 2003 12:13:47 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Gene, thanks for the compliment in calling the Program Chief Engineer
> of the USAF MX [Peacekeeper] Re-Entry System/Re-Entry Vehicle a fool.
>
>It says a lot about you. I forgive you.
>
>Dave, W1MCE
>+ + +
>
>Gene Nygaard wrote:
> > not concerned enough about the possibility that fools like you

Since you aren't honest enough to tell us exactly what Sears and
Zemansky said in 1956, I'll tell everyone what they said in 1970. If
there are any significant differences, feel free to point them out.
This thing is, I know that Sears and Zemansky weren't going to lie
about this, because they grew up using poundals, which are by
definition the force which will accelerate a MASS of 1 lb at a rate of
1 ft/sï¿½.

Francis Weston Sears and Mark W. Zemansky, University Physics,
Addison-Wesley, 4th ed., 1970.

[page 3]

1 pound mass = 1 lbm = 0.45359237 kg

[The actual number will, of course, be different in 1956, because the
U.S. didn't adopt this definition until 1959 (it had been in use in
Canada since 1953, six years before the international
redefinition).--GAN]

[page 4]

We select as a standard body the standard pound,
defined in section 1-2 as a certain fraction
(approximately 0.454) of a standard kilogram.

[page 59]

In setting up the mks and cgs systems, we first selected
units of mass and acceleration, and defined the unit of
force in terms of these. In the British engineering system,
we first select a unit of force (1 lb) and a unit of
acceleration (1 ft s^-2) and then define the unit of mass as

the mass of a body whose acceleration is 1 ft s^-2 when
the resultant force on the body is 1 lb.

<end quote>

Now, Sears and Zemansky might be incompetent for not allowing for the fact that there are going to be people out there who are too blamed stupid to understand that that adjectival phrase "British engineering" has some meaning, and that it identifies one particular limited subset of the British units. It's perhaps even understandable, because that fact would be quite clear to anyone who, like them, had grown up using poundals in a "British absolute" system of units.

However, that doesn't change the fact that you are in fact one of the people who are that stupid.

--
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/
"It's not the things you don't know
what gets you into trouble.

"It's the things you do know
that just ain't so."
Will Rogers

1568. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 15:38:45 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <bp26nvcelino2825pdkfe3sqpng1cl6rc2@4ax.com>
Source record: 107535

On Thu, 25 Sep 2003 12:13:47 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Gene, thanks for the compliment in calling the Program Chief Engineer
> of the USAF MX [Peacekeeper] Re-Entry System/Re-Entry Vehicle a fool.

Is that as good as being chief of the Mars Climate Orbiter program as
evidence of competence in the use of units of measure?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1569. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 15:58:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g346nvg4csn423m6mh3vevvfujdj6og1pe@4ax.com>
Source record: 107536

On Thu, 25 Sep 2003 06:45:29 -0400, kd1@sympatico.ca wrote:

>Let's just all go metric. The only really confusing measure
>there seems to be the definition of the litre.
>
>...Keith

Hi Keith,

You mean liter? ;-)

73's
Richard Clark, KB7QHC

1570. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 16:08:24 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <k446nv4rvp796ineg7sru45uhujfnb8tj9@4ax.com>
Source record: 107538

On Thu, 25 Sep 2003 15:58:11 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Thu, 25 Sep 2003 06:45:29 -0400, kd1@sympatico.ca wrote:
>
>>Let's just all go metric. The only really confusing measure
>>there seems to be the definition of the litre.
>>
>>...Keith
>
>Hi Keith,
>
>You mean liter? ;-)

Up there in the Great White North, they use those dinky little
"litres" where it takes 4.54609 of them to make a gallon, rather than
the man-sized liters we have, which only take 3.785411784 to make a
gallon. ;-)

Unless, of course, you are talking about blueberries, where we use an
inbetween liter where it takes 4.40488377086 liters to make a gallon
(which we actually don't use much under that name any more, though we
do still use its quart and pint subdivisions).

Gene Nygaard

1571. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 16:10:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4o46nvkc7eh61vceijvquf4i5pamgh7d4f@4ax.com>
Source record: 107537

On Thu, 25 Sep 2003 05:33:31 -0500, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:
>Is life THAT boring?
>
>73
>H.

Hi OM,

Put the word "pound" in one posting and see what happens. ;-)

73's
Richard Clark, KB7QHC

1572. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 17:19:37 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <8r86nv0h006ptlur851bo3jieq2hd27ohm@4ax.com>
Source record: 107539

On Wed, 24 Sep 2003 16:32:54 -0500, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>Roy:
>
>You will find that a yellow Prestone anti-freeze bottle will last at least 5
>years, and likely 10. We get plenty of UV here in S. Texas, and I have
>found them to have the highest survivability of any plastic except Lexan.
>My 160 meter tuner is in one, as I didn't want to use a small coil or a
>large metallic enclosure. I use 2, cut the top off of one and invert it,
>and then use the inverted bottom from another as a press fit closure. No
>fasteners needed, although I usually put a couple 6-32 screws through the
>resulting double flange for good measure. The old red bottles were equally
>as good, but now hard to find.

We have to make sure the things are well sealed here in southern
Michigan or they get filled with Yellow Jackets.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>
>And for Ken, the best way to seal the end of that psuedo air line is some of
>the shrink tubing with the filler adhesive inside. Then point the sealed
>end DOWN.

1573. hy-gain AV-640

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 17:52:25 UTC
From: Pjotr <pvlispam@xs4all.nl>
Message-ID: <3f732b55$0$58712$e4fe514c@news.xs4all.nl>
Source record: 107540

Hi,

Any one good or bad experience with the Hy-Gain AV640? What about the mechanical construction?

73's

Pjotr

1574. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 18:51:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F733943.3FC0AE26@uci.edu>
Source record: 107541

"Fundamentals of Physics", Haliday and Resnick, Second Edition, 1981

Appendix F, Conversion Factors

Mass

"Quantities in the colored areas [ounce, pound, ton] are not mass units
but are often used as such. When we write, for example 1 kg "=" 2.205
lb this means that a kilogram is a _mass_ that _weighs_ 2.205 pounds
under standard condition of gravity (g = 9.80665 m/s^2)."

The units dyne, Newton, pound, and poundal are listed elsewhere in
Appendix F as units of force.

73, AC6XG

Gene Nygaard wrote:
>
> On Thu, 25 Sep 2003 12:13:47 GMT, Dave Shrader
> <david.shrader@comcast.net> wrote:
>
> >Gene, thanks for the compliment in calling the Program Chief Engineer
> > of the USAF MX [Peacekeeper] Re-Entry System/Re-Entry Vehicle a fool.
> >
> >It says a lot about you. I forgive you.
> >
> >Dave, W1MCE
> >+ + +
> >
> >Gene Nygaard wrote:
> > > not concerned enough about the possibility that fools like you
>
> Since you aren't honest enough to tell us exactly what Sears and
> Zemansky said in 1956, I'll tell everyone what they said in 1970. If
> there are any significant differences, feel free to point them out.
> This thing is, I know that Sears and Zemansky weren't going to lie
> about this, because they grew up using poundals, which are by
> definition the force which will accelerate a MASS of 1 lb at a rate of
> 1 ft/sï¿½.
>
> Francis Weston Sears and Mark W. Zemansky, University Physics,
> Addison-Wesley, 4th ed., 1970.
>
> [page 3]
>
> 1 pound mass = 1 lbm = 0.45359237 kg

>
> [The actual number will, of course, be different in 1956, because the
> U.S. didn't adopt this definition until 1959 (it had been in use in
> Canada since 1953, six years before the international
> redefinition).--GAN]
>
> [page 4]
>
> We select as a standard body the standard pound,
> defined in section 1-2 as a certain fraction
> (approximately 0.454) of a standard kilogram.
>
> [page 59]
>
> In setting up the mks and cgs systems, we first selected
> units of mass and acceleration, and defined the unit of
> force in terms of these. In the British engineering system,
> we first select a unit of force (1 lb) and a unit of
> acceleration (1 ft s^-2) and then define the unit of mass as
> the mass of a body whose acceleration is 1 ft s^-2 when
> the resultant force on the body is 1 lb.
>
> <end quote>
>
> Now, Sears and Zemansky might be incompetent for not allowing for the
> fact that there are going to be people out there who are too blamed
> stupid to understand that that adjectival phrase "British engineering"
> has some meaning, and that it identifies one particular limited subset
> of the British units. It's perhaps even understandable, because that
> fact would be quite clear to anyone who, like them, had grown up using
> poundals in a "British absolute" system of units.
>
> However, that doesn't change the fact that you are in fact one of the
> people who are that stupid.
>
> --
> Gene Nygaard
> http://ourworld.compuserve.com/homepages/Gene_Nygaard/
> "It's not the things you don't know
> what gets you into trouble.
>
> "It's the things you do know
> that just ain't so."
> Will Rogers

1575. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 19:02:12 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F733BB4.E47F5558@uci.edu>
Source record: 107543

Gene Nygaard wrote:
> Up there in the Great White North, they use those dinky little
> "litres" where it takes 4.54609 of them to make a gallon, rather than
> the man-sized liters we have, which only take 3.785411784 to make a
> gallon. ;-)

I suspect it's not the litre which is different, but the gallon which is different. The British Imperial Gallon occupies 277.4 in^3, while the gallon you're thinking of occupies 231 in^3.

What's your opinion of converting US speedometers from miles/hr to furlongs/fortnight?

73, AC6XG

1576. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 19:09:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f733d4d_2@127.0.0.1>
Source record: 107542

Jim Kelley wrote:
> "Quantities in the colored areas [ounce, pound, ton] are not mass units
> but are often used as such.

What is the mass of a banana slug in slugs?
--
73, Cecil, W5DXP

1577. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 19:23:34 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7340B6.517B299@uci.edu>
Source record: 107544

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > "Quantities in the colored areas [ounce, pound, ton] are not mass units
> > but are often used as such.
>
> What is the mass of a banana slug in slugs?

Ask somebody at UC Santa Cruz. ;-)

73, ac6xg

1578. Frenchies, back to fr.rec.radio.amateur !

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 20:05:59 UTC
From: Thierry <tlombry@hotmNOSPAMail.com>
Message-ID: <3f734aa6_2@news.vo.lu>
Source record: 107545
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hi OM, YL, and SWL

This post is dedicated to all French spoken hams.
If sometimes in the past you posted messages on fr.rec.radio.amateur forum
you quickly discovered that this forum was invaded by CBists and "louts"
like Coman, JMBCV and other anonymous who aggravated this forum,
widespreading a poor image of amateurs radio activities.

Today, the radioamateur.org forum is temporary closed so hams have to think
back to use another forum like the first.

Hopefully, for a few months now, a few amateur radios, including me, are
trying to reverse the bad image given by fr.rec.radio.amateur, giving it a
new breath and the secret hope to develop this French forum.

So if you can write French and are interested in preserving the interest and
ham spirit of our community, I suggest you to post sometimes, the soon the
best, your post in French in fr.rec.radio.amateur so that this this forum
recover quickly all its health ;-)

Best 73's
Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry

1579. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 20:06:37 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <hVHcb.580823$o%2.261933@sccrnsc02>
Source record: 107546

You are equating pound and POUNDAL ['pound mass']. They are two
different things.

Sears and Zemansky, 1956, Table 5-1, page 77

Systems of units Force Mass Acceleration
Engineering pound Slug ft/sec^2
mks newton kilogram m/sec^2
cgs dyne gram cm/sec^2

"One standard pound, by definition, is a body of mass 0.4535924277 kg."

"Since the weight of a body is a force, it must be expressed in units of
force. Thus in the engineering system weight is expressed in POUNDS; in
the mks system, in Newtons; and in the cgs system, in dynes."

Unless you disagree with Newton's Second Law, F=ma, Force [pounds] and
mass [slugs] are related by acceleration [of gravity, for example].

So, my weight [240 pounds] = my mass [7.45 slugs]*[gravity of 32.2
ft/sec^2].

If you want to argue, go ahead. I cited a source as you asked. Now you
choose to disagree with that source.

My final comment: Does a newton[force] = a kilogram[mass]??

Conclusion:

Force = pounds, or newtons, or dynes.
Mass = Slug, or kilogram, or gram
Acceleration = ft/sec^2, or m/sec^2, or cm/sec^2

Don't be so everbearing! It does not become you or enhance you statements.

1580. Re: Frenchies, back to fr.rec.radio.amateur !

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 20:26:11 UTC
From: "BIG-AL-3894.5-LSB-75-METERS" <BIG-AL@BIG-AL.KOM>
Message-ID: <vn6jrb3pl58ncb@corp.supernews.com>
Source record: 107547
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

THE FRENCH ARE WORTHLESS COWARDS. FRENCH WOMEN HAVE A TERRIBLE BODY ODOR AND FRENCH MEN ARE COWARDS. SO YES PLEASE LEAVE YOU STINKING COWARDS.

"Thierry" <tlombry@hotmNOSPAMail.com> wrote in message
news:3f734aa6_2@news.vo.lu...
> Hi OM, YL, and SWL
>
> This post is dedicated to all French spoken hams.
> If sometimes in the past you posted messages on fr.rec.radio.amateur
forum
> you quickly discovered that this forum was invaded by CBists and "louts"
> like Coman, JMBCV and other anonymous who aggravated this forum,
> widespreading a poor image of amateurs radio activities.
>
> Today, the radioamateur.org forum is temporary closed so hams have to
think
> back to use another forum like the first.
>
> Hopefully, for a few months now, a few amateur radios, including me, are
> trying to reverse the bad image given by fr.rec.radio.amateur, giving it a
> new breath and the secret hope to develop this French forum.
>
> So if you can write French and are interested in preserving the interest
and
> ham spirit of our community, I suggest you to post sometimes, the soon the
> best, your post in French in fr.rec.radio.amateur so that this this forum
> recover quickly all its health ;-)
>
> Best 73's
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry
>
>

1581. Re: Frenchies, back to fr.rec.radio.amateur !

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 20:35:41 UTC
From: Rene PE1RA / ON6ALD <REMOVErene.altena@gmx.net>
Message-ID: <bkvjit$6kn66$1@ID-153362.news.uni-berlin.de>
Source record: 107548
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

As you probably could have known, he was referring to french-speaking
people, not the French as a people.

The poster is from Belgium.

--
73 de Rene PE1RA / ON6ALD

Cuius testiculos habes, habeas cardeo et cerebellum

1582. Force12 C4

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 20:59:14 UTC
From: Stefano <stefano@catena.name>
Message-ID: <bkvkvulai1@lacerta.tiscalinet.it>
Source record: 107549

Hello to all

I'm going to buy the C-4 beam antenna by Force12.
What's about it? It is good choice?
The antenna will be on tower at a height of 55' .
Anyone can say his experience, pro and con

73's de IW6DPY Stefano

1583. Re: Force12 C4

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 21:33:32 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <NaJcb.24035$Ms2.450@fed1read03>
Source record: 107550

```
Lots of opinions at URL:
http://www.eham.net/reviews/products/11
eHam Reviews

--
73 From the Spurious Noise ';';;';x":.,";"'
-------------------------
"Stefano" <stefano@catena.name> wrote in message
news:bkvkvu$lai$1@lacerta.tiscalinet.it...
> Hello to all
>
> I'm going to buy the C-4 beam antenna by Force12.
> What's about it? It is good choice?
> The antenna will be on tower at a height of 55' .
> Anyone can say his experience, pro and con
>
> 73's de IW6DPY Stefano
>
>
```

1584. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 22:41:59 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F736F37.C1C7ADF3@uci.edu>
Source record: 107551

Hi Tom,

Since rho represents the fraction of forward power that is reflected,
what does a negative value for rho indicate?

Thanks,

Jim AC6XG

Tom Bruhns wrote:
>
> Hi Dave (and lurkers),
>
> Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
> If+Ir. You have to be careful about directions, and be careful to
> define things and stick with those definitions. I usually use
> Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
> physical direction along the line, and then of course
> rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
> should be clear. Anyway, rho=+1 at a point of zero net current,
> either way you define the current direction, and rho=-1 at a point of
> zero net voltage. No Smith chart, and no Zo, needed to figure that
> out.
>
> Cheers,
> Tom
>
> Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
> > Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
> > ... the net current is zero (i.e. at an open circuit). Therefore Ir =
> > -If, and rho is a -1.
> >
> > Comment?
> >
> > Tom Bruhns wrote:
> >
> > > I trust we can all agree that the definition of rho is rho=Vr/Vf, and
> > > I trust we can all agree that on a TEM line, the net voltage
> > > Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> > > then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> > > chose to use to find rho at a load from the load impedance, Zload, and
> > > the line characteristic impedance, Zo, better work out right for a
> > > short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> > > does NOT work for that simple case, unless Zo*=Zo. But

> > > "rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> > > something similar for an open circuit load. Note that rho=-1 for a
> > > short circuit load, and rho=+1 for an open circuit load, independent
> > > of line impedance.
> > >
> > > Cheers,
> > > Tom
> > >
> > > k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
> > >
> > >>It's even easier than that. Using the _definition_ of reflection
> > >>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
> > >>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
> > >>zero). That's either a real short or a virtual short.
> > >>
> > >>Cheers,
> > >>Tom
> > >>
> > >>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
> > >>
> > >>
> > >>>lets see...
> > >>>
> > >>>rho = (Z - Zo)/(Z + Zo)
> > >>>if rho = -1 then
> > >>>
> > >>>-1=(Z-Zo)/(Z+Zo)
> > >>>or
> > >>>-1*(Z+Zo)=(Z-Zo)
> > >>>or
> > >>>-Z - Zo = Z - Zo
> > >>>or
> > >>>-Z = Z
> > >>>the only value i know that satisfies that is zero.
> > >>>lets substitute it back in to be sure...
> > >>>-1=(0-(50+j50))/(0+(50+j50))
> > >>>-1=(-50-j50)/(50+j50)
> > >>>-1=-1(50+j50)/(50+j50)
> > >>>-1=-1 qed.

1585. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 23:05:57 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <pxKcb.339342$2x.101034@rwcrnsc52.ops.asp.att.net>
Source record: 107552

Tom, rho^2 represents the fraction of forward power that is reflected.

The squaring function produces a positive value.

Rho represents the percentage of voltage or current. Rho^2 is the power function.

Dave

Jim Kelley wrote:
> Hi Tom,
>
> Since rho represents the fraction of forward power that is reflected,
> what does a negative value for rho indicate?
>
> Thanks,
>
> Jim AC6XG
>
> Tom Bruhns wrote:
>
>>Hi Dave (and lurkers),
>>
>>Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
>>If+Ir. You have to be careful about directions, and be careful to
>>define things and stick with those definitions. I usually use
>>Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
>>physical direction along the line, and then of course
>>rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
>>should be clear. Anyway, rho=+1 at a point of zero net current,
>>either way you define the current direction, and rho=-1 at a point of
>>zero net voltage. No Smith chart, and no Zo, needed to figure that
>>out.
>>
>>Cheers,
>>Tom
>>
>>Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
>>
>>>Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
>>>... the net current is zero (i.e. at an open circuit). Therefore Ir =
>>>-If, and rho is a -1.
>>>
>>>Comment?

>>>
>>>Tom Bruhns wrote:
>>>
>>>
>>>>I trust we can all agree that the definition of rho is rho=Vr/Vf, and
>>>>I trust we can all agree that on a TEM line, the net voltage
>>>>Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
>>>>then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
>>>>chose to use to find rho at a load from the load impedance, Zload, and
>>>>the line characteristic impedance, Zo, better work out right for a
>>>>short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
>>>>does NOT work for that simple case, unless Zo*=Zo. But
>>>>"rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
>>>>something similar for an open circuit load. Note that rho=-1 for a
>>>>short circuit load, and rho=+1 for an open circuit load, independent
>>>>of line impedance.
>>>>
>>>>Cheers,
>>>>Tom
>>>>
>>>>k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
>>>>
>>>>
>>>>>It's even easier than that. Using the _definition_ of reflection
>>>>>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
>>>>>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
>>>>>zero). That's either a real short or a virtual short.
>>>>>
>>>>>Cheers,
>>>>>Tom
>>>>>
>>>>>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
>>>>>
>>>>>
>>>>>
>>>>>>lets see...
>>>>>>
>>>>>>rho = (Z - Zo)/(Z + Zo)
>>>>>>if rho = -1 then
>>>>>>
>>>>>>-1=(Z-Zo)/(Z+Zo)
>>>>>>or
>>>>>>-1*(Z+Zo)=(Z-Zo)
>>>>>>or
>>>>>>-Z - Zo = Z - Zo
>>>>>>or
>>>>>>-Z = Z
>>>>>>the only value i know that satisfies that is zero.

>>>>>>lets substitute it back in to be sure...
>>>>>>-1=(0-(50+j50))/(0+(50+j50))
>>>>>>-1=(-50-j50)/(50+j50)
>>>>>>-1=-1(50+j50)/(50+j50)
>>>>>>-1=-1 qed.

1586. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 23:11:42 UTC
From: kd1@sympatico.ca
Message-ID: <3F73762E.C997F6BA@sympatico.ca>
Source record: 107553

Gene Nygaard wrote:
>
> On Thu, 25 Sep 2003 15:58:11 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> >On Thu, 25 Sep 2003 06:45:29 -0400, kd1@sympatico.ca wrote:
> >
> >>Let's just all go metric. The only really confusing measure
> >>there seems to be the definition of the litre.
> >>
> >>...Keith
> >
> >Hi Keith,
> >
> >You mean liter? ;-)

It has to be litre so that it can rhyme with metre.

> Up there in the Great White North, they use those dinky little
> "litres" where it takes 4.54609 of them to make a gallon, rather than
> the man-sized liters we have, which only take 3.785411784 to make a
> gallon. ;-)
>
> Unless, of course, you are talking about blueberries, where we use an
> inbetween liter where it takes 4.40488377086 liters to make a gallon
> (which we actually don't use much under that name any more, though we
> do still use its quart and pint subdivisions).

We also have the Texas sized foot of 12.789 inches (legal for
surveying only in Quebec, they say).

But it seems that in the great country to the south there are
also two definitions for the foot: 0.3048 meter and
1200/3937 meter. When I buy a tape measure made in the U.S.A.
am I getting long feet or short feet?

...Keith

1587. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 23:24:07 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F737917.929D1324@uci.edu>
Source record: 107556

Ur right, thanks Dave. I meant to say voltage rather than power. Let
me ask the question properly.

Tom,
Since rho represents the fraction of forward voltage that is reflected,
what does a negative value for rho indicate?

Thanks and 73,

Jim AC6XG

Dave Shrader wrote:
>
> Tom, rho^2 represents the fraction of forward power that is reflected.
>
> The squaring function produces a positive value.
>
> Rho represents the percentage of voltage or current. Rho^2 is the power
> function.
>
> Dave
>
> Jim Kelley wrote:
> > Hi Tom,
> >
> > Since rho represents the fraction of forward power that is reflected,
> > what does a negative value for rho indicate?
> >
> > Thanks,
> >
> > Jim AC6XG
> >
> > Tom Bruhns wrote:
> >
> >>Hi Dave (and lurkers),
> >>
> >>Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
> >>If+Ir. You have to be careful about directions, and be careful to
> >>define things and stick with those definitions. I usually use
> >>Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
> >>physical direction along the line, and then of course
> >>rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
> >>should be clear. Anyway, rho=+1 at a point of zero net current,
> >>either way you define the current direction, and rho=-1 at a point of
> >>zero net voltage. No Smith chart, and no Zo, needed to figure that

> >>out.
> >>
> >>Cheers,
> >>Tom
> >>
> >>Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
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> >>>Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
> >>>... the net current is zero (i.e. at an open circuit). Therefore Ir =
> >>>-If, and rho is a -1.
> >>>
> >>>Comment?
> >>>
> >>>Tom Bruhns wrote:
> >>>
> >>>
> >>>>I trust we can all agree that the definition of rho is rho=Vr/Vf, and
> >>>>I trust we can all agree that on a TEM line, the net voltage
> >>>>Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> >>>>then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> >>>>chose to use to find rho at a load from the load impedance, Zload, and
> >>>>the line characteristic impedance, Zo, better work out right for a
> >>>>short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> >>>>does NOT work for that simple case, unless Zo*=Zo. But
> >>>>"rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> >>>>something similar for an open circuit load. Note that rho=-1 for a
> >>>>short circuit load, and rho=+1 for an open circuit load, independent
> >>>>of line impedance.
> >>>>
> >>>>Cheers,
> >>>>Tom
> >>>>
> >>>>k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
> >>>>
> >>>>
> >>>>>It's even easier than that. Using the _definition_ of reflection
> >>>>>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
> >>>>>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
> >>>>>zero). That's either a real short or a virtual short.
> >>>>>
> >>>>>Cheers,
> >>>>>Tom
> >>>>>
> >>>>>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
> >>>>>
> >>>>>
> >>>>>
> >>>>>

> >>>>>>lets see...
> >>>>>>
> >>>>>>rho = (Z - Zo)/(Z + Zo)
> >>>>>>if rho = -1 then
> >>>>>>
> >>>>>>-1=(Z-Zo)/(Z+Zo)
> >>>>>>or
> >>>>>>-1*(Z+Zo)=(Z-Zo)
> >>>>>>or
> >>>>>>-Z - Zo = Z - Zo
> >>>>>>or
> >>>>>>-Z = Z
> >>>>>>the only value i know that satisfies that is zero.
> >>>>>>lets substitute it back in to be sure...
> >>>>>>-1=(0-(50+j50))/(0+(50+j50))
> >>>>>>-1=(-50-j50)/(50+j50)
> >>>>>>-1=-1(50+j50)/(50+j50)
> >>>>>>-1=-1 qed.

1588. Re: Virus/Worm email messages

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 23:33:51 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ioi6nvc6q504pib5bcqp4ij2i2hr567e0p@4ax.com>
Source record: 107554

On 23 Sep 2003 18:00:04 -0800, Floyd Davidson <floyd@barrow.com>
wrote:

>Mike Coslo <mcoslo@adelphia.net> wrote:
>>Dee D. Flint wrote:
>>> "David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote:
>>>>"Dee D. Flint" <deehays@qix.net> wrote:
>>>>
>>>>>If you have a suggestion on how to stop them, please let us all in on
>>>>>it.
>>>
>>>>Persuade the universe to cease using unsafe operating system software,
>>>>browsers, and e-mail programs coming from Redmond, WA ;-). UNIX, including
>>>>the version now marketed by Apple, is pretty safe.
>>>>
>>>>David, ex-W8EZE, whose computers are happily MS-free except for safe 11
>>>>year old versions of Word and Excel
>>>
>>> If everyone switched to UNIX, the solution would be short-lived as the virus
>>> writers would then switch to attacking it. Right now, they simply get more
>>> "bang for the buck" by attacking Windows and it doesn't give them much of a
>>> thrill to also go after UNIX system users or Apple computer users.
>>
>> You have touched on the answer, Dee.
>
>David is the one who touched on it. The answer *is* to use an
>OS designed to be secure. Microsoft products are not, while
>virtually all of the current unix systems are. Some unixes (the
>ones with open source code, which does not include Apple) do
>have higher potential for good security than others.
>
>The "bang for the buck" argument is proof of it too. If you
>want a *bang*, then shutdown the *entire* Internet, not just
>some percentage of the hosts connected to it. The fact is
>that from the start the Internet itself ran on unix. That is
>less true today, but it is still true enough that if one could
>write a virus to knock out unix, one could just shut the
>Internet off for days.
>
>But, of course, it can't be done (or that is exactly what they
>would be doing).

Unfortunately this is an academic argument as the "rest-of-the-world",
is not going to change and wouldn't change if you provided it

free...which much already is.

The vast majority wouldn't change even if you installed UNIX, or LINUX and set up the applications.

Then, most of those who would be willing to use one of those "if you set it up", they would want mail and news readers that do the same as Outlook and Outlook Express. If the OS didn't open them to the world their applications would albeit they would be less likely to trash the OS ...

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1589. For the electrical engineers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-25 23:37:13 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0309251537.196da5c3@posting.google.com>
Source record: 107555
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,alt.ham-radio.mods,rec.radio.amateur.equipment

Come join Electrical Engineering Hams at
http://groups.yahoo.com/group/eeham/

There are more electrical engineering forums than you can shake a stick at. There are more ham radio forums than you can shake a stick at. But until now, there have been NO forums dedicated to people who are both electrical engineers AND ham radio operators. You can think of Electrical Engineering Hams as the unofficial IEEE Amateur Radio Society. (No, it has NO offical status whatsoever!)

Jason Hsu, AG4DG
usenet@@@@jasonhsu.com

1590. shunt feeding towers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 00:18:09 UTC
From: Gerry MacDonald <gerry.macdonald@globaltv.ca>
Message-ID: <5BLcb.223$uG.56@edtnps84>
Source record: 107557

Has anybody had any experience shuntfeeding towers for 160M.
I'm looking for information to shunt feed 2 100 foot towers and then phase the two towers together.

thanks

Gerry
ve6qlt

1591. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 00:30:01 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <5817nv0vhj42kp6r7u6qdf930gc2t1024u@4ax.com>
Source record: 107558

On Thu, 25 Sep 2003 19:11:42 -0400, kd1@sympatico.ca wrote:

>Gene Nygaard wrote:
>>
>> On Thu, 25 Sep 2003 15:58:11 GMT, Richard Clark <kb7qhc@comcast.net>
>> wrote:
>>
>> >On Thu, 25 Sep 2003 06:45:29 -0400, kd1@sympatico.ca wrote:
>> >
>> >>Let's just all go metric. The only really confusing measure
>> >>there seems to be the definition of the litre.
>> >>
>> >>...Keith
>> >
>> >Hi Keith,
>> >
>> >You mean liter? ;-)
>
>It has to be litre so that it can rhyme with metre.
>
>> Up there in the Great White North, they use those dinky little
>> "litres" where it takes 4.54609 of them to make a gallon, rather than
>> the man-sized liters we have, which only take 3.785411784 to make a
>> gallon. ;-)
>>
>> Unless, of course, you are talking about blueberries, where we use an
>> inbetween liter where it takes 4.40488377086 liters to make a gallon
>> (which we actually don't use much under that name any more, though we
>> do still use its quart and pint subdivisions).
>
>We also have the Texas sized foot of 12.789 inches (legal for
>surveying only in Quebec, they say).

Interestingly enough, Thomas Jefferson used Isaac Newton's
measurements of the length of a seconds pendulum at various latitudes
in terms of these feet, the royal foot of Paris, to calculate how long
his foot would be in terms of the English feet then in use, when he
proposed a decimal system based on the foot in 1790, before the metric
system had been invented. In Jefferson's system, a metre would have
been a cubic inch (0.001 cubic foot), and a metre of cool water would
have a mass of 1 ounce (0.1 pound), and an ounce of 11/12 silver would
have been a dollar.
Plan for establishing uniformity in the Coinage, Weights, and Measures
of the United States.
http://ourworld.compuserve.com/homepages/Gene_Nygaard/t_jeff.htm#from2

Some surveys in the United States (Lousiana) were originally done in these feet also, with lengths and areas in arpents. Some land grants in southwestern states were in terms of varas of various sizes, with areas expressed in labors and leagues.

>But it seems that in the great country to the south there are
>also two definitions for the foot: 0.3048 meter and
>1200/3937 meter. When I buy a tape measure made in the U.S.A.
>am I getting long feet or short feet?

The short ones, of course. The same document I cited before, the Federal Register notice which is the U.S. law redefining the yard as 0.9144 m and the pound as 0.45359237 kg spells out the limited surveying purposes for which the old definition would continue to be used.
http://www.ngs.noaa.gov/PUBS_LIB/FedRegister/FRdoc59-5442.pdf
http://gssp.wva.net/html.common/refine.pdf

Seriously, you are buying a lot better quality tape measures than I have ever used, if you expect them to be accurate to that 2 parts per million difference. Are any tape measures that good? You will, of course, have to be making temperature corrections as well.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1592. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 00:43:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn72tgbs0ib067@corp.supernews.com>
Source record: 107559

The voltage reflection coefficent, sometimes designated uppercase gamma, sometimes lowercase rho, is the ratio of the reflected voltage to forward voltage. It doesn't represent power at all, and you have to make some assumptions of questionable validity to try and associate it with a power.

People who like to speak of "forward power" and "reverse power" calculate that the ratio of "reverse power" to "forward power" is equal to the square of the magnitude of the voltage reflection coefficient, providing that the characteristic impedance of the line is assumed to be purely real.

The reflection coefficient is a complex number, so it isn't restricted to "positive" and "negative", but can have any phase angle. Its magnitude, like the magnitude of any complex number, is a real number, so is square is always positive. (Complex numbers can be written with a negative magnitude, but this isn't commonly done. If it were, though, the square of the magnitude would still be positive.) Incidentally, the magnitude of the reflection coefficient is also often designated as lowercase rho, so any question about "rho" is unclear unless you say whether you're talking about the complex reflection coefficient or just its magnitude.

The complex reflection coefficient can have a value of exactly -1, or a magnitude of 1 with a phase angle of 180 degrees. This simply means that the reflected voltage is equal in magnitude to the forward voltage, and exactly out of phase with it. The sum of forward and reflected voltage has to equal the total voltage at any point along the line. If you terminate a line with a short circuit, the reflection coefficient is -1 and the forward and reverse voltages at the end of the line are equal and opposite, so they add up to zero. Which is the voltage you have at a short circuit.

Roy Lewallen, W7EL

Jim Kelley wrote:
> Ur right, thanks Dave. I meant to say voltage rather than power. Let
> me ask the question properly.
>
> Tom,
> Since rho represents the fraction of forward voltage that is reflected,
> what does a negative value for rho indicate?
>
> Thanks and 73,
>
> Jim AC6XG

1593. Re: hy-gain AV-640

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 00:58:45 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <kh27nvg53jf7rp7uk9hfvs7gt2kv80qjmc@4ax.com>
Source record: 107560

On Thu, 25 Sep 2003 19:52:25 +0200, "Pjotr" <pvlispam@xs4all.nl>
wrote:

>Hi,
>
>Any one good or bad experience with the Hy-Gain AV640? What about the
>mechanical construction?
>
I *just* came in from setting one up on an 8' support to check the
settings.

My impressions:

It is well constructed and rugged. The aluminum tubing is of a heaver
stock than any I've seen so far in multi band verticals. It is
sturdy. You can support it horizontally from one end with no more
droop than the much shorter elements on a triband beam.

The metal hardware is well constructed. It uses stainless steel hose
clamps to clamp the tubing. The antenna to mast clamp is large enough
to handle a wide range of masts up to at least 2".

Make sure to get the holes in the stub insulators lined up. doing the
assembly on a flat floor or driveway should be sufficient.

I've only had a chance to do a very fast check. All bands but either
17, or 12 meters...(I said it was a quick check and I don't remember
which band) show very low SWR over the selected portions except the
one. I have made no adjustments from the original settings in the
dimension chart.

If you use the proper figures and only use the text as a guide the
assembly is easy and can be done by one person.

I'd either guy it with nylon rope, or use temporary guys to get the
thing installed. It can be a bit unwieldy and more than one person
would want to try to install alone. It is rated for 80 MPH wind
survival. However if installing it on even a short tower I'd guy the
thing as it'd put one terrible load on the top of the tower.

You can easily lift the thing with one hand, but not from one end.
<:-))

Now as to the negative...Although the stub insulators are most likely
more than sufficient, I'd like to see them made of a bit heavier
material. They have the *appearance* of being a bit light.

I'd change one step during assembly. I would not install the feed line connection box until *after* doing the counterpoise installation. It gets in the way of tightening several of the screws, but it's not impossible. Just an inconvenience. However know where you want it as there is no counterpoise radial installed in that direction.

They don't tell you until the end that if you are not going to be using the antenna on 6-meters you don't need to install the stub. They should tell ham that when they are at the point of installing the bracket.

I'd like to see them include a small tube of antioxidant grease instead of suggesting you use some.

Once I'm though with the checkout, the antenna is coming down and getting spray painted with a clear two part paint (Imeron) for protection. Then it's going on top of a 32 foot tower at the end of my shop.

I'll let you know how it works out.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>73's
>
>Pjotr
>

1594. Re: Rohn files for bankruptcy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:00:38 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <1r37nv83on1fplpj04hkpu6sjt5utlvl4b@4ax.com>
Source record: 107531

On 25 Sep 2003 02:16:41 -0700, the_kink@hotmail.com (the kink) wrote:

>"Crazy George" <munschNO@attglobal.net.SPAM> wrote in message
news:<3f711443_3@news1.prserv.net>...
>> Since no one else has posted this:
>>
>> http://www.rohnnet.com and click on "Press Releases", then
>> click on the September 16, 2003 entry.
>>
>> Hope no one needs parts for a while.
>
>
>I don't see "Press Releases" there at all.
>
>Can someone post the complete url. I'd like to read it.

BELOW IS THE PRESS RELEASE, COPIED FROM THE WEB SITE:

Bob
k5qwg

ROHN Files for Chapter 11 Protection
September 16, 2003

World Headquarters
6718 W. Plank Rd.
Peoria, IL 61604 USA
Ph: 309-697-4400
FAX: 309-697-5612

FOR IMMEDIATE RELEASE

For Further Information:
Horace Ward
President and Chief Executive Officer
(309) 633-6886
horace.ward@rohnnet.com

ROHN INDUSTRIES, INC. FILES FOR CHAPTER 11 PROTECTION;
$9.5 MILLION DEBTOR-IN-POSSESSION FINANCING SECURED;
BOARD MEMBERS RESIGN

PEORIA, IL, September 16, 2003 ï¿½ ROHN Industries, Inc., (OTCBB: ROHN), (the "Company") a provider of infrastructure equipment to the telecommunications industry, announced today that the Company and five of its direct and indirect subsidiaries have filed voluntary petitions for Chapter 11 relief in the United States Bankruptcy Court for the Southern District of Indiana (the "Bankruptcy Court").

The Company also announced that, concurrent with the Chapter 11 filing, it has entered into a $9.5 million debtor-in-possession ("DIP") line of credit with the lenders that are party to the Company's Amended and Restated Credit Agreement, subject to the approval of the Bankruptcy Court, which will include funds that will be rolled forward from the Company's current credit facility. Subject to the provisions of the Bankruptcy Code, the Company remains in possession of its assets and properties, and continues to operate its business. The Company said that the objective of the Chapter 11 proceeding is to maximize recovery to creditors by facilitating an orderly sale of assets. The Company is currently in discussions with an unrelated third party regarding a proposed sale of the assets of the Company.

Upon the filing of the bankruptcy petition of the Company, but following the approval by the Board of Directors of the Chapter 11 filing, Stephen Gorman and Jordan Roderick each have resigned from the Board of Directors of the Company. Currently, Horace Ward, the Chief Executive Officer of the Company, is the only remaining director of the Company.

Commenting on today's announcement, Mr. Ward said, "Our immediate goal is to stabilize the Company's financial situation and utilize the Chapter 11 process to enable the Company to conduct normal business operations as the Company works to complete a sale transaction."

The Company has retained the Indianapolis law firm of Ice Miller to act as its legal counsel in the bankruptcy proceedings. The Company has also retained Silverman Consulting, a national turnaround consulting firm.

About the Company

The Company is a manufacturer and installer of telecommunications infrastructure equipment for the wireless industry. Its products are used in cellular, PCS, radio and television broadcast markets. The Companyï¿½s products include towers, poles, related accessories and antennae mounts. The Company also provides design and construction services. The Company has a manufacturing location in Frankfort, IN along with offices in Peoria, IL and Mexico City, Mexico.

Statements in this press release include ï¿½forward-looking statementsï¿½ within the meaning of the Securities Exchange Act of 1934, the Private Securities Litigation Reform Act of 1995 and other related laws, and include, but are not limited to, those statements relating to sales

and earning expectations, expected demand and other statements of outlook. The Companyï¿½s actual results and effects could differ materially from those currently anticipated in our forward-looking statements. Factors and risks that could cause such differences include, but are not limited to: wireless and fiber optic communications industry capital spending; the ability of the Companyï¿½s customers to secure adequate financing; elections by customers to terminate or delay previously placed orders; the effects of competition, particularly on pricing and margins; the Companyï¿½s implementation of our growth objectives in foreign markets; the Companyï¿½s indebtedness, which could restrict its operations, making it more vulnerable to adverse economic conditions and making it more difficult for us to implement its business strategy; liquidity problems that confront or may confront the Company; the Companyï¿½s inability to obtain bonding required for certain customer contracts or potential contracts; liabilities arising from an engineering problem with the Companyï¿½s internal flange poles and a testing and repair program undertaken by the Company in connection with that problem; unexpected problems and costs the Company may encounter or incur in consolidating our manufacturing operations at its facilities in Frankfort, Indiana; the Companyï¿½s Commonwealth of Pennsylvania construction project staying on its currently anticipated schedule; and regulatory changes affecting the industry in which the Company operates. The cautionary statement contained in Exhibit 99.1 to the Companyï¿½s Form 10-K for the year ended December 31, 2002 is incorporated herein by reference. Forward-looking statements are given as of the date of this release and the Company is not undertaking any duty or obligation to update these statements publicly as a result of new information, future events or otherwise.

1595. 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:02:14 UTC
From: W4UDX <w4udx.nospam@juno.com>
Message-ID: <%cMcb.23637$iO.8753@bignews5.bellsouth.net>
Source record: 107561

Hi guys.
Quick question. I have in the past made 80 and 40 meter multiband dipoles using parallel wires and they worked fine with little 80/40 interaction. My question is, can a make one with a set of wires on it for 30M also? or will the 40M and 30M parallel wires interact too much?

Mark W4UDX

1596. Re: For the electrical engineers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:09:10 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030925210910.27009.00000227@mb-m11.aol.com>
Source record: 107562

>But until now, there have been NO forums dedicated to people who
>are both electrical engineers AND ham radio operators.

What, you think that hams are non-engineers?

And then break it up to African-Americans, European-Americans, etc. etc. ?

Stay away from Yahooooo groups, don't sell your soul (email) to spamers and marketeers.
I don't think this would serve any purpose.

Good luck!

Yuri

1597. Re: shunt feeding towers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:14:14 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20030925211414.27009.00000228@mb-m11.aol.com>
Source record: 107563

>
>Has anybody had any experience shuntfeeding towers for 160M.
>I'm looking for information to shunt feed 2 100 foot towers and then =
>phase the two towers together.
>
>

Get "ON4UN Low Band DXing" book, it is full of ideas, examples, phasing
systems.
Also check the TopBand reflector archives, lotsa stuff there too.

Yuri, K3BU

1598. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:30:45 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <bq47nv02sduq492jijcv7nef6ilbok77a2@4ax.com>
Source record: 107564

On Thu, 25 Sep 2003 11:51:47 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>"Fundamentals of Physics", Haliday and Resnick, Second Edition, 1981
>
>Appendix F, Conversion Factors
>
>Mass
>
>"Quantities in the colored areas [ounce, pound, ton] are not mass units
>but are often used as such. When we write, for example 1 kg "=" 2.205
>lb this means that a kilogram is a _mass_ that _weighs_ 2.205 pounds
>under standard condition of gravity (g = 9.80665 m/s^2)."
>
>The units dyne, Newton, pound, and poundal are listed elsewhere in
>Appendix F as units of force.
>
>73, AC6XG

Apparently Halliday and Resnick were a lot smarter a couple of decades
earlier, when they were only a little past their prime:

Robert Resnick and David Halliday, Physics For Students of Science and
Engineering, John Wiley & Sons, 1960.

[page 10]

Legally, the pound is a unit of mass. But in engineering
practice the pound is treated as a unit of force or weight.
This has given rise to the terms pound-mass and pound-
force. The pound mass is a body of mass 0.45359237
kg; no standard block of metal is preserved as the pound-
mass, but like the yard it is defined in terms of the mks
standard. The pound-force is the force that gives a
standard pound an acceleration equal to the standard
acceleration of gravity, 32.1740 ft/seci¿½.

So what are you going to believe? The main text of a book which
actually uses pounds? Or something hidden away in an appendix (which
the authors likely assinged some secretary to put together for them),
in a book which doesn't even use pounds?

Now go back in the book you have, and take a look at some of the
earlier stuff in it.

[page 356]

In the engineering system the unit of heat is the
British thermal unit (Btu), which is defined as the
heat necessary to raise the temperature of one
pound of water from 63 to 64ï¿½F.

How much water? You don't think that this is the amount of water that
exerts a certain amount of force due to gravity, do you?

What about when they give specific heat capacity in units expressed in
as Btu/lb ï¿½F in this book? What the hell do you suppose those units
in the denominator are? The corresponding metric unit in their book
are "cal/gï¿½C"; does that give you any clues?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1599. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 01:58:35 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309251758.34768124@posting.google.com>
Source record: 107565

The short answer is that you'd use the magnitude of rho, not its
complex value, to find the magnitude of Vr in terms of the magnitude
of Vf, and from that, the relative value of the powers.

So I suppose you'll get the same values for rho=+1 and rho=-1, since
the magnitude is +1 in both cases. Beware of how you do the calcs:
rho=+j, rho=-j, and rho=(1+j)/sqrt(2) all should also give you
|rho|=1.

But I'll leave the power calcs to you. Resolving things into "forward
power" and "reflected power" for steady-state excitation really
doesn't do a thing for me. I want to know the load presented to the
source, and the power delivered to the line by the source and to the
load by the line, and perhaps some other things like power dissipation
as a function of distance along the line, but I can't think of any
reason why I'd care about "f.p." or "r.p." Now what happens during
transient situations is a completely different story.

Cheers,
Tom

Jim Kelley <jwkelley@uci.edu> wrote in message news:<3F736F37.C1C7ADF3@uci.edu>...
> Hi Tom,
>
> Since rho represents the fraction of forward power that is reflected,
> what does a negative value for rho indicate?
>
> Thanks,
>
> Jim AC6XG
>
> Tom Bruhns wrote:
> >
> > Hi Dave (and lurkers),
> >
> > Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
> > If+Ir. You have to be careful about directions, and be careful to
> > define things and stick with those definitions. I usually use
> > Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
> > physical direction along the line, and then of course
> > rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
> > should be clear. Anyway, rho=+1 at a point of zero net current,
> > either way you define the current direction, and rho=-1 at a point of
> > zero net voltage. No Smith chart, and no Zo, needed to figure that
> > out.

> >
> > Cheers,
> > Tom
> >
> > Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
> > > Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
> > > ... the net current is zero (i.e. at an open circuit). Therefore Ir =
> > > -If, and rho is a -1.
> > >
> > > Comment?
> > >
> > > Tom Bruhns wrote:
> > >
> > > > I trust we can all agree that the definition of rho is rho=Vr/Vf, and
> > > > I trust we can all agree that on a TEM line, the net voltage
> > > > Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> > > > then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> > > > chose to use to find rho at a load from the load impedance, Zload, and
> > > > the line characteristic impedance, Zo, better work out right for a
> > > > short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> > > > does NOT work for that simple case, unless Zo*=Zo. But
> > > > "rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> > > > something similar for an open circuit load. Note that rho=-1 for a
> > > > short circuit load, and rho=+1 for an open circuit load, independent
> > > > of line impedance.
...

1600. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 02:20:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f73a463_7@corp.newsgroups.com>
Source record: 107566

Jim Kelley wrote:
> Since rho represents the fraction of forward power that is reflected,
> what does a negative value for rho indicate?

rho represents the fraction of forward voltage that is reflected.
|rho|^2 represents the fraction of forward power that is reflected.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1601. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 02:28:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f73a641$1_7@corp.newsgroups.com>
Source record: 107567

Jim Kelley wrote:
> Since rho represents the fraction of forward voltage that is reflected,
> what does a negative value for rho indicate?

rho = +1 means there is a zero degree phase shift in the reflected voltage.

rho = -1 means there is a 180 degree phase shift in the reflected voltage.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1602. please help.....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 02:35:25 UTC
From: alertjean_fake_id@rediffmail.com
Message-ID: <abd5b578.0309251835.3203bba@posting.google.com>
Source record: 107568

I am in a real trouble.....
I don't know how an antenna works can anyone tell me web resources
where the subject is treated elaborately ?????

Jean

1603. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 02:37:01 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <d7j6nv0hn33fad3vkfpl5cj157m4b7u2mv@4ax.com>
Source record: 107469

On Thu, 25 Sep 2003 20:06:37 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>You are equating pound and POUNDAL ['pound mass']. They are two
>different things.

Good grief! Go find a dictionary, or a physics book published before 1940 (and a number of them published later as well, it's just that for the 60 years before then it's a virtual certaintly that you'll see poundals used in these textbooks).

Poundals are unit of force. Not units of mass. A poundal is not a pound mass; it is not mass at all. A poundal is also not a pound force. In fact, it takes 32.16 pdl or 32.1740... pdl or 32.175 pdl, or something in that neighborhood, to make a pound force. The exact number will depend on how you choose to define a pound force, which doesn't even have an official definition. The de facto standard today is to define it so that it has the same relationship to a pound as a kilogram force has to a kilogram. Or, that a pound force has the same relationship to a kilogram force as a pound has to a kilogram. That's what I'll use for any other related numbers below.

>--
>
>Sears and Zemansky, 1956, Table 5-1, page 77
>
>Systems of units Force Mass Acceleration
>Engineering pound Slug ft/sec^2
>mks newton kilogram m/sec^2
>cgs dyne gram cm/sec^2
>--

Still too fucking dumb to see any adjective there, identifying a particular subset of English units? Even after it has been specifically pointed out to you?

You know, I was tempted to give you the benefit of the doubt, and assume that this had been sent before you had a chance to read my discussion of the 1970 edition of Sears and Zemansky. But then I double checked, not only that it graphically appeared to below that message on my newsreader, but also that your message did indeed in References the message ID of that one in which I discussed the 1970 ecition.

>"One standard pound, by definition, is a body of mass 0.4535924277 kg."

I told you the number would be different, didn't I--but that S&Z would not lie to you about the fact that pounds are units of mass.

>"Since the weight of a body is a force, it must be expressed in units of >force. Thus in the engineering system weight is expressed in POUNDS; in >the mks system, in Newtons; and in the cgs system, in dynes."

Do you see any adjective modifying "system" here, in each of the three times it is used?

Does the existence of a kilogram force prove that kilograms are not units of mass? No. Does the existence of a pound force prove that pounds are not units of mass? No.

Do you know that what they call the "engineering" system is, like SI, a coherent system of units, as that term is used in the jargon of metrology? Do you know what that means? It means that there is only one unit for each different quantity, and that that unit is a unitary combination of the base units.

Do you know the implications of that? That means that this system which they identify as the "engineering system" doesn't have any pints or gallons, no Btu or horsepower, no ounces or inches or miles or furlongs or fortnights. That's the only system that includes slugs--the one that doesn't have a whole lot of our commonly used units.

What's more, that's only one of several such systems. Some of the others include the absolute fps system (the one with pounds for mass and poundals for force), the gravitational inch-pound-second system (no slugs here either; the unit of mass in this system, equal to 1 lbfï¿½sï¿½/in, or about the weight (a synonym for mass in this case, of course) of the heaviest NFL linemen today, is probably most often used without a name, though some NASA engineers have called it a "slinch").

>Unless you disagree with Newton's Second Law, F=ma, Force [pounds] and >mass [slugs] are related by acceleration [of gravity, for example].

You can just as easily say that force [poundals] and mass [pounds] are related by the acceleration [ft/sï¿½]. It's every bit as true--and that system has been around a lot longer than the one with slugs.

Furthermore, Newton didn't use symbol to express this, and he only said that force is proportional to mass times the acceleration of gravity. Symbolically, that's F = kma. Using this more general form, you can use any units you want to for each of these quantities, as long as you make the constant k fit with them. That's what must be done in the system generally called the English "engineering" system of units (Sears and Zemansky are idiots who aren't even able to understand the distinction between the system identified by this term in normal usage by most other people, and the one they call by this name which everyone else calls the "gravitational" or "gravimetric" fps system of units). In what everyone else calls the engineering system of units, pounds are used for mass and pounds force for force,

and for Newton's Second Law we have F = kma where k = 0.03108095 = 1/32.1740.

>So, my weight [240 pounds] = my mass [7.45 slugs]*[gravity of 32.2 >ft/sec^2].
>----------
>If you want to argue, go ahead. I cited a source as you asked. Now you >choose to disagree with that source.

Go read my quotes from NIST and from ASTM on the subject of human body weight in my longest reply to Richard Clark.

>My final comment: Does a newton[force] = a kilogram[mass]??

No. The numbers won't even be the same, unless you happen to be some place outside this world where the local acceleration of free fall is pretty close to 1 m/sï¿½.

Furthermore, a kilogram force doesn't equal a kilogram either, not even if you call it by its other name, the kilopond. They measure different quantities. On earth, the numbers associated with each might be close to each other if the force you are measuring is the force due to gravity--but that doesn't make them "equal."

Now here's something else for you to chew on. Just to show that there have been people using metric units who have been bound and determined to show that they can be every bit as silly as those using English units, look up a unit of mass known variously as the hyl, or by the German acronym TME, or as the mug, which is derived from another of its names, the "metric slug." This is the mass which a kilogram of force will accelerate at a rate of 1 m/sï¿½.

In that system, the base units are the meter for length, the second for time, and the kilogram for force, with the hyl as the coherent, derived unit of mass.

Note that in that system, kilograms are never units of mass. Exactly the same as that system which Sears and Zemansky mislabel the "engineering" system, a similar limited subset of the English units rather than of the metric units, in which subset the pound is not used as a unit of mass.

Granted, that system probably never did see extensive use, and I haven't seen it used at all recently. But it's mere existence shoots all kinds of holes in your theories related to Newton's second law, and all the different names that the mass unit in this system has been given are clear evidence that it has been independently reinvented many times over.

The existence of the hyl does not prove that kilograms are not units of mass. The existence of the slug does not prove that pounds are not units of mass.

>--------------
>
>Conclusion:
>
>Force = pounds, or newtons, or dynes.
>Mass = Slug, or kilogram, or gram
>Acceleration = ft/sec^2, or m/sec^2, or cm/sec^2
>---------------------------------------
>Don't be so everbearing! It does not become you or enhance you statements.

It's a tradeoff I'm willing to accept as the price of getting the
message through some awfully thick skulls. After all, there are a lot
of dearly held memories of favorite teachers out there, and it's
awfully hard for anyone to admit that some favorite might actually
have led them astray.

For example, what about all those pounds you see in the grocery store?
You've been ignoring them for a long time, haven't you? Or are you
really so god-awful stupid as to think that when we buy and sell goods
by "weight" we'd want to measure some quantity that varies with
location?

PHASE II

Now, let's move on to Phase II of our examination of Sears and
Zemansky. Once again, I'll use the 1970 edition. Feel free to jump
in as show us that they said essentially the same thing in 1956.
Francis Weston Sears and Mark W. Zemansky, University Physics,
Addison-Wesley, 4th ed., 1970.

[page 228 (formula changed to one line)]:

If the system undergoes a temperature change dt,
the specific heat capacity c of the system is defined
as the ratio of the heat dQ to the product of the mass
m and temperature change dt; thus

c = dQ/(m dt)

The specific heat capacity of water can be taken
to be 1 cal g-1 (Cï¿½)-1 or 1 Btu lb-1 (Fï¿½)-1 for most
practical purposes.

Tell me, what exactly does "lb" mean in this quote?
Hints:
1. Look at what they tell you the denominator is in words. That would
the first quantity identified as part of the "product."
2. Look at the unit in the same position as "lb" in the calories
formula.

[page 230]

Mechanical engineers frequently use the British
thermal unit (Btu), defined as the quantity of heat
required to raise the temperature of 1 lb (mass) of

water from 63ï¿½F to 64ï¿½F. The following relations hold:

1 Btu = 778.3 ft lb = 252.0 cal = 1055 J.

How much water?

[page 232]

The quantity of heat per unit mass that must be
supplied to a material at its melting point to convert
it completely to a liquid at the same temperature is
called the heat of fusion of the material. The quantity
of heat per unit mass that must be supplied to a
material at its boiling point to convert it completely
to a gas a the same temperature is called the heat
of vaporization of the material. Heats of fusion and
vaporization are expressed in calories per gram, or
Btu per pound. Thus the heat of fusion of ice is
about 80 cal g^-1 or 144 Btu lb^-1. The heat of
vaporization of water (at 100ï¿½C) is 539 cal g^-1 or
970 Btu lb^-1. Some heats of fusion and
vaporization are listed in Table 16-2.

Now, it doesn't take a whole lot of genius to figure out what the quantities are which are measured in those units with the -1 exponents, does it?

But you don't even have to guess. Sears and Zemansky come right out and tell you. For you and some of the other slow-witted folks in this thread, here's a hint: Look for the seventh word in each of the first two sentences, that little word sandwiched in between the words "unit" and "that." Did you find it?

Do you notice anything strange here? Something different from that textbook which Keith described for us, which used "lbm" for pounds mass and "lbf" for pounds force?

Sears and Zemansky, earlier in the book, use the word "pound" and the symbol "lb" for units of force. But here they are using the word "pound" and the symbol "lb" for units of mass.

I feel sorry for you if you had to learn physics from idiots like this. But that still doesn't excuse your ignorance half a century later; you've had lots of opportunities in the intervening years to figure out the truth on your own.

Gene Nygaard
Time flies like an arrow;
fruit flies like a banana.

1604. SI (was: Supporting theory that Antennas "Match" to 377 Ohms (Free space))

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 03:28:25 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vn7ch62u74qm6e@corp.supernews.com>
Source record: 107470

Wow!

In SI: force is in Newtons
mass is in kg
distance is in meters
time is in seconds - and answers are always in SI units if
you use SI units.

A mass in a gravitational field has a force associated. That force is
not a mass even if it is (some of the time) proportional to mass.

When certain kinds of engineers provide me with specifications
involving pounds I shudder. Each use is converted into its equivalent
in SI. The context helps. An assumption of the strength of the
gravitational field needs to be used. Then I evaluate their work using
SI (and the same assumption about the gravitational field). In SI,
force and mass are quite distinct.
I continue to be amazed by the awesome ability of some engineers to
use a single term for two entirely different things. Use SI and the
answers are SI.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

1605. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 03:28:58 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f73b3e4_4@news1.prserv.net>
Source record: 107471

We have similar problems here, Roger, but that is the point of using the second bottom, which is a press fit inside the bead of the other container. This leaves a slight recess for controls. If you want no recess, then put the cut off bottom in right side up, and you end up with essentially a double ended sealed (except for the seam between pieces) bottle. Breathes just enough to equalize pressure changes, seam isn't big enough for most insects. Tiny ants might squeeze in, but insecticide could fix that.

--
Crazy George
Remove NO and SPAM from return address

1606. 2-440 on AM/FM antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 03:42:20 UTC
From: DeG <kg4fbg@onemain.com>
Message-ID: <wAOcb.5293$pP6.162@newsread2.news.atl.earthlink.net>
Source record: 107472

I am wanting to install a FT-90r in the wife's auto which she drive 95% of the time and want to use the AM/FM antenna.. It will be mostly used for receive..
I have a Veritas Electronics VCB-197 Multi-Band antenna coupler which allows 20/70 - 148/175 - 250/470 MHz hook-up to the AM/FM radio, but I have no info on this unit... I don't want to fry the AM/FM/CD radio with the RF should I decide to transmit..
Anyone out there that might have an insight on this?
Thanks,
Darrell ~ kg4fbg

1607. Re: For the electrical engineers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 04:37:24 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <ijg7nv0ujjmpick1ampuijn7mg2o0td18n@4ax.com>
Source record: 107473

On 26 Sep 2003 01:09:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>Stay away from Yahooooo groups, don't sell your soul (email) to spamers and
>marketeers.
>I don't think this would serve any purpose.
>
>Good luck!
>
>Yuri

Ditto, yahoo groups are advertiser supported. It's worse than prime
time television.

mike

1608. Re: Antenna Theory URL's (Was please help)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 04:41:06 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <CrPcb.24121$Ms2.2321@fed1read03>
Source record: 107474

About 15 URL's on Antenna Theory -- see URL:
http://ac6v.com/antprojects.htm#theory

--
73 From the Spurious Noise ';';;';x":.,";"'

<alertjean_fake_id@rediffmail.com> wrote in message
news:abd5b578.0309251835.3203bba@posting.google.com...
> I am in a real trouble.....
> I don't know how an antenna works can anyone tell me web resources
> where the subject is treated elaborately ?????
> Jean

1609. Re: shunt feeding towers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 05:01:50 UTC
From: Mike Luther <mike.luther@ziplog.com>
Message-ID: <vn7i0ikbdmk7f7@corp.supernews.com>
Source record: 107475

Gerry ..

Since the 100 foot mark is shorter than the quarter wave you'd like to have, you have to think along two lines here. The first is that whatever is mounted up at the top of the tower in the way of beams ans so on forms a capacity hat. That has the effect of making the tower look longer. It may be that your particular metal work will appear longer than the desired quarter way, or .. if you are superbly lucky, a perfect length. In that case, the idea of a shunt feed is likely to be about what you would find in ON4UN's book or any antenna book on this stuff in relation to broadcase band towers and so on.

The second line of thinking is a little different. Suppose whatever is up there, if anything, on these 100 foot towers, is so small it presents very little help for a capacity hat effect attempt. There is another out, perhaps. You can then step away from the tower side with a yard arm of a few feet or so. Then you drop a wire down the side off it to ground. You feed that wire as a folded monopole to reasonate the whole thing as a long thin loop sort of affair. Assuming that the tower guys are insulated from the tower, there will perhaps be some point up that tower where you can tap off with the yard arm and wire which forms the loop which will reasonate on 160 as a folded monopole affair. If so, you have your radiating element for which you are seeking.

LIkely, for this stuff, this is a cut and try issue! Suggestions have been made in a number of articles as to this over the years. But the only way you will really get it done, sad to say, is ... cut and try. The only one I ever did like this was done with one man up the tower with the yard arm for test, one on the ground with an antenna analyser playing with the match. It was done before the current round of antenna programs for computers. Obviously, if you want to work with one of these programs and craft in all the segments and so on, it would be likely that you'd get close to your particular configuration that way. But in any case, if those two towers are loaded with different stuff up at the top, it is going to be a different setup, to whatever extent they are different, to get you radiating elements.

From the point where you have those two towers presenting, say, a 50 ohm match to a feed point for each, you can then take a look at the spacing and begin to contemplate the phase delay which might give you a pattern boost and/or rejection in a couple of directions you will get based on where they are currently postured. That done you will hopefully get where you want to go for the array.

Just thoughts for your consideration.

W5WQN

Gerry MacDonald wrote:

> Has anybody had any experience shuntfeeding towers for 160M.
> I'm looking for information to shunt feed 2 100 foot towers and then
> phase the two towers together.
>
>
> thanks
>
> Gerry
> ve6qlt
>

--

--> Sleep well; OS2's still awake! ;)

Mike Luther

1610. Re: Parallel runs of coax to antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 05:31:28 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <p6j7nvss6dgls18o3uokcnnm148hm7tffq@4ax.com>
Source record: 107476

On Thu, 25 Sep 2003 22:28:58 -0500, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>We have similar problems here, Roger, but that is the point of using the
>second bottom, which is a press fit inside the bead of the other container.
>This leaves a slight recess for controls. If you want no recess, then put
>the cut off bottom in right side up, and you end up with essentially a
>double ended sealed (except for the seam between pieces) bottle. Breathes
>just enough to equalize pressure changes, seam isn't big enough for most
>insects. Tiny ants might squeeze in, but insecticide could fix that.

Just throw in a single moth ball. <:-))

Yellow Jackets have turned out to be a real problem over the past two
years. Last year I destroyed over 40 nests on our 200 X 200 foot
lot. I really don't know how many thousands I've done in, but it's a
lot.

We had them get under the siding just under the peak of the roof on
the sough end. They built a nest so large it popped the siding loose
and it had to be re-nailed.

About a month ago I went out to move some sections of a C-band
satellite dish. I had them stacked 2 by 2. I had hauled away several
pair when I reached for one and had it slip out of my grip as I went
to pull it away from the one under it. All of a sudden there was a
cloud of Yellow Jackets coming out from around each side. I beat a
hasty retreat (full tilt), but unfortunately I was building the base
for a small outbuilding right behind where I was standing. I had 7
2 X 6s running North and south with the top edges about 14 inches off
the ground. I was headed west. I made it all the way through with
just one barked shin and never fell. I waited till dark, set up some
halogen lights to blind them and then squirted in some wasp and hornet
killer. The kind that shoots a solid stream. When I got the dish
section out I found a nest over a foot across in there.
(and...I never got stung which is a lot better than last summer with a
total of 4. Three yellow Jackets and one wasp got me.)

Actually throwing a few mothballs around the attic insulation should
keep out the bees as well.

BTW, I'm probably going to use something similar to house a matching
network as I'm either going to put up an inverted L, or shunt feed the
tower for 160.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com

N833R World's oldest Debonair? (S# CD-2)

1611. Re: please help.....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 05:43:12 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F73D1F0.AA32158@cwis.net>
Source record: 107477

Gilbert,
That ought to do it...
'Doc

1612. Re: 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 06:20:49 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0309252220.3157ce64@posting.google.com>
Source record: 107478

"W4UDX" <w4udx.nospam@juno.com> wrote in message
news:<%cMcb.23637$iO.8753@bignews5.bellsouth.net>...
> Hi guys.
> Quick question. I have in the past made 80 and 40 meter multiband dipoles
> using parallel wires and they worked fine with little 80/40 interaction. My
> question is, can a make one with a set of wires on it for 30M also? or will
> the 40M and 30M parallel wires interact too much?
>
> Mark W4UDX

Hi Mark,
probably it's possible, see
http://w1.859.telia.com/~u85920178/antennas/dipole.htm I personally
haven't tried it, though.

73 Ivan OK1SIP

1613. How the SWR meter works.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 10:09:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bl1395$fh3$1@titan.btinternet.com>
Source record: 107479

How does the so-called SWR, Forward pwr, Reflected pwr meter work?

(Or how gullible can you get?)

A small fraction of the line voltage is tapped off. This is V1.

A small resistor is inserted in series with the line. The voltage across it is V2.

The resistors are proportioned such that when the meter is terminated with 50 ohms, V1 = V2.

The meter can be switched to indicate the magnitudes of either V1+V2 or V1-V2.

V1+V2 is calibrated to indicate Fwd.Pwr.

V1-V2 is calibrated to indicate Ref.Pwr and SWR.

It's a sort of confidence trick which works provided a lot of assumptions are made.

Whatever is inside the box, a little toroid or tiny fraction of wavelength of line, they all work in exactly the same way.

By the way, they make excellent little transmitter-loading indicators and, provided the transmitter is loaded with exactly 50 ohms, they will also indicate the power dissipated in it. Otherwise - - - ???

Reg, G4FGQ

1614. Re: SI (was: Supporting theory that Antennas "Match" to 377 Ohms (Free space))

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 10:56:29 UTC
From: kd1@sympatico.ca
Message-ID: <3F741B5D.77072185@sympatico.ca>
Source record: 107480

"J. McLaughlin" wrote:
> When certain kinds of engineers provide me with specifications
> involving pounds I shudder. Each use is converted into its equivalent
> in SI. The context helps. An assumption of the strength of the
> gravitational field needs to be used. Then I evaluate their work using
> SI (and the same assumption about the gravitational field). In SI,
> force and mass are quite distinct.
> I continue to be amazed by the awesome ability of some engineers to
> use a single term for two entirely different things. Use SI and the
> answers are SI.

This captures the essence of the issue. The question is not so much
'are pounds mass or force?', but, rather, 'what did the author
mean when writing pounds?'

An engineer who believes that pounds are always mass will make
just as many errors as one who believes pounds are always force.

...Keith

1615. Porting NEC2 Fortran->C, need help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 11:20:57 UTC
From: 5b4az@qsl.net
Message-ID: <e637e579.0309260320.4896a0c3@posting.google.com>
Source record: 107481

Hi all,

For better or worse I have decided to port NEC2 from fortran to C (on a Linux machine but should be easy to port to other platforms if/when I succeed). I am porting mostly by hand (with help from some Unix power tools) but not using f2c because already there is such a port, but its buggy and won't compile. In any case, I want a clean C code with no GOTO's as far as possible and a better structure, so that it can be hacked and improved as necessary.

The original Fortran code is very messy with aprox. 960 GOTOs, many arithmetic conditionals, indexed jumps etc and to replace all these with a clean code is proving extremely difficult and prone to errors. I would like to complete this project but I need help in testing the resulting C source. Mainly, I need a way to check that the goto-less flowcharts are functionally identical to the original GOTO labyrinths and I can only do this by feeding the C program with a test suit of input files and comparing with output files known to be correct.

More specifically, I need a way to test that the Main function is responding correctly to the various combinations of program control flags, as at this time its the only function I hacked out of goto's etc (bar 2 that won't go away!), so I would be greateful for any urls/info etc for any test files or other procedures to test NEC2.

PLEASE NOTE that my email is now neoklisk_AT_cytanet_dot_com_dot_cy.

My thanks in advance and 73's to all.

1616. Re: How the SWR meter works.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 14:07:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7448e5$1_2@127.0.0.1>
Source record: 107482

Reg Edwards wrote:
> The meter can be switched to indicate the magnitudes of either V1+V2 or
> V1-V2.
>
> V1+V2 is calibrated to indicate Fwd.Pwr.
>
> V1-V2 is calibrated to indicate Ref.Pwr and SWR.

The key to the functionality of such is that the addition
and subtraction involve two phasors so the phase angle
between the voltage and current is taken into account.
Assuming the meter is calibrated for Z0 and actually in
a Z0 environment, the necessary conditions for functionality
are met for all Smith Chart impedance points on a particular
SWR circle.
--
73, Cecil, W5DXP

1617. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 14:58:06 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <gfi6nvol035ggp4r3qinde8phn5134vqp4@4ax.com>
Source record: 107483

On Thu, 25 Sep 2003 12:02:12 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> Up there in the Great White North, they use those dinky little
>> "litres" where it takes 4.54609 of them to make a gallon, rather than
>> the man-sized liters we have, which only take 3.785411784 to make a
>> gallon. ;-)
>
>I suspect it's not the litre which is different, but the gallon which is
>different. The British Imperial Gallon occupies 277.4 in^3, while the
>gallon you're thinking of occupies 231 in^3.

Oh, good grief. Don't tell me the Canucks use different cubic inches
too, and don't even distinguish them with the spelling like they do
for "litres" vs. "liters"!

Are you ready for your next assignment, Sherlock? I'm wondering if
you'd be willing to take on another job for me. Do you suppose you
could help me track down a missing wink? Apparently there was one
that didn't show up on your newsreader--they look something like
this-- ;-)
>
>What's your opinion of converting US speedometers from miles/hr to
>furlongs/fortnight?

I think you'd be one of those guys who try to talk the talk, without
having learned how to walk the walk. You've never actually calculated
any speeds in furlongs per fortnight yourself, have you?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1618. Tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:14:05 UTC
From: Robert Daniel <pagerman@worldnet.att.net>
Message-ID: <1JYcb.153872$0v4.11483203@bgtnsc04-news.ops.worldnet.att.net>
Source record: 107484

My thanks for those that responded for info on tower installation.
It got us started in right direction.
Thanks and 73
"Robert Daniel" <pagerman@worldnet.att.net> wrote in message
news:ahobb.153629$3o3.10921074@bgtnsc05-news.ops.worldnet.att.net...
> A freind is setting up a tower (HDX-589 MDPL) from U S Tower in soil that
> appears to be all sand. Has anyone had experience in doing this. This is
a
> very heavy duty fold over and crank up tower. Anyone with thoughts or
> experience on this i would like to hear from you. I am gathering info for
> friend.
>
> Robert K5RGD
>
>

1619. info on tower installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:16:02 UTC
From: Robert Daniel <pagerman@worldnet.att.net>
Message-ID: <SKYcb.153877$0v4.11484392@bgtnsc04-news.ops.worldnet.att.net>
Source record: 107485

Thanks to those that responded for tower installation.
It got us starte in right direction.

Thanks 73

1620. Re: 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:32:27 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <1RmcnUp5P_KFwemiXTWJkw@comcast.com>
Source record: 107487

Mark,

I had 40, 17, and 12 meters all off the same feedline, and it worked great (SWR < 1.5). Trim the antennas from lowest to highest frequency.

I had the 17 on top as a V (17 was the main support), the 12 underneath that as a flat top, and the 40 as an inverted V about 30 degrees out of plane with the others.

Tam/WB2TT
"W4UDX" <w4udx.nospam@juno.com> wrote in message news:%cMcb.23637$iO.8753@bignews5.bellsouth.net...
> Hi guys.
> Quick question. I have in the past made 80 and 40 meter multiband dipoles
> using parallel wires and they worked fine with little 80/40 interaction.
My
> question is, can a make one with a set of wires on it for 30M also? or
will
> the 40M and 30M parallel wires interact too much?
>
> Mark W4UDX
>
>

1621. Re: SI (was: Supporting theory that Antennas "Match" to 377 Ohms (Free space))

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:32:47 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <qsm8nv4gqcffe3eqssngceqe3ti8tiaaia@4ax.com>
Source record: 107488

On Thu, 25 Sep 2003 23:28:25 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:

>Wow!
>
>In SI: force is in Newtons
> mass is in kg
> distance is in meters
> time is in seconds - and answers are always in SI units if
>you use SI units.
>
>A mass in a gravitational field has a force associated. That force is
>not a mass even if it is (some of the time) proportional to mass.
>
> When certain kinds of engineers provide me with specifications
>involving pounds I shudder. Each use is converted into its equivalent
>in SI. The context helps. An assumption of the strength of the
>gravitational field needs to be used. Then I evaluate their work using
>SI (and the same assumption about the gravitational field). In SI,
>force and mass are quite distinct.
> I continue to be amazed by the awesome ability of some engineers to
>use a single term for two entirely different things.

It helps to be too stupid to know that there are in fact two entirely
different things. There are several of those people in this thread.

Not for the accuracy of the result, of course. But you can blithely
plug in the numbers and get an answer of some sort.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1622. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:37:21 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bl1lto$3ek$1@news.service.uci.edu>
Source record: 107486

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f73a641$1_7@corp.newsgroups.com...
> Jim Kelley wrote:
> > Since rho represents the fraction of forward voltage that is reflected,
> > what does a negative value for rho indicate?
>
> rho = +1 means there is a zero degree phase shift in the reflected
voltage.
>
> rho = -1 means there is a 180 degree phase shift in the reflected voltage.

So in other word the sign sometimes indicates phase, and other times
indicates a direction in propagation depending on which hand is waving..
Thanks.

73, Jim AC6XG

1623. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 15:46:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bl1mec$3mj$1@news.service.uci.edu>
Source record: 107489

"Gene Nygaard" <gnygaard@nccray.com> wrote in message
news:gfi6nvol035ggp4r3qinde8phn5134vqp4@4ax.com...

> Are you ready for your next assignment, Sherlock? I'm wondering if
> you'd be willing to take on another job for me. Do you suppose you
> could help me track down a missing wink? Apparently there was one
> that didn't show up on your newsreader--they look something like
> this-- ;-)

Well, Gene. One never knows. I appologize. Your bit about the pound was
funny too, but didn't have the smiley face. Next you'll be telling us it's
a unit of currency! :-)

> >What's your opinion of converting US speedometers from miles/hr to
> >furlongs/fortnight?

> I think you'd be one of those guys who try to talk the talk, without
> having learned how to walk the walk. You've never actually calculated
> any speeds in furlongs per fortnight yourself, have you?

A grad student an I made an overlay for his speedometer - must have been
close to 15 years ago now.

73, Jim AC6XG

1624. Yaesu ATAS 120

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:06:19 UTC
From: Ed Findley <edfindley@txucom.net>
Message-ID: <3f745ff5$1@katy-news.txucom.net>
Source record: 107490

Has anyone tried this antenna as a base station ant? If so how did you mount it.

Thanks
Ed Findley

1625. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:25:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f74692e_2@127.0.0.1>
Source record: 107491

Jim Kelley wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote:
>>rho = +1 means there is a zero degree phase shift in the reflected voltage.
>
>>rho = -1 means there is a 180 degree phase shift in the reflected voltage.
>
> So in other word the sign sometimes indicates phase, and other times
> indicates a direction in propagation depending on which hand is waving..
> Thanks.

Consider the equation, rho = (ZL-Z0)/(ZL+Z0). If ZL>Z0, then the
voltage reflection coefficient is positive and there is no reflected
voltage phase shift. If ZL<Z0, then the voltage reflection coefficient
is negative and there is a 180 degree phase shift in the reflected
voltage. The same holds true for the E-field of reflected light.

The RF reflected current convention differs from the reflected light
H-field convention. Kirchhoff's current convention enters into the sign
of the reflected RF current where no such convention exists for light.
--
73, Cecil, W5DXP

1626. Porting NEC2 Fortran->C, need help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:31:17 UTC
From: 5b4az@qsl.net
Message-ID: <e637e579.0309260831.138367d2@posting.google.com>
Source record: 107492

Hi all,

For better or worse I have decided to port NEC2 from fortran to C (on a Linux machine but should be easy to port to other platforms if/when I succeed). I am porting mostly by hand (with help from some Unix power tools) but not using f2c because already there is such a port, but its buggy and won't compile. In any case, I want a clean C code with no GOTO's as far as possible and a better structure, so that it can be hacked and improved as necessary.

The original Fortran code is very messy with aprox. 960 GOTOs, many arithmetic conditionals, indexed jumps etc and to replace all these with a clean code is proving extremely difficult and prone to errors. I would like to complete this project but I need help in testing the resulting C source. Mainly, I need a way to check that the goto-less flowcharts are functionally identical to the original GOTO labyrinths and I can only do this by feeding the C program with a test suit of input files and comparing with output files known to be correct.

More specifically, I need a way to test that the Main function is responding correctly to the various combinations of program control flags, as at this time its the only function I hacked out of goto's etc (bar 2 that won't go away!), so I would be greateful for any urls/info etc for any test files or other procedures to test NEC2.

PLEASE NOTE that my email is now neoklisk_AT_cytanet_dot_com_dot_cy.

My thanks in advance and 73's to all.

1627. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:54:20 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ddycneHvKMHU8umiXTWJkA@comcast.com>
Source record: 107493

Jim,

Take the sign of rho literally. For instance, if Zl=0, a short circuit, rho=-1; therefore, at the termination, V=V+ +(- V+) = 0. If Zl= open, then rho=+1, and V= V+ + V+ =2V+

Tam/WB2TT

"Jim Kelley" <jwkelley@uci.edu> wrote in message news:3F737917.929D1324@uci.edu...
> Ur right, thanks Dave. I meant to say voltage rather than power. Let
> me ask the question properly.
>
> Tom,
> Since rho represents the fraction of forward voltage that is reflected,
> what does a negative value for rho indicate?
>
> Thanks and 73,
>
> Jim AC6XG
>
>
>
> Dave Shrader wrote:
> >
> > Tom, rho^2 represents the fraction of forward power that is reflected.
> >
> > The squaring function produces a positive value.
> >
> > Rho represents the percentage of voltage or current. Rho^2 is the power
> > function.
> >
> > Dave
> >
> > Jim Kelley wrote:
> > > Hi Tom,
> > >
> > > Since rho represents the fraction of forward power that is reflected,
> > > what does a negative value for rho indicate?
> > >
> > > Thanks,
> > >
> > > Jim AC6XG
> > >
> > > Tom Bruhns wrote:

> > >
> > >>Hi Dave (and lurkers),
> > >>
> > >>Well, if rho=Ir/If, then the net current on the line is If-Ir, NOT
> > >>If+Ir. You have to be careful about directions, and be careful to
> > >>define things and stick with those definitions. I usually use
> > >>Zo=Vf/If=-Vr/Ir, so that Ir and If measure "positive" in the same
> > >>physical direction along the line, and then of course
> > >>rho=Vr/Vf=-Ir/If. If that's at all hazy, just draw a picture and it
> > >>should be clear. Anyway, rho=+1 at a point of zero net current,
> > >>either way you define the current direction, and rho=-1 at a point of
> > >>zero net voltage. No Smith chart, and no Zo, needed to figure that
> > >>out.
> > >>
> > >>Cheers,
> > >>Tom
> > >>
> > >>Dave Shrader <david.shrader@comcast.net> wrote in message
news:<iBkcb.568264$o%2.253779@sccrnsc02>...
> > >>
> > >>>Hmmm ... Tom rho also equals Ir/If. Now if the line is open circuited
> > >>>... the net current is zero (i.e. at an open circuit). Therefore Ir =
> > >>>-If, and rho is a -1.
> > >>>
> > >>>Comment?
> > >>>
> > >>>Tom Bruhns wrote:
> > >>>
> > >>>
> > >>>>I trust we can all agree that the definition of rho is rho=Vr/Vf,
and
> > >>>>I trust we can all agree that on a TEM line, the net voltage
> > >>>>Vnet=Vr+Vf. If the net voltage is zero (i.e. at a short circuit),
> > >>>>then clearly Vr=-Vf, and rho=-Vf/Vf=-1. Then whatever formula you
> > >>>>chose to use to find rho at a load from the load impedance, Zload,
and
> > >>>>the line characteristic impedance, Zo, better work out right for a
> > >>>>short circuit termination. Note that "rho=(Zload-Zo*)/(Zload+Zo)"
> > >>>>does NOT work for that simple case, unless Zo*=Zo. But
> > >>>>"rho=(Zload-Zo)/(Zload+Zo)" does work. You can easily go through
> > >>>>something similar for an open circuit load. Note that rho=-1 for a
> > >>>>short circuit load, and rho=+1 for an open circuit load, independent
> > >>>>of line impedance.
> > >>>>
> > >>>>Cheers,
> > >>>>Tom
> > >>>>
> > >>>>k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0309211804.a50de3@posting.google.com>...
> > >>>>

> > >>>>
> > >>>>>It's even easier than that. Using the _definition_ of reflection
> > >>>>>coefficient, rho = Vr/Vf, we see that Vr=-Vf and therefore the net
> > >>>>>line voltage at that point is zero (that is, Vf+Vr, or Vf-Vf, or
> > >>>>>zero). That's either a real short or a virtual short.
> > >>>>>
> > >>>>>Cheers,
> > >>>>>Tom
> > >>>>>
> > >>>>>"David Robbins" <k1ttt@arrl.net> wrote in message
news:<Nm-dnUOWScX5H_GiU-KYvw@crocker.com>...
> > >>>>>
> > >>>>>
> > >>>>>
> > >>>>>>lets see...
> > >>>>>>
> > >>>>>>rho = (Z - Zo)/(Z + Zo)
> > >>>>>>if rho = -1 then
> > >>>>>>
> > >>>>>>-1=(Z-Zo)/(Z+Zo)
> > >>>>>>or
> > >>>>>>-1*(Z+Zo)=(Z-Zo)
> > >>>>>>or
> > >>>>>>-Z - Zo = Z - Zo
> > >>>>>>or
> > >>>>>>-Z = Z
> > >>>>>>the only value i know that satisfies that is zero.
> > >>>>>>lets substitute it back in to be sure...
> > >>>>>>-1=(0-(50+j50))/(0+(50+j50))
> > >>>>>>-1=(-50-j50)/(50+j50)
> > >>>>>>-1=-1(50+j50)/(50+j50)
> > >>>>>>-1=-1 qed.

1628. Re: SI (was: Supporting theory that Antennas "Match" to 377 Ohms (Free space))

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:56:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F746FB8.6707186E@uci.edu>
Source record: 107496

kd1@sympatico.ca wrote:
> An engineer who believes that pounds are always mass will make
> just as many errors as one who believes pounds are always force.
>
> ...Keith

Yep. And an engineer who uses pounds for either will either make or cause more mistakes than one who doesn't. Remember the Mars Climate Orbiter?

73, Jim AC6XG

1629. Re: How the SWR meter works.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 16:58:32 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bl1r7n$7p$1@hercules.btinternet.com>
Source record: 107494

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f7448e5$1_2@127.0.0.1...
> Reg Edwards wrote:
> > The meter can be switched to indicate the magnitudes of either V1+V2 or
> > V1-V2.
> >
> > V1+V2 is calibrated to indicate Fwd.Pwr.
> >
> > V1-V2 is calibrated to indicate Ref.Pwr and SWR.
>
> The key to the functionality of such is that the addition
> and subtraction involve two phasors so the phase angle
> between the voltage and current is taken into account.
> Assuming the meter is calibrated for Z0 and actually in
> a Z0 environment, the necessary conditions for functionality
> are met for all Smith Chart impedance points on a particular
> SWR circle.
> --
> 73, Cecil, W5DXP
==========

Assumptions, assumptions, assumptions.

Imagination, imagination, imagination.

And what on earth has it to do with a Smith Chart?

I've never used one in anger in the whole of my life! Don't have one!

Cec, don't worry about it. ;o)

Let's not confuse the gullible younger generation.

Is the transmitter loaded with X ohms or is it not?

Reg, G4FGQ.

1630. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:05:08 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7471C4.4B83633D@uci.edu>
Source record: 107499

Gene Nygaard wrote:
> Apparently Halliday and Resnick were a lot smarter a couple of decades
> earlier, when they were only a little past their prime:

Hey Gene,

Maybe Halliday and Resnick in fact _avoided_ becoming "past their prime"
when they adapted their point of view to the one which now prevails.

73, Jim AC6XG

1631. Re: MFJ monoband mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:17:16 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <6w_cb.32962$Hb.502958@news4.e.nsc.no>
Source record: 107495

Thanks for input. I didn't realize that it was base loaded from the info given so that was helpful to know.
I guess a center loaded antenna like e.g. the Outbacker will give better performance at the lowest frequencies.

Sverre
www.qsl.net/la3za

1632. Re: How the SWR meter works.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:19:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7475cb_2@127.0.0.1>
Source record: 107497

Reg Edwards wrote:
> And what on earth has it to do with a Smith Chart?

The phase angle between the total voltage and total current can be had from the Smith Chart. Here's a procedure that I use that works well for ladder-line fed dipoles.

1. Model the antenna feedpoint impedance. Plot it as a point on the Smith Chart. Draw an SWR circle through that point.

2. Knowing the length of the ladder-line and the VF, follow the SWR circle toward the source for the appropriate wavelength(s). Mark that point as the calculated impedance seen by the 50 ohm SWR meter.

3. Measure the 50 ohm SWR. The difference in the calculated lossless SWR and the actual SWR reading indicates the variations plus losses.

The above exercise gets me into the ballpark (almost) every time.
--
73, Cecil, W5DXP

1633. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:21:11 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F747587.60C0C0BA@uci.edu>
Source record: 107500

Yes, Cecil. I have considered it, and I agree. It just bothers me when people forget what the minus sign means, and try using it to make unrealistic claims.

73, Jim AC6XG

Cecil Moore wrote:
>
> Cecil Moore wrote:
> > Consider the equation, rho = (ZL-Z0)/(ZL+Z0). If ZL>Z0, then the
> > voltage reflection coefficient is positive and there is no reflected
> > voltage phase shift. If ZL<Z0, then the voltage reflection coefficient
> > is negative and there is a 180 degree phase shift in the reflected
> > voltage. The same holds true for the E-field of reflected light.
>
> The above assumes ZL and Z0 to be real numbers. The light index
> of refraction is usually a real number.
> --
> 73, Cecil, W5DXP

1634. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:22:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f747676_2@127.0.0.1>
Source record: 107498

Cecil Moore wrote:
> Consider the equation, rho = (ZL-Z0)/(ZL+Z0). If ZL>Z0, then the
> voltage reflection coefficient is positive and there is no reflected
> voltage phase shift. If ZL<Z0, then the voltage reflection coefficient
> is negative and there is a 180 degree phase shift in the reflected
> voltage. The same holds true for the E-field of reflected light.

The above assumes ZL and Z0 to be real numbers. The light index
of refraction is usually a real number.
--
73, Cecil, W5DXP

1635. Re: How the SWR meter works.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:46:13 UTC
From: richardharrison@webtv.net
Message-ID: <10311-3F747B65-419@storefull-2311.public.lawson.webtv.net>
Source record: 107503

Reg, G4FGQ wrote:
"Whatever is inside the box, a little toriod or tiny fraction of wavelength of line, they all work in exactly the same way."

In-line power meters separate reflected power from incident power for determinations.

My second edition of the RSGB "Test Equipment For The Radio Amateur" has an in-line wattmeter diagram on page 4.7 which uses a toriod but operates much like a Bird wattmeter.

The RSGB meter uses a 4-inch longth of coax which is grounded only on one end. It carries the power to be measured through the center of the toroid, and this coax forms a 1-turn primary for the toroidal transformer. A center-tapped secondary is wound on the toroid. A capaciitive voltage divider is connected between the coaz center conductor and ground. This voltage divider and the transformer center tap share a common load resistor.

The capacitive ratio of the divider is adjusted so that its voltage out is equal to that of the magnetically induced secondary voltage on either side of the center tap. The capacitively supplied voltage is proportional to the coax voltage. The magnetically supplied voltage is proportional to the coax current.

Reflected current is flowing in the opposite direction in the coax from forward current in the short piece of coax, so in the direction of current flow where induced volts in the transformer secondary add to those capacitively coupled to the common load the total is douple either contribution. Output of the combo is proportional to the power represented by the current and voltage samples. Reflected power doesn`t affect forward power determination in this instance because its voltage and current samples are out-of-phase and exactly cancel.

Since the start and finish of the toroid`s secondary winding are 180-degrees out-of-phase, when the start of the coil is phased with the capacitive sample to produce an output proportional to reverse (reflected) power, the finish end of the coil is phased with the capacitive sample contribution to produce an output proportional to the forward (incident) power.

Calibration procedure is given in the book.

Best regards, Richard Harrison, KB5WZI

1636. Re: MFJ monoband mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:47:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f747c50_2@127.0.0.1>
Source record: 107501

Sverre Holm wrote:
> Thanks for input. I didn't realize that it was base loaded from the info
> given so that was helpful to know.
> I guess a center loaded antenna like e.g. the Outbacker will give better
> performance at the lowest frequencies.

The Outbacker is barely better than a Hamstick. The MFJ may
actually be better than the Outbacker. To get the full benefit
of a center-loaded antenna, please consider a screwdriver
or bugcatcher.
--
73, Cecil, W5DXP

1637. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 17:53:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f747ddc_2@127.0.0.1>
Source record: 107502

Jim Kelley wrote:
> Yes, Cecil. I have considered it, and I agree. It just bothers me when
> people forget what the minus sign means, and try using it to make
> unrealistic claims.

At least for real Z0's, it should be consistent. Wouldn't
a rho of 0.5 at 20 degrees would be the same as a rho of
-0.5 at 200 degrees?
--
73, Cecil, W5DXP

1638. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 18:21:49 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <0i09nvouv5ajqoehmamcmh9vl23g3ckqcp@4ax.com>
Source record: 107505

On Thu, 25 Sep 2003 07:14:09 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Thu, 25 Sep 2003 03:41:10 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>Do you think I'm that stupid, that you can pull the wool over
>>my eyes so easily?
>
>Hi Gene,
>
>As I pointed out earlier, your feelings belong at the end of the line
>with the rest whose minds I cannot change.

I proved you wrong, from the NIST site--your groundrules--and from
many other sources as well. I gave you a web page from NIST defining
the pound as a unit of mass exactly equal to 0.45359237 kg.

Now I have a challenge for you, Mr. Metrologist:

Show me an official definition of a pound force on the NIST pages.
Bet you can't do so. Note that a conditional definition, with a big
"if", indicating that this is only one possible acceptable definition,
is not sufficient--I want an official definition.

If you can't do that, try a broader problem: Show me an official
definition of a pound as a unit of force from ANY law of ANY country
in the world, or from ANY standard of ANY national or international
standards organization, or from ANY standard of ANY professional
organization.

Are you up to the challenge?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1639. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 18:22:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vn9107664t0t58@corp.supernews.com>
Source record: 107504

No. The voltage reflection coefficient is the ratio of two voltages, and has nothing to do with their directions. The reverse voltage wave is always traveling toward the source. The forward voltage wave is always traveling toward the load. The angle of the reflection coefficient is the relative phases of these two at the point the reflection coefficient is being evaluated. It makes sense to speak of the reflection coefficient as having a "sign" only in the two special cases of zero and 180 degree angles. Otherwise, it has an angle, not a positive or negative "sign".

The current reflection coefficient is a little more ambiguous because of the freedom of defining which direction represents positive flow of Ir. If Ir is defined to be positive toward the load (the more common definition), then the current reflection coefficient, Ir/If = -Vr/Vf. If it's defined to be positive toward the source, then Ir/If = Vr/Vf.

Roy Lewallen, W7EL

Jim Kelley wrote:
> "Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
> news:3f73a641$1_7@corp.newsgroups.com...
>
>>Jim Kelley wrote:
>>
>>>Since rho represents the fraction of forward voltage that is reflected,
>>>what does a negative value for rho indicate?
>>
>>rho = +1 means there is a zero degree phase shift in the reflected
>
> voltage.
>
>>rho = -1 means there is a 180 degree phase shift in the reflected voltage.
>
>
> So in other word the sign sometimes indicates phase, and other times
> indicates a direction in propagation depending on which hand is waving..
> Thanks.
>
> 73, Jim AC6XG
>
>

1640. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 19:12:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0l39nv4jntqlo6vocoi2260l4kvvub8h4v@4ax.com>
Source record: 107506

On Fri, 26 Sep 2003 12:53:50 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:
>At least for real Z0's, it should be consistent. Wouldn't
>a rho of 0.5 at 20 degrees would be the same as a rho of
>-0.5 at 200 degrees?

Hi Cecil,

The Reflection Coefficient is a characteristic of the Load or Source,
not a value projected all along the line. This is the teaching of
Chipman that you undoubtedly speed-read past on your way to the
cut-and-paste opportunities you sought.

When are you going to ride your bike back to the library to fill all
these shortfalls of his teachings you so liberally sprinkle your
missives with?

73's
Richard Clark, KB7QHC

1641. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 19:18:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f349nv4pk8kelol848b8ul9t8jrqv8qvbq@4ax.com>
Source record: 107507

On Fri, 26 Sep 2003 18:21:49 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>Now I have a challenge for you, Mr. Metrologist:

Hi Gene,

What are your credentials? Can one expect you have at least a degree
in English? ;-)

If not, you will have to assemble at the end of the line with the
rest. Please leave room in front of you for those with serious
differences who might arrive later (almost guaranteed).

73's
Richard Clark, KB7QHC

1642. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 19:32:28 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <1t49nv0gk0dku656a89vuo8d8b4mmlm992@4ax.com>
Source record: 107508

On Fri, 26 Sep 2003 19:18:23 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 26 Sep 2003 18:21:49 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>Now I have a challenge for you, Mr. Metrologist:
>
>Hi Gene,
>
>What are your credentials? Can one expect you have at least a degree
>in English? ;-)

My credentials won't change what you WON'T find on the NIST web pages,
wimp!

Show me the official definition of a pound as a unit of force from
NIST, either on their web pages or from any published document of NIST
or its predecessors.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1643. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 19:35:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7495ab$1_2@127.0.0.1>
Source record: 107509

Richard Clark wrote:
> The Reflection Coefficient is a characteristic of the Load or Source,
> not a value projected all along the line. This is the teaching of
> Chipman that you undoubtedly speed-read past on your way to the
> cut-and-paste opportunities you sought.

For lossless transmission lines, |rho| = Sqrt(Pref/Pfwd). You don't
even need to know the load and/or source impedances.

> When are you going to ride your bike back to the library to fill all
> these shortfalls of his teachings you so liberally sprinkle your
> missives with?

Just as soon as I am over my sinusitis and have a day off.
--
73, Cecil, W5DXP

1644. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 20:45:27 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <dg59nvsh6pv4tvdkm20674c8j4hbrnvjre@4ax.com>
Source record: 107511

On Fri, 26 Sep 2003 19:18:23 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 26 Sep 2003 18:21:49 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>Now I have a challenge for you, Mr. Metrologist:
>
>Hi Gene,
>
>What are your credentials? Can one expect you have at least a degree
>in English? ;-)

I am a wheat farmer who has already proved not only our resident engineer/programmer and Capital-M Metrologist wrong, but our Chief Peacekeeper Missileman Engineer as well. Isn't that enough for one week?

Of course, from that job, I'm well aware of what a bushel is on the Minneapolis Grain Exchange and other commodities markets, or at the local grain elevator. It isn't a unit of volume at these places. And while it is a certain number of pounds for each particular commodity, it most certainly is not unit of force, either.

Not only did I prove Mr. Metrologist wrong, but I also proved that he has no integrity. He won't even admit that I did so, even though I followed his ground rules to a T, specifically citing a NIST web page showing him to be wrong.

My degrees weren't in English, however--though I did enjoy some English classes, and such a degree would have been quite relevant to our discussion of linguistics earlier. What are your credentials in linguistics? In the law, another primary subject matter of our discussion? In history?

Now, find somebody on the NIST web pages with better credentials than mine and yours to tell us what the official definition of a pound force is. Still bet you can't do so.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1645. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 20:47:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lv59nvgu5qrb7i9ib7ds5n4dr88pe5kv53@4ax.com>
Source record: 107510

On Fri, 26 Sep 2003 19:32:28 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>My credentials won't change what you WON'T find on the NIST web pages,
>wimp!

Hi Gene,

OK no credentials. No proficiency in English and not even a CB? How
droll, that is indeed an amusing challenge from a middle aged farmer
who would challenge where the center of North America lies. I suppose
the doggerel of "a pint's a pound, the world round" bears more
directly on this slim side topic - but you don't offer credentials
into that. ;-)

You remain inseparable (through your own choice, but not view) from
any of 6 Billion who could as easily deny anything offered by me
through your simple random strokes at the keyboard for rebuff. Thus
fulfilling any -um- challenge is of equal magnitude in its
achievement.

"A learned gentleman who in the course of conversation
wished to inform us of this simple fact, that the counsel upon
the circuit at Shrewsbury were much bitten by fleas, took,
I suppose, seven or eight minutes in relating it circumstantially.
Johnson sat in great impatience till the gentleman had finished
his tedious narrative, and then burst out (playfully however),
'It is a pity, Sir, that you have not seen a lion; for a flea has
taken you such a time, that a lion must have served you for
a twelvemonth.'" "Boswell's Life of Johnson," pg. 407

Please leave plenty of room in front of you at the end of the line.
Those with credentials and important issues (and there are many,
metaphorical lions as it were instead of your fleas) will no doubt
(playfully however) slip in front of you in the future.

73's
Richard Clark, KB7QHC

1646. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 20:50:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gg99nvgmklfnlauer6hfsk1eb4rn6hjfen@4ax.com>
Source record: 107512

On Fri, 26 Sep 2003 14:35:33 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>For lossless transmission lines, |rho| = Sqrt(Pref/Pfwd). You don't
>even need to know the load and/or source impedances.

Hi Cecil,

How did you get a -1 out of your |rho|? Take a box of kleenex on
your bike ride to the library - your logic is dribbling.

73's
Richard Clark, KB7QHC

1647. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 21:38:12 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <qga9nv4lk296q8dssovcv507srospn6uqg@4ax.com>
Source record: 107513

On Fri, 26 Sep 2003 10:05:08 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> Apparently Halliday and Resnick were a lot smarter a couple of decades
>> earlier, when they were only a little past their prime:
>
>Hey Gene,
>
>Maybe Halliday and Resnick in fact _avoided_ becoming "past their prime"
>when they adapted their point of view to the one which now prevails.

It isn't a matter of "point of view." This isn't politics or an
opinion poll, and it isn't psychology or sociology, and it isn't
freshman literature. It's a matter of facts--of standards and
definitions. The fact is that pounds are units of mass, and that
pounds force also exist (a recent bastardization, of course).

Their 1981 Appendix misstates those facts. That's it, plain and
simple.

Now prevails? I issue you the same challenge I issued to our
Metrologist:

Show me an official definition of a pound force on the NIST pages.
Bet you can't do so. Note that a conditional definition, with a big
"if", indicating that this is only one possible acceptable definition,
is not sufficient--I want an official definition.

If you can't do that, try a broader problem: Show me an official
definition of a pound as a unit of force from ANY law of ANY country
in the world, or from ANY standard of ANY national or international
standards organization, or from ANY standard of ANY professional
organization.

Halliday and Resnick were right on top of things in 1960, already
aware of the change of definition that had taken place only 1 July of
the previous year, effective immediately on its publication. If you
haven't read what the National Bureau of Standards said in that
announcement, take the time now to do so (partial excerpt below).
http://www.ngs.noaa.gov/PUBS_LIB/FedRegister/FRdoc59-5442.pdf
http://gssp.wva.net/html.common/refine.pdf

Announcement. Effective July 1, 1959, all calibrations in
the U.S. customary system of weights and measures carried

out by the National Bureau of Standards will continue to be
based upon metric measurement standards and except for
the U.S. Coast and Geodetic Survey as noted below, will be
made in terms of the following exact equivalences and
appropriate multiples and submultiples:
1 yard = 0.9144 meter
1 pound (avoirdupois) = 0.453 592 37 kilogram

Currently, the units defined by these same equivalences,
which have been designated as the International Yard and
the International Pound, respectively, will be used by the
National Standards Laboratories of Australia, Canada, New
Zealand, South Africa, and United Kingdom; thus there will
be brought about international accord on the yard and
pound by the English-speaking nations of the world, in
precise measurements involving these basic units.

Now, perhaps you think something changed between 1960 and 1981 when the revised Halliday & Resnick came out. What would that have been? Some change in the law? In the standards kept by the National Bureau of Standards (later replaced by NIST)? Show me some justification for a change, some change in facts, that would justify a different "point of view" as you put it.

Or were Halliday and Resnick just terribly prescient, and they foresaw some change that took place between 1981 and today? If so, tell us exactly what that change was.

Or maybe you think that the 1959 redefinition is just some sort of "legal definition" and that in the sciences we have some other "real definition" that we go by. Is that your position? No problem if it is, but if that is indeed what you are claiming, please fill us in on a few followup questions:

1. What is the nature of the standard for a pound in its "scientific definition"? Is it something mechanical, something electrical, or what?

2. Who declared whatever the standard is to be the standard? NIST? U.S. Congress? ISO? BIPM? The First International Extraordinary Hydrographic Conference (they are the ones who defined the standard for the international nautical mile)? Some other entity?

3. When was it made the standard? Just the year will do.

4. To whom does the standard apply? In other words, for whom does the defining agency have the authority to make the standards?

5. Along the same lines, if this is a "scientific definition" which differs from the "legal definition," what is its scope? What is "in science"? Does it include Halliday and Resnick's definition of a Btu, and their use of units of Btu/(lb ï¿½F) for specific heat capacity? Same for Sears and Zemansky, the textbook cited by the Peacekeeper

Engineer?

6. What is the exact relationship between pounds force and the metric units, or the relationship to the greatest precision in which it can be expressed if it is not exact?

7. Even if all this were true, would it mean that the pound is a unit of mass? Is there some rule that says that textbook authors are allowed to bury their heads in the sand, and ignore the real world which does in fact use the definition agreed on by those six national standards laboratories of some of the most advanced nations in the world in 1959?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1648. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 22:20:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9ac9nvc9khnj1i90pr32rglf8l3jjc26g5@4ax.com>
Source record: 107514

On Fri, 26 Sep 2003 20:45:27 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>Not only did I prove Mr. Metrologist wrong, but I also proved that he
>has no integrity.

Hi Gene,

And yet this does not seem to satisfy you. ;-)

No doubt this is product of an insecure basis in logic that is more
heartfelt than intuitive (despite the cut-and-paste philosophies).

A historical lesson is brought to bear by the publisher of Newton's
Principia:
21 Nov. 1667
"I out and took coach and to Arundell house, where the meeting
of Gresham College was broke up; but there meeting Creed, I
with him to the tavern in St. Clements churchyard, where
was Deane Wilkins, Dr. Whistler, Dr. Floyd, a divine, admitted,
I perceive, this day, and other brave men. Among the rest, they
discourse of a man that is a little frantic (that hath been a kind
of minister, Dr, Wilkins saying that he hath read for him in his
church) that is poor and a debauched man, that the College have
hired for 20s. to have some of the blood of a Sheep let into his
body; and it is to be done Saturday next. They purpose to let in
about twelve ounces, which they compute is what will be let in in
a minutes time by a watch. They differ in the opinion they have
of the effects of it..."

30 Nov. 1667
"I was pleased to the see the person who had his blood taken
out. He speaks well, and did this day give the Society a relation
thereof in Latin, saying he finds himself much better since, and
as a new man. But he is cracked a little in his head, though he
speaks very reasonably and very well, He had but 20s. for his
suffering it, and is to have the same tried upon him..."

As I offered elsewhere; there are many in my fan club who's minds I
cannot change. For such trivial matters as yours, I am afraid you
have to go to the end of that line, and leave room for others of
substance ahead of you.

73's
Richard Clark, KB7QHC

1649. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 22:27:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p3f9nvsa2uceej4nah4r4invas1cvmacv7@4ax.com>
Source record: 107515

On Fri, 26 Sep 2003 22:20:17 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

> But he is cracked a little in his head, though he
> speaks very reasonably and very well

Hi Gene,

Knowing you need references (a classic education would have exposed
this to you and it would have served no purpose to cite) Samuel Pepys.

73's
Richard Clark, KB7QHC

1650. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 22:44:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F74C139.774BCEB1@uci.edu>
Source record: 107516

Gene Nygaard wrote:
> Now, perhaps you think something changed between 1960 and 1981 when
> the revised Halliday & Resnick came out.

Hi Gene,
You'll be surprised to learn that a lot has changed since 1960.

> Show me some justification for
> a change, some change in facts, that would justify a different "point
> of view" as you put it.

Since it's apparent that you have no need to change your point of view,
I find that I likewise have no need to change your point of view.

Why do you think torque wrenches have the unit 'foot-pounds' printed on
them if the pound is a unit of mass?

> 2. Who declared whatever the standard is to be the standard?

I don't know, but I guess they should have spoken to you about it
first. ;-)

> 4. To whom does the standard apply?

It applies to everyone except the people who apparently don't want it to
apply to them. :-)

> 6. What is the exact relationship between pounds force and the metric
> units, or the relationship to the greatest precision in which it can
> be expressed if it is not exact?

It's not like it's a big secret or anything.

> 7. Even if all this were true, would it mean that the pound is a unit
> of mass?

The pound is generally accepted to be a unit of force. Otherewise,
they'd have to get rid of all the PSI pressure gauges.

> Is there some rule that says that textbook authors are
> allowed to bury their heads in the sand, and ignore the real world
> which does in fact use the definition agreed on by those six national
> standards laboratories of some of the most advanced nations in the
> world in 1959?

It really wouldn't hurt you to pick up a (modern) physics book and just
look at it some time. Or maybe you're of the opinion that all modern
physics books are wrong?

But here's a question: if one pound of mass weighs one pound and exerts one pound of force, given F = MA, what are the units of A (little g)? Or, would you claim one pound of mass actually weighs 32.17 pounds?

73, Jim AC6XG

1651. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-26 23:35:11 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <0ci9nvo5gf1ah0s32doru9r07ihopbnjm2@4ax.com>
Source record: 107517

On Fri, 26 Sep 2003 15:44:09 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Gene Nygaard wrote:
>> Now, perhaps you think something changed between 1960 and 1981 when
>> the revised Halliday & Resnick came out.
>
>Hi Gene,
>You'll be surprised to learn that a lot has changed since 1960.
>
>> Show me some justification for
>> a change, some change in facts, that would justify a different "point
>> of view" as you put it.
>
>Since it's apparent that you have no need to change your point of view,
>I find that I likewise have no need to change your point of view.
>
>Why do you think torque wrenches have the unit 'foot-pounds' printed on
>them if the pound is a unit of mass?

Mine also has "meter kilograms" on it. What does that tell you?

Note that I've said all along that pounds force exist as well. I've
just been attacking the idiots who claim that pounds are never units
of mass.

>> 2. Who declared whatever the standard is to be the standard?
>
>I don't know, but I guess they should have spoken to you about it
>first. ;-)

Did anybody do so?

Missed that part, didn't you!

>> 4. To whom does the standard apply?
>
>It applies to everyone except the people who apparently don't want it to
>apply to them. :-)
>
>> 6. What is the exact relationship between pounds force and the metric
>> units, or the relationship to the greatest precision in which it can
>> be expressed if it is not exact?
>
>It's not like it's a big secret or anything.
>

>> 7. Even if all this were true, would it mean that the pound is a unit
>> of mass?
>
>The pound is generally accepted to be a unit of force. Otherewise,
>they'd have to get rid of all the PSI pressure gauges.

And what about Btu's? Specific heat capacities in Btu/(lb ï¿½F)?

>> Is there some rule that says that textbook authors are
>> allowed to bury their heads in the sand, and ignore the real world
>> which does in fact use the definition agreed on by those six national
>> standards laboratories of some of the most advanced nations in the
>> world in 1959?
>
>It really wouldn't hurt you to pick up a (modern) physics book and just
>look at it some time. Or maybe you're of the opinion that all modern
>physics books are wrong?
>
>But here's a question: if one pound of mass weighs one pound and exerts
>one pound of force, given F = MA,

There's your error, a faulty premise.

All we really know is that force is proportional to mass times
acceleration. One way we can express this is F = kï¿½mï¿½a. Yes, we can
choose our units so that the proportionality constant is one, but we
don't have to do so. In any case, the k, whether it is 1 or some
other number, is always the same for a particular choice of units for
those three quantities.

Also, when we do choose our units that way, we have several different
ways we can do so using English units, as well as several ways we can
do so using metric units (only one of which is SI, the modern metric
system).

>what are the units of A (little g)?
>Or, would you claim one pound of mass actually weighs 32.17 pounds?

A pound of mass at sea level on Earth exerts a force of 32.088
poundals and 32.258 poundals (not pounds force). It will exert a
force of something like 32.024 poundals atop Mt. Chimborazo, the
highest mountain on Earth (at least in both ways relevant to this
example). It exerts a force of somewhere between 0.9973 lbf and
1.0026 lbf at sea level.

--
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/
"It's not the things you don't know
what gets you into trouble.

"It's the things you do know
that just ain't so."

Will Rogers

1652. Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 00:28:36 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <q2m9nv48iedbqkecjsif6bthgg2cf1nngi@4ax.com>
Source record: 107518

After reading http://www.cebik.com/fdim/fdim8.html and coming to the conclusion I may never get my random wire up high enough for any real DX, I am looking to sloper and TTFD. I can install either of these facing eastward toward Europe quite easily with a top height of 30 feet or better.

I can barely get my random wire 3 feet off the ground. Unless I run it off the roof like a sloper.

Noise reduction is right up there with signal strength on my priority list. My house has a metal roof I am thinking anything up above them might help sheild the antennas from household noise.

Any thoughts about one antenna over the other?

mike

1653. Re: 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 03:01:19 UTC
From: N4LQ <N4LQ@igLou.com>
Message-ID: <3f74fdbd$1_1@news.iglou.com>
Source record: 107419

For some reason you never see 30m dipoles in parallel with the rest. I always suspected there must be a reason. Wonder what impedance 7 mhz would see on a 10.1 mhz dipole?

--
Steve Ellington N4LQ.
"W4UDX" <w4udx.nospam@juno.com> wrote in message news:%cMcb.23637$iO.8753@bignews5.bellsouth.net...
> Hi guys.
> Quick question. I have in the past made 80 and 40 meter multiband dipoles
> using parallel wires and they worked fine with little 80/40 interaction. My
> question is, can a make one with a set of wires on it for 30M also? or will
> the 40M and 30M parallel wires interact too much?
>
> Mark W4UDX
>
>

1654. Re: For the electrical engineers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 03:17:02 UTC
From: Rob Judd <judd@ob-wan.com>
Message-ID: <3F75012E.24C31505@ob-wan.com>
Source record: 107423
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,alt.ham-radio.mods,rec.radio.amateur.equipment

Gads, another elitist twonk.

Jason Hsu wrote:
>
> Come join Electrical Engineering Hams at
> http://groups.yahoo.com/group/eeham/
>
> There are more electrical engineering forums than you can shake a
> stick at. There are more ham radio forums than you can shake a stick
> at. But until now, there have been NO forums dedicated to people who
> are both electrical engineers AND ham radio operators. You can think
> of Electrical Engineering Hams as the unofficial IEEE Amateur Radio
> Society. (No, it has NO offical status whatsoever!)
>
> Jason Hsu, AG4DG
> usenet@@@@jasonhsu.com

1655. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 03:23:14 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <dov9nvgh4p3h7d7fuqk7bp2ofm1albl6kh@4ax.com>
Source record: 107420

On Sat, 27 Sep 2003 00:28:36 GMT, mike <intotheapex@yahoo.com> wrote:

>After reading http://www.cebik.com/fdim/fdim8.html and coming to the
>conclusion I may never get my random wire up high enough for any real
>DX, I am looking to sloper and TTFD. I can install either of these
>facing eastward toward Europe quite easily with a top height of 30
>feet or better.
>
>I can barely get my random wire 3 feet off the ground. Unless I run it
>off the roof like a sloper.

When it comes to wire antennas the sloper works pretty well.
I've run a pair of half wave, center fed slopers on 75 (W2AU balun).
They are identical antennas so naturally they tune differently....
(Surrounding objects) The upper ends are close to 90 feet and the
angles are close to 45 degrees. A half sloper would take ... about
half the space, or about 45 feet and it sounds as if that is within
your requirements.

I have one To the NE for Europe and one to the SW, although the one to
the SW is coming down. BTW, into Europe I usually show about 2
S-units difference between the two antennas. It does vary, but the
least I've seen has been one S-unit.

4 nights ago I worked EA3JE in Barcelona (after the sun was up
there...bout 0600Z) on 3.791 with 5/8 reports in both directions.
A half hour earlier he was something like 20 over 9.
>
>Noise reduction is right up there with signal strength on my priority
>list. My house has a metal roof I am thinking anything up above them
>might help sheild the antennas from household noise.

Metal roofs may not be the best unless the sheets are bonded and
grounded...then again like any noise generator; they may not bother at
all. I have very little problem with noise except for an electric
fence about a 1/4 mile to the SW and another about a half mile to the
East. Most of the time, at least on the lower frequencies
atmospherics (QRN) is far stronger than most anything else.

Now I'm working to either put up a couple of half slopers on 160, a
fan dipole, and inverted L or shunt feed the tower

>
>Any thoughts about one antenna over the other?

You really need to give a bit more information, but for me, I prefer
the sloper, or half sloper...IF you have the room and the height...A

lot depends on which band(s). Done right the tower can act as a
reflector for a "little" bit of gain.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>mike

1656. Re: hy-gain AV-640

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 03:50:33 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <hm0anv0a52vu1lk7795n05as9la3a9f50u@4ax.com>
Source record: 107421

On Fri, 26 Sep 2003 00:58:45 GMT, Roger Halstead
<newsgroup@rogerhalstead.com> wrote:

>On Thu, 25 Sep 2003 19:52:25 +0200, "Pjotr" <pvlispam@xs4all.nl>
>wrote:
>
>>Hi,
>>
>>Any one good or bad experience with the Hy-Gain AV640? What about the
>>mechanical construction?
>>
>I *just* came in from setting one up on an 8' support to check the
>settings.
>
>My impressions:
>
>It is well constructed and rugged. The aluminum tubing is of a heaver
>stock than any I've seen so far in multi band verticals. It is
>sturdy. You can support it horizontally from one end with no more
>droop than the much shorter elements on a triband beam.
>
A bit more information:...

No, I've not been out working DX like crazy with it, but I have
finished tuning, listening, and have made a few observations:

As I mentioned in the prior post the SWR looked good on all bands, but
I wanted to get a bit more bandwidth out of 20 and 40. Actually 40
looked good, but it was basically 1:1 at the band edge so I figured I
could shorten it a tad and raise the upper frequency limit.

I think I mentioned that the 40 meter sloper ran within 4 or 5 feet of
the top and just to the south of the AV640.

At any rate, my wife Joyce (N8JBW) came out and helped me take the
vertical off the temporary mount so I could adjust the length of the
radiator for 40 and prune one inch off one of the top hat wires for
20.

Both had the desired effect, but when I dropped the 40 meter sloper
for a check the band width on 40 narrowed a bit. I now have from the
bottom band edge to about 7.175 between the 2:1 points. On 20 I now
have the entire band between the 2:1 points.

So, now I'm waiting to get the rest of the bare #2 copper for the
ground system...The 32 foot tower at the end of the shop is not

grounded. I want to add two 50 foot runs with 4 8' ground rods and tie the end of the one run into the ground system for the big tower. I also need to put in a ground rod right outside the wall from the station in the shop and then ties that into the big ground system as well. I currently have about 400 feet of bare #2 wire cad welded to 20 ground rods. I'll be adding about 175 feet more #2 wire and 6 more ground rods. I use a piece of 3/4 inch thin wall conduit as a hydraulic drill. Go in 8 1/2 feet, and then just drop the ground rod in. Dig away from the top a bit and then cad weld the wire and rod together. (I'd sure hate to have to remove all that ground wire and ground rods.)

Then it's install a good 144/440 duo band vertical on top of the shop using a small tripod.

I also need to add a 2" steel conduit run from the rigs in the shop, up over the small garage door, back down along the edge of the wall, around the corner and about half way across the west end before going through the wall to the tower.

I have lots of work left before cold weather too. I need to get all the cables "inside" the big tower, and install an inverted-L, half slopers, or shunt feed the tower for 160.

To top it off, the center support on the 6-meter yagi has come off and I have to let the whole works down to the top of the tower. That requires about a half day tower climb and a lot of work with a come along. In addition I have to remove the rotor from the tower so I can lower the mast down through so I can work on the antennas.

As long as I have to go that far, I'm going to replace the LMR flexible pig tails from the antennas to the top of the tower.

Ohhhh...yah....I have to finish the cat 5 cable run from the shop to the computer room and router. Right now there is a 130 foot run of cat 5 running out a basement window and laying on the ground all the way to the shop.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1657. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 04:15:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7510d2_3@corp.newsgroups.com>
Source record: 107422

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>>For lossless transmission lines, |rho| = Sqrt(Pref/Pfwd). You don't
>>even need to know the load and/or source impedances.
>
> How did you get a -1 out of your |rho|?

I probably should have said rho^2 = Pref/Pfwd. When Pref = Pfwd,
rho can be plus or minus one. I used |rho| to indicate a magnitude,
sans phase angle, not an absolute value.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1658. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 04:26:17 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309262026.49b79e4b@posting.google.com>
Source record: 107424

Jim Kelley <jwkelley@uci.edu> wrote in message news:<3F737917.929D1324@uci.edu>...
> Ur right, thanks Dave. I meant to say voltage rather than power. Let
> me ask the question properly.
>
> Tom,
> Since rho represents the fraction of forward voltage that is reflected,
> what does a negative value for rho indicate?
>
Jim,

I suppose your question has been answered sufficiently (Thanks, Roy,
Cecil and Tam), but I'd like to offer a bit different viewpoint than
is implied by your "fraction that is reflected."

I prefer to think of it not as "a fraction that's reflected" but
rather as a resolution of a particular voltage and current into two
modes. There are two modes of propagation supported by TEM line, one
in each direction along the line. If you excite a line to
steady-state at one frequency, there will be some sinusoidal current
at each point along the line, and some sinusoidal voltage across the
line at each point along its length. (You can have a load at one end
and a source at the other, or two sources each with its own internal
impedance, one at each end, so long as they are on the same
frequency.) That set of voltages and currents can be resolved
mathematically into two components, one corresponding to the mode of
propagation in one direction and one corresponding to the mode in the
other direction. Rho is simply a number representing that resolution
at the point on the line where that rho is measured (or calculated).
It's a complex number because it represents both phase and amplitude.

(Note that our resolution of measured voltage and current into the two
modes generally assumes that we know the line's Zo, and the degree to
which we don't know that will introduce an error in our determination
of rho. But that's a whole 'nuther topic...)

Cheers,
Tom

1659. Re: 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 11:05:54 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <lhranvsda79c2vl59bsc9kht55frguache@4ax.com>
Source record: 107425

On Fri, 26 Sep 2003 23:01:19 -0400, "N4LQ" <N4LQ@igLou.com> wrote:

>For some reason you never see 30m dipoles in parallel with the rest. I
>always suspected there must be a reason. Wonder what impedance 7 mhz would
>see on a 10.1 mhz dipole?

The reason why is that 3.5 Mhz and 10.1 interact somewhat the 3rd
harmonic of 3.5 is 10.5 close enough to give tuning problems. at
least that is what i've found here.. you can minimize the interaction
by placing the 10.1 mhz element at Right angles to the 3.5 mhz
element.. and it may take careful tuning of both bands to get it
acceptible.

73 Dave Kc1di

1660. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 11:48:24 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <cOedb.597735$Ho3.115677@sccrnsc03>
Source record: 107426

I am 240 pounds 'mass' on earth. That's a fact.

I am 240 pounds 'mass' on moon. That's a weird assertion!

If that assertion is true, who changed the density of the moon??

1661. Test Post, don't bother reading.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 13:51:02 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <aBgdb.24070$ai7.22995@newsread1.news.atl.earthlink.net>
Source record: 107427

Sorry... This is just a test post, don't bother reading.

--
Peter K1PO
Indialantic By-the-Sea, FL
[via arrl relay]

1662. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 14:56:34 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309270656.65d61d3b@posting.google.com>
Source record: 107428

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message news:<3f747ddc_2@127.0.0.1>...
...
> Wouldn't
> a rho of 0.5 at 20 degrees would be the same as a rho of
> -0.5 at 200 degrees?

Yes, and any other complex quantity would likewise be the same
expressed either way. But it would certainly be confusing to the
readers. It would be much better to stick with rectangular or with
polar and not mix them in the same quantity. Of course, sometimes one
is easier to work with, or offers more insight, than the other and
you're welcome to convert between them at any time.

Let's see if we can keep it more along the lines of 0.5 at 20 degrees
being (very nearly) the same as .4698+j.1710

Cheers,
Tom

1663. shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 15:05:06 UTC
From: Jerry <jerryaa@fbx.com>
Message-ID: <3f75a719@news.lh.net>
Source record: 107429

October's QST has an article "Designing a Shortened Antenna" pp 28-32. It gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole length of the half-sized dipole [p30 "a second example"] is 10.61 meters. This is 20 feet off ground using #12 wire. The formulas give a solution of XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from each leg.

I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007 khz gives impedance =11.33 - j 881.2 ohms.

If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg of the dipole, rather than +j1776?

--
Jerry

1664. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 17:02:02 UTC
From: richardharrison@webtv.net
Message-ID: <10189-3F75C28A-41@storefull-2318.public.lawson.webtv.net>
Source record: 107430

Dave Shrader wrote:
"If that assertion (I am 240 pounds "mass" on earth. That`s a fact. I am 240 pounds "mass" on moon. That`s a weird assertion!) is true, who changed te density of the moon??"

Mass is the bulk of matter though not necessarily equal to its weight. A mass weighing 240 pounds on earth weighs less on the moon because there is less mutual attraction between the moon, of much smaller mass than the earth`s mass, and the object which weighs 240 pounds on the earth.

Mass is the property which provides a body with inertia. Mass is the mechanical analogy of inductance. Mass is equal to the weight of a body divided by the acceleration due from gravity (32ft./sec./sec.). This is an expression of Newton`s 2nd law of motion: F = MA, thus M = F/A.

Newton`s 1st law says that to move a body at rest, enough force must be applied to overcome its inertia.

Newton`s 3rd law says that for every action there is an equal and opposite reaction.

The gravitational force of the earth is stated as "1". The gravitational force on the moon is about 0.16 that on earth, so an object weighing 240 pounds on earth would weigh only 38.4 pounds on the moon.

Best regards, Richard Harrison, KB5WZI

1665. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 17:24:39 UTC
From: Eskay <sieb_kNOS@PAMyahoo.ca>
Message-ID: <dGjdb.79922$PD3.4799281@nnrp1.uunet.ca>
Source record: 107431

Jerry wrote:
> October's QST has an article "Designing a Shortened Antenna" pp 28-32. It
> gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole
> length of the half-sized dipole [p30 "a second example"] is 10.61 meters.
> This is 20 feet off ground using #12 wire. The formulas give a solution of
> XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from each
> leg.
>
>
> I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007 khz
> gives impedance =11.33 - j 881.2 ohms.
>
> If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg of
> the dipole, rather than +j1776?
>
Get a copy of VE3ERP's Hamcalc,it includes a program that lets you set
the total length and "slide" the loading coil anywhere inside that length..
Hamcalc is available on the CQ magazine website.
73 de VE3JUA....

1666. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 18:18:02 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <rckbnvscpd0rrgd62i5akhj9kqid8duc47@4ax.com>
Source record: 107432

On Sat, 27 Sep 2003 11:48:24 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>I am 240 pounds 'mass' on earth. That's a fact.
No, in the US system of measurement your mass is measured in slugs.
your weigh is measured in pounds and is 240# on earth

In the metric system mass is in kg. Again the metric system is easier.
240#=109.091 kg
>
>I am 240 pounds 'mass' on moon. That's a weird assertion!

Your mass is still the same (109.091 kg), but your weight is
considerably less on the moon.

>
>If that assertion is true, who changed the density of the moon??
>
It has nothing to do with the assertion, but the mass of the moon is
less than the mass of the earth.

The mass of you and the earth sets what you weight on earth.
Your mass and the mass of the moon set what you weigh on the moon. The
mass of the moon is much less than that of earth so you weight much
less on the moon.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1667. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 19:18:26 UTC
From: Bob Walker <N4CU@AMSAT.ORG>
Message-ID: <6oldb.599411$YN5.441352@sccrnsc01>
Source record: 107433

Jerry,
I tried an EZNEC simulation also and did not have the same results. I got
74 ohms at 1912 ohms inductive reactive. I resonated the simulated antenna
with 28 uH, getting an SWR of 2:1
I will send my simulation to you. Please send me yours as we are not getting
the same thing from the QST numbers.
Bob, N4CU@AMSAT.ORG

1668. RF chokes and baluns: black magic or experimentation?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:14:06 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86oex6yooh.fsf@duchess.twilley.org>
Source record: 107434

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

It's a good weekend for home improvement, so I thought I'd tune my
antennas and replace my coax with longer runs to suit where I'd like
to place my station. I figured now was a good time to build in an RF
choke in an attempt to remove interference and hopefully be able to
receive HF, but there are no online resources with formulas or
anything. I was hoping for something like the innumerable dipole
calculators out there -- something where I could input a frequency and
a diameter, then select a type of coax, and hit a button to find out
how many turns.

Most online references are very vague, so I'm just going to
experiment. I was hoping, though, that someone could direct me to a
useful reference. I have an PDF of an old QST article which says that
W7EL has a table in the Antenna Handbook. A friend of mine has a copy
of the Antenna Handbook, but she may have lost it in the move.

Any suggestions? Right now, I'm going to experiment with different
values and see what I can discover, but it can't hurt to hear about
what others have done.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/de+TGPFSfAB/ezgRAk2IAJ9Aanda0CutUlFZlIvY+3ZTmD+fsACgsXdu
Cg8I9KSeVlmvo+QNs7pmaKg=
=mHAv
-----END PGP SIGNATURE-----
```

1669. Re: RF chokes and baluns: black magic or experimentation?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:29:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4isbnv0fph1k5afaobb6c8j7lh9nhli1je@4ax.com>
Source record: 107435

On Sat, 27 Sep 2003 13:14:06 -0700, Jack Twilley
<jmt+usenet@twilley.org> wrote:

>
>Most online references are very vague, so I'm just going to
>experiment. I was hoping, though, that someone could direct me to a
>useful reference. I have an PDF of an old QST article which says that
>W7EL has a table in the Antenna Handbook. A friend of mine has a copy
>of the Antenna Handbook, but she may have lost it in the move.
>
>Any suggestions? Right now, I'm going to experiment with different
>values and see what I can discover, but it can't hurt to hear about
>what others have done.
>
>Jack.

Hi Jack,

Do an advanced search in Google for this newsgroup using the keywords
Choke, and W7EL which would bring up a several dozen hits easily and
at least a couple could fill in the gaps with that table.

73's
Richard Clark, KB7QHC

1670. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:38:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o6tbnvg06d909j8h5pnaurmsnn2jt66qdk@4ax.com>
Source record: 107436

On Sat, 27 Sep 2003 10:05:06 -0500, "Jerry" <jerryaa@fbx.com> wrote:

>
>I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007 khz
>gives impedance =11.33 - j 881.2 ohms.
>
> If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg of
>the dipole, rather than +j1776?
>
>--
>Jerry

Hi Jerry,

I can confirm your first pass analysis is close enough (probably
differs only by wire gauge from mine).

I would suggest you simply add the loads you speculate and find out
for yourself, which is, after all, the point of modeling.

73's
Richard Clark, KB7QHC

1671. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:39:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rusbnv8gautvt0ncc32absmc33gfne71uo@4ax.com>
Source record: 107437

On Sat, 27 Sep 2003 19:18:26 GMT, "Bob Walker" <N4CU@AMSAT.ORG> wrote:

>Jerry,
>I tried an EZNEC simulation also and did not have the same results. I got
>74 ohms at 1912 ohms inductive reactive. I resonated the simulated antenna
>with 28 uH, getting an SWR of 2:1
>I will send my simulation to you. Please send me yours as we are not getting
>the same thing from the QST numbers.
>Bob, N4CU@AMSAT.ORG
>

Hi Bob,

For a 40M dipole (short or long) that is only 20' off the ground?

73's
Richard Clark, KB7QHC

1672. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:41:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vdtbnv4oalr8ch6nraa9t2jea2pqhhjldv@4ax.com>
Source record: 107438

On Sat, 27 Sep 2003 00:28:36 GMT, mike <intotheapex@yahoo.com> wrote:

>I can barely get my random wire 3 feet off the ground. Unless I run it
>off the roof like a sloper.
>
>Noise reduction is right up there with signal strength on my priority
>list. My house has a metal roof I am thinking anything up above them
>might help sheild the antennas from household noise.
>
>Any thoughts about one antenna over the other?
>
>mike

Hi Mike,

A metal roof? Make it one half of the antenna, the other half driving
straight for ground.

73's
Richard Clark, KB7QHC

1673. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 20:53:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2jtbnvk28ltd1dppfq6pu2bmfdk89kinro@4ax.com>
Source record: 107439

On Fri, 26 Sep 2003 23:15:44 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.org> wrote:
>>>For lossless transmission lines, |rho| = Sqrt(Pref/Pfwd). You don't
>>>even need to know the load and/or source impedances.
>>
>> How did you get a -1 out of your |rho|?
>
>I probably should have said rho^2 = Pref/Pfwd. When Pref = Pfwd,
>rho can be plus or minus one. I used |rho| to indicate a magnitude,
>sans phase angle, not an absolute value.

Hi Cecil,

You obviously don't respect/know the difference between a dependant
variable (rho) and independent variables (P).

Rho is a dependency of the interface, not a translatable value you are
forcing illogic to perform. You really need to ride your bike to the
library more and offer these poor examples less. Since Rho is the
dependant variable, even squared (for you to force a -1 into this
charade) requires a concurrent observance of a negative in the right
hand side (negative power - perhaps if you were in a black hole).

The long and short of it is that this confirms Jim's observance of
your forced math serving your canards rather than logic. Oh, and
please stop offering and polluting Chipman as a resource when you've
only copied one page.

73's
Richard Clark, KB7QHC

1674. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 21:22:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f760172_2@corp.newsgroups.com>
Source record: 107440

Jerry wrote:
> October's QST has an article "Designing a Shortened Antenna" pp 28-32. It
> gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole
> length of the half-sized dipole [p30 "a second example"] is 10.61 meters.
> This is 20 feet off ground using #12 wire. The formulas give a solution of
> XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from each
> leg.
>
> I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007 khz
> gives impedance =11.33 - j 881.2 ohms.
>
> If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg of
> the dipole, rather than +j1776?

Yes, if you were going to put the loading coils at the center of the antenna.
That is akin to a base-loaded mobile antenna. But you are going to put the
coils in the center of each leg. That is akin to a center-loaded mobile
antenna and that requires about double the inductive reactance that a base-
loading coil requires.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1675. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 21:34:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f760456$1_2@corp.newsgroups.com>
Source record: 107441

Richard Clark wrote:
> Since Rho is the
> dependant variable, even squared (for you to force a -1 into this
> charade) requires a concurrent observance of a negative in the right
> hand side (negative power - perhaps if you were in a black hole).

You seem to have forgotten some junior high math, Richard. There is no requirement for a negative anywhere in order for the square root of a number to be negative. The square root of 100W/100W has two values, plus or minus one, and sure enough, an open or a short will cause 100% reflection.

BTW, I copied that page in Chipman with which you are having such a problem and I don't see the problem you described. Absolutely nothing said about reflections from the source. In fact, the source has the same impedance as the transmission line so there are no reflections from the source.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1676. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 21:57:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2h1cnvs9e5vo2oqqqm82fhoc5t92aj9vs7@4ax.com>
Source record: 107442

On Sat, 27 Sep 2003 16:34:43 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> Since Rho is the
>> dependant variable, even squared (for you to force a -1 into this
>> charade) requires a concurrent observance of a negative in the right
>> hand side (negative power - perhaps if you were in a black hole).
>
>You seem to have forgotten some junior high math, Richard. There is
>no requirement for a negative anywhere in order for the square root
>of a number to be negative. The square root of 100W/100W has two
>values, plus or minus one, and sure enough, an open or a short will
>cause 100% reflection.

Hi Cecil,

If neither powers are negative, the square root of them cannot
possibly enclose a negative. There is no possibility of Rho being
negative by your description. You should start biking to junior high.

>
>BTW, I copied that page in Chipman with which you are having such a
>problem and I don't see the problem you described.

My problem? Quote me rather than give me your tarted up remembrance
of what I said. Clearly your head cold cannot answer for such
consistently unreliable correspondence.

>Absolutely nothing
>said about reflections from the source. In fact, the source has the
>same impedance as the transmission line so there are no reflections
>from the source.

Duh!

Cecil, You are going to run your bike's mileage warrantee out by
pedalling to the library for one page copies at a time. Why don't you
spend a couple hours there and read it instead?

73's
Richard Clark, KB7QHC

1677. Name That Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-27 23:26:10 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <l0pdb.28546$Ms2.2526@fed1read03>
Source record: 107443

Spotted this on the rec.radio.shortwave NG's
Interesting configuration, so thought I'd post it here for comments.
From Spurious Noise

Respond to group and Michael below

"Michael" <md1966@optonline.net> wrote in message
news:QGodb.27307$XF.26998189@news4.srv.hcvlny.cv.net...

Hiya...

One of my two antennas is a home brew 200 ft random wire antenna. It's well grounded and also makes use of a coax feed and an ICE-180 matching transformer. Most importantly, it's set up and folded more like a piece of modern art rather then an antenna :-). I've had a number of DX'ing friends over here to check out my R-75 rig and my antennas. A number of times, we have also had them bring their rigs over here, including an R-8A and a Kenwood R-5000. We did some side by side comparisons between radios to see what was the best DX'ing rig. Although we didn't come up with a definitive answer about what rig was best, we've decided that for reasons unknown, my 200ft "FRANKENSTEIN" random wire antenna was by far the best DX'in antenna that any of us have used. Still, I have no idea of what the thing is. I just strung the thing up.. LOL.

Here is a link to the part on my DX'ing page that has comprehensive info on "FRANKENSTEIN" including diagrams.

http://md_dxing.tripod.com/hobbyandhowto/id5.html

Does anyone know what the heck this thing is ??? How would you classify this antenna besides being a work of modern art ??? LOL. There has got to be a reason behind it's performance.

Any input would be appreciate.

In short.. What the heck is it ???

--
Respectfully,

Michael

Home Page: http://md_dxing.tripod.com/
Northern NJ
R75 w/DSP, Kiwa agc/sync & audio mods
G5RV & 200ft longwire w/ICE-180
MFJ-1048 preselector

SoundBlstr Live PC card w/five piece Cambridge
speakers & full software mixer/eq.

1678. Re: Name That Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 00:15:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mn9cnv4vu144a8k9q3bmt0k3ahvqoie0ap@4ax.com>
Source record: 107444

On Sat, 27 Sep 2003 16:26:10 -0700, "Spurious Noise" <HDA@zilch.com>
wrote:

>"FRANKENSTEIN" including diagrams.
>
>http://md_dxing.tripod.com/hobbyandhowto/id5.html
>
>Does anyone know what the heck this thing is ??? How would you classify
>this antenna besides being a work of modern art ??? LOL. There has got to
>be a reason behind it's performance.

That is called "anecdotal evidence."

>Any input would be appreciate.
>
>In short.. What the heck is it ???
>
>--
>Respectfully,
>
>Michael

Hi Michael,

It's a lot of wire that probably catches as many birds as DX. I am
surprised 30 or 40 turns around the chimney weren't added as a loading
coil. I also bet that 3/4ths of the wire could have been snipped off
to no more than 1dB (the hearing acuity of a pre-teen) difference.

73's
Richard Clark, KB7QHC

1679. Re: RF chokes and baluns: black magic or experimentation?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 00:16:11 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bl598b$6a2$1@sparta.btinternet.com>
Source record: 107445

To design self-resonant, single-layer chokes, starting with any length and any diameter and number of turns of wire or coax, download program SOLNOID3. This program will also estimate the temperature rise above ambient when a given RF voltage is applied across it. And a lot of other features.

To make a current/choke balun, such as may be fitted between a balanced line and a tuner, just wind 8 or 10 turns spaced turns of 18 or 20 gauge twin speaker cable around a 1.75" or 2" diameter ferrite ring. Use HF grade ferrite.

But best way to choke a coax feedline is to slide 10 or more ferrite hollow cylinders over it. Space them out if you like.

For easy design of 4-to-1 impedance ratio voltage-baluns, using speaker-type twin cable, download program TOROID.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

1680. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 00:23:32 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <5bacnvkm0s8d3c8h7ka33dt5vgha4hgre0@4ax.com>
Source record: 107446

On Sat, 27 Sep 2003 20:41:45 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Hi Mike,
>
>A metal roof? Make it one half of the antenna, the other half driving
>straight for ground.
>
>73's
>Richard Clark, KB7QHC

Thats a thought. But Wouldnt it be really noisy?
I also have a really big CB antenna up top too.
Hasnt been used in 15 years and would need to rewire it as the
hardline is tatered.

mike

1681. Re: Name That Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 00:26:40 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <enacnvog0dqmlcavui62nt9qcj15cej8su@4ax.com>
Source record: 107447

On Sat, 27 Sep 2003 16:26:10 -0700, "Spurious Noise" <HDA@zilch.com>
wrote:

>Does anyone know what the heck this thing is ??? How would you classify
>this antenna besides being a work of modern art ??? LOL. There has got to
>be a reason behind it's performance.
>
>Any input would be appreciate.

It's pretty cool looking if you ask me;-)

mike

1682. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 00:33:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <akacnvorludcougjtfclrihohg0hphd75k@4ax.com>
Source record: 107448

On Sun, 28 Sep 2003 00:23:32 GMT, mike <intotheapex@yahoo.com> wrote:

>On Sat, 27 Sep 2003 20:41:45 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>
>>Hi Mike,
>>
>>A metal roof? Make it one half of the antenna, the other half driving
>>straight for ground.
>>
>>73's
>>Richard Clark, KB7QHC
>
>
>Thats a thought. But Wouldnt it be really noisy?
>I also have a really big CB antenna up top too.
>Hasnt been used in 15 years and would need to rewire it as the
>hardline is tatered.
>
>mike

Hi Mike,

Noisy? Only listening can tell. There is nothing terribly important about antennas except they be as high as possible and long in proportion to the longest wavelength (tenth wavelength would be bordering on pretty small, one wavelength bordering on getting large - notice there's a lot of latitude between). If you notice the presence or absence of the CB antenna, I would suspect you must have a mighty small roof.

No one ever stops at one design. You are the first example of that with your comment about two. No one stops at two either. If they did, they sure don't post here (and you, again, provide yet another example of that verity). The reason being is that you can't tell what you've done unless you can compare it (and it hardly pays to take someone else's word without testing ;-)

73's
Richard Clark, KB7QHC

1683. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 01:15:22 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bl5cna$gc3$1@hercules.btinternet.com>
Source record: 107449

For design of short coil-loaded centre-fed dipoles begin with a short loaded 1/4-wave vertical and, in-effect, connect a pair of them back to back.

Download programs VERTLOAD or LOADCOIL or ADDALOAD. For even shorter loaded dipoles download MIDLOAD. All these programs will tell you how may turns are needed on a former of given length and diameter at whatever position along the wire you chose to locate it.

In most cases the length of the coil is taken into account in the overall length.

When using the design of short-verticals to design short-dipoles the ground loss estimates can be assumed zero.

Some of these programs include assistance with bottom-end tuner design which, of course, is of no use when a pair is connected back to back. It should be remembered the feedpoint resistance of a short resonant dipole will be considerably less than the desirable 50 ohms and a poor match to a coax feedline will exist. But the mismatch may not be excessive.

The main disadvantage is single-band working whereas an unloaded short dipole can usually be effective on several bands by using a 450-ohm or 600-ohm feedline and a good tuner. But you will need a tuner with whatever length of dipole, loaded or unloaded, you end up with.

As for myself, when using short antennas, I prefer not to use heavy-weight loading coils in antenna wires but concentrate on keeping home-brew tuner losses to a minimum.

Programs can be downloaded in a few seconds and run immediately.

As were Bolton & Watt's condensing steam engines - Made in Birmingham.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

1684. Re: RF chokes and baluns: black magic or experimentation?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 01:19:41 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ogdcnv40uro8vg65009sm73jbvrenmugpk@4ax.com>
Source record: 107450

On Sat, 27 Sep 2003 20:29:50 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 27 Sep 2003 13:14:06 -0700, Jack Twilley
><jmt+usenet@twilley.org> wrote:
>
>>
>>Most online references are very vague, so I'm just going to
>>experiment. I was hoping, though, that someone could direct me to a
>>useful reference. I have an PDF of an old QST article which says that
>>W7EL has a table in the Antenna Handbook. A friend of mine has a copy
>>of the Antenna Handbook, but she may have lost it in the move.
>>
>>Any suggestions? Right now, I'm going to experiment with different
>>values and see what I can discover, but it can't hurt to hear about
>>what others have done.
>>
>>Jack.
>
>Hi Jack,
>
>Do an advanced search in Google for this newsgroup using the keywords
>Choke, and W7EL which would bring up a several dozen hits easily and
>at least a couple could fill in the gaps with that table.

The ARRL Handbook as well as the ARRL Antenna book also have
information on them.

The ones I've seen use roughly an 8 inch diameter coil with the turns
varying to suit the lowest frequency covered.

I know one of them has a rule of thumb for the number of turns and I
don't remember how many turns I've used in the past, but "I think" I
may have used about 6 or 8 turns for 20 meters. "As I recall" (please
note all the weasel words so don't take the numbers for specifics) It
takes about 40 feet of cable wound up in the 8 inch diameter coil for
160 meters.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>73's
>Richard Clark, KB7QHC

1685. Re: Important news For all webmaster,newsmaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 02:06:09 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <lmrdb.448121$Oz4.256434@rwcrnsc54>
Source record: 107451

Do you talk like that? Do people actually understand you?

<Wazo@that.bug.you.on.net.com> wrote in message
news:leqdb.82145$PD3.4801255@nnrp1.uunet.ca...
> To all webmaster,newsmaster
>
> To fight Copyright and illegal usagers of Newsgroups
> it's recommand to set all you News server to receive and send
> only 32 kbytes of article for all newsgroups (250 lines)
>
> Newsgrousp was use for Text , chit chat , permit to post more
> of 32 kbytes of article it's flood internet all around the world
> and groups team piracy have use usenet for long time
>
> Fight Piracy set your News Server to 32 kbytes (250 lines)
>
>
>
> Thanks
>
> Fight Piracy Team !
>
>
>
>
>

1686. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 02:46:47 UTC
From: gnygaard@nccray.com
Message-ID: <df336888.0309271846.65285449@posting.google.com>
Source record: 107452

Reposted because of server error, possible but unlikely that some get multiple copies.
<david.shrader@comcast.net> wrote:

>I am 240 pounds 'mass' on earth. That's a fact.
>
>I am 240 pounds 'mass' on moon. That's a weird assertion!

You've got me totally buffaloed now. I can't imagine what your problem is.

Sure, mass is an ambiguous word, with several different meanings. But there is only one of its meanings that is normally used with numbers to express a measurement of its magnitude.

>If that assertion is true, who changed the density of the moon??

What in the world would the density of the moon have to do with your mass?

It would be more understandable if you were having a hard time understanding the normal definitions for this particular context of the ambiguous word 'weight,' as it is quite properly and legitimately used for body weight of humans in medicine (including space medicine by NASA astronauts and doctors), and in sports, the normal reasons we weigh ourselves, and in the science of anthropology as well. Or as the word 'weight' is also used in zoology and veterinary medicine and paleontology for the weight of other animals as well as humans. Now certainly, in any of these contexts, this quantity will sometimes be referred to as 'mass' as well; that is also quite proper and legitimate.

My 'weight' is 230 pounds on earth. That's a fact.

My 'weight' would be 230 pounds on the earth's moon. That's also a fact.

Let's review what I've already posted in other messages in this thread, from ASTM

. . . thus, when one speaks of a person's weight,
the quantity referred to is mass. . . .

and from NIST

Thus the SI unit of the quantity weight used in this
sense is the kilogram (kg) and the verb "to weigh" means
"to determine the mass of" or "to have a mass of".

Examples: the child's weight is 23 kg

You know damn well that those kilograms are used for body weight all around the world, including most hospitals in the United States. They are indeed the proper SI units for this weight (which, as I pointed out above, is also sometimes called "mass" instead). Furthermore, as you've already seen many times over in the past few days, pounds are by definition exactly 0.45359237 kg.
http://www.ngs.noaa.gov/PUBS_LIB/FedRegister/FRdoc59-5442.pdf

THE REAL WORLD, AND THE REAL MOON

Now let's look at something different, not dealing with imaginary transportations of you or me to the moon, but with the real world, and the real moon.

What do you suppose it means when NASA tells us that the weight of the Apollo 11 Lunar Module was "10,776.6 lbs" at the time of liftoff?

What ...

Whoops, just about forgot where I was and got ahead of myself, forgetting that I need to slowly spell out what might be obvious to people in other newsgroups. The Lunar Module at liftoff, of course, was in actual fact located right ON THE MOON.

Now, what do you suppose those pounds are? If you really have no idea how big the Lunar Module is and what its weight might be on the moon, here's a big hint. NASA also tells us that the same Lunar Module at the time of docking had a weight of 5738.0 lb.
Selected Mission Weights
http://history.nasa.gov/SP-4029/Apollo_18-37_Selected_Mission_Weights.htm

Where was this LM at the time of docking? That's when it caught up with the command module, where Commander Collins was at that time "weightless" in an entirely different definition of the word weight, in free-fall orbit around the moon. But not only was he not weightless in the definition being used by NASA for this LM weight, though he also was far from weightless in the definition of "weight" as a force as used by Sears and Zemansky, from whom you claim to have learned your physics. Much less in terms of force units than he would have been on Earth (about a tenth as much, only an order of magnitude guess), of course, but far from zero, in the Sears and Zemansky definition of weight.

[Sears and Zemansky, 1970 page 61]
5.5 MASS AND WEIGHT
The weight of a body can now be defined more generally than in the preceding chapters as the resultant gravitational force exerted on the body by all other bodies in the universe. . . .

There is no general agreement among physicists as to the precise definition of "weight." Some prefer to use this term for a quantity we shall define later and call the "apparent

weight" or "relative weight." In the absence of a generally accepted definition we shall continue to use the term as defined above.

The NASA site discussed above, of course, is not some aberrant web page. Nor is it some alteration of the units by the NASA public affairs office--this is straight from the scientists and engineers. This is indeed normal NASA usage, to call this "weight." It is also normal NASA usage of the units "pounds." We even know that this is exactly the term under which it was programmed into their onboard computers, and the units used there as well, because we have dialogs between Ground Control and the astronauts in which they are reading out these figures for something called "weight" on both ends of the conversation, and those weights are in pounds mass. You also routinely see the same usage of the word weight when NASA talks about the weight of the space shuttles or the weight of components of the Space Station, or the weight of the spinning satellite some spacewalkers wrestled into submission a few years ago..

As an aside, what do you think: Will NASA ever learn the lesson of the Mars Climate Orbiter, and quite using pounds?

--
Gene Nygaard
At the present time, however, the metrical system
is the only system known that has the ghost of a
chance of being adopted universally by the world.
-- Alexander Graham Bell,1906

1687. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 02:57:41 UTC
From: gnygaard@nccray.com
Message-ID: <df336888.0309271857.6f811a76@posting.google.com>
Source record: 107453

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<10189-3F75C28A-41@storefull-2318.public.lawson.webtv.net>...
> Dave Shrader wrote:
> "If that assertion (I am 240 pounds "mass" on earth. That`s a fact. I am
> 240 pounds "mass" on moon. That`s a weird assertion!) is true, who
> changed te density of the moon??"
>
> Mass is the bulk of matter though not necessarily equal to its weight. A
> mass weighing 240 pounds on earth weighs less on the moon because there
> is less mutual attraction between the moon, of much smaller mass than
> the earth`s mass, and the object which weighs 240 pounds on the earth.
>
> Mass is the property which provides a body with inertia. Mass is the
> mechanical analogy of inductance. Mass is equal to the weight of a body
> divided by the acceleration due from gravity (32ft./sec./sec.). This is
> an expression of Newton`s 2nd law of motion: F = MA, thus M = F/A.
>
> Newton`s 1st law says that to move a body at rest, enough force must be
> applied to overcome its inertia.
>
> Newton`s 3rd law says that for every action there is an equal and
> opposite reaction.
>
> The gravitational force of the earth is stated as "1".

Not really; the standard acceleration due to gravity (more accurately,
of free fall), or an approximation of the local acceleration, is
sometimes expressed as 1 lb/lbf, or 1 kgf/kg, or 1 gee. But it isn't
dimensionless, and it is also often expressed with units in which its
numerical value is not one (always, if you are using SI units, the
modern metric system).

> The gravitational
> force on the moon is about 0.16 that on earth, so an object weighing 240
> pounds on earth would weigh only 38.4 pounds on the moon.

That's certainly true enough, at least for one definition of weight.
But it has nothing to do with Dave Shrader's "I am 240 pounds "mass"
on moon. That`s a weird assertion!" You are talking about something
different from mass.

Gene Nygaard

1688. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 02:58:56 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <cihcnv4sn3vih9fc6n059j6oc67gv69cue@4ax.com>
Source record: 107454

On Sun, 28 Sep 2003 00:33:47 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Hi Mike,
>
>Noisy? Only listening can tell. There is nothing terribly important
>about antennas except they be as high as possible and long in
>proportion to the longest wavelength (tenth wavelength would be
>bordering on pretty small, one wavelength bordering on getting large -
>notice there's a lot of latitude between). If you notice the presence
>or absence of the CB antenna, I would suspect you must have a mighty
>small roof.
>
>No one ever stops at one design. You are the first example of that
>with your comment about two. No one stops at two either. If they
>did, they sure don't post here (and you, again, provide yet another
>example of that verity). The reason being is that you can't tell what
>you've done unless you can compare it (and it hardly pays to take
>someone else's word without testing ;-)
>
>73's
>Richard Clark, KB7QHC
Hey Richard,

Well the random wire has been a huge improvement over the indoor coax
loops (Got 3 of those BTW) both in terms of signals and noise
reduction. Course with that metal roof, I am sure you can understand
why.

Last evening while trying to hastily install a length of wire as a
psuedo sloper (for comparison purposes), I Lost a coax connector on
the random wire where it enters the second floor window. That was it
for the random wire as the coax went sailing off the porch and out
onto the lawn, he,he.

Anyway, I found a north pointing length of wire sloping off the house
is totaly useless here in New England. But we are taking about 1/3
less wire at a random length. (with an antenna tuner)

Needless to say the radom wire outperformed the sloper except for RCI
which was unusually clear last night. So, I kept the psuedo sloper up
and just connected the end of it to the random wire as it ended where
the random began. Total length is now 30 meters or so. <grin>

I probably should be reasonably happy with what I have going as it
really is quiet and pulls in quite a few stations. I even managed to

get the average height up a tad more.

However, like most SWL's, I feel compelled to install something that pulls in even more.

Enter Alpha Delta

mike

1689. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 03:21:31 UTC
From: gnygaard@nccray.com
Message-ID: <df336888.0309271921.50c9af51@posting.google.com>
Source record: 107455

Roger Halstead <newsgroup@rogerhalstead.com> wrote in message
news:<rckbnvscpd0rrgd62i5akhj9kqid8duc47@4ax.com>...
> On Sat, 27 Sep 2003 11:48:24 GMT, Dave Shrader
> <david.shrader@comcast.net> wrote:
>
> >I am 240 pounds 'mass' on earth. That's a fact.
> No, in the US system of measurement your mass is measured in slugs.
> your weigh is measured in pounds and is 240# on earth
>
> In the metric system mass is in kg. Again the metric system is easier.
> 240#=109.091 kg

If you expect to sound like you have some expertise in this area, I
suggest you study up on precision, on significant digits and the like.

You can't start with a mass with only 2 or 3 at the most significant
digits, and get a conversion accurate to 6 significant digits.

Furthermore, if he were 240.000 lb, then he would be 108.862 kg, not
109.091 kg. You also cannot use a conversion factor with only 2 or 3
significant digits, and get a result with six significant digits (you
used 1 kg = 2.2 lb, whereas the actual definition of a pound is
exactly 0.45359237 kg).

> >I am 240 pounds 'mass' on moon. That's a weird assertion!
>
> Your mass is still the same (109.091 kg), but your weight is
> considerably less on the moon.

His mass is still the same, 240 lb, is every bit as true. What's this
bullshit about mixing together pounds and kilograms in a totally
confusing and stupid system of units? After all, your claim above was
that "in the US system of measurement your mass is measured in slugs"
so why aren't you using these units?

Yes, if his mass is 240 lb, you could also say that his mass is 7.5
slugs.

But by the same token, you could use one of the old non-SI metric
systems, and say that his mass is 11.1 hyls, in the system in which
the base units are the meter for length, the kilogram for force, and
the second for time.

But the existence of the hyl does not prove that kilograms are not
units of mass. By the same token, the existence of the slug does not
prove that pounds are not units of mass.

Each of those units, the slug and the hyl (aka the metric slug), exist in only one particular subset of units, a subset which forms a coherent system of units like SI, in which there is only one unit for each different quantity and that unit is a unitary combination of the base units.

The only system which uses slugs is normally identified as the English (or British, this identifier being a matter of history and derivation), or the U.S. (because it is also used here) "gravitational foot-pound-second system of units." Your characterization of it as "the U.S. system" is vague and misleading, overly broad. The only system which has slugs excludes many of the units used in the United States, such as pints and gallons and bushels and horsepower and Btu and miles and ounces and psi.

> >
> >If that assertion is true, who changed the density of the moon??
> >
> It has nothing to do with the assertion, but the mass of the moon is
> less than the mass of the earth.

The mass of the Earth is in fact 81.3 times that of the earth's moon, and you are right, it has absolutely nothing to do with what Dave Shrader was talking about.

> The mass of you and the earth sets what you weight on earth.
> Your mass and the mass of the moon set what you weigh on the moon. The

No. Even accepting that you are using a force definition of the ambiguous word weight (IOW, a definition nonstandard for the context of body weight), there is one other factor that is also especially important. After all, remember that I told you above that the mass of the Earth is 81.3 times the mass of the moon. Do you think that the force due to gravity that an object exerts on Earth will be 81.3 times the force that the same object would exert on the moon? What do you suppose that other important factor might be (hint--while the force varies only linearly with mass, it varies in inverse proportion to the square of this other factor).

> mass of the moon is much less than that of earth so you weight much
> less on the moon.

--
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/
"It's not the things you don't know
what gets you into trouble.

"It's the things you do know
that just ain't so."
Will Rogers

1690. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 03:41:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f765a5d_1@corp.newsgroups.com>
Source record: 107456

Richard Clark wrote:
> If neither powers are negative, the square root of them cannot
> possibly enclose a negative.

Huh?????? The square root of +100W/+100W cannot be negative?????
WOW! Sounds like you are letting your personal feelings get in
the way of accepted math principles. Hint: If one of those powers
is negative, the square root will be imaginary.

> Cecil, You are going to run your bike's mileage warrantee out by
> pedalling to the library for one page copies at a time. Why don't you
> spend a couple hours there and read it instead?

I've got page 139, the one you referenced, in front of me. It says
absolutely nothing about reflections from the source. All it seems
to say is that conjugately matched loads accept more power than
non-conjugately matched loads but we knew that already.

Incidentally, pages 140-143 discusses "Transmission line sections
as two-port networks" using the h-parameter analysis. Who said
transmission lines didn't have ports?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1691. 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 05:56:10 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <sptcnvon2qpgjherhp198ssht4a7j7ihhv@4ax.com>
Source record: 107457

I've played a bit with inverted Ls, but I'm going to try one on a 100 foot tower with a TH5 at 100 feet, 28'8" 6-meter yagi at 115 feet and the UHF and VHF arrays at 130 feet.

By my calculations the tower should be close to a half wave, or slightly shorter than a half wave.

I know that some tower heights and antennas can pose a problem such as the 70 feet and a tribander listed in the handbook.

This antenna will be about 80 to 90 feet vertical and the rest horizontal.

Has any one out there tried anything close to this?

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1692. 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 06:16:13 UTC
From: theplanters95@aol.comnospam
Message-ID: <20030928021613.27589.00000209@mb-m27.aol.com>
Source record: 107458

I need plans for a quick, easy to build, reasonable efficient 80m antenna. I have very limited space. Any ideas will be considered. I possible, email them to me at theplanters95@aol.com.

Randy ka4nma

1693. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 06:16:40 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309272216.72aa53a0@posting.google.com>
Source record: 107459

Cecil Moore <Cecil.A.Moore@ieee.org> wrote in message
news:<3f760456$1_2@corp.newsgroups.com>...
...
> There is
> no requirement for a negative anywhere in order for the square root
> of a number to be negative. The square root of 100W/100W has two
> values, plus or minus one, and sure enough, an open or a short will
> cause 100% reflection.

Problem is, the power ratio you mention is the square of the
magnitude of rho, and the magnitude of a complex number is always
positive. Your "100W/100W" can also result from rho=+j, rho=-j,
rho=(1-j)/sqrt(2), and an infinite set of other complex values you
can't get to as simply the square root of a positive real number.
|rho| must be +1 in this case, and we only know that rho lies on a
circle of radius 1.

Now can you children quit bickering?

Cheers,
Tom

1694. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 07:02:54 UTC
From: richardharrison@webtv.net
Message-ID: <22056-3F76879E-172@storefull-2313.public.lawson.webtv.net>
Source record: 107460

Gene Nygaard wrote:
"You are talking about something different from mass."

Yes. An orbiting astronaut may be weightless due to a particular balance of forces, but he has mass and inertia.

We have weight and force. Either weight or force may be expressed in pounds or kilograms. The conversion number I remember and use is: 2.2 pounds equal 1 kilogram.

The dictionary says the kilogram is a unit of mass, since a mass can conveniently be accurately represented by an object. That particular object is a cylinder of platinum-iridium alloy, called the international prototype kilogram. This object is preserved in a vault at Sevres, France.

Work may be meaasured as force times distance or as pounds times feet. Power is work per unit time. Power may be expressed as foot-pounds per minute. James Watt`s horse was said capable of working at a rate of 33,000 foot-pounds per minute. I calculate that as 250 kilogram-feet per second or 76.2 kilogram-meters per second.

Best regards, Richard Harrison, KB5WZI

1695. OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 11:37:46 UTC
From: n9jgq@netins.net
Message-ID: <3f76c705.3749399@localhost>
Source record: 107461

I've been wondering this for years. Is there anyone out there that works for these companies that knows? I see a 3 sided platform at the top and 3 antennas per side. What kind of radiation pattern does that create? TIA ...Steve

1696. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 13:44:48 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <b2pdnvofi350h6su8e9qkg8pr6kmfbh4c5@4ax.com>
Source record: 107462

On Fri, 26 Sep 2003 22:20:17 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 26 Sep 2003 20:45:27 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>Not only did I prove Mr. Metrologist wrong, but I also proved that he
>>has no integrity.
>
>Hi Gene,
>
>And yet this does not seem to satisfy you. ;-)
>
>No doubt this is product of an insecure basis in logic that is more
>heartfelt than intuitive (despite the cut-and-paste philosophies).
<snip>

>As I offered elsewhere; there are many in my fan club who's minds I
>cannot change. For such trivial matters as yours, I am afraid you
>have to go to the end of that line, and leave room for others of
>substance ahead of you.

We've already heard the same lame excuse three times before.

Translation (from the point of view of Mr. Metrologist, aka R. Clark):

I already wasted three hours searching through the NIST web site for a
definition of a pound, and I couldn't find one either as a unit of
force or as a unit of mass. So I didn't figure that some
whippersnapper who just popped into this thread would be able to find
any official definition of the pound as a unit of mass there.

Okay, so he proved me wrong about pounds as units of mass. But I'll
be damned if he's going to get me admit that there isn't any official
definition of a pound force on NIST's pages.

<end of translation>

There, I told them anyway. BTW, though I can't find an "official"
definition of a pound force on NIST's pages, I can find a conditional
one, with a big "if" indicating fairly clearly that the pound force
has never been officially defined. Can anyone else even find that
one?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1697. Re: OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 14:09:20 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <g4wPIbLQuud$EwKu@pickmere.demon.co.uk>
Source record: 107464

In message <3f76c705.3749399@localhost>, SBM <n9jgq@netins.net> writes
>I've been wondering this for years. Is there anyone out there that
>works for these companies that knows? I see a 3 sided platform at the
>top and 3 antennas per side. What kind of radiation pattern does that
>create? TIA ...Steve

Trough antennas?

120 degs each.

Mike
--
M.J.Powell

1698. FA: Power Cords for Heathkit SB-400 and SB-401

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 14:27:25 UTC
From: Larry <oops@poops.net>
Message-ID: <hdCdb.10735$BI7.10645@newssvr31.news.prodigy.com>
Source record: 107463
Cross-posted to: rec.ham-radio,rec.ham-radio.packet,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.swap

FA: Power Cords for Heathkit SB-400 and SB-401

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4675&item=3049635268

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4675&item=3049472172
A: Power Cords for Heathkit SB-400 and SB-401

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4675&item=3049635268

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4675&item=3049472172

1699. Re: Frenchies, back to fr.rec.radio.amateur !

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 15:06:19 UTC
From: Drink <drink@gnt.net>
Message-ID: <vne1cusbngbd0e@corp.supernews.com>
Source record: 107466
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.ssb,alt.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

So much for international good will... :(

1700. Re: OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 15:23:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f76fecf$1_3@corp.newsgroups.com>
Source record: 107465

SBM wrote:
> I've been wondering this for years. Is there anyone out there that
> works for these companies that knows? I see a 3 sided platform at the
> top and 3 antennas per side. What kind of radiation pattern does that
> create? TIA ...Steve

According to the diagrams in my cellphone textbook, it gives a
hexagonal pattern. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1701. Re: Name That Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 16:01:05 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <9e2dnU1QG95SmOqiU-KYjQ@comcast.com>
Source record: 107467

You never can tell what works best. Years ago I had trouble getting decent FM performance from a Heathkit FM tuner. The antenna that worked best was about a 10 foot piece of bell wire thrown into a heap behind the couch.

Tam/WB2TT

1702. WTB: 2" spreaders for open wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 17:29:31 UTC
From: k9sqg@aol.com
Message-ID: <20030928132931.29142.00000243@mb-m24.aol.com>
Source record: 107468

Would like to buy a few more, new, Johnson spreaders to make 2" open wire line.

Thanks.

Evan

1703. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:04:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <im6env418uf7i6qshvd769cdokuks41mpa@4ax.com>
Source record: 107369

On Sun, 28 Sep 2003 13:44:48 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>We've already heard the same lame excuse three times before.

Hi Gene,

So how deep do I have to plant it before it takes root? ;-)

Like this compulsive interest with your fleas, you have written a
Gregorian Mass that consists of only one note. To your advantage, if
you had transposed "Old MacDonald Had a Farm"; then the monotonic
rendition would at least give the appearance of CW. You are
dreadfully out of your element here.

Given the low intellectual bandwidth offered by your specious claims,
I can sit back and enjoy some stylistic variations to exercise my
fingers at the keyboard. I especially enjoy your barnyard epithets -
such a self fulfilling cliche inspires my anecdotes. Here's another
that a liberal education would have exposed you to (if only):

21 Nov. 1667
"On this occasion Dr. Whistler told a pretty story related
by Muffett, a good author, of Dr. Cayus that built Key's
College: that being very old and lived only at that time upon
woman's milk, he, while he fed upon the milk of a angry
fretful woman, was so himself; and then being advised to
take of a good natured woman, he did become so, beyond the
common temper of his age."

Oh, if you missed the citation to the quote above, that was again from
Samuel Pepys (same day in fact) who, although not trained in the
sciences, did learn to respect others of learning and accomplishment.
And by the way, that earlier quote:
> Dr, Wilkins saying that he hath read for him in his
> church) that is poor and a debauched man, that the College have
> hired for 20s. to have some of the blood of a Sheep let into his
> body
Contains a Pound reference you obviously missed (from the exchange
rate of 20 Shillings). Now, as every good Englishman would have
understood back then, this was a conversion. If he held 20 coins they
were NOT a Pound which is a single coin. There is an equivalency, but
this does not constitute an equality. Pepys could have written 1ï¿½
that is shorter, but he did not as it was obviously not what was
tendered to the debauched man. Even the debauched man would
understand the significance of weight v. mass and how equivalencies of
1pound = umpty-ump grams does not render the term pound as mass,

merely an antiquated variant much like 10000 swallows' tongues = 1KG. Shirley you don't consider swallows' tongues as units of mass? Cow tongues (Neat's tongue to the English) perhaps. And this leads us back to the good Dr. Cayus' condition - perhaps you should change your diet.

The folks at the end of the line are beginning to complain - could you move back some more?

73's
Richard Clark, KB7QHC

1704. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:21:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hu8env8c64qmo2bis7nkv3pua66grksn1m@4ax.com>
Source record: 107370

On Sat, 27 Sep 2003 22:41:41 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Richard Clark wrote:
>> If neither powers are negative, the square root of them cannot
>> possibly enclose a negative.
>
>Huh?????? The square root of +100W/+100W cannot be negative?????
>WOW! Sounds like you are letting your personal feelings get in
>the way of accepted math principles.

Personal feelings, hmmm? You are the one enclosing the statement with excessive marks, bucko. And I also note that what is enclosed is a hoot!

> Hint: If one of those powers
>is negative, the square root will be imaginary.

We can all tell where imagination springs from. Give me better than a hint of negative power - you obviously didn't embrace it between your emotional markings.

>I've got page 139, the one you referenced, in front of me. It says
>absolutely nothing about reflections from the source.

Duh!

Two for Two. You still can't do any better than your tarted up versions of what you "think" I said? Your ability to find a Google copy is no better than your cut-and-paste library skills. You can (and have) spin these fantasies out to 600 postings if you put your mind to it. Could we at least expect you may actually read Chipman at some future date?

73's
Richard Clark, KB7QHC

1705. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:22:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nl9envgpt74p54r6o1039jj83v6nu6ulkn@4ax.com>
Source record: 107371

On 27 Sep 2003 23:16:40 -0700, k7itm@aol.com (Tom Bruhns) wrote:

>Now can you children quit bickering?
>
Whatasmatta Tom? Not getting enough attention?

73's
Richard Clark, KB7QHC

1706. Re: OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:28:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aq9envcpg774v2q3830bpipsnq7clk263o@4ax.com>
Source record: 107372

On Sun, 28 Sep 2003 11:37:46 GMT, n9jgq@netins.net (SBM) wrote:

>I've been wondering this for years. Is there anyone out there that
>works for these companies that knows? I see a 3 sided platform at the
>top and 3 antennas per side. What kind of radiation pattern does that
>create? TIA ...Steve

Hi Steve,

Other responses are overly literal.

The companies only install what they need serviced. Each points in a direction that requires coverage and nearly all overlap given that the antennas are stacked vertically (which more contributes to narrowing the radiation lobe in the vertical direction, not the horizontal). Along with that vertical orientation, harnesses add phase that provides for what is called down tilt. My buddy, AA7UJ, and I have had to replace his 440 array because (unmodified from commercial application) it made his repeater deaf in comparison to one without a down tilt delay.

73's
Richard Clark, KB7QHC

1707. Re: Slopers and TTFD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:37:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <78aenvkoburh6iqgsani4b3ntik8hqt939@4ax.com>
Source record: 107373

On Sun, 28 Sep 2003 02:58:56 GMT, mike <intotheapex@yahoo.com> wrote:

>
>However, like most SWL's, I feel compelled to install something that
>pulls in even more.
>
>Enter Alpha Delta
>
>mike

Hi Mike,

If one antenna were perfect, we would all have that one (and I am sure no two users would duplicate the other's choice).

I have several (goes without saying I suppose) that easily overlap in the HF region and none duplicate the performance of the other. ALSO no single one is always better than the other (choose any pair or combination to compare).

Signals do not always arrive at the same strike angle to earth and given the variety of antennas, I find one is more suitable to that angle than another. Sometimes the choice is like a dead resistor where the other shines, and then an hour later their roles reverse. Propagation does not always conform to our design choice that is optimized for what the signal is not.

73's
Richard Clark, KB7QHC

1708. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 18:39:41 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F772AED.7E11C5B9@cwis.net>
Source record: 107374

Roger,
Have you thought about just shunt feeding the tower?
'Doc

1709. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:25:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7737a3_2@corp.newsgroups.com>
Source record: 107375

Tom Bruhns wrote:
> Now can you children quit bickering?

Does it really hurt anything to remind everyone that +1 at 180 degrees
equals -1 at zero degrees?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1710. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:35:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7739ec_2@corp.newsgroups.com>
Source record: 107377

Richard Clark wrote:

> <Cecil.A.Moore@ieee.org> wrote:
>
>>Richard Clark wrote:
>>>If neither powers are negative, the square root of them cannot
>>>possibly enclose a negative.
>>
>>Huh?????? The square root of +100W/+100W cannot be negative?????
>>WOW! Sounds like you are letting your personal feelings get in
>>the way of accepted math principles.
>
> Personal feelings, hmmm? You are the one enclosing the statement with
> excessive marks, bucko. And I also note that what is enclosed is a
> hoot!

Owls are not really all that intelligent, Richard, even if they are
MENSA's mascot. You really should upgrade to parrots if you want an
intelligent bird.

> Give me better than a
> hint of negative power - you obviously didn't embrace it between your
> emotional markings.

By convention, direction can change power to a negative number. That is
positive power flowing in a negative direction. To the best of my
knowledge, there is really no such thing as negative energy as would be
required for negative power.

> Could we at least expect you may actually read Chipman
> at some future date?

I've got page 139 in front of me. It doesn't say what you said it said.
It says a conjugate match will ensure maximum power transfer.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1711. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:39:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <69cenvgr9jgf9iuimnt8c090rod0uka2mp@4ax.com>
Source record: 107376

On Sun, 28 Sep 2003 18:04:26 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>> Dr, Wilkins saying that he hath read for him in his
>> church) that is poor and a debauched man, that the College have
>> hired for 20s. to have some of the blood of a Sheep let into his
>> body
>Contains a Pound reference you obviously missed (from the exchange
>rate of 20 Shillings). Now, as every good Englishman would have
>understood back then, this was a conversion. If he held 20 coins they
>were NOT a Pound which is a single coin. There is an equivalency, but
>this does not constitute an equality. Pepys could have written 1ï¿½
>that is shorter, but he did not as it was obviously not what was
>tendered to the debauched man.

Hi All,

The application of the monetary unit is not without is antecedents in
weight. The ancients, that is the pre-Newtonians, did not comprehend
the separable notion of mass from weight as they did not accept the
concept of "force" which was largely rejected by scientists of
Newton's day. In fact, Newton introduced the notion of forces in his
treatise "Opticks."

However, to return to the legacy of ï¿½. The symbol is drawn from
Libra. I have already discussed the operation of the balance scale
and its relationship to Libra is evident in the astrological
application. Libra (as is the latinate pondo) was the unit of weight
(not scientific mass, they had no such distinction) in ancient Rome.

I notice that our correspondent who relies on scientific cut-and-paste
retorts to dismiss scientific workers; and, as an acknowledged
untutored English speaker (several classes notwithstanding) also
leverages dictionaries to the same poor quality of transliteration.

The OED (which I am sure to get copious and unreliable rebuttal to)
offers of "mass" a physics application buried quite deeply within the
usage of this word across time (the OED is a dictionary of enumerated
usage by time, not by current application). For many hundreds of
years, mass merely meant the agglomeration of stuff (it didn't matter
what or why). Through the work of Newton's introduction of the
concept of force, the term, by OED account, then gained a distinction
such that they offer the definition:
"6.b. Physics. The quantity of matter which a body contains;
in strict use distinct from weight. 1704"

This is a pleasurable aside, these side bars of minutia to our usual concerns. A do enjoy the drama queens that our group attracts and the revisionist logic that attends their petty issues. Forgive me Gene, but you don't have much else to offer and you will be gone soon anyway, so go away mad (to invert an old saw). ;-)

73's
Richard Clark, KB7QHC

1712. Re: OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:48:03 UTC
From: Bob Gaudio <bob31439@ix.netcom.com>
Message-ID: <k3eenvc7qjrqp6mg7vrgg3gkbrgs3kgm69@4ax.com>
Source record: 107378

What you see is a typical 3 sector cellsite configuration, where each antenna array on the face of the platform is spaced 120 degrees from the other. These antennas have a range of front-to-back ratio and directivity. There are several antennas that provide different horizontal radiation patterns, and are determined by the RF engineer to augment the frequency reuse and coverage plan for the complete system . Vertical radiation is determined by either mechanical or electrical downtilt of the antenna. Here is a link to a type of antenna, which gives you the detailed antenna specification. http://www.grintek.com/GE/antennas/pdf/470330_00000.pdf

On Sun, 28 Sep 2003 11:37:46 GMT, n9jgq@netins.net (SBM) wrote:

>I've been wondering this for years. Is there anyone out there that
>works for these companies that knows? I see a 3 sided platform at the
>top and 3 antennas per side. What kind of radiation pattern does that
>create? TIA ...Steve

1713. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:49:35 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <9CGdnXYySYzApuqiU-KYvA@comcast.com>
Source record: 107379

Jerry,

I ran EZNEC on this, using the QST dimensions, and got what seem to be reasonable results.

Resonant frequency = ~7.11 MHz
Impedance = 21.15 + j1.17

For those who obviously did not read the QST article, the 25 uH loading coils are 1.7 meters from the ends. Total length is 10.64 meters, and height is 6 meters. Over real ground, maximum gain is about 6dbi, straight up, and about 3 dbi at 30 degrees elevation.

Tam/WB2TT
"Jerry" <jerryaa@fbx.com> wrote in message news:3f75a719@news.lh.net...
> October's QST has an article "Designing a Shortened Antenna" pp 28-32. It
> gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole
> length of the half-sized dipole [p30 "a second example"] is 10.61 meters.
> This is 20 feet off ground using #12 wire. The formulas give a solution
of
> XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from
each
> leg.
>
>
> I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007
khz
> gives impedance =11.33 - j 881.2 ohms.
>
> If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg
of
> the dipole, rather than +j1776?
>
> --
> Jerry
>
>

1714. Help ID an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 19:57:29 UTC
From: mxduffie@axtxom.net
Message-ID: <34fenv0j7gbon834rjs1ukcp9jr0bn7qcd@4ax.com>
Source record: 107380

Someone wrote me asking for help identifying an antenna
manufacturer. I don't recognize this antenna at all. Note the
construction of the traps and the feed point.

http://actcom.net/~mcduffie/trap/trap.htm

Drop me a line if you recognize this and I'll get the info to the
owner.

Thank.

Gary - A G ï¿½ N

--
Replace x in adr with c

1715. Re: Complex Z0 Consistency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 21:30:05 UTC
From: pez <pez7sv@hotmail.com>
Message-ID: <bl7jsv$5c1$1@nic.grnet.gr>
Source record: 107381

http://antennas.ee.duth.gr/recradioamateurantenna/ComplexZ0Consistency.txt

1716. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 21:49:52 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <deudnv4colmoit0p4c08uo0s9s76r4o8vc@4ax.com>
Source record: 107382

On Sun, 28 Sep 2003 02:02:54 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Gene Nygaard wrote:
>"You are talking about something different from mass."
>
>Yes. An orbiting astronaut may be weightless due to a particular balance
>of forces, but he has mass and inertia.
>
>We have weight and force. Either weight or force may be expressed in
>pounds or kilograms.

This is the only place you deal with Dave Shrader's comment.

The fact that you are implying he SHOULD NOT be surprised that his
mass on the moon would be 240 lb is totally obscured by the rest of
your ramblings.

>The conversion number I remember and use is: 2.2
>pounds equal 1 kilogram.

That will be acceptable for many purposes, iff

1. You are smarter than Roger Halstead and realize that you cannot
get six significant digits in your result by using this conversion
factor.

2. You are dealing with pounds in their normal definition as units of
mass, not pounds force.

You ought to be remembering both 1 lb = 453.6 g and 1 lbf = 4.448 N,
or something along those lines.
>
>The dictionary says the kilogram is a unit of mass, since a mass can
>conveniently be accurately represented by an object.

Of course, that applies to a troy pound standard as well (in the
United States from 1828 until at least after 1850, and probably until
1893 when the avoirdupois pound was redefined as an exact fraction of
a kilogram, our primary standard was a particular artifact known as
the Troy Pound of the Mint, and our avoirdupois pounds were units of
mass defined as an exact fraction of this standard).

>That particular
>object is a cylinder of platinum-iridium alloy, called the international
>prototype kilogram. This object is preserved in a vault at Sevres,
>France.

>
>Work may be meaasured as force times distance or as pounds times feet.
>Power is work per unit time. Power may be expressed as foot-pounds per
>minute. James Watt`s horse was said capable of working at a rate of
>33,000 foot-pounds per minute. I calculate that as 250 kilogram-feet per
>second or 76.2 kilogram-meters per second.

Those aren't acceptable units in the modern metric system, however
(and it would actually be 76.0 kgf m/s, not 76.2).

BTW, Watt used the miner's measurements of mass as if they were
measurments of force in determining that a mine pony could do
sustained work at the rate of 22,000 foot-pounds per minute, before
using his arbitrary 1 horsepower = 1.5 ponypower conversion.

In the modern metric system, an English horsepower is 745.700 newton
meters per second, or 745.700 joules per second, or 745.700 watts.
Those pounds force convert to newtons, not to kilograms force, in SI.
The metric horsepower (PS in German acronym, CV in French acronym) is
75 kgf m/s, or 4500 kgf m/min. In SI, that's 735.4875 W.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1717. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 22:10:13 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <n3kenv8uvnjqocvvpsegpifccchjvjfn7u@4ax.com>
Source record: 107383

On Sun, 28 Sep 2003 18:04:26 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Given the low intellectual bandwidth offered by your specious claims,

Still dreaming that somebody is going to come to your rescue, and show
us some NIST web page giving an _official_ definition of a pound as a
unit of force, aren't you?

Wake up and smell the coffee! It isn't going to happen, for several
reasons, including

1. Your research skills are better than those of most others
following this thread, and

2. You are better able to distinguish "swallow's tongue" conversion
factors from official definitions, and

3. They don't have a reputation to reconstruct, and

4. They don't know people at NIST that they can call on for help in
this search for the official definition, and

5. You've got them all convinced that you are an expert in this area,
and everyone expects that you could easily prove your point, and

6. A lot of people who know more about this than you do have
unsucessfully searched for an official definition, and

7. Dr. Barry Taylor, the NIST expert in this particular field who
must be a METROLOGIST if you are a mere capital-M Metrologist, is the
one who gives us the conditional definition which is a clear indicator
that an official definition does not exist.

Face the facts. Hard as it might be to believe (even for me, when I
first came to this realization!), THERE IS NO SUCH OFFICIAL DEFINITION
OF A POUND FORCE. Nobody has ever gone to the trouble of officially
defining these bastard offspring of pounds as units of mass, and
nobody will bother doing so in the future.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1718. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 22:53:41 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309281453.3fda3df5@posting.google.com>
Source record: 107384

Roger Halstead <newsgroup@rogerhalstead.com> wrote in message
news:<sptcnvon2qpgjherhp198ssht4a7j7ihhv@4ax.com>...
> I've played a bit with inverted Ls, but I'm going to try one on a 100
> foot tower with a TH5 at 100 feet, 28'8" 6-meter yagi at 115 feet and
> the UHF and VHF arrays at 130 feet.
>
> By my calculations the tower should be close to a half wave, or
> slightly shorter than a half wave.
>
> I know that some tower heights and antennas can pose a problem such as
> the 70 feet and a tribander listed in the handbook.
>
> This antenna will be about 80 to 90 feet vertical and the rest
> horizontal.
>
> Has any one out there tried anything close to this?
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

Dunno...Offhand, I don't think it will look that long myself. The
largest beam is 30 ft lower than the top. I think that will reduce the
effectiveness as a hat. The beams on top are fairly small per 160m,
and probably won't amount to a whole lot. Unless indicated otherwise
by an analyser, I'd assume it to act just a tad longer than a 1/4
wave. You could add top loading wires if you wanted to raise the
current max higher up the tower. Being the tower is likely grounded,
I'd shunt feed it. You could also probably rig up a linear loaded
sloper also.
But a top hat with even symmetrical spokes would give you a cleaner
vertical pattern, with an overhead null. If you run a wire to only
80-90 ft, and then out horizontal, I don't think the height of the
tower will matter. It won't be part of the antenna, except maybe for
close coupling. Or do you mean running the wire out from the grounded
tower itself? MK

1719. Re: WTB: 2" spreaders for open wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 23:04:14 UTC
From: jgboyles@aol.com
Message-ID: <20030928190414.23263.00000224@mb-m14.aol.com>
Source record: 107385

>Would like to buy a few more, new, Johnson spreaders to make 2" open wire
>line.

Hi Evan, Get some Wal Mart plastic coat hangers and saw them up for your
spacers. Gives you lots more color options, and cheap.
73 Gary N4AST

1720. EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 23:13:18 UTC
From: stefano <sgalast@tin.it>
Message-ID: <iWJdb.135875$hE5.4634507@news1.tin.it>
Source record: 107386

Hello,

After sometime ,I am here again to inform all the Om community interested about the last news on the EH antenna.
The antenna was tested, following the FCC rules ,by Stu Graham a important broadcasting engineer.
For any news and to read any data on it (including the complete report from the consultant) please go here:
http://www.eh-antenna.com/AM_Broadcast.htm

Please read all the docs related.

Three years ago I put on this forum a special announce about this important discovery.
Now we can publish all the evidences we were right.
There is no doubt, the so called "EH mode " is real and alive.
During the test the antenna was installed at about 1/10 of a wavelenght .
On this position alomst equalled (only -0.4 db) a perfect 1/4 standard tower with 120 radials.
The real important feature is we can trade height for gain.
When the antenna is installed at 1/4 wav. it shows a 2.5 db of gain (yes , GAIN for a ground wave over a standard tower)

very high efficiency
very large bandwidth
very compact size

For the ham applications a new era is approaching. Antennas on 40, 80 or 160 metres are very small on size, showing the same or better efficiency over a standard full size vertical dipole.

I wanted just share this great news with all interested people.
My best 73's
Stefano IK5IIR

1721. Re: Complex Z0 Consistency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-28 23:20:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bl7qcmsgr1@titan.btinternet.com>
Source record: 107387

"pez" wrote -

> http://antennas.ee.duth.gr/recradioamateurantenna/ComplexZ0Consistency.txt
>

Much obliged for your hard work.

But could you please describe in one very short paragraph, say 100 words,
your conclusions?

- - - - and oblige,

Yours, Reg, G4FGQ.

1722. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 00:51:22 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <4tOcnfDUVNOKH-qiXTWJkA@comcast.com>
Source record: 107388

Whoops, I see I did "Building the Antenna", not "Second Example". There is
something wrong with "Second Example", because the dimensions are about the
same as "Building", but the coil is almost twice as big.

Tam/WB2TT
"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:9CGdnXYySYzApuqiU-KYvA@comcast.com...
> Jerry,
>
> I ran EZNEC on this, using the QST dimensions, and got what seem to be
> reasonable results.
>
> Resonant frequency = ~7.11 MHz
> Impedance = 21.15 + j1.17
>
> For those who obviously did not read the QST article, the 25 uH loading
> coils are 1.7 meters from the ends. Total length is 10.64 meters, and
height
> is 6 meters. Over real ground, maximum gain is about 6dbi, straight up,
and
> about 3 dbi at 30 degrees elevation.
>
> Tam/WB2TT
> "Jerry" <jerryaa@fbx.com> wrote in message news:3f75a719@news.lh.net...
> > October's QST has an article "Designing a Shortened Antenna" pp 28-32.
It
> > gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole
> > length of the half-sized dipole [p30 "a second example"] is 10.61
meters.
> > This is 20 feet off ground using #12 wire. The formulas give a solution
> of
> > XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from
> each
> > leg.
> >
> >
> > I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007
> khz
> > gives impedance =11.33 - j 881.2 ohms.
> >
> > If EZNEC is correct wouldn t I need an inductance of +j881.2 on each
leg
> of
> > the dipole, rather than +j1776?

> >
> > --
> > Jerry
> >
> >
>
>

1723. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 01:17:52 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <4o1fnvc9f2oct1u7lbal4o6et3rlrnf2dv@4ax.com>
Source record: 107389

On Sun, 28 Sep 2003 13:39:41 -0500, 'Doc <w5lz@cwis.net> wrote:

>
>
>Roger,
> Have you thought about just shunt feeding the tower?

Mater'a'fact...that's my other option. The problem with shunt feeding the tower is all the wire antennas hanging from it. Two half wave, center fed 75 meter slopers and one half wave center fed sloper for 40. That and the tower is only 10 feet from the corner of the attached garage.

I have some concerns about a 160 vertical and all that house wiring right next to it. It does have a good ground system with over 500 feet of #2 bare copper just under the surface and 25 8' ground rods cad welded to it. That's good electrical and safety ground though and a bit shy for a good ground under a vertical.

However IF I can make the shut feed work then I don't have to find a support for the end of the inverted L.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

> 'Doc

1724. Re: WTB: 2" spreaders for open wire line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 01:30:16 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <bk2fnvgs2r2bn0q650h4fdpt782n9aessa@4ax.com>
Source record: 107390

On 28 Sep 2003 17:29:31 GMT, k9sqg@aol.com (K9SQG) wrote:

>Would like to buy a few more, new, Johnson spreaders to make 2" open wire line.

I haven't seen them in a long time, but they are easy to make using
either 1/4 inch thick plexiglass, or Lexan. You can some times pick
up scrap plexiglass pieces for free at the local hardware store. The
Lexan is more expensive, but it sure is tough.

If you want the actual Johnson spreaders to keep everything looking
the same I wish you luck.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Thanks.
>
>Evan

1725. VHF on a shoestring budget

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 01:58:16 UTC
From: "news.verizon.net" <richard.arland@verizon.net>
Message-ID: <YkMdb.11563$yU5.7508@nwrdny01.gnilink.net>
Source record: 107391

After over 40 years in ham radio I have decided to try my hand at VHF + weak signal modes. Unfortunately, due to a severely restricted budget and physical space for antennas, I am trying to put together a small VHF + station that will provide some fun.

Following a 1999 QST article I have converted two Radio Shack 6 element FM yagis to 5 element 2 Meter beams. I need to stack these and I am wondering what the proper procedure and spacing is for this array. The old VHF handbook says 5/8 wave length if they booms are under 1 wavelength. The ARRL HB (2003) says for booms 1 wavelength long use a 1 wavelength spacing. Unfortunately, I cannot space them at 1 wavelength. The rotor I am going to use won't support that spacing. Can anyone point me in the right direction on stacking and phasing these two beams?

73 Rich WB3WVC

1726. Re: Help ID an Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 02:18:56 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <0f3fnv0847h3qh3c8gatqet865d7ktc7ei@4ax.com>
Source record: 107392

On Sun, 28 Sep 2003 13:57:29 -0600, mxduffie@axtxom.net wrote:

>
>Someone wrote me asking for help identifying an antenna
>manufacturer. I don't recognize this antenna at all. Note the
>construction of the traps and the feed point.
>
>http://actcom.net/~mcduffie/trap/trap.htm
>
>Drop me a line if you recognize this and I'll get the info to the
>owner.

I have one out in the garage...I don't remember where I picked it up,
but "I think" it's one of the old Hy-gain, or Cushcraft multi band
verticals.

Unfortunately there is no information on it such as ID marks or
numbers. As I recall there is no information inside the traps either,
but I will check as it's just a parts antenna.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>Thank.
>
>Gary - A G ï¿½ N

1727. Re: VHF on a shoestring budget

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 02:25:14 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <XtWdnSWHHoGLBeqiU-KYvQ@comcast.com>
Source record: 107393

I had used 3/4 wave spacing for a pair of CushCraft 7 element 2m beams.
Rotor was a U100, but the lower beam was only a few inches above the rotor.
Assuming the antennas are about 50 Ohms impedance, you phase them by running
equal lengths of 75 Ohm coax from each antenna to a T connector. The lengths
of the 75 Ohm coaxes must be an ODD electrical multiple of 1/4 wavelength,
as for instance 3/4 wavelength. As I recall, the calculated stacking gain
for my setup was about 2 db.

Tam/WB2TT
"news.verizon.net" <richard.arland@verizon.net> wrote in message
news:YkMdb.11563$yU5.7508@nwrdny01.gnilink.net...
>
>
> After over 40 years in ham radio I have decided to try my hand at VHF +
weak
> signal modes. Unfortunately, due to a severely restricted budget and
> physical space for antennas, I am trying to put together a small VHF +
> station that will provide some fun.
>
> Following a 1999 QST article I have converted two Radio Shack 6 element FM
> yagis to 5 element 2 Meter beams. I need to stack these and I am wondering
> what the proper procedure and spacing is for this array. The old VHF
> handbook says 5/8 wave length if they booms are under 1 wavelength. The
ARRL
> HB (2003) says for booms 1 wavelength long use a 1 wavelength spacing.
> Unfortunately, I cannot space them at 1 wavelength. The rotor I am going
to
> use won't support that spacing. Can anyone point me in the right direction
> on stacking and phasing these two beams?
>
> 73 Rich WB3WVC
>
>

1728. Re: 80/40/30M dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 02:56:08 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <cbNdb.37494$ai7.1940@newsread1.news.atl.earthlink.net>
Source record: 107394

Sure you can. You can make a 80/40 dipole that is the same length as the 40 meter. THis is the basis for the old Mor-Gain dipole. You wrap the 80 meter wire around the 40 meter dipole
almost like a folded dipole that is open at the bottom. Just like Mor-gain you can add other bands as parallel wires. There is little interaction. Jim West of Antennas West built a version called the PM Dipole and found the 40 meter lower band portion was broadened ...I have one Mor-Gain and one homebrew and find the 80 meter is at least 100Khz and the 40 is less than 1.2 across the band. K4TWJ had a more recent version in his column last fall using ladder line.
I plan to add 60 meters to one of my dual banders.
73 Dave K4JRB

W4UDX <w4udx.nospam@juno.com> wrote in message news:%cMcb.23637$iO.8753@bignews5.bellsouth.net...
> Hi guys.
> Quick question. I have in the past made 80 and 40 meter multiband dipoles
> using parallel wires and they worked fine with little 80/40 interaction. My
> question is, can a make one with a set of wires on it for 30M also? or will
> the 40M and 30M parallel wires interact too much?
>
> Mark W4UDX
>
>

1729. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 04:20:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v7cfnv4qktjolpkm5ipop3e0pl2qg9mhkq@4ax.com>
Source record: 107395

On Sun, 28 Sep 2003 14:35:30 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>Owls are not really all that intelligent, Richard, even if they are
>MENSA's mascot. You really should upgrade to parrots if you want an
>intelligent bird.

I didn't think you could deal with the negative power intelligently.
>
>> Give me better than a
>> hint of negative power - you obviously didn't embrace it between your
>> emotional markings.
>
>By convention, direction can change power to a negative number.

What convention, Shriners?

>That is
>positive power flowing in a negative direction. To the best of my
>knowledge, there is really no such thing as negative energy as would be
>required for negative power.

Thus it follows your negative that doesn't exist in your own formula,
doesn't exist as a figment of someone else's over-indulgent
imagination. I already said as much.

>> Could we at least expect you may actually read Chipman
>> at some future date?
>
>I've got page 139 in front of me. It doesn't say what you said it said.
>It says a conjugate match will ensure maximum power transfer.

Duh!

You are still at a loss to respond to the post, and instead in your
own tradition of the unreliable correspondent decide to respond to
your own rhetoric. Three for three now. It is painfully obvious you
haven't got a clue what you are answering to.

This is a curious state of affairs where your imagination works
overtime to build these fantasies of power flow signs, and then paint
up these supposed quotes of mine with such pale and weak colors.

73's
Richard Clark, KB7QHC

1730. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 04:27:04 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309282027.661dd099@posting.google.com>
Source record: 107396

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0309281453.3fda3df5@posting.google.com>...
> Roger Halstead <newsgroup@rogerhalstead.com> wrote in message
>

> But a top hat with even symmetrical spokes would give you a cleaner
> vertical pattern, with an overhead null.

Was just thinking...if you had the antenna a 1/2 wave in electrical
length, with long top hat wires, they could radiate a good degree, and
you might not have an overhead null. Still would probably work pretty
well overall though. Ground losses would be less than a 1/4 wave. You
could model that to check. MK

1731. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 05:30:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <acdfnvkptpuqfcv0lfaucr2489ap4g1g7o@4ax.com>
Source record: 107397

On Sun, 28 Sep 2003 22:10:13 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>Wake up and smell the coffee!

Hi Gene,

You've missed one point (beyond I am not a coffee drinker) to which I
can respond:
I don't give a damn. :-)

Your condescending attitude towards others
>all convinced that you are an expert
is obviously spun from your imagination as absolutely no one here has
commented for me, with me, to me, or about me (your QRM hardly allows
them that).

As for reputation.... You, admittedly, have absolutely no experience
in the matter, and this is not rec.sci.amateur.hour. Given your
petulance out of the gate discussing the subject, you don't even
qualify for honorary troll. You have no style, and the cut-and-paste
philosophy runs thick in this group as it is. Yours certainly is no
more distinctive, and when it is laid out by the ream like so much
textual fertilizer, it won't grow the crops to save the farm.

C'mon now Gene, we both know what I have to say on the matter is
wholly irrelevant to how you are going to boast about it around town.
Sort of like the tailor who wore on his belt "Killed seven with one
blow" and was only boasting about flies while gushing it up about
giants. Talk about (emphasis on talk) reputations made. ;-)

73's
Richard Clark, KB7QHC

1732. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 05:39:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q1hfnv8i819htbjdr7dioqmoh8nihe2bqi@4ax.com>
Source record: 107398

On Sun, 28 Sep 2003 23:13:18 GMT, "stefano" <sgalast@tin.it> wrote:

>When the antenna is installed at 1/4 wav.

>very compact size

Hi Stefano,

Note any contradictions here? Ever really look at a picture of one?
You claim you build them for a cost, so naturally you have no
pecuniary interest in misinformation, n'est pas?

>very high efficiency
Higher than the same 1/4 radiator that its compact size replaces?

Geeze, a new moon and more nuts falling in this group than would be
expected.

73's
Richard Clark, KB7QHC

1733. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 05:50:50 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F77C83A.2FB3ADE9@cwis.net>
Source record: 107399

Roger,
I wish I had that kinda problem (LOL). I think I'd
have to give the shunt feeding a try. All the antennas
hanging on the tower should act as capacitive hats (might
try with them both shorted and not shorted, see what the
difference is). As for the house wiring, who knows till
you try it? The part that would stop me would be the trips
up the tower...
'Doc

PS - Former owner of the second most costly Ercoupe in
the world, N415E. Don't ask.

1734. Re: VHF on a shoestring budget

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 07:01:59 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ZHBMufDnj9d$EAvT@ifwtech.co.uk>
Source record: 107402

news.verizon.net wrote:
>
>
>After over 40 years in ham radio I have decided to try my hand at VHF + weak
>signal modes. Unfortunately, due to a severely restricted budget and
>physical space for antennas, I am trying to put together a small VHF +
>station that will provide some fun.
>
>Following a 1999 QST article I have converted two Radio Shack 6 element FM
>yagis to 5 element 2 Meter beams. I need to stack these and I am wondering
>what the proper procedure and spacing is for this array. The old VHF
>handbook says 5/8 wave length if they booms are under 1 wavelength. The ARRL
>HB (2003) says for booms 1 wavelength long use a 1 wavelength spacing.
>Unfortunately, I cannot space them at 1 wavelength. The rotor I am going to
>use won't support that spacing. Can anyone point me in the right direction
>on stacking and phasing these two beams?

The "magic numbers" in the old handbooks for optimum stacking distance,
such as 1/2 wl, 5/8 wl and "half the boom length", were all guesses.

The optimum stacking distance actually depends on both the type of beam
and the performance you want. For example, closer stacking can greatly
reduce sidelobe levels at a small cost in forward gain.

There's more background information on my website, but the only real way
to know is to model the antennas. One of the free trial downloads such
as EZNEC will easily handle your two small yagis, and you'll also learn
a new and valuable skill in modelling.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1735. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 07:23:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uajfnv09eh4jup5u86cdjnb22qtc482has@4ax.com>
Source record: 107400

On Sun, 28 Sep 2003 23:13:18 GMT, "stefano" <sgalast@tin.it> wrote:

>The antenna was tested, following the FCC rules ,by Stu Graham a important
>broadcasting engineer.

Hi Stefano,

Others may reference URL
http://www.eh-antenna.com/documents/EHANTENNA_proof.pdf

I note that in photograph found on page 27 of 29 that the "reference"
antenna is close enough to fall on the eh antenna. I also note that
the engineer speculates that this structure was not isolated enough
from the eh tests as it is demonstrated in the single radiation chart
that was conducted within 6 wavelengths of the test antenna (page 25).

I also note that the antenna tower (yes folks, a common tower)
supporting the supposed antenna has guying that is not broken up with
insulators (plainly in view for the reference antenna in the
background). Top loading, how convenient.

When we actually look at the data (starting on page 7) and stepping
back from the antenna 10 Miles (a reasonable distance to evaluate the
far field) we see that both charts and tables of data for the eh fall
dismally below the reference.

The page of data called FCC figure 8 reveals that at 10Miles (actually
9.43 Miles) that the eh, tower, and top-hat are -4.24dB from the
reference and -15dB from FCC standard curve. The chart marked Exhibit
#1B (page 8) shows that further out at 20 Miles that the eh, tower,
and top-hat are -26.6dB from the FCC standard curve.

Continuing on through the remaining data does nothing to pull the eh
out of the toilet.

However, none of this means anything if the radio station that hosted
this test does not buy one. After all, they are a commercial
enterprise and if they want the additional efficiency within a couple
of wavelengths at the cost of 10 to 30dB coverage outside of the
block, they can certainly let economics rule that decision.

Perhaps I read the data out of order, or the charts upside down.
Please advise.

Have they placed an order for this cheap, efficient, low antenna?

73's
Richard Clark, KB7QHC

1736. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 08:00:21 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309290000.1dc11ceb@posting.google.com>
Source record: 107401

"stefano" <sgalast@tin.it> wrote in message
news:<iWJdb.135875$hE5.4634507@news1.tin.it>...
> Hello,
>
> After sometime ,I am here again to inform all the Om community interested
> about the last news on the EH antenna.
> The antenna was tested, following the FCC rules ,by Stu Graham a important
> broadcasting engineer.
> For any news and to read any data on it (including the complete report from
> the consultant) please go here:
> http://www.eh-antenna.com/AM_Broadcast.htm
>
> Please read all the docs related.

I saw nothing to read but a bunch of useless jibber jabber, and silly
claims. Where's the beef? MK

1737. 300 ohm Feeder SG-230

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 08:52:29 UTC
From: Andy <dx90@blueyonder.co.uk>
Message-ID: <gpSdb.4954$Ge2.516@news-binary.blueyonder.co.uk>
Source record: 107403

I am thinking of buying a SG-230 Smartuner.

My antenna is a 120 feet center feed dipole with 300 ohm feeder and a 4:1 balun up at 25 feet with 20 feet of 50 ohm coax to the radio.
What I need to know is - if I replace the feeder and balun with a SG-230 Smartuner what sort of improvement can I expect?

Would it benefit me to use the Smartuner on a 120 feet end fed inverted L instead? The frequencies I mainly want to use it for are 160 - 40 meters.

Any help would be appreciated

Thanks

Andy

1738. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 10:44:59 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <L2Udb.5007$La.1604@fed1read02>
Source record: 107404

"stefano" <sgalast@tin.it> wrote in message
news:iWJdb.135875$hE5.4634507@news1.tin.it...
> Hello,
>
> After sometime ,I am here again to inform all the Om community interested
> about the last news on the EH antenna.
> The antenna was tested, following the FCC rules ,by Stu Graham a important
> broadcasting engineer.

Uhhh, what FCC "rule" describes antenna testing?

Ed
WB6WSN

1739. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 11:37:53 UTC
From: stefano <sgalast@tin.it>
Message-ID: <IQUdb.137406$hE5.4686187@news1.tin.it>
Source record: 107405

Hello,
I thought it was useful add here some words from Ted:

THE FOLLOWING IS A SUMMARY: The test report shows there were 15 measurements at various distances out to 10 miles from the antenna on each of 6 radials. Then the data is plotted to show that there is some directivity due to local interference (power lines). Finally, a RMS value of all data points presents a value of 0.4 dB less than the standard AM Broadcast antenna. That value is then used in the News Release and plotted on a curve to show that even though the center of the EH antenna is at 0.1 wavelengths, the radiation is only 0.4 dB less than a standard 1/4 wavelength tower with 120 radials. The curve also shows that if the center of the EH Antenna is raised to 1/4 wavelength, the radiation from it would exceed that from the standard tower by more than 2 dB.

For the AM Broadcaster, the primary benefit is that he can have an antenna that does not require any ground. He can even locate the antenna on top a building. We are currently developing a free standing antenna that will only require enough ground for a base. The end user (the Broadcaster) has no interest in the latest technology, he only wants to make money. For those that have a station, in most cases he can sell the land his antenna is now on, install an EH Antenna on a small plot, then sell the existing land and put money in his pocket. For those that want to build a new station, the land cost has been prohibitive - until now.

Ted
"stefano" <sgalast@tin.it> ha scritto nel messaggio
news:iWJdb.135875$hE5.4634507@news1.tin.it...
> Hello,
>
> After sometime ,I am here again to inform all the Om community interested
> about the last news on the EH antenna.
> The antenna was tested, following the FCC rules ,by Stu Graham a important
> broadcasting engineer.
> For any news and to read any data on it (including the complete report
from
> the consultant) please go here:
> http://www.eh-antenna.com/AM_Broadcast.htm
>
> Please read all the docs related.
>
> Three years ago I put on this forum a special announce about this
important
> discovery.
> Now we can publish all the evidences we were right.

> There is no doubt, the so called "EH mode " is real and alive.
> During the test the antenna was installed at about 1/10 of a wavelenght .
> On this position alomst equalled (only -0.4 db) a perfect 1/4 standard
tower
> with 120 radials.
> The real important feature is we can trade height for gain.
> When the antenna is installed at 1/4 wav. it shows a 2.5 db of gain (yes
,
> GAIN for a ground wave over a standard tower)
>
> very high efficiency
> very large bandwidth
> very compact size
>
> For the ham applications a new era is approaching. Antennas on 40, 80 or
160
> metres are very small on size, showing the same or better efficiency over
a
> standard full size vertical dipole.
>
> I wanted just share this great news with all interested people.
> My best 73's
> Stefano IK5IIR
>
>
>

1740. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 13:18:36 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <g2bgnv8tv4vg95g53kq7garsdd1a8mg5pg@4ax.com>
Source record: 107406

On Mon, 29 Sep 2003 05:30:51 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

> As for reputation.... You, admittedly, have absolutely no
> experience in the matter, and this is not rec.sci.amateur.hour.

I live in one of the windiest parts of the country, and I am quite
capable of recognizing the sound of hot air rushing by.

If there is, in fact, an official definition of the pound as a unit of
force, it isn't going to be a closely guarded secret, even post-11 Sep
2001.

If you are a Metrologist, it should be a piece of cake to find it.

So for you, or anyone else who would like to help you out, here are a
few hints.

Some of you likely are or have been science teachers. Use the
resources you have at hand to find this elusive official definition of
the pound as a unit of force. Tell me exactly what the standard is,
who defined it, and when.

Or go to someone you had as a science teacher, and enlist their help.

Go to a science teacher who is teaching your kids or grandkids.

Look in the textbooks you used, and see if the authors have any
footnotes citing the authority for whatever definition they use.

Look for the official definition in the CRC Handbook of Chemistry and
Physics, or in the Engineer's Handbook.

Look for the official definition in Encyclopï¿½dia Britannica, or in
World Book Encyclopedia, or the World Almanac, and whatever source is
cited in any of these.

Write or email NIST, and be sure to ask them not only what the
official definition is, but what makes it official and how long it has
been in use.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1741. WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 13:55:24 UTC
From: bob_weiss@prodigy.net
Message-ID: <gRWdb.8429$iC7.5294@newssvr32.news.prodigy.com>
Source record: 107407

very interesred in obtaining data and pricing on smallest possible 10M thu
20M
log periodic antenna.....what have you got?
Bob_Weiss@prodigy.net....W6NKC San Diego

1742. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 13:56:50 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <iidgnv89gg6mqbkag94vqa0bnamgkn4ghr@4ax.com>
Source record: 107408

On Sun, 28 Sep 2003 18:04:26 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

> Pepys could have written 1ï¿½
>that is shorter, but he did not as it was obviously not what was
>tendered to the debauched man. Even the debauched man would
>understand the significance of weight v. mass and how equivalencies of
>1pound = umpty-ump grams does not render the term pound as mass,

Let me explain to you the difference between your mere equivalence and
a definition.

At the same time the pound was redefined around the world as
0.45359237 kg, the yard was redefined as 0.9144 m. Since then, no
specific action has ever been taken to redefine the yard, yet its
ultimate definition has changed not just once but twice.

When the yard was redefined as 0.9144 m in 1959, exactly 2 parts per
million less than the old U.S. definition, the meter was defined by
the distance between two lines on a certain platinum-iridium bar with
a Tresca (crooked x) cross-section, kept by the BIPM at the same
location where the official kilogram is kept.

The yard was then 0.9144 times the distance between those two marks.

Then in 1960 the meter was redefined as 1650763.73 wavelengths of the
orange-red emission line emitted by a certain transition in krypton-86
atoms. Thus, at that time the yard was ultimately defined as
1509458.354712 wavelengths of the same light.

Then in 1983 the definition of the meter was changed, making it so the
speed of light in a vacuum is exactly 299792458 meters per second. No
action was taken to change the definition of a yard, but it changed
nonetheless. A yard is now ultimately defined, for the present time
and until and if the meter definition ever changes again, as the
distance that light travels in a vacuum in 1143/374740572500 second.

On the other hand, suppose that one or all of the countries involved
choose to abrogate the 1959 redefinition of the yard in terms of the
meter, and instead restore some independent standard. What effect
would that have on the ultimate definition of the meter? None
whatsoever.

Likeways, if the kilogram were to be redefined as x buckyballs of
carbon-12, then the pound would automatically become 0.45359237x
buckyballs of carbon-12. OTOH, if someone restored the definition of
the pound to some independently maintained chunk of metal, that would

have no effect whatsoever on the definition of the kilogram, and the realtionship between the pound and the kilogram would then become a measured quantity rather than an exact definition.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1743. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 14:18:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f784129_3@corp.newsgroups.com>
Source record: 107409

Richard Clark wrote:
> Thus it follows your negative that doesn't exist in your own formula,
> doesn't exist as a figment of someone else's over-indulgent
> imagination. I already said as much.

The sign of the reflection coefficient has absolutely nothing
to do with negative power. The sign of the reflection coefficient
is simply a math convention where -1 at zero degrees equals +1
at 180 degrees.

> You are still at a loss to respond to the post, ...

Exactly where does Chipman talk about reflections from the source?
As far as I can tell, the concept of reflections from the source
originated with you, not with Chipman.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1744. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 14:33:10 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7842A6.3902A0E2@cwis.net>
Source record: 107410

Stefano,
There appear to be a lot of "if's" in the 'certification',
and more conjecture than measured fact. Like most (should
say ~all~) press releases, this one can be used on gardens to
increase the growth rate. Just remember to wash the produce
carefully before use.
'Doc

1745. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 14:39:05 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <teggnvsidn6mcc0ukudonqo2vaprmoktcd@4ax.com>
Source record: 107411

On Mon, 29 Sep 2003 13:18:36 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>On Mon, 29 Sep 2003 05:30:51 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>> As for reputation.... You, admittedly, have absolutely no
>> experience in the matter, and this is not rec.sci.amateur.hour.
>
>I live in one of the windiest parts of the country, and I am quite
>capable of recognizing the sound of hot air rushing by.
>
>If there is, in fact, an official definition of the pound as a unit of
>force, it isn't going to be a closely guarded secret, even post-11 Sep
>2001.
>
>If you are a Metrologist, it should be a piece of cake to find it.
>
>So for you, or anyone else who would like to help you out, here are a
>few hints.
>
>Some of you likely are or have been science teachers. Use the
>resources you have at hand to find this elusive official definition of
>the pound as a unit of force. Tell me exactly what the standard is,
>who defined it, and when.
>
>Or go to someone you had as a science teacher, and enlist their help.
>
>Go to a science teacher who is teaching your kids or grandkids.
>
>Look in the textbooks you used, and see if the authors have any
>footnotes citing the authority for whatever definition they use.
>
>Look for the official definition in the CRC Handbook of Chemistry and
>Physics, or in the Engineer's Handbook.
>
>Look for the official definition in Encyclopï¿½dia Britannica, or in
>World Book Encyclopedia, or the World Almanac, and whatever source is
>cited in any of these.
>
>Write or email NIST, and be sure to ask them not only what the
>official definition is, but what makes it official and how long it has
>been in use.

More possibilities--

Go to sci.physics or slug.support and ask the people there to point you to the official definition of the pound as a unit of force.

Search Lexis (http://www.lexis-nexis.com) for a legal definition, if you are a subscriber to this service or know someone who has access to it.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1746. 144/440 ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 14:53:53 UTC
From: Mike Lisenco <lisenco@bellatlantic.net>
Message-ID: <5IXdb.11844$yU5.5597@nwrdny01.gnilink.net>
Source record: 107412

Anyone have a design for a 144/440 dual band ground plane. I know that it's available commercially, but I'd like to put one together myself. I have not been able to find a design on-line. Any ideas?

73,
Mike
N2YBB

1747. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 15:08:27 UTC
From: tdonaly@aol.com
Message-ID: <20030929110827.10105.00000003@mb-m21.aol.com>
Source record: 107413

Gene wrote,
>
>
>Some of you likely are or have been science teachers. Use the
>resources you have at hand to find this elusive official definition of
>the pound as a unit of force. Tell me exactly what the standard is,
>who defined it, and when.

I'm not a science teacher, but it wasn't hard to find. Look in the _Handbook
of
Mathematical Functions_ under "Physical Constants and Conversion Factors," by
A.G. McNish of the National Bureau of Standards (this is an old book). There
it is,
clear as a drunkard's gin, 1 pound force = 4.44822 Newtons. Speaking of
Newtons,
Newton, is the catty a unit of weight, force, or mass, and where is the
official
definition of same? What! No official definition of a unit that has been in
use for
thousands of years?
Why are you arguing about old measurement standards on a newsgroup that is
supposed to be devoted to the amateur use of antennas? There should be a
newsgroup
devoted to the obsessions of amateur physicists where like-minded people
could rail at one another without bothering anyone else. You should understand
that
there are very few people in the world who ever bother to let the concept of
pound
force disturb their sleep at night. Perhaps you shouldn't let it bother yours,
either.
73,
Tom Donaly, KA6RUH

1748. Re: WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 15:27:53 UTC
From: Duane Allen <computeruser@sprintmail.com>
Message-ID: <3F7852DE.7070705@sprintmail.com>
Source record: 107414

Bob,

If your willing to experiment a little,
Antenna Compendium 3 has estimates for a log periodic loop array.

I have never heard of one being built. W1NMZ said that he had modelled
one and it performed similar to prediction with the exception that I had
overestimate the gain over a traditional log periodic dipole array.

One design detail that I have not figured out is the spacing of the feed
between adjacent loops.

With respect to dimension, if I recall correctly, the overall length was
about 36 feet and the widest element, the reflector, was about 24 feet.
This would result in a turning radius of about 30 feet.

If you decide to try out the LPLA, let me know. I am very curious to
see if the design works. I would be glad to assist you.

Good luck,
Duane Allen
N6JPO Riverside

bob_weiss@prodigy.net wrote:

> very interesred in obtaining data and pricing on smallest possible 10M thu
> 20M
> log periodic antenna...........what have you got?
> Bob_Weiss@prodigy.net....W6NKC San Diego
>
>

1749. Re: 144/440 ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 15:51:17 UTC
From: "Eric C. Weaver" <weav@sigma.net>
Message-ID: <3f7854f8$1@news.announcetech.com>
Source record: 107415

Mike Lisenco wrote:
> Anyone have a design for a 144/440 dual band ground plane. I know that it's
> available commercially, but I'd like to put one together myself. I have not
> been able to find a design on-line. Any ideas?

An ordnary 2m ground plane ought to do; it'll be about 3/4 wave at 440. The SWR may not match perfectly but use good coax like LMR-600 and you'll get out fine.

Another option is Arrow's 2m/440 dual-band open-stub J-pole, one of which I have (after my home-made ground plane fell apart in the winds).

1750. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 15:53:34 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <qjjgnv455esr8lgh5uj0a4793ikm4g2trl@4ax.com>
Source record: 107416

On 29 Sep 2003 15:08:27 GMT, tdonaly@aol.com (Tdonaly) wrote:

>Gene wrote,
>>
>>
>>Some of you likely are or have been science teachers. Use the
>>resources you have at hand to find this elusive official definition of
>>the pound as a unit of force. Tell me exactly what the standard is,
>>who defined it, and when.
>
> I'm not a science teacher, but it wasn't hard to find. Look in the _Handbook
>of
>Mathematical Functions_ under "Physical Constants and Conversion Factors," by
>A.G. McNish of the National Bureau of Standards (this is an old book). There
>it is,
>clear as a drunkard's gin, 1 pound force = 4.44822 Newtons. Speaking of
>Newtons,

How old? When was it published (before or after 1959, in particular).

I will bet that Richard Clark won't endorse your finding as being any
sort of "official definition." What do you say, Richard? Did he find
a hidden treasure?

McNish also gives a conversion factor for pounds to kilograms, doesn't
he? From what you have given us, he identified the "pounds force" as
such. What does he call the pounds which are converted to kilograms?
Just "pounds"? Or "pounds mass"? Or just "pounds avoirdupois" and
"pounds troy" without saying that they are pounds mass?

I'll also bet that McNish didn't call them "Newtons"--it is newtons,
not capitalized in English.

Now, let's assume that this were an official definition. Then what is
the "standard acceleration of gravity" in English units? A pound
force is equal to a pound mass times the standard acceleration of
gravity. We already know a pound is officially defined as 0.45359237
kg, so that standard acceleration of gravity will be 1 lbf divided by
1 lb.

1 lbf/1 lb =4.44822 N/0.45359237 kg = (4.44822 kg m/sï¿½)/0.45359237 kg
= 4.44822/0.45359237 m/sï¿½ or about 9.80664643896 m/sï¿½

(4.44822/0.45359237 m/sï¿½)(1 ft/0.3048 m) =
4.44822/0.138254954376 ft/sï¿½ =
32.17403687... ft/sï¿½

That is indeed awfully close to the standard acceleration of free fall which is official for defining kilograms force. But it isn't the same, if that is an official definition of a pound force.

>Newton, is the catty a unit of weight, force, or mass, and where is the
>official
>definition of same? What! No official definition of a unit that has been in
>use for
>thousands of years?

There are lots of official definitions--but since I don't read Chinese, I'm not about to venture a guess as to whether or not any of them are found on the Internet.

They are units of mass, of course. Originally represented by independently maintained standards, and varying somewhat in different countries. Just as pounds were and just as kilograms still are. But at various times and places, and for various purposes such as international trade, catties were officially redefined in several different ways: as exactly 1 1/3 lb avoirdupois, as exactly 600 g, and as exactly 500 g are just a few of those official redefinitions--there might also have been one in terms of troy units, perhaps 20 oz troy = 1 2/3 lb troy, and perhaps other redefinitions in terms of either Spanish or Portuguese libras.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1751. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:17:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8fmgnvcmf6nig00em8tlm0t233cp670r84@4ax.com>
Source record: 107417

On Mon, 29 Sep 2003 11:37:53 GMT, "stefano" <sgalast@tin.it> wrote:

>Hello,
>I thought it was useful add here some words from Ted:

Hi Stefano,

You forgot to include that the eh is down, -10 to -30 dB from FCC
station field measurements:
http://www.eh-antenna.com/documents/EHANTENNA_proof.pdf
All the while requiring a tower and top hat to perform so poorly.

73's
Richard Clark, KB7QHC

1752. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:29:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dqmgnv80p53tnemohj0sic978pdsk4lb16@4ax.com>
Source record: 107418

On Mon, 29 Sep 2003 09:18:39 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>> You are still at a loss to respond to the post, ...
>
>Exactly where does Chipman talk about reflections from the source?
>As far as I can tell, the concept of reflections from the source
>originated with you, not with Chipman.

Hi Cecil,

You deliberately isolate my complaint, and then entirely ignore it. Does this give you some insight into you being observed as an unreliable correspondent? Is it so difficult to search Google to find the actual post that you claim you can quote from memory (sic)? If you do find it difficult, what makes me think you have the library research skills to find any printed material to a citation?

Your inability to quote or follow Chipman's work is equal in the poor treatment you post in regards to Optics here, a field you are so naive about, and so terribly unfamiliar with, you cannot even perform the simplest of field solutions.

This is indeed the price and evidence of your career in binary electronics.

73's
Richard Clark, KB7QHC

1753. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:33:30 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f786048_3@news1.prserv.net>
Source record: 107319

Roger:

Somewhere I believe I read that you have a good ground plane under the tower, but consider an alternative: I have a 100' tower which has numerous VHF antennas and a couple of HF dipoles hanging off of it. Tip elevation is 130' AGL. I added 4 elevated radials at 10' and brought all the feedlines out below that level. I am sure that the dipoles must add some capacitance loading, but with a gamma match and tuner at the antenna, I get 170 kHz usable bandwidth (SWR<2:1) on 160 meters without retuning.

--
Crazy George
Remove NO and SPAM from return address
"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:sptcnvon2qpgjherhp198ssht4a7j7ihhv@4ax.com...
> I've played a bit with inverted Ls, but I'm going to try one on a 100
> foot tower with a TH5 at 100 feet, 28'8" 6-meter yagi at 115 feet and
> the UHF and VHF arrays at 130 feet.
>
> By my calculations the tower should be close to a half wave, or
> slightly shorter than a half wave.
>
> I know that some tower heights and antennas can pose a problem such as
> the 70 feet and a tribander listed in the handbook.
>
> This antenna will be about 80 to 90 feet vertical and the rest
> horizontal.
>
> Has any one out there tried anything close to this?
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

1754. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:38:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aingnvoesd3v1amv026t0mg6kdth6qv0mv@4ax.com>
Source record: 107320

On Mon, 29 Sep 2003 15:53:34 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>I will bet that Richard Clark won't endorse your finding as being any
>sort of "official definition." What do you say, Richard? Did he find
>a hidden treasure?
>
Hi Gene,

You haven't got it yet?
I don't care. :-)

Your correspondence with its one note tune reminds me of the couplet
about fleas
"and fleas have littler fleas,
and so on ad infinitum"

73's
Richard Clark, KB7QHC

1755. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:50:17 UTC
From: tdonaly@aol.com
Message-ID: <20030929125017.07899.00000011@mb-m11.aol.com>
Source record: 107321

>
>
>On 29 Sep 2003 15:08:27 GMT, tdonaly@aol.com (Tdonaly) wrote:
>
>>Gene wrote,
>>>
>>>
>>>Some of you likely are or have been science teachers. Use the
>>>resources you have at hand to find this elusive official definition of
>>>the pound as a unit of force. Tell me exactly what the standard is,
>>>who defined it, and when.
>>
>> I'm not a science teacher, but it wasn't hard to find. Look in the
>_Handbook
>>of
>>Mathematical Functions_ under "Physical Constants and Conversion Factors,"
>by
>>A.G. McNish of the National Bureau of Standards (this is an old book).
>There
>>it is,
>>clear as a drunkard's gin, 1 pound force = 4.44822 Newtons. Speaking of
>>Newtons,
>
>How old? When was it published (before or after 1959, in particular).
>
>I will bet that Richard Clark won't endorse your finding as being any
>sort of "official definition." What do you say, Richard? Did he find
>a hidden treasure?
>
>McNish also gives a conversion factor for pounds to kilograms, doesn't
>he? From what you have given us, he identified the "pounds force" as
>such. What does he call the pounds which are converted to kilograms?
>Just "pounds"? Or "pounds mass"? Or just "pounds avoirdupois" and
>"pounds troy" without saying that they are pounds mass?
>
>I'll also bet that McNish didn't call them "Newtons"--it is newtons,
>not capitalized in English.
>
>Now, let's assume that this were an official definition. Then what is
>the "standard acceleration of gravity" in English units? A pound
>force is equal to a pound mass times the standard acceleration of
>gravity. We already know a pound is officially defined as 0.45359237
>kg, so that standard acceleration of gravity will be 1 lbf divided by
>1 lb.

>
>1 lbf/1 lb =4.44822 N/0.45359237 kg = (4.44822 kg m/sï¿½)/0.45359237 kg
> = 4.44822/0.45359237 m/sï¿½ or about 9.80664643896 m/sï¿½
>
>(4.44822/0.45359237 m/sï¿½)(1 ft/0.3048 m) =
> 4.44822/0.138254954376 ft/sï¿½ =
> 32.17403687... ft/sï¿½
>
>That is indeed awfully close to the standard acceleration of free fall
>which is official for defining kilograms force. But it isn't the
>same, if that is an official definition of a pound force.
>
Gene wrote,
>>Newton, is the catty a unit of weight, force, or mass, and where is the
>>official
>>definition of same? What! No official definition of a unit that has been in
>>use for
>>thousands of years?
>
>There are lots of official definitions--but since I don't read
>Chinese, I'm not about to venture a guess as to whether or not any of
>them are found on the Internet.
>
>They are units of mass, of course. Originally represented by
>independently maintained standards, and varying somewhat in different
>countries. Just as pounds were and just as kilograms still are. But
>at various times and places, and for various purposes such as
>international trade, catties were officially redefined in several
>different ways: as exactly 1 1/3 lb avoirdupois, as exactly 600 g,
>and as exactly 500 g are just a few of those official
>redefinitions--there might also have been one in terms of troy units,
>perhaps 20 oz troy = 1 2/3 lb troy, and perhaps other redefinitions in
>terms of either Spanish or Portuguese libras.
>
>Gene Nygaard
>http://ourworld.compuserve.com/homepages/Gene_Nygaard/
>

That's the kind of reply I expected. You didn't reply, however, to my
contention
that your posts are off topic and excessively obsessive. I'd like to
know something, though. What made you believe that anyone here
would be interested in your petty distinction between pounds and pounds?
I expect Richard is enjoying himself, as he collects much laughter up the
sleeve, but I think the whole thing is strange, even for this newsgroup.
73,
Tom Donaly, KA6RUH

1756. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:51:55 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <vhognv4cafbk0lrqftdknr0gim7ibecsma@4ax.com>
Source record: 107322

On Mon, 29 Sep 2003 16:38:03 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Mon, 29 Sep 2003 15:53:34 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>I will bet that Richard Clark won't endorse your finding as being any
>>sort of "official definition." What do you say, Richard? Did he find
>>a hidden treasure?
>>
>Hi Gene,
>
>You haven't got it yet?
> I don't care. :-)

Gee, I forgot.

I suppose 14 responses are pretty good evidence of how little you do
care.

If anybody actually does come up with an official definition, you'll
be latching onto it like a fly onto shit.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1757. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 16:59:09 UTC
From: richardharrison@webtv.net
Message-ID: <8204-3F7864DD-119@storefull-2317.public.lawson.webtv.net>
Source record: 107325

Richard Clark wrote:
"The folks at the end of the line are beginning to complain - could you move back some more?"

Could Richard Clark be referring to Stan Freburg`s parody of Harry Belafonte`s "Banana Boat Song" (Day-O, Day-O, etc)?

Some more! They can still hear you!

Best regards, Richard Harrison, KB5WZI

1758. Re: 300 ohm Feeder SG-230

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 17:06:35 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <bl9oqr$38n$1@news1.tribune.com>
Source record: 107324

Download Reg edwards, "Dipole3.exe" and you will be able to compare the
two feed systems quite easily.

http://www.btinternet.com/~g4fgq.regp/

KA9CAR

"Andy" <dx90@blueyonder.co.uk> wrote in message
news:gpSdb.4954$Ge2.516@news-binary.blueyonder.co.uk...
> I am thinking of buying a SG-230 Smartuner.
>
> My antenna is a 120 feet center feed dipole with 300 ohm feeder and a 4:1
> balun up at 25 feet with 20 feet of 50 ohm coax to the radio.
> What I need to know is - if I replace the feeder and balun with a SG-230
> Smartuner what sort of improvement can I expect?
>
> Would it benefit me to use the Smartuner on a 120 feet end fed inverted L
> instead? The frequencies I mainly want to use it for are 160 - 40 meters.
>
> Any help would be appreciated
>
> Thanks
>
> Andy
>
>

1759. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 17:08:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <51ognvcekdqd63560rntsnd6inftqbbs4u@4ax.com>
Source record: 107323

On Mon, 29 Sep 2003 13:56:50 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>Let me explain to you the difference between your mere equivalence and
>a definition.

Hi Gene,

You admittedly don't have the skills (which is evident in the single sentence quote above). And further, you say nothing responsive to the post, instead, yet again repeating, ad nauseum, the same poor quality of scripted response.

You are out of your element and terribly devoid of communication concepts that go beyond a cut-and-paste philosophy. Your knee jerk response to label any intelligent response as being offered by a fool is no retort of substance here. I willingly embrace such a title of fool. You can easily consult Google to the matter, but I will repeat it for you:
"Considering how many fools can calculate, it is surprising that it should be thought either a difficult or a tedious task for any other fool to learn how to master the same tricks.

"Some calculus-tricks are quite easy, Some are enormously difficult. The fools who write the text-books of advanced mathematics - and they are the most clever fools - seldom take the trouble to show you how easy the easy calculations are. On the contrary, they seem to desire to impress you with their tremendous cleverness by going about it in the most difficult way.

"Being myself a remarkably stupid fellow, I have had to unteach myself the difficulties, and now beg to present to my fellow fools the parts that are not hard. Master these thoroughly, and the rest will follow. What one fool can do, another can."
Silvanus P. Thompson, F.R.S.

If this seems a little dense in its meaning, it suggests the totality of your intellectual achievement in 3000+ posts can be contained in a handheld calculator with that calculator's added benefit that it won't back sass the operator. :-)

C'mon now Gene, we both know that any perceived admission to your inestimable authority would deflate you immediately into the depression of not being the focus - merely the period ending a lengthy, but trivial unread footnote. The web is littered with similar academic wannabees.

Your one note opera doesn't even need the fat lady.

Curtain.

73's
Richard Clark, KB7QHC

1760. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 17:12:33 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F786801.9F59F6CD@uci.edu>
Source record: 107336

Gene Nygaard wrote:
> My 'weight' is 230 pounds on earth. That's a fact.
>
> My 'weight' would be 230 pounds on the earth's moon. That's also a
> fact.

Your weight is defined as what you weigh on Earth, assuming a gravitational acceleration of g. Obviously it's not true that your weight would be measured as 230 pounds on the moon. The CRC Handbook of Chemistry and Physics states that the weight of a body varies with location, and defines weight as W = mg, where g is the local acceleration due to gravity.

Reflecting the apparent dichotomy, the CRC defines the pound both ways: "1. A unit of mass equal in the U.S. to 0.45359237 kg. exactly. 2. Specifically, a unit of measurement of the thrust or force of a reaction engine representing the weight the engine can move, as an engine with 100,000 pounds of thrust. 3. The force exerted on a one pound mass by the standard acceleration of gravity."

Interestingly, they also define poundal, pound mass and pound weight. No mention of pound force. Evidently, that would be redundant. ;-)

> As an aside, what do you think: Will NASA ever learn the lesson of
> the Mars Climate Orbiter, and quite using pounds?

Actually the contractor had specified the thrust of its rocket motor in pounds. NASA failed to properly convert to the CGS system that it (and most other scientific organizations) normally use.

73, Jim AC6XG

1761. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 17:29:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3fqgnvsousaladiakrareqf4pdqqimffvr@4ax.com>
Source record: 107326

On Mon, 29 Sep 2003 16:51:55 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:
>>You haven't got it yet?
>> I don't care. :-)
>
>Gee, I forgot.
>If anybody actually does come up with an official definition, you'll
>be latching onto it like a fly onto shit.

Hi Gene,

Suffering from www.Alzheimer's? You dropped the cue in the space of
one line. :-)

You really need to read Tom's comment. Your return to barnyard
epithets again reinforces the fulfilled clichï¿½ of the bumpkin. Our
comparison of credentials does serve a useful purpose, n'est pas?

My sleeve runneth over.

73's
Richard Clark, KB7QHC

1762. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 17:47:30 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F787032.44735AA4@uci.edu>
Source record: 107338

Tom Bruhns wrote:
> (Note that our resolution of measured voltage and current into the two
> modes generally assumes that we know the line's Zo, and the degree to
> which we don't know that will introduce an error in our determination
> of rho. But that's a whole 'nuther topic...)

To my way of thinking, rho is entirely dependent upon the impedances, and the voltages (reflected voltages in particular) are dependent upon rho. Not the other way around.

73, Jim AC6XG

1763. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:06:15 UTC
From: richardharrison@webtv.net
Message-ID: <18964-3F787497-133@storefull-2311.public.lawson.webtv.net>
Source record: 107328

Richard Clark wrote:
"Silvanus P. Thompson, F.R.S."

Anyone who can present a subject so simply and logically as Thompson does in "Calcus Made Easy", Second Edition Enlarged, The Macmillan Company, 1951, for the 21st printing, October 1914 for the 2nd edition release, truly understands his subject.

Thompson also says:
"There are 60 minutes in the hour, 24 hours in the day, 7 days in the week. There are therefore 1440 minutes in the day and 10080 in the week."

This leaped off the page for me after the 12 pence to the shilling, 20 shillings to the pound, etc in an earlier posting.

Different names and unit sizes for the same item. It`s the same for baloney. No matter how thin you slice it it`s still baloney. Kilograms and pounds are also different names and unit sizes for the same items, mass and force. Kilograms and pounds readily exchange when using the proper rates.

Best regards, Richard Harrison, KB5WZI

1764. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:13:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <56tgnv4qcg6fb5umacbhcq3uh0jj8pv4hv@4ax.com>
Source record: 107327

On 29 Sep 2003 16:50:17 GMT, tdonaly@aol.com (Tdonaly) wrote:
>I expect Richard is enjoying himself, as he collects much laughter up the
>sleeve, but I think the whole thing is strange, even for this newsgroup.
>73,
>Tom Donaly, KA6RUH

Hi Tom,

You are right. There come's a time when too much laughing is going
on, and not enough commentary. To quote a British comic, Frankie
Howerd of "Up Pompeii"
"It's a sin to mock the afflicted."

But to put this into perspective (I haven't lost my taste for humor),
there's still the eh antenna! I suppose I will go and sin some more.

73's
Richard Clark, KB7QHC

1765. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:21:32 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <0ltgnvcjet480j1pg93sqgsk0fcb6g5u4t@4ax.com>
Source record: 107329

On Mon, 29 Sep 2003 17:29:54 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Mon, 29 Sep 2003 16:51:55 GMT, Gene Nygaard <gnygaard@nccray.com>
>wrote:
>>>You haven't got it yet?
>>> I don't care. :-)
>>
>>Gee, I forgot.
>>If anybody actually does come up with an official definition, you'll
>>be latching onto it like a fly onto shit.
>
>Hi Gene,
>
>Suffering from www.Alzheimer's? You dropped the cue in the space of
>one line. :-)
>
>You really need to read Tom's comment.

It's good to see that you have enough integrity left not to claim that
the old NBS conversion factor which Tom found (which differs from the
conditional definition given by Dr. Barry Taylor of NIST in 1995) is
the *official* definition of a pound as a unit of force.

Even if you were deceitfully hoping that some of the others in this
thread would misinterpret that last-quoted statement that way.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1766. Re: OT: What type of antenna does the cell phone tower use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:30:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g6ugnvkkolcba745soghp5g8p40090t91o@4ax.com>
Source record: 107330

This is an open letter to a correspondent due to two rejected mails:
>Permanent Failure: 550_<...>_user_unknown
[name/address obscured by me]
>Why didn't you just mount the antenna upside down, and get the downtilt
>working for you as uptilt?

Hi OM,

Wasn't my choice, and would not have been my advice. A solution that is the mirror image of a bad situation is not necessarily a good solution. We want repeater coverage, not local low spot filling, and inverting that behavior would simply warm clouds.

Anyway, the service it was removed from had unknown requirements, but was obviously a poor performer for our application. There seems little likelihood that inverting this would accomplish any great benefit.

73's
Richard Clark, KB7QHC

1767. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:44:14 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <68penvccbf686qajrrh5fv9bmul9gel9vo@4ax.com>
Source record: 107331

On Sun, 28 Sep 2003 19:39:53 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Hi All,

Star Avoirdupois Pound
http://museum.nist.gov/object.asp?ObjID=10

Hassler constructed troy pounds and avoirdupois pounds, for
distribution to the custom-houses and to the States. The mass of a
troy pound is 0.82286 of an avoirdupois pound's mass. The troy pound
is used for determining the mass of precious metals. Hassler used the
troy pound of the U.S. Mint in Philadelphia, procured in London in
1827 by Albert Gallatin, to derive both types of standards. It is
likely that the Star Avoirdupois Pound (so named because of the star
inscribed on top of its knob) is the avoirdupois pound that was
directly derived from the Mint Pound by Hassler.

http://museum.nist.gov/exhibits/ex1/Room2.html
Ferdinand Rudolph Hassler was appointed the first Superintendent of
the Survey of the Coast by President Madison in 1816.
Born in Aarau, Switzerland in 1770, Hassler emigrated to the United
States in 1805.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1768. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:51:30 UTC
From: k7itm@aol.com
Message-ID: <3200347.0309291051.363dc21c@posting.google.com>
Source record: 107332

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f7737a3_2@corp.newsgroups.com>...
>
> Does it really hurt anything to remind everyone that +1 at 180 degrees
> equals -1 at zero degrees?

No, and I already agreed with that in another posting in this thread.
Perhaps you missed it. But it's just flat wrong to claim that the
negative value for sqrt(x^2) can be correct when you know that the the
original value of x is not negative: x in this case is the magnitude
of a complex number, and that magnitude is real and never negative.

Not only is that wrong, but it's also potentially confusing to lurkers
who may read into it that the only two values of rho which can result
in |rho|=1 are rho=+1 and rho=-1, and that's wrong. Just do it right
and say that your square root = |rho| = +1 and not -1, because it's a
magnitude, and that rho then can be magnitude 1 at ANY phase angle,
not just 0 and 180.

None of which has anything to do with the two of you continuing to
squabble like a couple of young children.

Cheers,
Tom

1769. Re: WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:52:51 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bl9v23$1b9m$1@f04n12.cac.psu.edu>
Source record: 107334

Look at the 6 element Tennadyne T6. http://www.tennadyne.com/
Very well made and works just like the specs. say it should.

--
John Passaneau W3JXP
State College Pa
w3jxp@arrl.net

<bob_weiss@prodigy.net> wrote in message
news:gRWdb.8429$iC7.5294@newssvr32.news.prodigy.com...
> very interesred in obtaining data and pricing on smallest possible 10M thu
> 20M
> log periodic antenna..........what have you got?
> Bob_Weiss@prodigy.net....W6NKC San Diego
>
>

1770. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:55:51 UTC
From: stefano <sgalast@tin.it>
Message-ID: <Xe%db.191620$R32.6182490@news2.tin.it>
Source record: 107333

Hi Doc and all,
I think you don't want read the document.
is not a press release.
Please ask to Mr. Graham
He can answer any question
Stefano

"'Doc" <w5lz@cwis.net> ha scritto nel messaggio
news:3F7842A6.3902A0E2@cwis.net...
>
>
> Stefano,
> There appear to be a lot of "if's" in the 'certification',
> and more conjecture than measured fact. Like most (should
> say ~all~) press releases, this one can be used on gardens to
> increase the growth rate. Just remember to wash the produce
> carefully before use.
> 'Doc

1771. Re: WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 18:59:08 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <0i%db.462969$Oz4.264989@rwcrnsc54>
Source record: 107335

Look at Tennadyne

<http://www.tennadyne.com>

A satisfied customer

bob_weiss@prodigy.net wrote:
> very interesred in obtaining data and pricing on smallest possible 10M thu
> 20M
> log periodic antenna..........what have you got?
> Bob_Weiss@prodigy.net....W6NKC San Diego
>
>

1772. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 19:34:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u52hnvcef11293qdg8jalv2lm162jlrmn8@4ax.com>
Source record: 107337

On Mon, 29 Sep 2003 18:55:51 GMT, "stefano" <sgalast@tin.it> wrote:
>Hi Doc and all,
>I think you don't want read the document.
>is not a press release.
>Please ask to Mr. Graham
>He can answer any question
>Stefano

Hi Stefano,
I think you haven't read the document.
what you describe is press release.
Please read
http://www.eh-antenna.com/documents/EHANTENNA_proof.pdf
which shows poor performance
73's
Richard Clark, KB7QHC

1773. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 22:14:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f78b0b8_4@corp.newsgroups.com>
Source record: 107339

Richard Clark wrote:
> You deliberately isolate my complaint, and then entirely ignore it.

I give up trying to communicate with you as have most others.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1774. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 22:21:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f78b252$1_4@corp.newsgroups.com>
Source record: 107340

Jim Kelley wrote:
> To my way of thinking, rho is entirely dependent upon the impedances,
> and the voltages (reflected voltages in particular) are dependent upon
> rho. Not the other way around.

Even when the impedances are only V/I ratios? Seems like circular
logic to me. The V/I ratio causes rho which causes the voltage???
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1775. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 22:32:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f78b4cf_4@corp.newsgroups.com>
Source record: 107341

Tom Bruhns wrote:

> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>Does it really hurt anything to remind everyone that +1 at 180 degrees
>>equals -1 at zero degrees?
>
> No, and I already agreed with that in another posting in this thread.

When a piece of coax is shorted, we can calculate:

rho = (Z1-Z0)/(Z1+Z0) = (0-50)/(0+50) = -1

After that, we can say it really means +1 at 180 degrees but it is
mathematically consistent in either case.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1776. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 23:14:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f1fhnv8190bg40uhbd5pphea2r6qb00ke9@4ax.com>
Source record: 107342

On Mon, 29 Sep 2003 17:14:38 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>I give up trying to communicate with you

Hi Cecil,

You did that long ago and were in denial only till now.

73's
Richard Clark, KB7QHC

1777. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 23:16:13 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F78BD3C.E03C322C@cwis.net>
Source record: 107343

Stefano,
It isn't? Then why does it say it's a press
release? And you are right, I didn't read ALL
the documents. After going through most of them
I had seen enough to know that my 'garden' wasn't
large enough for ALL the documents.
I'm sorry Stefano, until there is documented
proof from a reliable source, presented in a
straight forward manner, my credulity meter will
stay stuck on 'B.S.'...
'Doc

1778. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 23:18:23 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F78BDBF.8337029D@cwis.net>
Source record: 107344

Randy,
How much space do you have? Kind of hard to get
an idea of what may work for you without knowing that.
'Doc

1779. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 23:20:36 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F78BE44.E9C49A7F@uci.edu>
Source record: 107345

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > To my way of thinking, rho is entirely dependent upon the impedances,
> > and the voltages (reflected voltages in particular) are dependent upon
> > rho. Not the other way around.

> The V/I ratio causes rho which causes the voltage???

Nope. Rho is not dependent upon V/I ratios other than those at real physical impedance discontinuities. I think you know that. V/I ratios can vary with position along the line and are not constrained to equalling Z0 or Zl.

I'm curious why you would ask.

73, Jim AC6XG

1780. Re: 144/440 ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-29 23:29:58 UTC
From: arrow146@aol.com
Message-ID: <20030929192958.05023.00000027@mb-m18.aol.com>
Source record: 107346

<< Subject: 144/440 ground plane
From: "Mike Lisenco" lisenco@bellatlantic.net
Date: Mon, Sep 29, 2003 7:53 AM
Message-id: <5IXdb.11844$yU5.5597@nwrdny01.gnilink.net>

Anyone have a design for a 144/440 dual band ground plane. I know that it's available commercially, but I'd like to put one together myself. I have not been able to find a design on-line. Any ideas?

73,
Mike
N2YBB >>

<A HREF="http://ArrowAntennas.com/gp146.html#">Arrow Antenna GP146 & GP146/440</A>

1781. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 02:23:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8nphnvk410sce5vhtr5ns0q41q37odhr0g@4ax.com>
Source record: 107347

On Mon, 29 Sep 2003 18:16:13 -0500, 'Doc <w5lz@cwis.net> wrote:
> I'm sorry Stefano, until there is documented
>proof from a reliable source, presented in a
>straight forward manner, my credulity meter will
>stay stuck on 'B.S.'...
> 'Doc

Hi Doc,

The documentation is there, it is in the appendix no one reads (especially Stefano). It shows quite distinctly how this antenna goes straight into the toilet out beyond line of sight (that should show some change in the Neilsens for an AM station). Somewhere between -10 and -30dB compared to the standard quarterwave antenna. It shows up clear as a bell on the charts (the test engineer drew the FCC standard in RED and the test data plunges like a russian submarine). They could use this stuff in the economics department of an University class in how to kill business without really trying.

Of course the introductory material reads like the Playboy After Dark advisor. They used the line of sight numbers to show that the best numbers for the eh equaled the worst field readings the FCC considered allowable. In other (their) words "just as efficient or better."
P.T. Barnum showed more class when he fleeced suckers.

73's
Richard Clark, KB7QHC

1782. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 02:36:42 UTC
From: kd1@sympatico.ca
Message-ID: <3F78EC3A.DD5DE44B@sympatico.ca>
Source record: 107349

Cecil Moore wrote:
>
> Tom Bruhns wrote:
>
> > Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>Does it really hurt anything to remind everyone that +1 at 180 degrees
> >>equals -1 at zero degrees?
> >
> > No, and I already agreed with that in another posting in this thread.
>
> When a piece of coax is shorted, we can calculate:
>
> rho = (Z1-Z0)/(Z1+Z0) = (0-50)/(0+50) = -1
>
> After that, we can say it really means +1 at 180 degrees but it is
> mathematically consistent in either case.

This has been repeated so frequently of late, without qualification,
that readers may begin to believe that it is true in general.

It is only true for the special case of single frequency sinusoidal
waveforms.

For more complex waveforms (consider square, sawtooth, step, for
example), negation and 180 degree phase shift are not the same
operation.

Since reflection coefficients (at least for lines with approximately
real Z0) work perfectly fine for these more complex waveforms, it
seems unwise to be thinking that negation and 180 degree phase
shift are the same.

For the example above, stick with rho = -1. It will help you solve
more problems that way.

...Keith

1783. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 02:49:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F78EF52.162A72D1@cwis.net>
Source record: 107348

Richard,
It's just the same old advertising 'gimmick', tell'em what
you want them to believe, then hide the truth in all the
small print and numbers. I think the data furnished by the
Mr. Graham is ligitimate, it's just been massaged by the sales
people till it says something that isn't a fact. I also think
that Stefano may not have read ALL of the documents as you
suggested. He doesn't really sound like he's as naive as he
seems...
'Doc

1784. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 02:56:41 UTC
From: yooser@fluadub.com
Message-ID: <yooser-3C90FD.21565829092003@netnews.attbi.com>
Source record: 107350

In article <3F6CBC6E.9080505@get.lost>,
Zoran Brlecic <...WA7AA...@get.lost> wrote:

..... Either way, he has to see a
> lawyer.

Well, maybe eventually. He can start by requesting to look at the Zoning
Ordinance at the town/city hall.

1785. Re: Is a tower a "structure"?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 03:50:12 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F788CFC.30909@optonline.net>
Source record: 107351

The township in question has absolutely no regulations at all for towers
up to 70ft. high used by a "federally licensed Amateur Radio operator";
one does not even have to have a building permit to make sure the tower
is up to the task and installed safely -- although of course I want to
do that.

The only concern was the wording of the CC&Rs. I am now satisfied that
that they do not outlaw a tower -- that, in context, the word
"structure" applies only to buildings.

-=-
Alan AB2OS

On 09/30/03 02:56 am yooser@fluadub.com put fingers to keyboard and
launched the following message into cyberspace:

> ..... Either way, he has to see a lawyer.

> Well, maybe eventually. He can start by requesting to look at the Zoning
> Ordinance at the town/city hall.

1786. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 04:09:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7903d2_3@corp.newsgroups.com>
Source record: 107352

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>The V/I ratio causes rho which causes the voltage???
>
> Nope. Rho is not dependent upon V/I ratios other than those at real
> physical impedance discontinuities. I think you know that. V/I ratios
> can vary with position along the line and are not constrained to
> equalling Z0 or Zl.

Consider the following:

Source---50 ohm feedline---+---1/2WL 150 ohm---50 ohm load

Isn't the 50 ohms that causes rho=0 on the 50 ohm feedline
simply the V/I ratio at point '+'?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1787. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 04:12:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f790498$1_3@corp.newsgroups.com>
Source record: 107353

kd1@sympatico.ca wrote:
> It is only true for the special case of single frequency sinusoidal
> waveforms.

Which is the general case for a key-down ham transmitter.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1788. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 04:19:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f79064e_3@corp.newsgroups.com>
Source record: 107354

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>I give up trying to communicate with you
>
> You did that long ago and were in denial only till now.

You created your own reality based on your feelings. Nobody
else is capable of experiencing it.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1789. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 04:38:14 UTC
From: richardharrison@webtv.net
Message-ID: <6434-3F7908B6-498@storefull-2314.public.lawson.webtv.net>
Source record: 107355

Gene Nygaard wrote:
"Look in the textbooks you used, and see if the authors have any
footnotes citing the authority for whatever definition they use.

My Random House American College Dictionary (circa 1950) says:
"kilogram, n. Metric System. a unit of mass and weight, equal to 1000
grams and equivalent to
2.2046 pounds avoirdupois.

For pounds, the same dictionary says:
"Pound. 1. a unit of weight and of mass, varying in different periods
and countries.

Pounds and kilograms are different units for the same things, force and
weight.

Rants in this thread are inane. The world gets by just fine using 2.2046
pounds equal 1 kilogram.

The question, "Which is heavier - a pound of gold or a pound of
feathers?"

A pound of feathers is heavier than a pound of gold because gold is
measured in troy pounds while feathers are measured in avoirdupois
pounds. Troy pounds have 12 ounces; avoirdupois pounds have 16 ounces. A
troy pound contains 372 grams in the Metric System: an avoirdupois pound
contins 454 grams. Each troy ounce is heavier than an avoirdupois ounce,
says "The Handy Science Answer Book".

Baloney is sliced thinly above, but it`s still baloney.

Best regards, Richard Harrison, KB5WZI

1790. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 04:52:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pd2inv001pb6ro8tpspi81tq6mqo3ffcmf@4ax.com>
Source record: 107356

On Mon, 29 Sep 2003 23:19:47 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>You created your own reality based on your feelings. Nobody
>else is capable of experiencing it.

Hi Cecil,

See? You haven't given up afterall!

Feelings hmmm? Yeah, I suppose I get pretty emotional over your wild nonsense of sqrt of 1 could be -1. It's called laughing until your sides ache (not really, more a chuckle). You need to ride your bike more and skip the library.

Practice smiling once a day, read an eh posting from Stefano to break the ice.

73's
Richard Clark, KB7QHC

1791. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 07:35:11 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0309292335.3b1507cb@posting.google.com>
Source record: 107357

Richard Clark <kb7qhc@comcast.net> wrote in message
> Others may reference URL
> http://www.eh-antenna.com/documents/EHANTENNA_proof.pdf

Ok, found it now. Missed the link as it was buried in jibber jabber,
and my mind automatically tried to filter it out. :/
>
> I note that in photograph found on page 27 of 29 that the "reference"
> antenna is close enough to fall on the eh antenna. I also note that
> the engineer speculates that this structure was not isolated enough
> from the eh tests as it is demonstrated in the single radiation chart
> that was conducted within 6 wavelengths of the test antenna (page 25).

Probably benefiting from the ground radials also to a degree also.
"Being I consider the tower as part of the antenna, unless it's proven
not to be radiating."
>
> I also note that the antenna tower (yes folks, a common tower)
> supporting the supposed antenna has guying that is not broken up with
> insulators (plainly in view for the reference antenna in the
> background). Top loading, how convenient.

You would think after all the harping about the support being most of
the antenna, and also feedline radiation issues, he would have stuck
it on a non metal roof with the xmtr at the feedpoint. No feedline to
speak of. But what do I seem to see? A 90 ft tower with a small sleeve
dipole object, with a feed seemingly at the center of the device.
No mention of decoupling from said feedline running down to the base.
>
> When we actually look at the data (starting on page 7) and stepping
> back from the antenna 10 Miles (a reasonable distance to evaluate the
> far field) we see that both charts and tables of data for the eh fall
> dismally below the reference.

About what I would expect from a 90 ft tower with a less than optimum
loading scheme. :/
Just for grins, lets see the 90 ft tower by itself with only top
loading wires.
Wait, that might clash with the "program".... Wouldn't want the guinea
pig "victim" antenna to outshine the wunderstick of the 21st
century...

>
> The page of data called FCC figure 8 reveals that at 10Miles (actually
> 9.43 Miles) that the eh, tower, and top-hat are -4.24dB from the
> reference and -15dB from FCC standard curve. The chart marked Exhibit

> #1B (page 8) shows that further out at 20 Miles that the eh, tower,
> and top-hat are -26.6dB from the FCC standard curve.

No bueno.
>

>
> However, none of this means anything if the radio station that hosted
> this test does not buy one. After all, they are a commercial
> enterprise and if they want the additional efficiency within a couple
> of wavelengths at the cost of 10 to 30dB coverage outside of the
> block, they can certainly let economics rule that decision.

Dunno. They would need to buy an office building to mount it on to fit
with the "program"...:/
>
> Perhaps I read the data out of order, or the charts upside down.

Yea, that PDF file kind of gave me a headache also...

> Have they placed an order for this cheap, efficient, low antenna?

I bet it ain't cheap, if he's going to all this trouble to "prove" it
works.
Kind of reminds me of a lawyer buying the services of a handwriting
expert...

Efficient? Well, I guess as efficient as a UFO on a 90 ft metal stick
can be....

Low? I would hope so, if only for the neighbors sake...MK

1792. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 10:56:20 UTC
From: kd1@sympatico.ca
Message-ID: <3F796154.8AC20F11@sympatico.ca>
Source record: 107358

Cecil Moore wrote:
>
> kd1@sympatico.ca wrote:
> > It is only true for the special case of single frequency sinusoidal
> > waveforms.
>
> Which is the general case for a key-down ham transmitter.

It is indeed the usual case, but limiting your thinking to the
usual case reduces your opportunity for understanding.

Believing too strongly in the usual case will inhibit your
ability to understand when you begin to explore more
general cases. First you will have to unlearn your beliefs.
If you have repeated them to yourself for too long without
understanding their limitations, you can find it very difficult
to let go of them even when they no longer serve.

It is therefore useful to occasionally remind yourself of
the limitations applicable to your assertions.

...Keith

1793. Re: 300 ohm Feeder SG-230

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 12:45:55 UTC
From: Andy <dx90@blueyonder.co.uk>
Message-ID: <5Weeb.2562$L46.877@news-binary.blueyonder.co.uk>
Source record: 107359

Hi KA9CAR

Thanks for the web address very good.

73 de Andy

"KA9CAR" <ka9car@a_r_r_l_.net> wrote in message
news:bl9oqr$38n$1@news1.tribune.com...
> Download Reg edwards, "Dipole3.exe" and you will be able to compare the
> two feed systems quite easily.
>
> http://www.btinternet.com/~g4fgq.regp/
>
> KA9CAR
>
>
>
>
> "Andy" <dx90@blueyonder.co.uk> wrote in message
> news:gpSdb.4954$Ge2.516@news-binary.blueyonder.co.uk...
> > I am thinking of buying a SG-230 Smartuner.
> >
> > My antenna is a 120 feet center feed dipole with 300 ohm feeder and a
4:1
> > balun up at 25 feet with 20 feet of 50 ohm coax to the radio.
> > What I need to know is - if I replace the feeder and balun with a SG-230
> > Smartuner what sort of improvement can I expect?
> >
> > Would it benefit me to use the Smartuner on a 120 feet end fed inverted
L
> > instead? The frequencies I mainly want to use it for are 160 - 40
meters.
> >
> > Any help would be appreciated
> >
> > Thanks
> >
> > Andy
> >
> >
>
>

1794. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 13:41:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7989de$1_6@corp.newsgroups.com>
Source record: 107361

Richard Clark wrote:
> Feelings hmmm? Yeah, I suppose I get pretty emotional over your wild
> nonsense of sqrt of 1 could be -1.

It is well known that (-1)^2 = +1. You sometimes quote Johnson as a reference. From Johnson, section 1.6, page 16: "The ratio 'k' is called the reflection coefficient." "The terminating impedance is zero at this end, provided the internal resistance of the generator is negligible; hence for the generator end"

the reflection coefficient, "k(g) = -Z0/Z0 = -1"

--
73, Cecil http://www.qsl.net/w5dxp

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1795. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 13:42:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f798a47_6@corp.newsgroups.com>
Source record: 107362

kd1@sympatico.ca wrote:

> Cecil Moore wrote:
>
>>kd1@sympatico.ca wrote:
>>>It is only true for the special case of single frequency sinusoidal
>>>waveforms.
>>
>>Which is the general case for a key-down ham transmitter.
>
> It is indeed the usual case, but limiting your thinking to the
> usual case reduces your opportunity for understanding.

Can you give me an example of a key-down CW transmitter that is not
single frequency sinusoidal waveforms?
--
73, Cecil http://www.qsl.net/w5dxp

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1796. SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 13:44:11 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F791831.3090306@optonline.net>
Source record: 107360

Does anybody have any words of wisdom concerning the SteppIR antennas? The participants in the Yahoo! group devoted to them all seem rapturous -- except for the complaints about having to wait a couple of months for their orders to be filled. All but one of the reviews on eham give it a 5/5; the only exception is a 3/5 by someone who doesn't own one and *thinks* that the moving parts could present a maintenance and repair problem.

-=-
Alan AB2OS

1797. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 14:09:15 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0309300609.7fc55157@posting.google.com>
Source record: 107363

theplanters95@aol.comnospam (Theplanters95) wrote in message
news:<20030928021613.27589.00000209@mb-m27.aol.com>...
> I need plans for a quick, easy to build, reasonable efficient 80m antenna. I
> have very limited space...

Hi Randy,
such antenna is probably a dream of every low-band-ham.
Super-ultra-efficient ferrite antennas, E-H monsters and fractal
beasts seem to be a bit unbelievable. Think about single-turn
capacitor-tuned loops and loaded dipoles or verticals.

73 Ivan OK1SIP

1798. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 14:17:53 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <il2jnv4fujsljfeu77tf74ln1lffq11q9c@4ax.com>
Source record: 107364

On Mon, 29 Sep 2003 23:38:14 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Gene Nygaard wrote:
>"Look in the textbooks you used, and see if the authors have any
>footnotes citing the authority for whatever definition they use.
>
>My Random House American College Dictionary (circa 1950) says:
>"kilogram, n. Metric System. a unit of mass and weight, equal to 1000
>grams and equivalent to
>2.2046 pounds avoirdupois.
>
>For pounds, the same dictionary says:
>"Pound. 1. a unit of weight and of mass, varying in different periods
>and countries.
>
>Pounds and kilograms are different units for the same things, force and
>weight.

Still haven't figured out that your claims that both kilograms and
pounds are names of both a unit of mass and a unit of force is at odds
with what Dave Shrader and Richard Clark have been telling us, have
you?

Of course, kilograms force were also still quite acceptable units in
1950 when your dictionary was written, before the International System
of Units was introduced in 1960.
>
>Rants in this thread are inane. The world gets by just fine using 2.2046
>pounds equal 1 kilogram.

In 1950, that's about as good as they could do--more precise
expressions of this equivalence would have required specifying the
location in which the avoirdupois pounds were used.

That changed in 1959, when the national standards laboratories of the
six major countries using English units got together and defined the
pound as 0.45359237 kg.

But people who care about what they are doing also know that this
conversion factor doesn't work for pounds force, which are converted
to newtons rather than to kilograms in the modern metric system.
>
>The question, "Which is heavier - a pound of gold or a pound of
>feathers?"
>

>A pound of feathers is heavier than a pound of gold because gold is
>measured in troy pounds while feathers are measured in avoirdupois
>pounds. Troy pounds have 12 ounces; avoirdupois pounds have 16 ounces. A
>troy pound contains 372 grams in the Metric System: an avoirdupois pound
>contins 454 grams. Each troy ounce is heavier than an avoirdupois ounce,
>says "The Handy Science Answer Book".

You missed the most important difference between troy pounds and
avoirdupois pounds. The troy units of weight are always units of
mass, never units of force. The avoirdupois units of weight were
units of mass from the beginning, but they recently spawned a unit of
force of the same name (a unit that was never well defined before the
20th century, when people first started using a "standard acceleration
of gravity").
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1799. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 14:41:44 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <hl6inv04se7d870pv640rv3k8uf0l0kvi4@4ax.com>
Source record: 107365

On Mon, 29 Sep 2003 10:12:33 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> My 'weight' is 230 pounds on earth. That's a fact.
>>
>> My 'weight' would be 230 pounds on the earth's moon. That's also a
>> fact.
>
>Your weight is defined as what you weigh on Earth, assuming a
>gravitational acceleration of g. Obviously it's not true that your
>weight would be measured as 230 pounds on the moon. The CRC Handbook of
>Chemistry and Physics states that the weight of a body varies with
>location, and defines weight as W = mg, where g is the local
>acceleration due to gravity.

It doesn't cost you any more to pay attention.

Repeat to yourself until you understand it: Weight is an AMBIGUOUS
word. IT HAS SEVERAL DIFFERENT MEANINGS.

The one you cite from the Chemical Rubber Company is, of course, one
of those several definitions. If it always meant the same as mass in
physics jargon, I wouldn't have to point out to you that this is an
ambiguous word, would I?

Didn't you read the message you responded to, especially what
immediately followed the sentence you quoted? Didn't you see what
NIST and ASTM have to say about this? Look at it again, and read it
slowly this time

>Let's review what I've already posted in other messages in this
>thread, from ASTM
>
> . . . thus, when one speaks of a person's weight,
> the quantity referred to is mass. . .
>
>and from NIST
>
> Thus the SI unit of the quantity weight used in this
> sense is the kilogram (kg) and the verb "to weigh" means
> "to determine the mass of" or "to have a mass of".
>
> Examples: the child's weight is 23 kg

Learn to evaluate your sources, also. Those sources are more credible than any CRC Handbook on this subject.

Your definition of weight is not the proper one to use for your body weight in the doctor's office or the gym. It is not the one used in our hospitals. It is not the one used in weighing an NFL lineman at 380 lb, which is equal to 0.98 slinches in one system or 11.8 slugs in another system of those strange units only used in calculations, only in the sciences, and only in North America to any significant extent (people in other English-units countries continued to use the absolute fps system with force in poundals until they converted to the metric system in their engineering).

You can, of course, choose not to call this quantity "weight." You can call it mass instead, if you want to.

But keep in mind that if you do make that voluntary decision, that fact doesn't prove that anyone else is making an error if they call it "weight."

Furthermore, it is not an acceptable option to misinterpret what they are saying, and to misapply an inappropriate definition of weight.

You could, of course, argue that we should all change to your usage. But you certainly aren't going to exert the effort that would be necessary get us to give up a word to which we have a prior claim, if you aren't smart enough to figure out that it would be a change.

Furthermore, to have any hope of success, you'd have to offer us a verb as well as a noun.

>Reflecting the apparent dichotomy, the CRC defines the pound both ways:
>"1. A unit of mass equal in the U.S. to 0.45359237 kg. exactly.
>2. Specifically, a unit of measurement of the thrust or force of a
>reaction engine representing the weight the engine can move, as an
>engine with 100,000 pounds of thrust. 3. The force exerted on a one
>pound mass by the standard acceleration of gravity."

That really shouldn't come as any surprise to you, does it, at this stage of the game?

>Interestingly, they also define poundal, pound mass and pound weight.
>No mention of pound force. Evidently, that would be redundant. ;-)

Have you figured out yet what those poundals are, and how they are used? What is the base unit of mass in the system in which these force units are used?

One thing about the CRC Handbook (which edition?) is that they include stuff put in there over a period of many years, most of it undated. Those "pounds weight" are an obsolete term for what are now called pounds force.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1800. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 15:01:56 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F799AE4.FA8E0945@cwis.net>
Source record: 107366

Alan,
I don't own one either, but I think I'd have
to go along with the 'maintenance and repair'
opinion. If it moves, it will break, eventually.
'Doc

PS - But, don't give me one, I won't give it back!

1801. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 15:32:46 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blc7mu$or4$1@hercules.btinternet.com>
Source record: 107367

Take a wire through your radio shack window up to the top of a pole on your house chimney. Extend the wire from the top of the pole to a tree or other high support.

Make the wire as high and as long as you can. It is known as an Inverted-L. To increase overall length the end of the wire can be further extended sideways or downwards towards the ground.

This will be most efficient, all-band, all-direction, all elevation antenna which is possible in your back yard.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

1802. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 15:38:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <db7jnv41per6423udv6pjl0oiii6g87sak@4ax.com>
Source record: 107368

On Tue, 30 Sep 2003 08:41:06 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> Feelings hmmm? Yeah, I suppose I get pretty emotional over your wild
>> nonsense of sqrt of 1 could be -1.
>
>It is well known that (-1)^2 = +1.

You cannot show that any two powers used to compute Rho are negative
to fulfill this shift of your logic.
>>I probably should have said rho^2 = Pref/Pfwd. When Pref = Pfwd,
>>rho can be plus or minus one.
Rho can never be plus or minus one on the basis of sqrt (Pref/Pfwd).
To insist otherwise is the joke that gets me emotional with the
chuckles and gets you into a huff claiming you can't talk about it.

>You sometimes quote Johnson

Hi Cecil,

This again demonstrates how you are an unreliable correspondent. You
ascribe an action to me that is simply not true.
>From Johnson, section 1.6, page 16:
Is NOT a citation. Who is Johnson? Certainly you feel free to
associate my name with him, but Dr. Samuel Johnson never said any such
thing in his life. Note that I always give full names and complete
titles to my citations - unreliable correspondents are lazy
correspondents who throw statement after statement against the wall
until one sticks and they call that their authority. Read any of Gene
Nygaard's postings for boundless examples.

Cecil, this laziness of yours is part and parcel to your poor
recitations and flawed logic. You squirm to pull away from your
absurd example of imparting direction of power flow based on an
erroneous concept of finding negativity extracted from a dependant
variable based on negative power ratios. You are attempting to recast
that argument into other equivalent terms of Rho, while maintaining
this charade of that same sign inversion supporting your un-referenced
direction issue. You cannot demonstrate the direction flow sign being
constructed from a negative Rho on the basis of sqrt(Pref/Pfwd).

If you feel you cannot communicate with me, you certainly have that
right; but for this issue I am not the only one and it is not due to
my lack of communication ability (as I am probably the only one here
credentialed to that matter).

73's
Richard Clark, KB7QHC

1803. Re: WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 15:52:26 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <blebjo$6dp$1@ins22.netins.net>
Source record: 107318

I would also chime in as a very satisfied current owner/user of the Tennadyne T-6 Log Periodic and formerly a T-10 at the old qth. Very well built and does what an antenna of it's size should. At the prior qth the T-10 (24' boom) went through FIVE major ice storms without obvious damage (although when I took it down to move I did notice a crack in the boom at the rear of the antenna (largest element)). Tennadyne has since re-designed the booms, and the T-6 now uses two rectangular booms. If you're not a big-gun dx'er and just want an antenna that does a very good job from 20-10m with moderate gain and excellent f/b, then the T-6 would be a wise choice. It's also quite reasonably priced, has low wind loading and weight.

...hasan, N0AN
<bob_weiss@prodigy.net> wrote in message
news:gRWdb.8429$iC7.5294@newssvr32.news.prodigy.com...
> very interesred in obtaining data and pricing on smallest possible 10M thu
> 20M
> log periodic antenna.....what have you got?
> Bob_Weiss@prodigy.net....W6NKC San Diego
>
>

1804. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 16:28:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u3ajnvsan4rufnvg2id9ko73edu0888n58@4ax.com>
Source record: 107269

On 30 Sep 2003 00:35:11 -0700, nm5k@wt.net (Mark Keith) wrote:

>>
>> The page of data called FCC figure 8 reveals that at 10Miles (actually
>> 9.43 Miles) that the eh, tower, and top-hat are -4.24dB from the
>> reference and -15dB from FCC standard curve. The chart marked Exhibit
>> #1B (page 8) shows that further out at 20 Miles that the eh, tower,
>> and top-hat are -26.6dB from the FCC standard curve.
>
>No bueno.
>
>> Perhaps I read the data out of order, or the charts upside down.
>
>Yea, that PDF file kind of gave me a headache also...

Hi All,

On further review of the data offered, their tabular offering, the FCC Ground Survey Map (M3_map.zip available at the FCC homepage), it is evident I overstated the loss of the eh/tower/top-loaded antenna.

As noted above, this combination shows 4dB loss over their reference comparison standing nearby their test (except in the direction of that convenient passive radiator of course or with the concurrent re-radiative properties of the nearby power lines the engineer notes may affect readings). Employing the jpg file named 35e within the zip file from the FCC, it is evident that the ground conductivity is NOT 2mS as computed, but 4mS as reported by the FCC. The location of Eatonton is in the dead center of that quality of ground (not great, but not as poor as 2mS).

I shrugged at what appeared to be perhaps an insubstantial difference and reached for the calculator to see what the correlations would bring if this data were applied to the FCC data of 4mS ground instead. The loss is still apparent at -2.7dB. This agrees with the tabular data instead of the misapplication of 2mS to the charting of it.

Off hand, it would seem safe to say that the eh/tower/top-load is an average of mid 30's percent efficient.

Now, lets see, would a commercial station choose to replace a guyed tower, with a top loaded short guyed tower, plus cost of do-dad to enjoy the benefit of 1/3rd coverage? Let me be generous and return to the -2.7dB valuation instead, but to observe that we are facing a square law issue with population served. Those folks in the outlying regions cover vastly more square miles than those in the near region,

so we will consider a population halfway between and note that
squaring that radius reveals half the listenership suffers degraded
service through this antenna substitution.

Economics 101: "How to kill a business without really trying."

Hi Stefano,

the simple english version
of the text above:
eh antenna is not efficient -
you seem to read
the press release english
easier than data numbers.

73's
Richard Clark, KB7QHC

1805. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 17:19:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f79bd1e_1@corp.newsgroups.com>
Source record: 107270

Gene Nygaard wrote:
> You can, of course, choose not to call this quantity "weight." You
> can call it mass instead, if you want to.

Here's an interesting quote from _University_Physics_ by Young and Freedman: "On the moon, a stone would be just as hard to throw horizontally, but it would be easier to lift." It also says weight is a vector and mass is a scalar.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1806. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 17:48:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f79c3de_1@corp.newsgroups.com>
Source record: 107271

Richard Clark wrote:
> You cannot show that any two powers used to compute Rho are negative
> to fulfill this shift of your logic.

It doesn't require either power to be negative. All it requires is a short circuit. +1 simply has two square roots. rho = -1 for a short circuit and rho = +1 for an open circuit. All (rho = -1) requires is a short at the end of a transmission line as explained in _Transmission_ Lines_and_Networks_, by Walter C. Johnson when he was chairman of the Princeton EE Dept. Here's how he calculated rho for a short:

rho = (Z1-Z0)/(Z1+Z0) = (0-Z0)/(0+Z0) = -Z0/Z0 = -1

So your argument is with Dr. Johnson whom I am merely quoting. The (rho = -1) simply indicates a 180 degree phase shift in the reflected voltage at the short.

>>From Johnson, section 1.6, page 16:
> Is NOT a citation. Who is Johnson?

It doesn't surprise me a bit that you are ignorant of Johnson. In 1950, his book was one of the series of McGraw-Hill Electrical and Electronic Engineering Series with Terman as the consulting editor and containing textbooks by Kraus, Skilling, Terman, and others.

> ... it is not due to
> my lack of communication ability (as I am probably the only one here
> credentialed to that matter).

Must be really difficult to communicate when you are so special as to be the "only one here" who is "credentialed to that matter". Many of the posters to this newsgroup have written books and articles which I find to be communicated rather well.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1807. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 18:25:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kvhjnvkokaq2dttk4kpg3cl1cls4bpmd5i@4ax.com>
Source record: 107272

On Tue, 30 Sep 2003 12:48:32 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> You cannot show that any two powers used to compute Rho are negative
>> to fulfill this shift of your logic.
>
> Walter C. Johnson when he was chairman of the
>Princeton EE Dept. Here's how he calculated rho for a short:
>
>rho = (Z1-Z0)/(Z1+Z0) = (0-Z0)/(0+Z0) = -Z0/Z0 = -1
>
>So your argument is with Dr. Johnson whom I am merely quoting.

No my argument is with your perversion of yet another source in your
vain attempt to draw a faulty conclusion in applying direction as the
basis of the -1 drawn from your observation
>>I probably should have said rho^2 = Pref/Pfwd. When Pref = Pfwd,
>>rho can be plus or minus one.
I notice you continually flee from your assertion to prove a different
statement "Dr. Johnson" made.
>
>It doesn't surprise me a bit that you are ignorant of Johnson.

The unreliable correspondent once again, in laziness, again fails to
offer which Johnson. Presumably Walter, but you don't say, and
several Dr. Johnsons have been employed as sources in this group.
Your characteristic failure to attend boundary conditions is
consistent with your inability to preserve your assertion that somehow
a negative association is made with the sqrt(Pref/Pfwd) and that it
proves a change of direction (wholly unsubstantiated by any but your
own Johnson).
>
>Must be really difficult to communicate when you are so special as to
>be the "only one here" who is "credentialed to that matter". Many of
>the posters to this newsgroup have written books and articles which
>I find to be communicated rather well.

And with whom you have such difficulty communicating with.

73's
Richard Clark, KB7QHC

1808. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 18:36:50 UTC
From: tdonaly@aol.com
Message-ID: <20030930143650.27553.00000091@mb-m04.aol.com>
Source record: 107273

Cecil wrote,
>
>Gene Nygaard wrote:
>> You can, of course, choose not to call this quantity "weight." You
>> can call it mass instead, if you want to.
>
>Here's an interesting quote from _University_Physics_ by Young and
>Freedman: "On the moon, a stone would be just as hard to throw
>horizontally, but it would be easier to lift." It also says weight
>is a vector and mass is a scalar.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

You better watch out, Cecil, Gene is liable to write a scathing indictment
of your intelligence, integrity, and job fitness, for quoting that. By the way,

what ever happened to the old idea that the attraction between two masses
was directly proportional to the size of the two masses multiplied together,
and inversely
proportional to the square of the distance between them - sort of like positive
and
negative charge (Coulomb's Law and all that).
73,
Tom Donaly, KA6RUH

1809. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 18:45:08 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F79CF34.D1BC3FB8@cwis.net>
Source record: 107274

Dang Reg, how did you know what his backyard looks
like??
'Doc

1810. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 19:13:51 UTC
From: richardharrison@webtv.net
Message-ID: <6434-3F79D5EF-584@storefull-2314.public.lawson.webtv.net>
Source record: 107275

Cecil, W5DXP wrote:
"On the moon, a stone would be just as hard to throw horizontally, but it would be easier to lift."

The normal forces are different on the earth and moon. But, the physics book statement follows from Newton: F= MA, and M is the same on earth or moon.

Best regards, Richard Harrison, KB5WZI

1811. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 19:44:35 UTC
From: richardharrison@webtv.net
Message-ID: <6434-3F79DD23-588@storefull-2314.public.lawson.webtv.net>
Source record: 107276

Cecil, W5DXP wrote:
'I probably should have said rho^2 = Pref / Pfwd, rho can be plus or minus 1."

Terman mentions a power ratio at the bottom of page 97 of his 1955 edition:
"This definition of standing-wave ratio is sometimes called voltage standing-wave ratio (VSWR) to distinguish it from the standing-wave ratio expressed as a power ratio, which is (Emax / Emin) squared.

Best regards, Richard Harrison, KB5WZI

1812. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 20:32:55 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <xHadnXWkdYoYdeSiU-KYhw@comcast.com>
Source record: 107277

Richard,

I think their point is that, for a new installation, it would be cheaper since you don't need radials and the associated real estate. I seem to recall in one place they suggested putting it on top of a building.

What a messed up web site though. They could have a picture and a diagram without looking at the last two pages of a PDF file that took several minutes to download via a cable modem.

There is also something messed up with the description. In one place they mention (arbitrarily) using 450 Ohm open wire line, and then go on to say they match 450 Ohms to 50. I don't think they mean that.

Tam/WB2TT

1813. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 21:02:18 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F79EF5A.D2840847@uci.edu>
Source record: 107278

Cecil Moore wrote:
> Consider the following:
>
> Source---50 ohm feedline---+---1/2WL 150 ohm---50 ohm load
>
> Isn't the 50 ohms that causes rho=0 on the 50 ohm feedline
> simply the V/I ratio at point '+'?

The nature of things a point '+' are undefined, so I can't address that. But according to the way you defined the problem, the characteristic impedance of the 50 ohm feedline is 50 ohms. That sets the V/I ratio. The impedance is determined by the distributed capacitances and inductances of the transmission line - not by the voltage you put across it. Is there some other way I'm supposed to look at it?

73, Jim AC6XG

1814. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 21:10:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F79F14F.8E4F3E46@uci.edu>
Source record: 107279

Richard Harrison wrote:
>
> Cecil, W5DXP wrote:
> "On the moon, a stone would be just as hard to throw horizontally, but
> it would be easier to lift."
>
> The normal forces are different on the earth and moon. But, the physics
> book statement follows from Newton: F= MA, and M is the same on earth or
> moon.

I think the point is that the inertia is the same, independent of what
the gravity might happen to be, thus demonstrating the most fundamental
property and defining feature of mass.

73, Jim AC6XG

1815. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 21:21:14 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F79F3CA.A6208084@uci.edu>
Source record: 107280

Gene Nygaard wrote:
> It doesn't cost you any more to pay attention.
>
> Repeat to yourself until you understand it: Weight is an AMBIGUOUS
> word. IT HAS SEVERAL DIFFERENT MEANINGS.

What cause have I given you to write to me in such a manner?

> The one you cite from the Chemical Rubber Company is, of course, one
> of those several definitions. If it always meant the same as mass in
> physics jargon, I wouldn't have to point out to you that this is an
> ambiguous word, would I?

This is the first you've mentioned anything about it being ambiguous.
Until now, you've just been belligerent and accusational about it.

> Didn't you read the message you responded to, especially what
> immediately followed the sentence you quoted? Didn't you see what
> NIST and ASTM have to say about this? Look at it again, and read it
> slowly this time

I'm commenting on what you said, Gene. I have no comment on what NIST
had to say.

> > Thus the SI unit of the quantity weight used in this
> > sense is the kilogram (kg) and the verb "to weigh" means
> > "to determine the mass of" or "to have a mass of".
> >
> > Examples: the child's weight is 23 kg
>
> Learn to evaluate your sources, also. Those sources are more credible
> than any CRC Handbook on this subject.

You need to learn how to attribute yours. I didn't write that. :-)

> Your definition of weight is not the proper one to use for your body
> weight in the doctor's office or the gym.

I don't write definitions. But the ones I have cited are no less
accurate in the doctors office than the physics lab.

> You can, of course, choose not to call this quantity "weight." You
> can call it mass instead, if you want to.

As I recall, the argument was about whether to call it a mass or a
force.
It's generally accepted that weight is a force. Problems can arise when
someone claims a mass is a force and vice versa.

> Furthermore, it is not an acceptable option to misinterpret what they
> are saying, and to misapply an inappropriate definition of weight.

It is possible that you are doing some of the misinterpreting.

> You could, of course, argue that we should all change to your usage.

Many people already have, obviously.

> >Reflecting the apparent dichotomy, the CRC defines the pound both ways:
> >"1. A unit of mass equal in the U.S. to 0.45359237 kg. exactly.
> >2. Specifically, a unit of measurement of the thrust or force of a
> >reaction engine representing the weight the engine can move, as an
> >engine with 100,000 pounds of thrust. 3. The force exerted on a one
> >pound mass by the standard acceleration of gravity."
>
> That really shouldn't come as any surprise to you, does it, at this
> stage of the game?

I believe I had stated the same thing in so many words, earlier.

> >Interestingly, they also define poundal, pound mass and pound weight.
> >No mention of pound force. Evidently, that would be redundant. ;-)

> Have you figured out yet what those poundals are, and how they are
> used?

Were you not able to ascertain that from my earlier post where I
referenced the definition in Halliday and Resnick?

> One thing about the CRC Handbook (which edition?) is that they include
> stuff put in there over a period of many years, most of it undated.
> Those "pounds weight" are an obsolete term for what are now called
> pounds force.

So which units of weight do you think we're supposed to use now?

73, Jim AC6XG

1816. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 21:29:06 UTC
From: buddy clark <buddycl@swbell.net>
Message-ID: <CAmeb.63$wz7.78016627@newssvr11.news.prodigy.com>
Source record: 107281

i've had a 3 element up 15 months or so
and the only problems i've had are self
inflicted or inflicted by squirrels. admittedly
my winters here in the dallas/ft worth metro
area are not as severe as new england. john
and company are really nice guys to deal with.
the beam in my estimation meets or exceeds
all advertised specs. the beam does not work
well on 6m in my opinion, but my frame of
reference for that band was a 5 element on a
30 foot boom. 20m - 10m it works like a fire
hose and the 180 degree is a great feature.
it's expensive but i'd buy one again with no
reservations.

larry
kd5foy

"Alan Beagley" <abeagley@optonline.net> wrote in message
news:3F791831.3090306@optonline.net...
> Does anybody have any words of wisdom concerning the SteppIR antennas?
> The participants in the Yahoo! group devoted to them all seem rapturous
> -- except for the complaints about having to wait a couple of months for
> their orders to be filled. All but one of the reviews on eham give it a
> 5/5; the only exception is a 3/5 by someone who doesn't own one and
> *thinks* that the moving parts could present a maintenance and repair
> problem.
>
> -=-
> Alan AB2OS
>

1817. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:01:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7A0B5B.15E4AE53@uci.edu>
Source record: 107282

Cecil Moore wrote:
> Isn't the 50 ohms that causes rho=0 on the 50 ohm feedline
> simply the V/I ratio at point '+'?

I see now. Your interested in something else here, I think. The rho for the whole network which includes both impedance discontinuities is indeed zero. We've talked about that before. But the rho for the single discontinuity at '+' is not equal to zero. The reflected impedance (the load impedance, repeated a half wavelength away) is not considered in the evaluation of rho at '+'. It is the characteristic impedance of the line that is considered. You would agree, no?

73, Jim AC6XG

1818. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:12:17 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <y2oeb.4200$N94.1839@lakeread02>
Source record: 107283

Rotors break, coax fails, connectors get water in them,
aluminum elements fracture and break off... Even if it
stands still it will eventually fail. Nothing is forever.

Pete

"'Doc" <w5lz@cwis.net> wrote in message news:3F799AE4.FA8E0945@cwis.net...
> Alan,
> I don't own one either, but I think I'd have
> to go along with the 'maintenance and repair'
> opinion. If it moves, it will break, eventually.
> 'Doc
>
> PS - But, don't give me one, I won't give it back!

1819. Re: QST & Antenna Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:13:44 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <V3oeb.4201$N94.2621@lakeread02>
Source record: 107284

"Al Lorona" <al_lorona@agilent.com> wrote in message
news:3F4F7FCD.69F00C14@agilent.com...
> Dan Richardson wrote:
>
> > >
> > Yes, that policy was updated in 1998.
>
> > 73
> > Danny, K6MHE
>
> Wow, that's over five years ago, yet I only first noticed gain numbers
> in an ad earlier this year. Thanks, Danny.
>
> Al W6LX

Probably because most manufacturers don't want verifiable gain figures
published.

Peter

1820. element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:17:41 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20030930191741.10332.00000073@mb-m14.aol.com>
Source record: 107285

Is this test open game? Basically, are all characters, q-codes, and prosigns fair game on this test. I have studied relentlessly and know a majority of them and can receive at 10wpm but everytime I look at a different book or website I find more stuff.

Thanks for the input

73
G. Doughty
KI4BBL

1821. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:26:16 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vnk48uuo58mb0@corp.supernews.com>
Source record: 107286

"buddy clark" <buddycl@swbell.net> wrote in message
news:CAmeb.63$wz7.78016627@newssvr11.news.prodigy.com...
>
> i've had a 3 element up 15 months or so
> and the only problems i've had are self
> inflicted or inflicted by squirrels. admittedly
> my winters here in the dallas/ft worth metro
> area are not as severe as new england. john
> and company are really nice guys to deal with.
> the beam in my estimation meets or exceeds
> all advertised specs. the beam does not work
> well on 6m in my opinion, but my frame of
> reference for that band was a 5 element on a
> 30 foot boom. 20m - 10m it works like a fire
> hose and the 180 degree is a great feature.
> it's expensive but i'd buy one again with no
> reservations.
>
> larry
> kd5foy
>
> "Alan Beagley" <abeagley@optonline.net> wrote in message
> news:3F791831.3090306@optonline.net...
> > Does anybody have any words of wisdom concerning the SteppIR antennas?
> > The participants in the Yahoo! group devoted to them all seem rapturous
> > -- except for the complaints about having to wait a couple of months for
> > their orders to be filled. All but one of the reviews on eham give it a
> > 5/5; the only exception is a 3/5 by someone who doesn't own one and
> > *thinks* that the moving parts could present a maintenance and repair
> > problem.
> >
> > -=-
> > Alan AB2OS
> >
>

yeah

what he said!
I've had one for years, one of the first 3el yagis;
I'm the guy in the QST review who said it "ignores ice".
Even here near Austin, TX it ices up from time to time, and the fact the ice
was not touching the radiators was obvious compared to some wire antennas I
have.

Someone can be over s-nine, hit the 180 button and they're noisy!

I have ordered the 4 element addition, they said they'd ship Sep.
Too late!

Also I have the big vertical.
The stepper motors are good for a huge number (10000's?) of cycles.
This is seriously good stuff.
H.
NQ5H

1822. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-09-30 23:41:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jr4knv802rgoblklchoef7578ote0klbd1@4ax.com>
Source record: 107287

On 30 Sep 2003 23:17:41 GMT, nightowls627@aol.comnojunk (G. Doughty)
wrote:

>Is this test open game? Basically, are all characters, q-codes, and prosigns
>fair game on this test. I have studied relentlessly and know a majority of
>them and can receive at 10wpm but everytime I look at a different book or
>website I find more stuff.
>
>Thanks for the input
>
>73
>G. Doughty
>KI4BBL

Hi OM,

The answer is found by taking only questions from the question pool.
In your case, the questions would be a CW pool (there are only so many
tapes to do the job, unless it is computerized now - in that regard it
becomes a matter of a QSO content pool). Unless your opportunity for
testing is only occasional, re-testing will motivate and get you
through the process as quickly as any other. After all, there is the
clean copy part (if that hasn't changed) where you may never hear
anything but straight text.

73's
Richard Clark, KB7QHC

1823. Re: Converting a 2M antenna to 224MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 00:42:20 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <dlpeb.192600$mp.106193@rwcrnsc51.ops.asp.att.net>
Source record: 107288
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Inside the mag mount is a tuning circuit for 146 MHZ!! So, it's not simply cutting the length from 49 inches to another value. It will require changing the tuning inside the mag mount.

So, scaling the 49 inches from 146 MHZ to 223 MHZ yields a length of 32 inches for 5/8 wavelength at 223 MHz. But, you still have to solve the retuning of the internal circuit.

W1MCE

Darrin wrote:

> I found an old mag mount 2 meter antenna, and want to convert it for
> use on 224MHz. The whip is 49". Is there a simple formula to figure
> out how short to cut it?

1824. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 00:46:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <5tpeb.192603$mp.105707@rwcrnsc51.ops.asp.att.net>
Source record: 107289

47 CFR97.503

The alphabet, the numerals, the period, the comma, the fraction bar, the
question mark; and the prosigns: AR, SK and BT.

If you can handle these at 10 wpm you are home free!!!! Go upgrade at
next session.

Deacon Dave, W1MCE
Registered Instructor, ARRL

G. Doughty wrote:

> Is this test open game? Basically, are all characters, q-codes, and prosigns
> fair game on this test. I have studied relentlessly and know a majority of
> them and can receive at 10wpm but everytime I look at a different book or
> website I find more stuff.
>
> Thanks for the input
>
> 73
> G. Doughty
> KI4BBL

1825. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 00:48:37 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bld894okg1@sparta.btinternet.com>
Source record: 107290

"'Doc" wrote -
> Dang Reg, how did you know what his backyard looks like??

> 'Doc

Randy said -

" I need plans for a quick, easy to build, reasonable efficient
80m antenna. I have very limited space... "
>

Dear Doc,

The key words in Randy's frantic appeal for help were QUICK, EASY, REASONABLY EFFICIENT, 80m, LIMITED SPACE.

My response fits the bill exactly. It is the concise, accurate, reply which I would have expected from your good, practical self.

The key words in my response were contained in the last sentence. For your benefit I repeat -

"This will be the most efficient, all-band, all-direction, all-elevation antenna which is possible in YOUR BACK YARD."

A coloured photograph with an ordinance survey map of his back yard, showing his domestic and nearby buildings with trees and overhead power and phone lines, with a cross to indicate the position of his shack window, are not necessary to satisfactorily comply with Randy's brief, very common requirements specification.

You may rest assured my suggestions apply to ANYBODY's small back yard. Read them again.

The foregoing is for the benefit of novices and other lurkers. It should be included in all editions of ARRL and RSGB publications. You just forgot to include a smiley in your message. ;o) ;o)

Incidentally, I am accustomed to changing my antennas fairly frequently. Never had a permanent installation. My present recent antenna is an 18-gauge enamelled wire which extends from the ground-floor kitchen window, up the wall of the house, to a 10-feet mast affixed to the house chimney above the apex of the roof. Overall height is about 40 feet. It is bottom tuned. There are two ground radials. One radial consists of the domestic incoming metal

water pipe and is about 5 miles long. It is also connected to all the other 100 thousand water pipes in the area. The second radial is a fairly useless 12 feet long wire, connected along the soil surface to a 2-feet earth rod in the garden soil. Resulting measured ground loss resistance is about 15 ohms on the 80m band. So much for Marzipan the Magician's magic number of 120 as plagiarised by the magazine guru's.

Athough I have considerably more real estate it is what I would refer to as a very small backyard antenna. With 100 watts it will keep me happy on 160, 80, 40, 30 and 20m although, sooner or later, I MIGHT have a complaint from the next door neighbour about TV interference on the higher frequencies. His TV antenna coax down-lead is about 25 feet from my 'vertical' wire and he has 3 TV receivers connected to his antenna, from one room to another via an amateur electrician's coaxial ring main.

He will notify me of a problem by means of a heavy hammer on the adjoining wall. He's that sort of person - considers himself to be the local Mafia Godfather. He's 83 years of age, waiting for a hip operation, but claims to have a step-son employed in a local firm of legal solicitors. However I have reason to believe his step-son is just the inter-office message and tea/coffee boy.

You fortunate, cheap gasoline, USA citizens, with vast antenna farms, don't have the foggiest idea of what life is like for us mini-backyard denizens inhabiting the rest of this over-populated world, wondering from where the next scrap length of enamelled, annealed, copper magnet wire is coming from.

And if anybody thinks I'm just pulling your lazy legs - for once you are right on the ball! ;o)

To estimate the L and C values of a home-brew tuner, suitable for any small backyard vertical or inverted-L wire, download in a few seconds program ENDFEED from website below and run immediately. A 3-weeks training course not needed.

Regards from Reg, G4FGQ.
==========
For Free Radio Design Software,
made in the Black Country, near
the original Birmingham, England,
go to http://www.g4fgq.com
==========

1826. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 01:18:15 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7A2B57.ECDBB977@cwis.net>
Source record: 107291

Reg,
As Gomer used to say... "Shazzaam!"
'Doc

1827. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 01:22:10 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7A2C42.4C336F99@cwis.net>
Source record: 107292

G.,
It also helps if you know the TTY characters, Baudot
code, and the 'Star Spangled Banner'... but not much.
'Doc

1828. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 01:43:20 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <s8bknv0j69ul95e9af288bmhupcek90jr7@4ax.com>
Source record: 107293

On 30 Sep 2003 18:36:50 GMT, tdonaly@aol.com (Tdonaly) wrote:

>Cecil wrote,
>>
>>Gene Nygaard wrote:
>>> You can, of course, choose not to call this quantity "weight." You
>>> can call it mass instead, if you want to.
>>
>>Here's an interesting quote from _University_Physics_ by Young and
>>Freedman: "On the moon, a stone would be just as hard to throw
>>horizontally, but it would be easier to lift." It also says weight
>>is a vector and mass is a scalar.
>>--
>>73, Cecil http://www.qsl.net/w5dxp
>>
>
>You better watch out, Cecil, Gene is liable to write a scathing indictment
>of your intelligence, integrity, and job fitness, for quoting that. By the way,

I don't know why I would. I agree with the quoted part. Of course,
though the stone is just as hard to throw, it will likely go farther
before it falls to the ground.

Would you say that a boat is heavy because it is hard to push away
from the dock? What is the relevant factor here--that it is pressing
down with a force due to gravity of 9000 pounds force? Or that it has
a mass of 9000 pounds?

What is the metric equivalent of a ton used for the weight of a U.S.
Navy ship? For example, the tanker USNS Henry J. Kaiser is 27,561
tons deadweight. How much is that is SI units?
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1829. free antenna located in Michigan

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 02:27:43 UTC
From: Bud Tuggley <pgietzen2638@wideopenwest.com>
Message-ID: <fK2dnQjLw_UCpueiU-KYgA@wideopenwest.com>
Source record: 107294

Located in Michigan, Plymouth, Rohn25.. Email
Pgietzen2638@wideopenwest for info.

1830. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 02:55:02 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <l7fknvs425osognfrcg6vfvo0ejhiugvrk@4ax.com>
Source record: 107295

On Tue, 30 Sep 2003 14:21:14 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Gene Nygaard wrote:
>> It doesn't cost you any more to pay attention.
>>
>> Repeat to yourself until you understand it: Weight is an AMBIGUOUS
>> word. IT HAS SEVERAL DIFFERENT MEANINGS.
>
>What cause have I given you to write to me in such a manner?
>
>> The one you cite from the Chemical Rubber Company is, of course, one
>> of those several definitions. If it always meant the same as mass in
>> physics jargon, I wouldn't have to point out to you that this is an
>> ambiguous word, would I?
>
>This is the first you've mentioned anything about it being ambiguous.

You just haven't been paying attention.

>Until now, you've just been belligerent and accusational about it.
>
>> Didn't you read the message you responded to, especially what
>> immediately followed the sentence you quoted? Didn't you see what
>> NIST and ASTM have to say about this? Look at it again, and read it
>> slowly this time
>
>I'm commenting on what you said, Gene. I have no comment on what NIST
>had to say.
>
>> > Thus the SI unit of the quantity weight used in this
>> > sense is the kilogram (kg) and the verb "to weigh" means
>> > "to determine the mass of" or "to have a mass of".
>> >
>> > Examples: the child's weight is 23 kg
>>
>> Learn to evaluate your sources, also. Those sources are more credible
>> than any CRC Handbook on this subject.
>
>You need to learn how to attribute yours. I didn't write that. :-)

There isn't any standard way of handling this, as far as I know. I've
seen it done several different ways, none of them completely
satisfactory. So I'm open to suggestions, if you can tell us how you
think it should be done. Next time I'll mark the end of the quote

from an earlier message, as well as the beginning--would that satisfy
you?

>> Your definition of weight is not the proper one to use for your body
>> weight in the doctor's office or the gym.
>
>I don't write definitions. But the ones I have cited are no less
>accurate in the doctors office than the physics lab.

They are incorrect in the doctor's office, and even more incorrect in
the supermarket or the jewelry store. Like I said, you don't have to
call the quantities used there "weight"--but if you do call them
weight, use the definition which is correct in that context. Don't
misinterpret what is being used there.

>> You can, of course, choose not to call this quantity "weight." You
>> can call it mass instead, if you want to.
>
>As I recall, the argument was about whether to call it a mass or a
>force.

You recall incorrectly.

>It's generally accepted that weight is a force.

I've shown in this thread from the experts in the field, including
NIST (the U.S. national standards agency) and ASTM (an industry
standards agency) and NPL (the U.K. national standards agency) and the
Canadian Standard for Metric Practice, that this is false. All of
these sources and many others tell you that weight is an ambiguous
word, with several different meanings.

>Problems can arise when
>someone claims a mass is a force and vice versa.

I agree.

>> Furthermore, it is not an acceptable option to misinterpret what they
>> are saying, and to misapply an inappropriate definition of weight.
>
>It is possible that you are doing some of the misinterpreting.
>
>> You could, of course, argue that we should all change to your usage.
>
>Many people already have, obviously.

Not very many, surprisingly. It is much more common to find people
claiming, erroneously, that there is some error in that usage.

>> >Reflecting the apparent dichotomy, the CRC defines the pound both ways:
>> >"1. A unit of mass equal in the U.S. to 0.45359237 kg. exactly.
>> >2. Specifically, a unit of measurement of the thrust or force of a
>> >reaction engine representing the weight the engine can move, as an
>> >engine with 100,000 pounds of thrust. 3. The force exerted on a one

>> >pound mass by the standard acceleration of gravity."
>>
>> That really shouldn't come as any surprise to you, does it, at this
>> stage of the game?
>
>I believe I had stated the same thing in so many words, earlier.
>
>> >Interestingly, they also define poundal, pound mass and pound weight.
>> >No mention of pound force. Evidently, that would be redundant. ;-)
>
>> Have you figured out yet what those poundals are, and how they are
>> used?
>
>Were you not able to ascertain that from my earlier post where I
>referenced the definition in Halliday and Resnick?

No, I couldn't tell one way or the other from your mere statement that the poundal was idenitified in that appendix as a unit of force whether or not you know anything about the system in which they are used. Like slugs, poundals only exist in one limited purpose system of mechanical units, mostly used to simplify calculations. Do you understand how these systems are used, and the difference between them.

The part you snipped (the second sentence in the last paragraph of mine quited above) makes it clearer that this is what I was asking about. So tell me now, what is the base unit of mass in the system in which poundals are the derived unit of force? Do you understand that yet? I still don't know.

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1831. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 03:21:04 UTC
From: kd1@sympatico.ca
Message-ID: <3F7A4820.A829B0AC@sympatico.ca>
Source record: 107296

Cecil Moore wrote:
> All (rho = -1) requires is a
> short at the end of a transmission line as explained in _Transmission_
> Lines_and_Networks_, by Walter C. Johnson when he was chairman of the
> Princeton EE Dept. Here's how he calculated rho for a short:
>
> rho = (Z1-Z0)/(Z1+Z0) = (0-Z0)/(0+Z0) = -Z0/Z0 = -1
>
> So your argument is with Dr. Johnson whom I am merely quoting. The
> (rho = -1) simply indicates a 180 degree phase shift in the reflected
> voltage at the short.

Quite false. Negation is not simply a 180 degree phase shift.

And if Walter C. Johnson is worthy of the respect he receives
here, he has certainly never said it is.

...Keith

1832. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 03:42:41 UTC
From: KU2S <ku2s@arrl.net>
Message-ID: <17jknvguv5j60tjskj9o2m23cv86a94b3c@4ax.com>
Source record: 107297

On Tue, 30 Sep 2003 14:17:53 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>On Mon, 29 Sep 2003 23:38:14 -0500 (CDT), richardharrison@webtv.net
>(Richard Harrison) wrote:
>
>>Gene Nygaard wrote:
>>"Look in the textbooks you used, and see if the authors have any
>>footnotes citing the authority for whatever definition they use.
>>
>>My Random House American College Dictionary (circa 1950) says:
>>"kilogram, n. Metric System. a unit of mass and weight, equal to 1000
>>grams and equivalent to
>>2.2046 pounds avoirdupois.
>>
>>For pounds, the same dictionary says:
>>"Pound. 1. a unit of weight and of mass, varying in different periods
>>and countries.
>>
>>Pounds and kilograms are different units for the same things, force and
>>weight.
>
>Still haven't figured out that your claims that both kilograms and
>pounds are names of both a unit of mass and a unit of force is at odds
>with what Dave Shrader and Richard Clark have been telling us, have
>you?
>

Okay people.... before this thread goes any further wrong than it
already has....

Kilograms (base unit of measurement, the gram) are units of MASS.
This is a measure of the amount matter in an object...

Pounds are a unit of force, a measurement of the gravitational
attraction a body has relative to another, reference, body.

A 2 kilogram object will have the same mass on the earth as it does on
the moon.

A 60 pound object on the earth will have a weight of 10 pounds on the
moon.

If you kiddies are going to argue physics, you really SHOULD get your
terms straight.

God, pseudo-intellectuals really do begin to wear thin quite
quickly...

Raymond Sirois KU2S
SysOp: The Lost Chord BBS
607-733-5745
telnet://thelostchord.dns2go.com:6000

1833. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:06:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a54c1$1_5@corp.newsgroups.com>
Source record: 107298

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>Consider the following:
>>
>>Source---50 ohm feedline---+---1/2WL 150 ohm---50 ohm load
>>
>>Isn't the 50 ohms that causes rho=0 on the 50 ohm feedline
>>simply the V/I ratio at point '+'?
>
> The nature of things a point '+' are undefined,

Nope, they are not. The V/I ratio at '+' equals 50 ohms.

> so I can't address
> that. But according to the way you defined the problem, the
> characteristic impedance of the 50 ohm feedline is 50 ohms. That sets
> the V/I ratio. The impedance is determined by the distributed
> capacitances and inductances of the transmission line - not by the
> voltage you put across it. Is there some other way I'm supposed to look
> at it?

There are no reflections on the 50 ohm feedline because it "sees" 50
ohms at point '+'. The 50 ohms seen at point '+' is a V/I ratio equal
to 50 ohms. So V affects rho. And rho causes that same V? See
the circular logic?
--
73, Cecil http://www.qsl.net/w5dxp

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1834. Re: Converting a 2M antenna to 224MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:10:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a55a4_5@corp.newsgroups.com>
Source record: 107299
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Darrin wrote:
> I found an old mag mount 2 meter antenna, and want to convert it for
> use on 224MHz. The whip is 49". Is there a simple formula to figure
> out how short to cut it?

What you have is a 5/8WL on 2m. It, no doubt, has a coil in the base
which is too big for 224MHz. You will have to modify the coil along
with the whip. I hope it is not a potted coil.
--
73, Cecil http://www.qsl.net/w5dxp

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1835. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:16:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a5701_5@corp.newsgroups.com>
Source record: 107300

Jim Kelley wrote:

> Cecil Moore wrote:
>>Isn't the 50 ohms that causes rho=0 on the 50 ohm feedline
>>simply the V/I ratio at point '+'?
>
> I see now. Your interested in something else here, I think. The rho
> for the whole network which includes both impedance discontinuities is
> indeed zero. We've talked about that before. But the rho for the
> single discontinuity at '+' is not equal to zero. The reflected
> impedance (the load impedance, repeated a half wavelength away) is not
> considered in the evaluation of rho at '+'. It is the characteristic
> impedance of the line that is considered. You would agree, no?

I would agree if you were talking about s11. But rho on the coax is zero.
The impedance at '+' is 50 ohms. rho = (50-50)/(50+50) = sqrt(0/Pfwd) = 0
at point '+'. And that 50 ohms is a V/I ratio which, I assume, you would
agree cannot cause a voltage.
--
73, Cecil http://www.qsl.net/w5dxp

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1836. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:17:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a5748$1_5@corp.newsgroups.com>
Source record: 107301

Uncle Peter wrote:
> Nothing is forever.

Not even time. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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1837. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:26:11 UTC
From: richardharrison@webtv.net
Message-ID: <9630-3F7A5763-685@storefull-2315.public.lawson.webtv.net>
Source record: 107303

Gene Nygaard wrote:
"Those "pounds weight are an obsolete term for what are now called pounds force."

Spoken like a weight-loss promoter.

Good mathematics becomes obsolete very slowly. Archimedes found the approximate value of pi in the 3rd century before Christ.

Archimedes inscribed the largest regular polygon ithat would fit inside a circle. Next he drew outside the circle a similar regular polygon touching the circle on all sides and having its sides parallel to the polygon sides inside the circle. Then he increased the number of sides of his polygons until they totaled 96. He decided a 96-side, equal-sided, figure was close enough to a circle for practical purposes. He also knew that a real circle would have a circumference somewhere between the circumferences of his inside and outside polygons. Also, the circumferences of his inside and outside figures were very nearly the same anyway.

The tape measure must not have yet been invented, so Archimedes must have measured the sides of his figures with a straight ruler. He used the sums of the polygon sides to arrive at the circumference of his figures. From these constructions and measurements, Archimedes arrived at a figure of 3.1416 for the ratio of circumference to the diameter of a circle (pi). That`s still close enough for most purposes to this very day.

There was a PBS special here today on "The Method" one of the books written by Archimedes, a copy of which was recently sold at auction for 2 million dollars.

Archimedes was slain in his laboratory by a Roman soldier in spite of orders that he be taken alive and transported to Rome. He was the top Greek war machine designer.

Best regards, Richad Harrison, KB5WZI

1838. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:39:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a5c53_5@corp.newsgroups.com>
Source record: 107302

kd1@sympatico.ca wrote:

> Cecil Moore wrote:
>
>>All (rho = -1) requires is a
>>short at the end of a transmission line as explained in _Transmission_
>>Lines_and_Networks_, by Walter C. Johnson when he was chairman of the
>>Princeton EE Dept. Here's how he calculated rho for a short:
>>
>>rho = (Z1-Z0)/(Z1+Z0) = (0-Z0)/(0+Z0) = -Z0/Z0 = -1
>>
>>So your argument is with Dr. Johnson whom I am merely quoting. The
>>(rho = -1) simply indicates a 180 degree phase shift in the reflected
>>voltage at the short.
>
> Quite false. Negation is not simply a 180 degree phase shift.

Yes, it is, in the reflected voltage. A short has a voltage rho of -1
indicating a 180 degree phase shift between the incident voltage and
the reflected voltage. An open has a voltage rho of +1 indicating no
phase shift between the incident voltage and reflected voltage. The
rho for current has the opposite sign from the rho for voltage at a
short and open. And sure enough, the reflected current is 180 degrees
out of phase with the reflected voltage.

And let's see about a few values. How about?

0.5 + j0.5 Vs -(0.5 + j0.5) or -0.5 + j0.5 Vs 0.5 - j0.5

Sure enough. The first value is at 45 degrees and the second value
is at 180+45 degrees. The third value is at 135 degrees and the
fourth value is at 180+135 degrees.

> And if Walter C. Johnson is worthy of the respect he receives
> here, he has certainly never said it is.

Refer to Fig. 1.13 on page 20. The voltage reflection coefficient
at the open end is +1. The current reflection coefficient at the
open end is -1.
--
73, Cecil http://www.qsl.net/w5dxp

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1839. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 04:54:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7a5ffe_5@corp.newsgroups.com>
Source record: 107304

Richard Harrison wrote:
> There was a PBS special here today on "The Method" one of the books
> written by Archimedes, a copy of which was recently sold at auction for
> 2 million dollars.

Very interesting program. Archimedes apparently developed an elementary
calculus involving infinity 300 years before Jesus was born.
--
73, Cecil http://www.qsl.net/w5dxp

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1840. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 05:24:44 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <r1pknv4s00a8ueicm4g8dno2grfuvsraiv@4ax.com>
Source record: 107305

On Mon, 29 Sep 2003 11:33:30 -0500, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>Roger:
>
>Somewhere I believe I read that you have a good ground plane under the
>tower, but consider an alternative: I have a 100' tower which has numerous
>VHF antennas and a couple of HF dipoles hanging off of it. Tip elevation is
>130' AGL. I added 4 elevated radials at 10' and brought all the feedlines
>out below that level. I am sure that the dipoles must add some capacitance
>loading, but with a gamma match and tuner at the antenna, I get 170 kHz
>usable bandwidth (SWR<2:1) on 160 meters without retuning.

Glad to hear that...My feed lines all come out underground through
conduit and make a good 75 to 80 foot run to the basement wall.

My only concern has been the radiation getting in to the house wiring.
Well, besides matching that is.<:-))

Elevated radials are pretty much not an option, due to the shop,
driveways, and flower beds. I'm going to go ahead and play around
with shunt feeding, starting at roughly 70 to 80 feet and maybe a 24
inch spacing, then working from there.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

1841. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 05:36:15 UTC
From: richardharrison@webtv.net
Message-ID: <6434-3F7A67CF-646@storefull-2314.public.lawson.webtv.net>
Source record: 107307

Gene Nygaard wrote:
"What is the relevant factor here -- that it is pressing down with a
force due to gravity of 9000 pounds due to gravity of 9000 pounds force?
Or that it has a mass of 9000 pounds?

The tonnage of a ship is the weight of the water it displaces.

The force pressing down (normal force) in mechanical problems is
significant when friction is involved.

Force equals mass time acceleration. So, the mass opposes and increases
the force required to get an object moving, or slowed, for that matter.
That includes a ship. It has inertia and requires force to change its
velocity. Drag is imposed on the submerged portion of the hull,
especially when coated with barnacles.

I shipped out of Long Beach in WW-2 on the LSM 472. I returned to San
Francisco on the LSM 94. I was transferred to the LST 604 to take it up
river to Stockton to be decomissioned and scrapped. While at the ship
yard there I witnessed a curious sight. A large merchant vessel was
moved from one berth to another using a small boat with an outboard
motor as the tow boat. River current in the basin was almost nil, yet it
took several hours to move that large ship with the power of only an
outboard motor. It worked! There must have been nothing more powerful
available and there must have been no rush to get the berth swap made.

Point is that it is likely that neither mass nor weight is as important
as current in many situations. How soon you can get up to speed depends
a lot on mass as Newton predicts. That motorboat would have done its
thing much more quickly with a waterskier in tow than it did with a big
merchant ship in tow.

Best regards, Richard Harrison, KB5WZI

1842. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 05:36:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <MMT5M7Bifme$EAFa@ifwtech.co.uk>
Source record: 107306

buddy clark wrote:
> the beam in my estimation meets or exceeds all advertised specs. the
>beam does not work well on 6m in my opinion, but my frame of reference
>for that band was a 5 element on a 30 foot boom.

If the element spacing is anything like adequate for 20m, it has to be way too wide to be optimum on 6m.

I'd guess there is more performance to be had on 6m by adding a fixed reflector and at least one director at an optimum spacing. Using only the variable driven element and the variable-length director at the end of the boom, that would turn it into a reasonable 4- or 5-element with some dBs more forward gain. You'd lose the 180deg beam reversibility on 6m, but you could quickly remove the front/back ratio by lengthening the director. On the lower bands, the 6m elements would have very little effect.

Has anyone modeled this? Part of the trick would be to use a close-spaced first director to keep the feedpoint impedance reasonably close to 50 ohms (see www.cebik.com on Optimized Wideband Antennas).

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1843. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 05:55:12 UTC
From: tdonaly@aol.com
Message-ID: <20031001015512.04998.00000095@mb-m18.aol.com>
Source record: 107308

>
>
>Richard Harrison wrote:
>> There was a PBS special here today on "The Method" one of the books
>> written by Archimedes, a copy of which was recently sold at auction for
>> 2 million dollars.
>
>Very interesting program. Archimedes apparently developed an elementary
>calculus involving infinity 300 years before Jesus was born.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

Aristotle wrote that the Greek mathematicians didn't have any need for
infinity and never used it. Archimedes said that his "Method" wasn't a
proof but a means of mathematical exploration. He also said that
Democritus used infinitesimal methods before he did. Democritus
was born around 460 B.C. The Babylonians... aw, forget it.
73,
Tom Donaly, KA6RUH

1844. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 07:10:47 UTC
From: tdonaly@aol.com
Message-ID: <20031001031047.04818.00000096@mb-m18.aol.com>
Source record: 107309

Gene wrote,
>
>On 30 Sep 2003 18:36:50 GMT, tdonaly@aol.com (Tdonaly) wrote:
>
>>Cecil wrote,
>>>
>>>Gene Nygaard wrote:
>>>> You can, of course, choose not to call this quantity "weight." You
>>>> can call it mass instead, if you want to.
>>>
>>>Here's an interesting quote from _University_Physics_ by Young and
>>>Freedman: "On the moon, a stone would be just as hard to throw
>>>horizontally, but it would be easier to lift." It also says weight
>>>is a vector and mass is a scalar.
>>>--
>>>73, Cecil http://www.qsl.net/w5dxp
>>>
>>
>>You better watch out, Cecil, Gene is liable to write a scathing indictment
>>of your intelligence, integrity, and job fitness, for quoting that. By the
>way,
>
>I don't know why I would. I agree with the quoted part. Of course,
>though the stone is just as hard to throw, it will likely go farther
>before it falls to the ground.
>
>Would you say that a boat is heavy because it is hard to push away
>from the dock? What is the relevant factor here--that it is pressing
>down with a force due to gravity of 9000 pounds force? Or that it has
>a mass of 9000 pounds?
>
>What is the metric equivalent of a ton used for the weight of a U.S.
>Navy ship? For example, the tanker USNS Henry J. Kaiser is 27,561
>tons deadweight. How much is that is SI units?
>Gene Nygaard
>http://ourworld.compuserve.com/homepages/Gene_Nygaard/
>
>

Still playing the old one-note samba are we Gene? You must hold the
record for being the most boring guy at the cocktail party. You still
haven't answered my question about why you keep harping on a
question of elementary physics on a newsgroup devoted to
amateur radio antennas. Is this a new species of troll? Is that

all you know how to talk about? When did you first realize you
had this obsession with mass? Are you over-mass?
With the never ending thread about transmission lines, EH antennas,
mass, and the rest, it's pretty obvious what has happened. There's been
an earthquake; all the pots are cracked. Next, someone from the British
Isles will be writing to say gram scales don't MEASURE mass, they only
INDICATE mass.
Brother.
73,
Tom Donaly, KA6RUH

1845. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 07:38:55 UTC
From: stefano <sgalast@tin.it>
Message-ID: <jwveb.147595$hE5.5014709@news1.tin.it>
Source record: 107310

Hi Tarm,
please read better.
The antenna is ,at first ,matched to 450 ohms, then (through a bifilar
line)is fed to a classical "L" network to match 450 to 50 ohms.
73's steve

"Tarmo Tammaru" <t-tammaru@home.com> ha scritto nel messaggio
news:xHadnXWkdYoYdeSiU-KYhw@comcast.com...
> Richard,
>
> I think their point is that, for a new installation, it would be cheaper
> since you don't need radials and the associated real estate. I seem to
> recall in one place they suggested putting it on top of a building.
>
> What a messed up web site though. They could have a picture and a diagram
> without looking at the last two pages of a PDF file that took several
> minutes to download via a cable modem.
>
> There is also something messed up with the description. In one place they
> mention (arbitrarily) using 450 Ohm open wire line, and then go on to say
> they match 450 Ohms to 50. I don't think they mean that.
>
> Tam/WB2TT
>
>

1846. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 07:42:48 UTC
From: stefano <sgalast@tin.it>
Message-ID: <Yzveb.147605$hE5.5015122@news1.tin.it>
Source record: 107311

Hi all,
for any doubt you have please ask to Mr. Graham.
He was hired as an indipendent consultant and he's responsible for the
data.He has more than 30 years of experience.
I think to know very well the antenna, but I invite you to refer to him.
73's and best regards
Steve IK5IIR

"stefano" <sgalast@tin.it> ha scritto nel messaggio
news:iWJdb.135875$hE5.4634507@news1.tin.it...
> Hello,
>
> After sometime ,I am here again to inform all the Om community interested
> about the last news on the EH antenna.
> The antenna was tested, following the FCC rules ,by Stu Graham a important
> broadcasting engineer.
> For any news and to read any data on it (including the complete report
from
> the consultant) please go here:
> http://www.eh-antenna.com/AM_Broadcast.htm
>
> Please read all the docs related.
>
> Three years ago I put on this forum a special announce about this
important
> discovery.
> Now we can publish all the evidences we were right.
> There is no doubt, the so called "EH mode " is real and alive.
> During the test the antenna was installed at about 1/10 of a wavelenght .
> On this position alomst equalled (only -0.4 db) a perfect 1/4 standard
tower
> with 120 radials.
> The real important feature is we can trade height for gain.
> When the antenna is installed at 1/4 wav. it shows a 2.5 db of gain (yes
,
> GAIN for a ground wave over a standard tower)
>
> very high efficiency
> very large bandwidth
> very compact size
>
> For the ham applications a new era is approaching. Antennas on 40, 80 or
160
> metres are very small on size, showing the same or better efficiency over

a
> standard full size vertical dipole.
>
> I wanted just share this great news with all interested people.
> My best 73's
> Stefano IK5IIR
>
>
>

1847. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 08:02:59 UTC
From: stefano <sgalast@tin.it>
Message-ID: <TSveb.147692$hE5.5018906@news1.tin.it>
Source record: 107312

Hi Richard,
ok one small step better, now.. :-)
The cylinders/radiators are completely insulated from his tower support.
Then the top supporting piece of the tower is insulated from the bottom one.
I imagine you could say the capacitive coupling between the
cylinders/radiators and the under metallic structures , can be enough to
allow some rf currents flow on them.
But this , for me, is NOT enough to call the antenna ..a top hat one.Is not.
Yes the consultant engineer noted about some influences due to the local
power line and, may be, to the 1/4 spaced reference tower.
In fact the EH showed some directivity.
This, do not worry, can be further investigate in the near future . Since we
know very well , from many our previous measures , the antenna can be equal
to a standard 1/4 tower vertical , we are very confident all can be
demonstrated in the near future when Ted will sell the first antennas.
He's collected some orders already, so we will see soon.
The blue curve on the charts is the 1/4 tower standard with 120 radials.
The consultant proved this antenna is perfectely FCC compliant as class B.
We are speaking of an antenna considered as a standard.
Well the small red dots plotted around this blue curve are the EH ones.I
think is evident how close is (on the average) to it.
Is my opinion that any system you can model being 90 feet high with NO
GROUND and with NO RADIALS can not be as efficient as the EH antenna under
test.
Note I said 90 feet high because I know you are sure that ALL the system is
radiating....but is not.
73's and best regards
Steve Ik5IIR

"Richard Clark" <kb7qhc@comcast.net> ha scritto nel messaggio
news:u3ajnvsan4rufnvg2id9ko73edu0888n58@4ax.com...
> On 30 Sep 2003 00:35:11 -0700, nm5k@wt.net (Mark Keith) wrote:
>
> >>
> >> The page of data called FCC figure 8 reveals that at 10Miles (actually
> >> 9.43 Miles) that the eh, tower, and top-hat are -4.24dB from the
> >> reference and -15dB from FCC standard curve. The chart marked Exhibit
> >> #1B (page 8) shows that further out at 20 Miles that the eh, tower,
> >> and top-hat are -26.6dB from the FCC standard curve.
> > >
> > >No bueno.
> > >
> >> Perhaps I read the data out of order, or the charts upside down.
> > >

> >Yea, that PDF file kind of gave me a headache also...
>
> Hi All,
>
> On further review of the data offered, their tabular offering, the FCC
> Ground Survey Map (M3_map.zip available at the FCC homepage), it is
> evident I overstated the loss of the eh/tower/top-loaded antenna.
>
> As noted above, this combination shows 4dB loss over their reference
> comparison standing nearby their test (except in the direction of that
> convenient passive radiator of course or with the concurrent
> re-radiative properties of the nearby power lines the engineer notes
> may affect readings). Employing the jpg file named 35e within the zip
> file from the FCC, it is evident that the ground conductivity is NOT
> 2mS as computed, but 4mS as reported by the FCC. The location of
> Eatonton is in the dead center of that quality of ground (not great,
> but not as poor as 2mS).
>
> I shrugged at what appeared to be perhaps an insubstantial difference
> and reached for the calculator to see what the correlations would
> bring if this data were applied to the FCC data of 4mS ground instead.
> The loss is still apparent at -2.7dB. This agrees with the tabular
> data instead of the misapplication of 2mS to the charting of it.
>
> Off hand, it would seem safe to say that the eh/tower/top-load is an
> average of mid 30's percent efficient.
>
> Now, lets see, would a commercial station choose to replace a guyed
> tower, with a top loaded short guyed tower, plus cost of do-dad to
> enjoy the benefit of 1/3rd coverage? Let me be generous and return to
> the -2.7dB valuation instead, but to observe that we are facing a
> square law issue with population served. Those folks in the outlying
> regions cover vastly more square miles than those in the near region,
> so we will consider a population halfway between and note that
> squaring that radius reveals half the listenership suffers degraded
> service through this antenna substitution.
>
> Economics 101: "How to kill a business without really trying."
>
> Hi Stefano,
>
> the simple english version
> of the text above:
> eh antenna is not efficient -
> you seem to read
> the press release english
> easier than data numbers.
>
> 73's
> Richard Clark, KB7QHC

1848. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 08:15:35 UTC
From: theplanters95@aol.comnospam
Message-ID: <20031001041535.04781.00000088@mb-m18.aol.com>
Source record: 107313

Hi Doc and Reg,

I live in a 2 story historical house with a hill and 4 story house in the back. On one side is a large 2 story house. The road is in front, only about 15-20 feet away. The only remaining side has a cottege and parking lot with a single tree about 30 or 40 feet away. I have very close power and cable tv lines on 3 sides of the house. On 2 sides, including the side where the radio shack is, we have 2 propane gas lines (one for hot water, the other for the heater). Did I mention the owner cemented all the land and installed raised flower beds? The nearest run to a ground would be from the wall about 5 feet to a flower bed. The good news is that I have no antenna restrictions in the lease and actually the landlord said antennas were OK! I am thinking of mounting a DK3 screwdriver on a tripod, and when I want to operate, move it to the parking area, and then move it back when done. Not quite sure how to mount it on a tripod. Any advice? For 20m & 17m I have Par Electronics end feed hertz, which could be run to the tree.

Randy ka4nma

1849. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 08:54:56 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <d65lnvkrmagcnstpppn9l1bdfpufaviont@4ax.com>
Source record: 107314

On Wed, 1 Oct 2003 00:36:15 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Gene Nygaard wrote:
>"What is the relevant factor here -- that it is pressing down with a
>force due to gravity of 9000 pounds due to gravity of 9000 pounds force?
>Or that it has a mass of 9000 pounds?
>
>The tonnage of a ship is the weight of the water it displaces.
>
>The force pressing down (normal force) in mechanical problems is
>significant when friction is involved.
>
>Force equals mass time acceleration. So, the mass opposes and increases
>the force required to get an object moving, or slowed, for that matter.
>That includes a ship. It has inertia and requires force to change its
>velocity. Drag is imposed on the submerged portion of the hull,
>especially when coated with barnacles.
>
>I shipped out of Long Beach in WW-2 on the LSM 472. I returned to San
>Francisco on the LSM 94. I was transferred to the LST 604 to take it up
>river to Stockton to be decomissioned and scrapped. While at the ship
>yard there I witnessed a curious sight. A large merchant vessel was
>moved from one berth to another using a small boat with an outboard
>motor as the tow boat. River current in the basin was almost nil, yet it
>took several hours to move that large ship with the power of only an
>outboard motor. It worked! There must have been nothing more powerful
>available and there must have been no rush to get the berth swap made.
>
>Point is that it is likely that neither mass nor weight is as important
>as current in many situations. How soon you can get up to speed depends
>a lot on mass as Newton predicts. That motorboat would have done its
>thing much more quickly with a waterskier in tow than it did with a big
>merchant ship in tow.

So what is the SI equivalent of those 27,561 tons deadweight for that
U.S. Navy ship?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1850. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 09:13:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnl6m43eq3dp77@corp.supernews.com>
Source record: 107315

It's disappointing to see that people have gotten so many different results modeling such a simple antenna with EZNEC.

Jerry's results are correct. You'll get slight variations with differing segmentation and ground conductivity, by they won't be large differences.

I haven't followed through the article's math, but there's either a computational error or something fundamentally wrong with the equations to produce a value of j1776 for the antenna's reactance. The fact that the author's reactance is just about twice what it should be points to a likely error in computation.

Jerry, what the EZNEC result means is that you'd need a *total* of j881 ohms at the feedpoint to resonate the antenna. You could do this by adding half the amount to each leg, or the total to one leg. Or, you could move the coils out toward the end, but you'd then need more inductance. Of course, you've still got a feedpoint resistance of about 11 ohms, plus coil resistance, to transform into something close enough to 50 ohms to make your rig happy.

Roy Lewallen, W7EL

Jerry wrote:
> October's QST has an article "Designing a Shortened Antenna" pp 28-32. It
> gives an example of a shortened dipole for 40 meters at 7007 khz. Dipole
> length of the half-sized dipole [p30 "a second example"] is 10.61 meters.
> This is 20 feet off ground using #12 wire. The formulas give a solution of
> XL= +j1776 ohms or an inductance of 40 microhenries at 30 degrees from each
> leg.
>
>
> I tried to simulate this antenna on EZNEC. A 10.61 meter antenna at 7007 khz
> gives impedance =11.33 - j 881.2 ohms.
>
> If EZNEC is correct wouldn t I need an inductance of +j881.2 on each leg of
> the dipole, rather than +j1776?
>

1851. Re: RF chokes and baluns: black magic or experimentation?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 09:18:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnl6vk3sop9nf3@corp.supernews.com>
Source record: 107316

I assume the article is referring to the coil dimensions in the _ARRL Handbook_. Each coil works best over about three bands. I highly recommend both the _ARRL Handbook_ and the _ARRL Antenna Book_. Not all the world's knowledge is on line yet.

If you have an antenna analyzer, you can measure the impedances of your experimental chokes. Twist the center conductor and shield together at both ends of the coax. Connect one end to the center conductor of the analyzer, and the other to the analyzer body. Adjust the coil for the highest impedance at the frequency or frequencies of interest.

Roy Lewallen, W7EL

Jack Twilley wrote:
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> It's a good weekend for home improvement, so I thought I'd tune my
> antennas and replace my coax with longer runs to suit where I'd like
> to place my station. I figured now was a good time to build in an RF
> choke in an attempt to remove interference and hopefully be able to
> receive HF, but there are no online resources with formulas or
> anything. I was hoping for something like the innumerable dipole
> calculators out there -- something where I could input a frequency and
> a diameter, then select a type of coax, and hit a button to find out
> how many turns.
>
> Most online references are very vague, so I'm just going to
> experiment. I was hoping, though, that someone could direct me to a
> useful reference. I have an PDF of an old QST article which says that
> W7EL has a table in the Antenna Handbook. A friend of mine has a copy
> of the Antenna Handbook, but she may have lost it in the move.
>
> Any suggestions? Right now, I'm going to experiment with different
> values and see what I can discover, but it can't hurt to hear about
> what others have done.
>
> Jack.
> - --
> Jack Twilley
> jmt at twilley dot org
> http colon slash slash www dot twilley dot org slash tilde jmt slash
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.2.3 (FreeBSD)
>

> iD8DBQE/de+TGPFSfAB/ezgRAk2IAJ9Aanda0CutUlFZlIvY+3ZTmD+fsACgsXdu
> Cg8I9KSeVlmvo+QNs7pmaKg=
> =mHAv
> -----END PGP SIGNATURE-----

1852. Re: Converting a 2M antenna to 224MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 10:36:41 UTC
From: dbn <dnicholson@mcmsys.com>
Message-ID: <bledng$27d$1@news.mcmsys.com>
Source record: 107317
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

I beleive there is a section in the HandBook on how to convert a 2 meter 5/8 wave to a 220 5/8 wave.

Dan

--
If I am tired now, why do I have to RETIRE later?

1853. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 11:08:33 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3f796412_2@newsfeed.slurp.net>
Source record: 107224

Here I thought Arkie was a fundamentalist/traditionalist who fatfingered in CCCLV divided by CXIII and CXCIII by LXXI on his GO34 in order to insert constants into his equations.
73, Dave, N3HE

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:9630-3F7A5763-685@storefull-2315.public.lawson.webtv.net...

SNIP
> Archimedes inscribed the largest regular polygon ithat would fit inside
> a circle. Next he drew outside the circle a similar regular polygon
> touching the circle on all sides and having its sides parallel to the
> polygon sides inside the circle. Then he increased the number of sides
> of his polygons until they totaled 96. He decided a 96-side,
> equal-sided, figure was close enough to a circle for practical purposes.
> He also knew that a real circle would have a circumference somewhere
> between the circumferences of his inside and outside polygons. Also, the
> circumferences of his inside and outside figures were very nearly the
> same anyway.
>
> The tape measure must not have yet been invented, so Archimedes must
> have measured the sides of his figures with a straight ruler. He used
> the sums of the polygon sides to arrive at the circumference of his
> figures. From these constructions and measurements, Archimedes arrived
> at a figure of 3.1416 for the ratio of circumference to the diameter of
> a circle (pi). That`s still close enough for most purposes to this very
> day.
SNIP

> Best regards, Richad Harrison, KB5WZI
>

1854. Re: SteppIR antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 11:08:45 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vnlde3pj03g35d@corp.supernews.com>
Source record: 107219

SteppIR sells a 4th element for 6 on the 3 el yagi and TWO six meter
elements for the 4 el yagi.
Yes, someone has modeled this.
;^)
H.
NQ5H
"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:MMT5M7Bifme$EAFa@ifwtech.co.uk...
> buddy clark wrote:
> > the beam in my estimation meets or exceeds all advertised specs. the
> >beam does not work well on 6m in my opinion, but my frame of reference
> >for that band was a 5 element on a 30 foot boom.
>
> If the element spacing is anything like adequate for 20m, it has to be
> way too wide to be optimum on 6m.
>
> I'd guess there is more performance to be had on 6m by adding a fixed
> reflector and at least one director at an optimum spacing. Using only
> the variable driven element and the variable-length director at the end
> of the boom, that would turn it into a reasonable 4- or 5-element with
> some dBs more forward gain. You'd lose the 180deg beam reversibility on
> 6m, but you could quickly remove the front/back ratio by lengthening the
> director. On the lower bands, the 6m elements would have very little
> effect.
>
> Has anyone modeled this? Part of the trick would be to use a
> close-spaced first director to keep the feedpoint impedance reasonably
> close to 50 ohms (see www.cebik.com on Optimized Wideband Antennas).
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> Editor, 'The VHF/UHF DX Book'
> http://www.ifwtech.co.uk/g3sek

1855. Colinear vhf/uhf from QST

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 13:44:32 UTC
From: Mogens <Fister@loegsovs.dk>
Message-ID: <3f7ada41$0$32504$edfadb0f@dread16.news.tele.dk>
Source record: 107221

Hi

Resently there was a colinear vhv/uhf antenna in QST.
The phasing between the 2 halfwave parts is made of a coil wound on a 1/2 inch coil.
Finding a 1/2 inch coil form is difficult, but can be solved.

How important is it to use AWG20 wire ? AWG18 is more common in my country.
Is it the length of wire or the inductance of the coil that matters?

73 de Mogens, OZ1AKN

1856. Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 14:33:28 UTC
From: abodo@netnitco.net
Message-ID: <8a3dbede.0310010633.74951e42@posting.google.com>
Source record: 107222

Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
TW-4000A? any hints/suggestions/recommendations greatly appreciated!
thank you for your time......73's....tony...wa9yoz

1857. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 14:59:45 UTC
From: tdonaly@aol.com
Message-ID: <20031001105945.17268.00000099@mb-m16.aol.com>
Source record: 107223

Gene wrote,
>
>
>So what is the SI equivalent of those 27,561 tons deadweight for that
>U.S. Navy ship?
>
>Gene Nygaard
>http://ourworld.compuserve.com/homepages/Gene_Nygaard/
>
>

I asked first. Why are you spamming the newsgroup with off-topic
posts?
73,
Tom Donaly, KA6RUH

1858. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 15:31:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <17plnv027cn5lo0ibuadd6vieb1q4g1ajv@4ax.com>
Source record: 107225

On Wed, 01 Oct 2003 08:02:59 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Richard,
>ok one small step better, now.. :-)
>The cylinders/radiators are completely insulated from his tower support.

Hi Stefano,

We all realize that you are not adept at the science of antenna design
so we expect you do not understand these issues.

>Then the top supporting piece of the tower is insulated from the bottom one.

This is, of course, immaterial.

>I imagine you could say the capacitive coupling between the
>cylinders/radiators and the under metallic structures , can be enough to
>allow some rf currents flow on them.

This is in fact what happens. The physics will not allow prevent it.

>But this , for me, is NOT enough to call the antenna ..a top hat one.Is not.

Again, you say this because of your inexperience in the matter. Top
Hats are part and parcel to antenna design, not for people to wear.
Please understand that it is not an article of clothing, it is a
working element of many antennas and necessary for small ones to
become partially efficient.

>Yes the consultant engineer noted about some influences due to the local
>power line and, may be, to the 1/4 spaced reference tower.
>In fact the EH showed some directivity.
>This, do not worry, can be further investigate in the near future .

Further investigation is not necessary, all the data is present. If
you do not trust this data, then you should not be here.

>Since we
>know very well , from many our previous measures , the antenna can be equal
>to a standard 1/4 tower vertical

The point of the test was to prove this. The test proved it is not.
The eh/tower/top-hat are 66% LESS efficient and the test proves this.

> , we are very confident all can be
>demonstrated in the near future when Ted will sell the first antennas.

Why didn't he sell one to the test station?

>He's collected some orders already, so we will see soon.

But he has not sold his first one - BIG difference (like 66% LESS
efficient).

>The blue curve on the charts is the 1/4 tower standard with 120 radials.

They are the wrong ones.

>The consultant proved this antenna is perfectely FCC compliant as class B.

Because it meets the MINIMUM requirement of a LOW EFFICIENT design.
The antenna in the background of the picture is BETTER! The data
proves it.

>We are speaking of an antenna considered as a standard.
>Well the small red dots plotted around this blue curve are the EH ones.I
>think is evident how close is (on the average) to it.

The standard you speak of is the wrong one. The FCC describes the
ground around Eatonton as having 4mS of conductivity. The antenna
curve used is 2mS of conductivity. This means 3dB LOSS.

>Is my opinion that any system you can model being 90 feet high with NO
>GROUND and with NO RADIALS can not be as efficient as the EH antenna under
>test.

I am glad to see you agree that ANY antenna is as good as eh antenna.
No one needs eh antenna.

>Note I said 90 feet high because I know you are sure that ALL the system is
>radiating....but is not.
>73's and best regards
>Steve Ik5IIR
>
Hi Stefano,

You are relatively untutored in the science of antennas, that is why
you come here for advice. We all recognize that the eh antenna alone
is a very poor one and that it needs other elements, such as a 90 foot
tower and top-hat to achieve 33% efficiency of standard antenna shown
in background. The data proves this. You need only look at the
numbers that you have difficulty with.

Let's look at several so that you can understand how poor the eh
antenna is:
point# Std Field eh Field eh Loss
1 310 275 -1.04dB
2 295 220 -2.55dB
3 66 43 -3.72dB
4 46 30 -3.71dB
5 36 24 -3.52dB
6 23 17.5 -2.37dB
7 20.1 12 -4.48dB
8 19.9 11.6 -4.69dB

As you can plainly see from the data taken, the further you go out the worse the efficiency becomes. Point 8 is less than 3kM away and compared to the antenna in the background:
the eh/tower/top-hat has an efficiency of 58%.
The antenna in the background has an efficiency of 100%

There are many charts, and on EVERY one there is in the last column a description of eh efficiency and if we choose the efficiency of the antenna at the last point or at least 10 miles (where the audience is):
035ï¿½ 2mS 67%
075ï¿½ 2mS 61%
135ï¿½ 3mS 65%
210ï¿½ 1mS 81%
260ï¿½ 0.1mS 120%
320ï¿½ 1.5mS 59%

It is evident that the eh/tower/top-hat was compared to 5 different FCC antenna curves! NONE of them were for the FCC mapped value of 4mS ground conductivity even when Eatonton is in the middle of that region. We can also see that there is a 29.5dB variation between those curves! Where is the greatest variation? Pointed directly at the nearby radiator of the standard antenna. If that antenna, and power lines, and tower, and top-hat were gone (use a wood mast with nylon rope and a choked transmission line); then the eh would be dead on arrival.

The data simply says the eh is a dog.

73's
Richard Clark, KB7QHC

1859. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 15:33:15 UTC
From: Lionel Carter <lionelcarter@cut-this-out.freezone.co.uk>
Message-ID: <3f7c5aa1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 107196

I plug in a 2m/70 colinear in my loft when upstairs or a discone in the garden on a 15ft plastic pipe when downstairs.
There is hardly any difference, just one or half a point on the 0-9 scale.
Also a home made 2m dipole works just as well.
The reception is more affected by the propergation conditions and your location relative to the surrounding terrain. I have compiled polar diagrams for each and it is surprising how reception is stronger in some directions than others despite the antenna theoretically being omnidirectional. I think only significant improvement would come from using a directional array.

I would be cautious about believing a particular antenna would be a 'vast improvement'.
The advantage with my discone is that I can listen to lots of other things as well as using it for 2m/70cm. In that respect my colinear or dipole doesn't work as well.

The best approach is by experimentation.

Lionel Carter
M3LRC

"Amigaman" <abodo@netnitco.net> wrote in message
news:8a3dbede.0310010633.74951e42@posting.google.com...
> Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
> TW-4000A? any hints/suggestions/recommendations greatly appreciated!
> thank you for your time......73's....tony...wa9yoz

1860. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 15:34:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8uslnv8b1bqldpleu3umotuec8efasiukd@4ax.com>
Source record: 107226

On Wed, 01 Oct 2003 07:42:48 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi all,
>for any doubt you have please ask to Mr. Graham.
>He was hired as an indipendent consultant and he's responsible for the
>data.He has more than 30 years of experience.
>I think to know very well the antenna, but I invite you to refer to him.
>73's and best regards
>Steve IK5IIR
>

Hi Stefano,

After consulting Mr. Graham's report, it is obvious the
eh/tower/top-hat is a poor substitute.

73's
Richard Clark, KB7QHC

1861. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 16:06:57 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <5hulnvgm85f4n5fnvtf1mfmfm3dol3ntpr@4ax.com>
Source record: 107227

On 01 Oct 2003 14:59:45 GMT, tdonaly@aol.com (Tdonaly) wrote:

>Gene wrote,
>>
>>
>>So what is the SI equivalent of those 27,561 tons deadweight for that
>>U.S. Navy ship?
>>
>>Gene Nygaard
>>http://ourworld.compuserve.com/homepages/Gene_Nygaard/
>>
>>
>
>I asked first. Why are you spamming the newsgroup with off-topic
>posts?

You seem to be operating under several delusions.

I'm not spamming.

I didn't start this discussion.

The discussion I entered was not off topic here.

You yourself, while you have contributed to the on-topic discussion,
have also been responsible for more thread drift in this thread than
anyone else. Democritus? Good grief! There wasn't anything on-topic
in the message in which you brought him up. What connection do you
find between him and the definition of ohms, and the inaccurate
analogy using faulty defintions of pounds that lead to my entry into
the discussion?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1862. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 16:07:52 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <kq7lnv0og8ld10e84pl5rlo9smjhpr0a5t@4ax.com>
Source record: 107228

On Wed, 01 Oct 2003 08:54:56 GMT, Gene Nygaard <gnygaard@nccray.com>
wrote:

>On Wed, 1 Oct 2003 00:36:15 -0500 (CDT), richardharrison@webtv.net
>(Richard Harrison) wrote:
>
>>Gene Nygaard wrote:
>>"What is the relevant factor here -- that it is pressing down with a
>>force due to gravity of 9000 pounds due to gravity of 9000 pounds force?
>>Or that it has a mass of 9000 pounds?
>>
>>The tonnage of a ship is the weight of the water it displaces.
>>
>>The force pressing down (normal force) in mechanical problems is
>>significant when friction is involved.
>>
>>Force equals mass time acceleration. So, the mass opposes and increases
>>the force required to get an object moving, or slowed, for that matter.
>>That includes a ship. It has inertia and requires force to change its
>>velocity. Drag is imposed on the submerged portion of the hull,
>>especially when coated with barnacles.
>>
>>I shipped out of Long Beach in WW-2 on the LSM 472. I returned to San
>>Francisco on the LSM 94. I was transferred to the LST 604 to take it up
>>river to Stockton to be decomissioned and scrapped. While at the ship
>>yard there I witnessed a curious sight. A large merchant vessel was
>>moved from one berth to another using a small boat with an outboard
>>motor as the tow boat. River current in the basin was almost nil, yet it
>>took several hours to move that large ship with the power of only an
>>outboard motor. It worked! There must have been nothing more powerful
>>available and there must have been no rush to get the berth swap made.
>>
>>Point is that it is likely that neither mass nor weight is as important
>>as current in many situations. How soon you can get up to speed depends
>>a lot on mass as Newton predicts. That motorboat would have done its
>>thing much more quickly with a waterskier in tow than it did with a big
>>merchant ship in tow.
>
>So what is the SI equivalent of those 27,561 tons deadweight for that
>U.S. Navy ship?

Let me open it up to everyone, and make it a multiple choice:

1. 245.19 MN
2. 245.19 hectopascals

3. 2.5003 x 10^7 kg
4. 28.003 Gg
5. 2.1892 x 10^8 newtons
6. 28 003 metric tons
7. 25 003 metric tons force
8. to have five significant digits, it depends on the latitude of the ship
9. all of the above
10. none of the above

Does your answer fit in with Richard Harrison's description above?

Does it fit with what any shipbuilder or any navy uses?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1863. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:03:09 UTC
From: tdonaly@aol.com
Message-ID: <20031001130309.17268.00000104@mb-m16.aol.com>
Source record: 107229

Gene wrote,
>
>
>You seem to be operating under several delusions.
>
>I'm not spamming.
>
>I didn't start this discussion.
>
>The discussion I entered was not off topic here.
>
>You yourself, while you have contributed to the on-topic discussion,
>have also been responsible for more thread drift in this thread than
>anyone else. Democritus? Good grief! There wasn't anything on-topic
>in the message in which you brought him up. What connection do you
>find between him and the definition of ohms, and the inaccurate
>analogy using faulty defintions of pounds that lead to my entry into
>the discussion?
>
>Gene Nygaard
>http://ourworld.compuserve.com/homepages/Gene_Nygaard/
>

Nope, you're spamming. The subject you keep harping on has very little
to do with antennas. Evidently, it's so overwhelmingly important to you
that you're willing to hand out gratuitous insults and a never-ending series
of posts to those you perceive as not agreeing with your narrow understanding
of the subject. I'm reminded of Samuel Johnson's friend who only had one
idea in his head, and that a wrong one. While you're not alone here in being
possessed of an overwhelming obsession, at least the obsessions of the others
bear some relation to antenna and transmission line theory. Personally, I
don't much care what you do, but I'm curious as to why you do it. How can
such a small idea trigger such a large obsession?
73,
Tom Donaly, KA6RUH

1864. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:07:17 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B09C5.E0EA9F73@uci.edu>
Source record: 107230

Cecil Moore wrote:
> But rho on the coax is zero.

Coax doesn't have a 'rho' - unless it's broken or damaged coax.

> The impedance at '+' is 50 ohms.

By virtue of reflection from the 50 ohm load.

> rho = (50-50)/(50+50) = sqrt(0/Pfwd) = 0
> at point '+'.

The same is true at points to the left of point '+' as well. So what?

> And that 50 ohms is a V/I ratio which, I assume, you would
> agree cannot cause a voltage.

As far as I know, V/I ratios don't "cause" anything.

73, Jim AC6XG

1865. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:25:18 UTC
From: Tom Sedlack <cts050@nospamhere.email.mot.com>
Message-ID: <blf287mcv1@avnika.corp.mot.com>
Source record: 107233

I took my test back in July and here's my advice to you;

All alpha characters will be in the test. Most if not all numerals will be in the test. Prosigns are there but are not required to pass the test. Q-codes are there but, of course, they are already covered with the "all alpha characters" mentioned previously.

The test itself consisted a simple QSO starting with a series of V's. They don't count but copy them anyway. It will put you into the right frame of mind.

VVV VVV KL1J DE K2UGO/4 TKS FR YR CALL VINCE. = UR RST 548 THE WX SUNNY RIG IS COLLINS KWM380 AT 476 WATTS, QTH IS BIRMINGHAM ALABAMA. NAME ZOLA = ANT IS MONOBANDER UP 29 FEET. HW COPY? KL1J DE K2UGO + *

You will be asked the following questions (typically)

What is the receiving station call sign?
What is the transmitting station call?
What is the receiving operators name?
What was the signal report?
What is the weather?
What equipment is used by the transmitting station?
What was the transmitting station RF power in watts?
What city is the transmitting station in?
What is the transmitting operators name?
What antenna was used by the transmitting station?
What is the antenna height?

It helps to be familiar with different antenna types and rig manufacturer names. When you hear RST being sent, pay close attention to the report. When you hear RIG or RADIO (whatever), pay close attention to what it is and the power level. Once you hear QTH, pay close attention to where the operator lives. You will be sent both calls twice - one at the beginning, again at the end. The slash will be in the QSO and you should know it. Everyone I talked to said it was part of one of the calls (as above). Sometimes the calls don't follow conventional formats. Don't worry about it! Don't worry about punctuation or prosigns.

Try and copy as much as you can. If you have problems answering the questions, the VE will then look for 25 (?) consecutive characters copied correctly (numbers count for 2).

Good Luck!

Tom - AC9TS

You would need to know
"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20030930191741.10332.00000073@mb-m14.aol.com...
> Is this test open game? Basically, are all characters, q-codes, and
prosigns
> fair game on this test. I have studied relentlessly and know a majority
of
> them and can receive at 10wpm but everytime I look at a different book or
> website I find more stuff.
>
> Thanks for the input
>
> 73
> G. Doughty
> KI4BBL

1866. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:25:48 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7B0E1C.53CC540F@cwis.net>
Source record: 107231

Stefano,
I am more than willing to accept Mr. Graham's report
since it clearly shows that the 'EH' antenna is not as
'good' (efficient) as the reference antenna (the 'normal'
broadcast antenna). I don't understand why you are happy
with this report, it disproves what you have been trying
to claim for the 'EH' antenna.
'Doc

1867. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:27:47 UTC
From: richardharrison@webtv.net
Message-ID: <4540-3F7B0E93-6@storefull-2312.public.lawson.webtv.net>
Source record: 107235

Raymond Sirois wrote:
"A 60-pound object on earth will have a weight of 10 pounds on the moon."

That`s about right. Gravitational force on the moon is about 0.16 times that on earth.

If a mass of 60 pounds is suspended from a weight scale on earth, the force on the scale registers 60 pounds. As Cecil noted, gravitational force is a vector. Its direction is toward the center of the mass that exerts the attraction.

A spring scale free to align itself will measure 60 pounds tension no matter where the 60-pound pul on it comes from. On the moon the object with a 60-pound attraction to the earth only exerts a 9.6-pound pull on the spring scale. The object did not change. The spring scale did not change. The mass of the moon is much smaller than that of the earth, so its attraction is proportionally less.

A weight balance scale would behave differently from the spring balance scale. The balance weights and positions would be almost unaffected by the change in gravitaional force because the forces on both scale and balance weights change in the same proportion.

A weight balance scale would usually employ a balancing weight much smaller than 60 pounds to balance a weight of 60 pounds. The balance is struck with a smaller weight through leverage..It`s a teeter-totter with the measured quantity getting the short end of the stick. Balance remains at the same spot regardless of the gravitational pull on both ends of the balance beam. It`s the torques which balance. When we change the gravitational force, we multiply both sides of the balance equation by the same factor.

The spring balance is calibrated for the force of gravity on a mass residing near the earth`s surface.

The weight balance is calibrated for the same gravitational attraction on earth.

On the moon the spring scale indicates about 10 pounds for an earth weight of 60 pounds. On the moon, the weight balance scale still indicates 60 pounds, though the gravitational pull is only about 10 pounds.

Best regards, Richard Harrison, KB5WZI

1868. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:32:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B0FC8.3F6E4C1B@uci.edu>
Source record: 107234

Gene Nygaard wrote:
> They are incorrect in the doctor's office, and even more incorrect in
> the supermarket or the jewelry store. Like I said, you don't have to
> call the quantities used there "weight"--but if you do call them
> weight, use the definition which is correct in that context. Don't
> misinterpret what is being used there.

Do you know what you're talking about Gene? Cuz I sure don't.

> >It's generally accepted that weight is a force.

> I've shown in this thread from the experts in the field, including
> NIST (the U.S. national standards agency) and ASTM (an industry
> standards agency) and NPL (the U.K. national standards agency) and the
> Canadian Standard for Metric Practice, that this is false.

I don't agree.

> All of
> these sources and many others tell you that weight is an ambiguous
> word, with several different meanings.

What physical quantity do you think a grocery store scale measures?

> >Problems can arise when
> >someone claims a mass is a force and vice versa.
>
> I agree.

And so a torque wrench has what kind of units printed on its scale -
mass and distance, or force and distance?

> >> You could, of course, argue that we should all change to your usage.
> >
> >Many people already have, obviously.
>
> Not very many, surprisingly.

Just the ones who write physics books maybe?

> It is much more common to find people
> claiming, erroneously, that there is some error in that usage.

You're the first guy I've ever seen making claims about errors in usage.

> Like slugs, poundals only exist in one limited purpose system
> of mechanical units, mostly used to simplify calculations.

But you'd like us to believe the unit of mass in that system is ubiquitous and universal, and that everybody is wrong!

73, Jim AC6XG

1869. Re: Yaesu ATAS 120

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:35:46 UTC
From: Daniel FY1FV <delete_fy1fv@wanadoo.fr>
Message-ID: <blf3acnrt1@news-reader1.wanadoo.fr>
Source record: 107232

Ed,
I's bought an ATAS 100 recently to install it on my car (Renault Kangoo).
It's a VERY good antenna IF you have a VERY good ground. So, on my car, I'd
built an adapter to the rear rod with 2 large (flat) copper wires "grounded"
on the both sides of the roof. I tried to install the ATAS on the roof of my
house which is corrugated iron: with a magnetic socket AND a short wire
connected to the roof, It's better than an horizontal dipole!
73's
Daniel

Ed Findley <edfindley@txucom.net> a �crit dans le message :
3f745ff5$1@katy-news.txucom.net...
> Has anyone tried this antenna as a base station ant? If so how did you
> mount it.
>
> Thanks
> Ed Findley
>
>

1870. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:40:04 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B1174.5E2DDC37@uci.edu>
Source record: 107236

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > The nature of things a point '+' are undefined,
>
> Nope, they are not.

There can exist no real point where the characteristic line impedance is both 50 ohms and 150 ohms.

> There are no reflections on the 50 ohm feedline because it "sees" 50
> ohms at point '+'.

Oh my gawd, somebody has brainwashed our Cecil! Maybe the pod people have invaded Texas! :-)

What about cancelled reflected waves, destructive interference and all that?

73, Jim AC6XG

1871. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 17:42:05 UTC
From: richardharrison@webtv.net
Message-ID: <4539-3F7B11ED-18@storefull-2312.public.lawson.webtv.net>
Source record: 107237

Jim, AC6XG wrote:
"As far as I know, V/I ratios don`t cause anything."

As symbols for load impedance, V/I ratios cause reflections when they
differ from the r-f transmission line surge impedance which feeds them.

Best rergards, Richard Harrison, KB5WZI

1872. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 18:31:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B1D9C.8A6E9FA@uci.edu>
Source record: 107238

Richard Harrison wrote:
>
> Jim, AC6XG wrote:
> "As far as I know, V/I ratios don`t cause anything."
>
> As symbols for load impedance, V/I ratios cause reflections when they
> differ from the r-f transmission line surge impedance which feeds them.
>
> Best rergards, Richard Harrison, KB5WZI

Hi Richard,

Would it be fair to say then that you don't agree that only physical
boundaries cause reflections?

73, Jim AC6XG

1873. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 19:18:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b2a69$1_8@corp.newsgroups.com>
Source record: 107239

Jim Kelley wrote:
> As far as I know, V/I ratios don't "cause" anything.

They sometimes cause 'rho' which then becomes an end
result and not the cause of anything. At a two-port
network with reflections, rho usually cannot be calculated
from the physical impedances involved. The moral is be
careful about saying that rho causes anything. Rho may
be only the end result of everything. The s11 reflection
coefficient doesn't suffer from that characteristic.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1874. HF9V9

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 19:33:58 UTC
From: Mouse <mouse@hotmail.com>
Message-ID: <G_Feb.296$qq2.120@edtnps84>
Source record: 107240

Hi guys. I just bought a Butternut HF9V9 vertical. I notice it calls for a length of 75 ohm coax to match - how long should this be?
Tnx

1875. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 19:37:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b2ed9$1_8@corp.newsgroups.com>
Source record: 107241

Jim Kelley wrote:

> There can exist no real point where the characteristic line impedance is
> both 50 ohms and 150 ohms.

I agree, and using the same logic, there also can be no such thing as real
steady-state conditions. That doesn't keep us from using it as a real concept.

```
+----------------
|
---------+
50 ohms 150 ohms
---------+
|
+----------------
```

You can draw a vertical line through the transition point. That vertical
line has zero width. Ergo, the 50 ohm to 150 ohm transition requires zero
length, conceptually, of course. But you knew that already. While you were
at it, why didn't you point out that there cannot exist a real characteristic
impedance exactly equal to 50 ohms or 150 ohms?

> What about cancelled reflected waves, destructive interference and all
> that?

I should have said there are no net reflections on the 50 ohm feedline.
There are two component reflections at point '+' that cancel each other
as illustrated by the s-parameter equation, b1 = s11*a1 + s12*a2 = 0
s11 is a reflection coefficient for a1 and s12 is a transmission coefficient
for a2, the voltage reflected from the load. Those two components have to
cancel for the b1 net reflections to equal zero.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1876. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 19:43:57 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b306d$1_8@corp.newsgroups.com>
Source record: 107242

Richard Harrison wrote:

> Jim, AC6XG wrote:
> "As far as I know, V/I ratios don`t cause anything."
>
> As symbols for load impedance, V/I ratios cause reflections when they
> differ from the r-f transmission line surge impedance which feeds them.

So can a V/I ratio cause reflections in the absence of a physical
impedance? For instance:

Source---50 ohm feedline---+---150 ohm feedline---450 ohms

The V/I ratio at point '+' is equal to 1350 ohms and the reflections
on the coax are the same as if a 1350 ohm resistor existed at point '+'.
So does the V/I=1350 ohms ratio cause the reflections at point 'x'?
Or is the reflected voltage, b1, equal to s11*a1 + s12*a2?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1877. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 19:53:23 UTC
From: ac6la@arrl.net
Message-ID: <960228f1.0310011153.5017edd1@posting.google.com>
Source record: 107243

By coincidence, one of the tutorial examples for the MultiNEC program deals with the subject of loading coils on a shorty dipole. With MultiNEC you can define the antenna model using variables for both the amount of reactance in the coils and for the placement of the coils along the wire. Each time you change the variable that controls the placement of the coil you can use the MultiNEC "Resonate" function which will automatically invoke EZNEC in an iterative manner and adjust the reactance of the coils until the antenna is resonant.

The example was written to illustrate and explain various capabilities of MultiNEC, of course, and not to address the particular scenario of this thread. It's available in standalone form at www.qsl.net/ac6la/mnex3.html.

Dan

1878. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 20:11:29 UTC
From: Crazy George <munschNO@attglobal.net.SPAM>
Message-ID: <3f7b396f_3@news1.prserv.net>
Source record: 107245

Roger:

I think you are trying to make a simple task difficult. Think about why you can't just hook a feeder to the base of the tower. Actually, you can, except matching it is a bitch because of the verrrry low impedance. So, go up a few feet (I use 20', as it is a common tubing length), and make it a gamma, delta, or whatever is convenient. Then use a "tuner" to match whatever appears to 50 ohms. Mine is a few microhenries of series inductance, with a few hundred picofarads of shunt capacitance at the 50 ohm end. I actually use a fixed inductance and a series capacitor instead of a variable inductor, but that is a construction detail.

--
Crazy George
Remove NO and SPAM from return address

1879. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 20:20:17 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <blfdfclko1@reader2.nmix.net>
Source record: 107244

The Radio Shack discone, while certainly not an efficient antenna at 50 MHz, works reasonably well at 144/440 MHz, and exhibits a low SWR (< 1.5:1) across these two bands. You should be able to use it with your radio no problem. You can pump up to 200W RF into it.

Bill / W5WVO

"Amigaman" <abodo@netnitco.net> wrote in message news:8a3dbede.0310010633.74951e42@posting.google.com...
> Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
> TW-4000A? any hints/suggestions/recommendations greatly appreciated!
> thank you for your time......73's....tony...wa9yoz

1880. Re: Discone ant on 144/440? [Further comment]

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 20:27:04 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <blfds2$ls5$1@reader2.nmix.net>
Source record: 107246

Just a "hint" -- If the Radio Shack discone is the one you have, be VERY CAREFUL when assembling the element rods to the central piece. The screw-in element fasteners are brittle (read: cheap) and can easily be snapped off. Tighten the locking nuts securely using a small wrench or needle-nose pliers, but DO NOT OVERTIGHTEN. I also recommend assembling the antenna when and where you are going to actually put it up. Spoken from experience. This antenna survives wind very well, even birds (they seem to love it), but it does not survive being bumped, dropped, etc.

Bill / W5WVO

"Bill VanAlstyne" <w5wvo@cybermesa.net> wrote in message news:blfdfclko1@reader2.nmix.net...
> The Radio Shack discone, while certainly not an efficient antenna at 50 MHz,
> works reasonably well at 144/440 MHz, and exhibits a low SWR (< 1.5:1)
> across these two bands. You should be able to use it with your radio no
> problem. You can pump up to 200W RF into it.
>
> Bill / W5WVO
>
> "Amigaman" <abodo@netnitco.net> wrote in message
> news:8a3dbede.0310010633.74951e42@posting.google.com...
> > Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
> > TW-4000A? any hints/suggestions/recommendations greatly appreciated!
> > thank you for your time......73's....tony...wa9yoz
>
>

1881. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 20:29:22 UTC
From: richardharrison@webtv.net
Message-ID: <20434-3F7B3922-38@storefull-2311.public.lawson.webtv.net>
Source record: 107247

Jim, AC6XG wrote:
"Would it be fair to say that you don`t agree that only physical boundaries cause reflections?"

A transmission line may be terminated in its surge impedance, yet somewhere along the line suffer a discontinuity producing an impedance irregularity and subsequent rteflection.

The line may be matched to its final load, yet have reflections on the transmitter side of the irregularity. Terman illustrates this on page 118 of his 1955 edition.

Terman suggests several reflection possibilities::
"sharp bends, insulating supports, resistive joints, coupled circuits and extraneous objects" as typical irregularities.

I am not persuaded that reflection is caused by anything other than a physical discontinuity, but Terman includes "coupled circuits" in his list, and I think this indicates a physical discontinuity may be referred to a reflection point from elsewhere.

Best regards, Richard Harrison, KB5WZI

1882. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 20:52:48 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <b1emnv48pfk88b9hb4h3l0bvdg1v7g1tbe@4ax.com>
Source record: 107260

On Wed, 01 Oct 2003 10:32:56 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Gene Nygaard wrote:
>> They are incorrect in the doctor's office, and even more incorrect in
>> the supermarket or the jewelry store. Like I said, you don't have to
>> call the quantities used there "weight"--but if you do call them
>> weight, use the definition which is correct in that context. Don't
>> misinterpret what is being used there.
>
>Do you know what you're talking about Gene? Cuz I sure don't.
>
>> >It's generally accepted that weight is a force.
>
>> I've shown in this thread from the experts in the field, including
>> NIST (the U.S. national standards agency) and ASTM (an industry
>> standards agency) and NPL (the U.K. national standards agency) and the
>> Canadian Standard for Metric Practice, that this is false.
>
>I don't agree.
>
>> All of
>> these sources and many others tell you that weight is an ambiguous
>> word, with several different meanings.
>
>What physical quantity do you think a grocery store scale measures?

You can probably figure that out for yourself, if you stop to think
about how they are tested and certified.

Especially if you have enough common sense to figure out that when we
buy and sell goods by weight, we wouldn't want to measure some
quantity that varies with location.

Another big clue is the units in which that quantity is measured;
grams in most of the world, and at least on prepackaged goods in the
United States. In that regard, you might also consider how the law
defines a pound (i.e., 0.45359237 kg), and then ask youself why in the
world the law bothers defining a pound in the first place.

When I was a kid, almost all the scales in the grocery stores were
balances. You do understand what Richard Clark, among others, has
told us about what we measure with those balances, don't you? Sure,
they had evolved to the point where you didn't have to place loose,
individual weights on a pan to get them to balance. The store we used
most often had one with a dial readout, and a computing scale listing

total price based on various prices per pound, but it prominently
displayed the company motto on the side facing the customer:

HONEST WEIGHT
NO SPRINGS

That scale wouldn't give you any different reading atop Mt. Chimborazo
or at the North Pole than it did in the store in which it was used.
Now, after the invention of the microprocessor, we have other options
with reasonable cost and performance to accomplish the same thing.

>> >Problems can arise when
>> >someone claims a mass is a force and vice versa.
>>
>> I agree.
>
>And so a torque wrench has what kind of units printed on its scale -
>mass and distance, or force and distance?

Once again, it doesn't cost you any more to pay attention.

Like I told you a long time ago, my torque wrench has "meter
kilograms" on it. What does that tell you? Why didn't you answer me
then?
Message-ID: <0ci9nvo5gf1ah0s32doru9r07ihopbnjm2@4ax.com>
Date: Fri, 26 Sep 2003 23:35:11 GMT

Though I have had mine for several years, such torque wrenches, of
course, are still readily available.
http://jcwhitney.com/webapp/wcs/stores/servlet/ProductDisplay?Dx=mode+matchall&productId=4
412&catalogId=10101&Ntx=mode+matchallany&langId=-1&storeId=10101

They are units of force and distance, if you can't figure it out, just
as the "foot pounds" which are the other units on my wrench are. But
just as the existence of the kilogram force does not prove that pounds
are not units of mass, the existence of pounds force does not prove
that pounds are not units of mass.

>> >> You could, of course, argue that we should all change to your usage.
>> >
>> >Many people already have, obviously.
>>
>> Not very many, surprisingly.
>
>Just the ones who write physics books maybe?
>
>> It is much more common to find people
>> claiming, erroneously, that there is some error in that usage.
>
>You're the first guy I've ever seen making claims about errors in usage.
>
>
>> Like slugs, poundals only exist in one limited purpose system

>> of mechanical units, mostly used to simplify calculations.
>
>But you'd like us to believe the unit of mass in that system is
>ubiquitous and universal, and that everybody is wrong!

The pound, of course, like the foot and the second, predates that system, and those units are all used in many other systems as well as outside any such specialized system. IIRC, there is only at most one unit in any of the commonly used specialized systems of English mechanical units that was invented specifically for use in that system: the poundal in the absolute fps system, the slug in the gravitational fps system, the slinch in the gravitational inch-pound-second system. The old metric cgs systems have two mechanical units with special names that aren't in other systems, the dyne and the erg, and of course they also have various names in the different flavors of cgs for electrical and magnetic units, quantities that have never been measured in English units. Of course, you also have combinations involving those units, such as foot-poundals.

That the poundal system is much older than the slug system is merely one of the many clues as to which is older, the pound mass or the pound force.
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1883. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:22:46 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <GAHeb.5346$Hd6.3246616@newssvr28.news.prodigy.com>
Source record: 107248

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20030930191741.10332.00000073@mb-m14.aol.com...
> Is this test open game? Basically, are all characters, q-codes, and
prosigns
> fair game on this test. I have studied relentlessly and know a majority
of
> them and can receive at 10wpm but everytime I look at a different book or
> website I find more stuff.
>
> Thanks for the input
>
> 73
> G. Doughty
> KI4BBL

It is the letters of the alphabet, numerals, period, comma, question mark, /, and the following prosigns: BT (written as =), K, KN, and AR. The test is sent in the form of a simulated QSO (conversation or contact) between two stations. It runs for 5 minutes and you copy as much as you can. Then you will either need to answer 7 out of 10 questions correctly on the content of the QSO or have 1 minute of solid copy (i.e. no errors) to pass. At 5wpm, one minute is 25 characters, however the numerals, punctuation and prosigns count as if they were two characters due to their length.

The Q-codes are composed of individual letters so there is no problem there. Even so, probably the only ones that will occur is QTH (location), QSO (conversation or contact), and QSL (acknowledge receipt of transmission).

As far as Q-codes (and abbreviations) copy exactly what you hear not what you think they might be sending and you should be all right.

Dee D. Flint, N8UZE

1884. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:40:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B49DF.D5C19181@uci.edu>
Source record: 107250

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > As far as I know, V/I ratios don't "cause" anything.
>
> They sometimes cause 'rho' which then becomes an end
> result and not the cause of anything.

I disagree. Reflections are caused by real impedances not reflected
ones.
Have you changed your mind about this?

> At a two-port
> network with reflections, rho usually cannot be calculated
> from the physical impedances involved.

It can certainly be done using the optical formulas for a pair of
boundaries.

For the two boundaries as a network, and we call rho at the first
boundary r12 and rho at the second boundary r23 then
rho(network) = (r12 + r23)/(1 + r12*r23) = 0. Note that if we use your
value for r12, the network generates a reflection. I note the utility
of negative rho in this example.

But, with a transmission line at odd multiples of lambda/4, rho for the
network would be at a maximum and the network equation would be
(r12 - r23)/(1 - r12*r23). In such a case you'd want to use a load
impedance that would provide a r23 of +.5. (x - 150)/(x + 150) = .5,
so x = 450.

> The moral is be
> careful about saying that rho causes anything. Rho may
> be only the end result of everything.

No question that rho is the end result of a ratio of impedances. It's
been my view that, like the V/I ratios we were speaking about, rho is
not a cause but a result.

73, Jim AC6XG

1885. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:44:02 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B4AA2.9AC6863D@uci.edu>
Source record: 107249

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > There can exist no real point where the characteristic line impedance is
> > both 50 ohms and 150 ohms.
>
> I agree, and using the same logic, there also can be no such thing as real
> steady-state conditions. That doesn't keep us from using it as a real concept.

No, but it made it difficult for me to anticipate every possible
observation you might want to make about what goes on at such a point.

73, Jim

1886. NYC, NNJ, EPA Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:50:16 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031001175016.10042.00000136@mb-m21.aol.com>
Source record: 107251

Howdy Antenna Aficionados and regular hams !

Reminder, reservations needed by Oct. 4th to K3BU@aol.com

There will be special Ham tables or you can book your exclusive. The price is paltry $25 per person, if table of 8 or more is reserved $20/person, no need for donations, bribes or taxes. Unbelievable fun fueled by original, direct from Schwartzwald - Spaten Oktoberfest Bier on tap, all you can drink! You can also bring your favorite booze, setups - glasses, ice will be provided. Don't miss it, make your reservations now before we run out of tables.

Directions and poster are at http://www.k3bu.us/octoberfest_2003.htm

See you all there!

Oktoberfest Oberchairman
Yuri Blanarovich

Montville Oktoberfest Dinner - Dance

Saturday, October 11, 2003 7 - 11 p.m.

Dinner includes:
Main course:
Sauerbraten mit gravy, Bratwurst,
Spaetzel, Red Cabbage

Desert:
Applestrudel, Coffee, Soft drinks

Main attraction:
Spaten Oktoberfest Beer on tap

For dancing and listening pleasure:
DJ music by popular European bands

by Knights of Columbus
at Msgr. Meyer Parish Center
St. Pius X RC Church
24 Changebridge Rd., Montville, NJ 07045

Admission $25/person, dinner and drinks included, BYOB setups

Reservations required by 10/4, tables for groups of 8 - 12 available at $20/person

Call Yuri Blanarovich, tel. 973 808-1981, Email K3BU@aol.com
or mail your reservations by Oct. 4th with checks made to
St. Pius X KoC,

Box 282, Pine Brook, NJ 07058

Bring your friends and have a great time!

Ein prosit!

1887. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:56:12 UTC
From: dwayne <dbagley@mindspring.com>
Message-ID: <04leb.4699$f11.3298@newsread1.news.atl.earthlink.net>
Source record: 107252

YES!!
each letter , prosign , and number is possible . including puncuation

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20030930191741.10332.00000073@mb-m14.aol.com...
> Is this test open game? Basically, are all characters, q-codes, and
prosigns
> fair game on this test. I have studied relentlessly and know a majority
of
> them and can receive at 10wpm but everytime I look at a different book or
> website I find more stuff.
>
> Thanks for the input
>
> 73
> G. Doughty
> KI4BBL

1888. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 21:59:39 UTC
From: stefano <sgalast@tin.it>
Message-ID: <f7Ieb.152216$hE5.5162877@news1.tin.it>
Source record: 107253

Hi Richard,
I think you missed some important facts.

on the third page of the exhibit the consultant reports:
"The ground conductivities of each radial,as ANALYZED,differ sligthly, but were within the range of 0.1 mmho to 3 mmho,wich,historically,is typical of this area in Georgia. We note the theoretical ground conductivity of the area surrounding Eatonton, Georgia,extracted from FCC M-3 is 4 mmhos "

This means he analyzed each radial and to a minimum of two points of distance from the antenna.
That is the reason because , for instance, on some of them the blue curve is broken on two . On that cases he measured two different conductivities at different distance. Please look at it.

This means he was very scrupolous and, for me , he did a great job.
Considering an average value of 4mmhos the measure would have been false.

Of course he changed the conductivity value for each radial accordingly with the measured one.
This is valid for both antennas , reference and not.

The EH antenna performed almost the same of the reference.

73's Stefano

"Richard Clark" <kb7qhc@comcast.net> ha scritto nel messaggio
news:17plnv027cn5lo0ibuadd6vieb1q4g1ajv@4ax.com...
> On Wed, 01 Oct 2003 08:02:59 GMT, "stefano" <sgalast@tin.it> wrote:
>
> >Hi Richard,
> >ok one small step better, now.. :-)
> >The cylinders/radiators are completely insulated from his tower support.
>
> Hi Stefano,
>
> We all realize that you are not adept at the science of antenna design
> so we expect you do not understand these issues.
>
> >Then the top supporting piece of the tower is insulated from the bottom
one.
>
> This is, of course, immaterial.
>
> >I imagine you could say the capacitive coupling between the
> >cylinders/radiators and the under metallic structures , can be enough to

> >allow some rf currents flow on them.
>
> This is in fact what happens. The physics will not allow prevent it.
>
> >But this , for me, is NOT enough to call the antenna ..a top hat one.Is
not.
>
> Again, you say this because of your inexperience in the matter. Top
> Hats are part and parcel to antenna design, not for people to wear.
> Please understand that it is not an article of clothing, it is a
> working element of many antennas and necessary for small ones to
> become partially efficient.
>
> >Yes the consultant engineer noted about some influences due to the local
> >power line and, may be, to the 1/4 spaced reference tower.
> >In fact the EH showed some directivity.
> >This, do not worry, can be further investigate in the near future .
>
> Further investigation is not necessary, all the data is present. If
> you do not trust this data, then you should not be here.
>
> >Since we
> >know very well , from many our previous measures , the antenna can be
equal
> >to a standard 1/4 tower vertical
>
> The point of the test was to prove this. The test proved it is not.
> The eh/tower/top-hat are 66% LESS efficient and the test proves this.
>
> > , we are very confident all can be
> >demonstrated in the near future when Ted will sell the first antennas.
>
> Why didn't he sell one to the test station?
>
> >He's collected some orders already, so we will see soon.
>
> But he has not sold his first one - BIG difference (like 66% LESS
> efficient).
>
> >The blue curve on the charts is the 1/4 tower standard with 120 radials.
>
> They are the wrong ones.
>
> >The consultant proved this antenna is perfectely FCC compliant as class
B.
>
> Because it meets the MINIMUM requirement of a LOW EFFICIENT design.
> The antenna in the background of the picture is BETTER! The data
> proves it.

>
> >We are speaking of an antenna considered as a standard.
> >Well the small red dots plotted around this blue curve are the EH ones.I
> >think is evident how close is (on the average) to it.
>
> The standard you speak of is the wrong one. The FCC describes the
> ground around Eatonton as having 4mS of conductivity. The antenna
> curve used is 2mS of conductivity. This means 3dB LOSS.
>
> >Is my opinion that any system you can model being 90 feet high with NO
> >GROUND and with NO RADIALS can not be as efficient as the EH antenna
under
> >test.
>
> I am glad to see you agree that ANY antenna is as good as eh antenna.
> No one needs eh antenna.
>
> >Note I said 90 feet high because I know you are sure that ALL the system
is
> >radiating....but is not.
> >73's and best regards
> >Steve Ik5IIR
> >
> Hi Stefano,
>
> You are relatively untutored in the science of antennas, that is why
> you come here for advice. We all recognize that the eh antenna alone
> is a very poor one and that it needs other elements, such as a 90 foot
> tower and top-hat to achieve 33% efficiency of standard antenna shown
> in background. The data proves this. You need only look at the
> numbers that you have difficulty with.
>
> Let's look at several so that you can understand how poor the eh
> antenna is:
> point# Std Field eh Field eh Loss
> 1 310 275 -1.04dB
> 2 295 220 -2.55dB
> 3 66 43 -3.72dB
> 4 46 30 -3.71dB
> 5 36 24 -3.52dB
> 6 23 17.5 -2.37dB
> 7 20.1 12 -4.48dB
> 8 19.9 11.6 -4.69dB
>
> As you can plainly see from the data taken, the further you go out the
> worse the efficiency becomes. Point 8 is less than 3kM away and
> compared to the antenna in the background:
> the eh/tower/top-hat has an efficiency of 58%.
> The antenna in the background has an efficiency of 100%

>
> There are many charts, and on EVERY one there is in the last column a
> description of eh efficiency and if we choose the efficiency of the
> antenna at the last point or at least 10 miles (where the audience
> is):
> 035° 2mS 67%
> 075° 2mS 61%
> 135° 3mS 65%
> 210° 1mS 81%
> 260° 0.1mS 120%
> 320° 1.5mS 59%
>
> It is evident that the eh/tower/top-hat was compared to 5 different
> FCC antenna curves! NONE of them were for the FCC mapped value of 4mS
> ground conductivity even when Eatonton is in the middle of that
> region. We can also see that there is a 29.5dB variation between
> those curves! Where is the greatest variation? Pointed directly at
> the nearby radiator of the standard antenna. If that antenna, and
> power lines, and tower, and top-hat were gone (use a wood mast with
> nylon rope and a choked transmission line); then the eh would be dead
> on arrival.
>
> The data simply says the eh is a dog.
>
> 73's
> Richard Clark, KB7QHC

1889. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 22:22:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7B5398.89671409@uci.edu>
Source record: 107256

Richard Harrison wrote:
> I am not persuaded that reflection is caused by anything other than a
> physical discontinuity, but Terman includes "coupled circuits" in his
> list, and I think this indicates a physical discontinuity may be
> referred to a reflection point from elsewhere.

I see, yes. Interesting that he would distinguish and include "coupled circuits". Why do you suppose he felt "coupled circuits" were somehow different than other circuits?

73, Jim AC6XG

1890. Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 22:24:10 UTC
From: Lushy <showbag@alphalink.com.au>
Message-ID: <3f7b5228@news.alphalink.com.au>
Source record: 107254

Can anyone point me to a site that shows how to build a multi freq hf
vertical, thanks in advance
LUSHY
VK3HDL
Victoria

1891. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 22:29:35 UTC
From: Lushy <showbag@alphalink.com.au>
Message-ID: <3f7b536c@news.alphalink.com.au>
Source record: 107255

Then toss it all out and use phone for the rest of your Ham days
Lushy
"dwayne" <dbagley@mindspring.com> wrote in message
news:04Ieb.4699$f11.3298@newsread1.news.atl.earthlink.net...
> YES!!
> each letter , prosign , and number is possible . including puncuation
>
> "G. Doughty" <nightowls627@aol.comnojunk> wrote in message
> news:20030930191741.10332.00000073@mb-m14.aol.com...
> > Is this test open game? Basically, are all characters, q-codes, and
> prosigns
> > fair game on this test. I have studied relentlessly and know a majority
> of
> > them and can receive at 10wpm but everytime I look at a different book
or
> > website I find more stuff.
> >
> > Thanks for the input
> >
> > 73
> > G. Doughty
> > KI4BBL
>
>

1892. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 22:58:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <67mmnvs9d8qlbpvpeebdeevagolloko6j8@4ax.com>
Source record: 107257

On Wed, 01 Oct 2003 21:59:39 GMT, "stefano" <sgalast@tin.it> wrote:

>Hi Richard,
>I think you missed some important facts.
>
Hi Stefano,

No, I did not miss ANY facts. They are quoted as follows. This is the DATA! not excuses, not explanations, not translations! It is understandable that this is very complex for you to understand. The science of antenna design can actually be reduced to simple analysis of results shown in the report. The numbers below are exact confirmation of the LOSS and POOR EFFICIENCY that confirm the eh is like any other small lossy and inefficient antenna. It also demonstrates that EVERY claim made for the eh is totally FALSE.

>>
>> Let's look at several so that you can understand how poor the eh
>> antenna is:
>> point# Std Field eh Field eh Loss
>> 1 310 275 -1.04dB
>> 2 295 220 -2.55dB
>> 3 66 43 -3.72dB
>> 4 46 30 -3.71dB
>> 5 36 24 -3.52dB
>> 6 23 17.5 -2.37dB
>> 7 20.1 12 -4.48dB
>> 8 19.9 11.6 -4.69dB
>>
>> As you can plainly see from the data taken, the further you go out the
>> worse the efficiency becomes. Point 8 is less than 3kM away and
>> compared to the antenna in the background:
>> the eh/tower/top-hat has an efficiency of 58%.
>> The antenna in the background has an efficiency of 100%
>>
>> There are many charts, and on EVERY one there is in the last column a
>> description of eh efficiency and if we choose the efficiency of the
>> antenna at the last point or at least 10 miles (where the audience
>> is):
>> 035ï¿½ 2mS 67%
>> 075ï¿½ 2mS 61%
>> 135ï¿½ 3mS 65%
>> 210ï¿½ 1mS 81%
>> 260ï¿½ 0.1mS 120%
>> 320ï¿½ 1.5mS 59%

>>
>> It is evident that the eh/tower/top-hat was compared to 5 different
>> FCC antenna curves! NONE of them were for the FCC mapped value of 4mS
>> ground conductivity even when Eatonton is in the middle of that
>> region. We can also see that there is a 29.5dB variation between
>> those curves! Where is the greatest variation? Pointed directly at
>> the nearby radiator of the standard antenna. If that antenna, and
>> power lines, and tower, and top-hat were gone (use a wood mast with
>> nylon rope and a choked transmission line); then the eh would be dead
>> on arrival.
>>
>> The data simply says the eh is a dog.
>>
>> 73's
>> Richard Clark, KB7QHC
>

The fact that the conductivity is changed for what ever reason does
not change the fact that the eh/tower/top-hat IS ALWAYS INFERIOR.
The numbers prove this whatever anything else appears to be said!

Sorry, Stefano, you have to accept the data: the eh is a dog.

73's
Richard Clark, KB7QHC

1893. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 23:05:33 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20031001190533.04818.00000132@mb-m18.aol.com>
Source record: 107258

Here is the catch . . . I don't want to use phone. I was very apprehensive at first about cw but now that I have been doing it, I can't wait to use it. I didn't study in college to not use it and I am not wasting my time now studying for element one. I just can't wait for my daughter to be old enough to use cw. LOL

Thanks for all the help folks, I am much more comfortable now!!
73
G. Doughty
KI4BBL

1894. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 23:09:13 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <t8Jeb.5368$Hd6.3265137@newssvr28.news.prodigy.com>
Source record: 107259

"dwayne" <dbagley@mindspring.com> wrote in message
news:04Ieb.4699$f11.3298@newsread1.news.atl.earthlink.net...
> YES!!
> each letter , prosign , and number is possible . including puncuation
>

Incorrect. There are many prosigns, such as AS, that will NOT be on the test. There are many of the punctuation marks, such as apostrophe, quotes, and parenthesis, that will not be on the test.

Dee D. Flint, N8UZE

> "G. Doughty" <nightowls627@aol.comnojunk> wrote in message
> news:20030930191741.10332.00000073@mb-m14.aol.com...
> > Is this test open game? Basically, are all characters, q-codes, and
> prosigns
> > fair game on this test. I have studied relentlessly and know a majority
> of
> > them and can receive at 10wpm but everytime I look at a different book
or
> > website I find more stuff.
> >
> > Thanks for the input
> >
> > 73
> > G. Doughty
> > KI4BBL
>
>

1895. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 23:35:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <khomnv0p13rjji6eirpmhsvbbab6ugvq1o@4ax.com>
Source record: 107261

On Wed, 01 Oct 2003 22:58:58 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 01 Oct 2003 21:59:39 GMT, "stefano" <sgalast@tin.it> wrote:
>
>>Hi Richard,
>>I think you missed some important facts.
>>
>Hi Stefano,
>
>No, I did not miss ANY facts. They are quoted as follows. This is
>the DATA! not excuses, not explanations, not translations! It is
>understandable that this is very complex for you to understand. The
>science of antenna design can actually be reduced to simple analysis
>of results shown in the report. The numbers below are exact
>confirmation of the LOSS and POOR EFFICIENCY that confirm the eh is
>like any other small lossy and inefficient antenna. It also
>demonstrates that EVERY claim made for the eh is totally FALSE.
>

Again, Stefano,

Let us just throw away the eh, and keep the tower and the top-hat. We
add a capacitor (just like the eh, except simpler for a match) and we
use the same ground that the test engineer "says" the Georgia ground
is like (2mS). Results show that this is BETTER than the eh antenna:
Impedance = 38.82 + J 5.631 ohms
Max gain = -4.42dBi

Who needs eh antenna? No one! :-)
Save money, ignore false claims and enjoy better performance!

Oh! Sorry, Stefano. You sell these don't you? Maybe this why you
don't like the data. :-(

EZNEC file available on request.

73's
Richard Clark, KB7QHC

1896. Re: shortened dipole loaded

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-01 23:57:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blfpm6$8sr$1@titan.btinternet.com>
Source record: 107262

For given location of loading coil along a short antenna wire, of given overall length, of given wire, rod or mast diameter, the following programs will calculate the inductance needed to resonate it to 1/4-wavelength.

Two loaded wires connected back-to-back form a 1/2-wave resonant dipole.

Program ADDALOAD will tell just that. It will also tell you the value and position of a loading capacitance if antenna length requires a resonating capacitor.

Program LOADCOIL will do likewise and also tell you how many turns of what gauge wire to wind on a coil of given former length and diameter.

Program VERTLOAD does a similar job insofar as dipoles are concerned.

Program MIDLOAD is dedicated to very short centre-loaded dipoles. All coil and wire dimensions and number of turns are taken into account. Such antennas can be fed via either coax or balanced-pair feedlines of any impedance.

Program SOLNOID2 will design any coil of any proportions for any given dimensions and required inductance, plus a variety of other performance characteristics including temperature rise for given applied RF volts. Nice for tank coils, loading coils and antenna traps.

All these programs are used in a "What-if " user-friendly mode. USA citizens may be at a slight disadvantage - metric measurement units are used although in some cases a translation is provided. Once one of these simple loaded anennas has been designed, provided you have a BIG, UNOBSTRUCTED back-yard, EZNEC may be used to estimate its receiving and radiating pattern. Otherwise your guess is as good as mine.

However, it should be borne in mind, a coil-loaded short antenna is essentially a single-band device and a tuner is nearly always needed even for the single band. With a tuner it may be goaded into doing something useful on one or two higher frequency bands.

For optimum efficiency the location of a loading coil is about 2/3 or 3/4 of the way along the wire length. The bigger the physical size of the loading coil, the higher the Q, the smaller the coil loss and the nearer it can be placed towards the end of the wire. But location is VERY non-critical.

If the wire is not very much shorter than self-resonance then efficiency can be maximised by NOT inserting a coil in the wire and depending entirely on a high-impedance balanced transmission line and a tuner. Without a high-in-the-air loading coil the antenna reverts advantageously to multiband operation.

In general, good efficiency is possible with a 450 or 600-ohm feed-line provided the overall length of an unloaded dipole is not less than 0.3 wavelengths at the lowest frequency of interest.

One antenna with its feedline, from coax to open wire, or both types in tandem, can be compared efficiency-wise with another by using program DIPOLE3.

All the above small programs, one self-contained file only, can be downloaded in a few seconds from the following website and run immediately. No training course needed. Free to USA citizens. ;o)

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
made in the original Birmingham,
go to http://www.g4fgq.com
==========

1897. New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 00:33:20 UTC
From: expeditionradio@aol.com
Message-ID: <20031001203320.00233.00000105@mb-m27.aol.com>
Source record: 107263

```
==========================================
HFpack Shootout 2003
==========================================

The HFpack Shootout 2003 is sponsored by
HFpack and open to all amateur radio operators.
HFpack is dedicated to furthering the state of the art
for HF Portable.
http://www.hfpack.com

On Saturday 18 October 2003, HFpack will hold the
3rd annual HFpack Shootout at USA's west coast ham
convention "Pacificon" in San Ramon, California.
The purpose of the shootout is to measure signal
strength of pedestrian and human mobile HF systems
on 18MHz and 5MHz in a controlled manner and report
the results as a service to radio operators around the
world. Participation and entry in the shootout is open
and free to all radio amateurs.

==========================================
New for 2003: Complete Systems Shootout
==========================================

Unlike previous years where only the antennas were
tested, the HFpack Shootout 2003 tests complete
backpack and human mobile systems on
18MHz and 5MHz in several power and type categories.

==========================================
Entrant Information Required:
==========================================

1) Entrant Operator Name and Callsign
2) Entrant Team Name
3) Category(s) and Band(s) of Entry
4) Description of transmitter
5) Description of antenna system
6) Description of power source
7) Description of other equipment used
8) Polarization (Horizontal or Vertical)
9) Measured power output of transmitter
10) Measured height of antenna system
11) Measured diameter of antenna system
```

==========
Basic Shootout Description
==========

1) A circle 10 meters (33ft) in diameter in an open area shall be clearly marked. The entrant operator, antenna system and equipment shall be within this circle during the RF measurement.

2) The entrant operator's voice transmission shall be measured in decibels of peak RF signal strength by a nearby test receiver, connected to a vertical and a horizontal antenna. The operator shall make a brief transmission for the Shootout test receiver engineer to verify best polarization.

3) The entrant operator shall make three voice transmissions and the Shootout test receiver engineer shall make 3 corresponding RF signal strength measurements. The maximum and minimum measurements shall not be used. The medium (median) measurement shall be recorded as the final measurement of the entrant.

4) The RF measurements shall be made on amateur frequencies designated by the Shootout engineer within the 18MHz and the 5MHz bands.

5) An entrant may separately enter any or all categories and frequency bands.

==========
Entrant Requirements and Guidelines
==========

1) The entrant operator shall check in, weigh in the equipment, and demonstrate the ability to move about freely while carrying all equipment and antenna system. The entrant's transmitter output power into a 50ohm dummy load shall be measured by the Shootout engineer.

2) The entrant operator shall carry and support the full weight of all equipment and antenna system during the RF measurements; however, a single wire or cable dragging counterpoise attached to the radio equipment with a maximum total length of 10 meters in a single direction and a maximum cross section of 1 centimeter may be touching, dragging, or laying on the surface upon which the operator is walking or standing. This counterpoise wire shall not be attached to a ground rod or imbedded in the ground, or in any way elevated above the surface of the earth by fixed objects on the ground.

3) The entrant's antenna system shall not exceed a
total height of 10 meters above the surface level upon
which the operator is walking or standing, and the
entire weight of the antenna shall be carried by the
operator during the RF measurements.

==========
Category 1 = Pedestrian 100W Class
==========

1) The output power of the Category 1 entrant
operator's transmitter shall not exceed 100 Watts PEP.

2) The total weight of the Category 1 entrant operator's
transmitting equipment shall not exceed 20 kilograms
(44 pounds), inclusive of transmitter, antenna system,
all wires, cables, backpack/cases, microphone, and
power supply.

3) Only the entrant operator's body may be used to
support the equipment; no monopod, tripod, wheeled
support, or other support device shall be used to hold
up the equipment or the antenna system.

==========
Category 2 = Pedestrian 10W Class
==========

1) The output power of the Category 2 entrant
operator's transmitter shall not exceed 10 Watts PEP.

2) The weight of the Category 2 entrant's equipment
is not limited.

3) Only the entrant operator's body may be used to
support the equipment; no monopod, tripod, wheeled
support, or other support device shall be used to hold
up the equipment or the antenna system.

==========
Category 3 = Human Mobile 100W Class
==========

1) A Human Mobile is considered to be any wheeled
vehicle, craft, device, cart, skates, wagon, bicycle,
tricycle, quadracycle, scooter, or carrier which is
powered for movement solely by human energy.

2) The output power of the Category 3 entrant
operator's transmitter shall not exceed 100 Watts PEP.

3) The weight of the Category 3 entrant's equipment
is not limited.

==========
Differently-Abled Notes
==========

1) Differently-abled operators may enter any category
of their choice, exempt from requirements of support
of equipment, and may utilize any type of body support
assistance including but not limited to: walkers, canes,
crutches, motorized wheelchair, other assisted devices,
or the assistance of another person for carrying
equipment.

==========
Shootout Notes
==========

1) The general public, amateur radio operators,
volunteer witnesses, and others may be present to view
the Shootout. All entrants should conduct themselves
in the spirit of friendly cooperation.

2) Other guidelines may be posted or verbally
announced or personally advised at the Shootout by
the organizers to comply with local laws and regulations.

3) In the unlikely event of confusion or dispute, a panel
of three HFpack members chosen by the HFpack
members present at the shootout will attempt to resolve
the issue in an amicable manner.

4) The results of the HFpack Shootout 2003 will be
announced on the HFpack website and a report will
be issued documenting the entrant systems.

==========
End of message
HFpack
http://www.hfpack.com

1898. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 00:48:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031001204857.10042.00000140@mb-m21.aol.com>
Source record: 107264

What is missing is the description of location of the antennas ("EH just north of existing"), their mutual positioning, location of the radial system, guy wires, etc.

Judging from the pictures, they are quite close and there is most likely quite a bit of coupling and the EH might be taking free ride off the full size vertical. Also some "simplification" going from 150 ft tower to 90 ft tower with all that stuff?

I bet I could get better performance with 90 ft tower loaded with coil, top hat and elevated radials. Much simpler and cheaper and no E H mumbo-jumbo.

Safe to file it with CFA and Freaktals?

Yuri

1899. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 01:10:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blfttl$2ap$1@hercules.btinternet.com>
Source record: 107265

"Lushy" wrote > Can anyone point me to a site that shows how to build a multi freq hf
> vertical, thanks in advance.

You can do no better than to begin with a bottom-fed, bottom-tuned, vertical or sloping wire, or pole or mast as high as you can manage.

For short vertical antennas of any sort a fairly good ground is needed. If you have an agricultural or reasonably fertile garden soil with occasional rainfall then a modest array of half-a-dozen shallow-buried ground radials may be sufficient. Radial length need be no longer than antenna height. Increase number of radials till you find there's no improvement in received signal strength. Not much point in having more than 20 or 30 radials.

If you have one, you best ground radial is your domestic incoming water main pipe.

If you have any more wire to bury in the ground then prefer to increase the number of radials rather than length.

If you can't increase height or length of antenna any more then a top capacitance hat can be very useful. Or take the wire sideways. Do NOT attempt to insert a loading coil for a particular band - it will no longer be multi-band.

If you can provide height only by taking a wire up the side of your house to a pole on the chimney then DO IT.

A simple vertical or sloping high wire is multi-band. It is impossible for a lower ground-mounted commercial antenna, festooned with coils to improve upon it.

Whatever short vertical antenna you select you will need a tuner somewhere between bottom and the transceiver. Concentrate on THAT! A home-brew with crocodile clips can be more versatile than any expensive commercial job.

Reg, G4FGQ

1900. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:24:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b9c4f$1_6@corp.newsgroups.com>
Source record: 107266

Jim Kelley wrote:
> Cecil Moore wrote:
>
>>Jim Kelley wrote:
>>>As far as I know, V/I ratios don't "cause" anything.
>>
>>They sometimes cause 'rho' which then becomes an end
>>result and not the cause of anything.
>
> I disagree. Reflections are caused by real impedances not reflected
> ones. Have you changed your mind about this?

Where did I say rho causes reflections? I didn't! Your statement
does NOT disagree with my statement.

>>At a two-port
>>network with reflections, rho usually cannot be calculated
>>from the physical impedances involved.
>
> It can certainly be done using the optical formulas for a pair of
> boundaries.

Unfortunately, only the index of refraction of one of the boundaries
is known in my statement above. The index of refraction of the second
boundary is unknown, i.e. only the impedances at the two-port network
are known - the load is unknown.

> No question that rho is the end result of a ratio of impedances. It's
> been my view that, like the V/I ratios we were speaking about, rho is
> not a cause but a result.

But earlier, I thought you said rho caused a result.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1901. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:25:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b9c9d$1_6@corp.newsgroups.com>
Source record: 107267

Jim Kelley wrote:

> Cecil Moore wrote:
>
>>Jim Kelley wrote:
>>>There can exist no real point where the characteristic line impedance is
>>>both 50 ohms and 150 ohms.
>>
>>I agree, and using the same logic, there also can be no such thing as real
>>steady-state conditions. That doesn't keep us from using it as a real concept.
>
> No, but it made it difficult for me to anticipate every possible
> observation you might want to make about what goes on at such a point.

All that proves is that you are not omniscient. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1902. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:28:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b9d4e_6@corp.newsgroups.com>
Source record: 107268

Jim Kelley wrote:
> I see, yes. Interesting that he would distinguish and include "coupled
> circuits". Why do you suppose he felt "coupled circuits" were somehow
> different than other circuits?

Additionally, exactly what does he mean by "coupled circuits"? Is a
perfect transformer a coupled circuit? I don't see why there would
be any reflections at a perfect transformer.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1903. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:38:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7b9f97_6@corp.newsgroups.com>
Source record: 107169

Expeditionradio wrote:
> The purpose of the shootout is to measure signal
> strength of pedestrian and human mobile HF systems
> on 18MHz and 5MHz ...
> ==========
> Category 3 = Human Mobile 100W Class
> ==========

Seems 5 MHz has a legal power limit of 50 watts.

> 2) The entrant operator's voice transmission shall be
> measured ...

Whoever can shout the loudest wins? Seems this test is
far too subjective.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1904. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:40:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ba01f_6@corp.newsgroups.com>
Source record: 107170

Reg Edwards wrote:
> You can do no better than to begin with a bottom-fed, bottom-tuned, vertical
> or sloping wire, or pole or mast as high as you can manage.

But don't allow the vertical radiator to be longer than 5/8WL
on the highest frequency of interest.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1905. Re: NYC, NNJ, EPA Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 03:50:28 UTC
From: "@'86 DASPAMnetscape.net" <"alaininvc\\@'86 DASPAMnetscape.net">
Message-ID: <1065066498.676432@news-1.nethere.net>
Source record: 107171

Hi Yuri!

When I was a kid in the '50's and '60's, I grew up in Newark. Once a
month, my folks would take me for a drive to the "Pine Brook Auction
House". They had just about everything for sale there!

Are they still in business?

Alain...WPE2OLR [Newark News Radio Club member, circa 1962]

Yuri Blanarovich wrote:

> Howdy Antenna Aficionados and regular hams !
>
> Reminder, reservations needed by Oct. 4th to K3BU@aol.com
>
> There will be special Ham tables or you can book your exclusive. The price is
> paltry $25 per person, if table of 8 or more is reserved $20/person, no need
> for donations, bribes or taxes. Unbelievable fun fueled by original, direct
> from Schwartzwald - Spaten Oktoberfest Bier on tap, all you can drink! You can
> also bring your favorite booze, setups - glasses, ice will be provided. Don't
> miss it, make your reservations now before we run out of tables.
>
> Directions and poster are at http://www.k3bu.us/octoberfest_2003.htm
>
> See you all there!
>
> Oktoberfest Oberchairman
> Yuri Blanarovich
>
>
> Montville Oktoberfest Dinner - Dance
>
> Saturday, October 11, 2003 7 - 11 p.m.
>
> Dinner includes:
> Main course:
> Sauerbraten mit gravy, Bratwurst,
> Spaetzel, Red Cabbage
>
> Desert:
> Applestrudel, Coffee, Soft drinks
>
> Main attraction:
> Spaten Oktoberfest Beer on tap
>

> For dancing and listening pleasure:
> DJ music by popular European bands
>
>
> by Knights of Columbus
> at Msgr. Meyer Parish Center
> St. Pius X RC Church
> 24 Changebridge Rd., Montville, NJ 07045
>
> Admission $25/person, dinner and drinks included, BYOB setups
>
> Reservations required by 10/4, tables for groups of 8 - 12 available at
> $20/person
>
> Call Yuri Blanarovich, tel. 973 808-1981, Email K3BU@aol.com
> or mail your reservations by Oct. 4th with checks made to
> St. Pius X KoC,
> Box 282, Pine Brook, NJ 07058
>
> Bring your friends and have a great time!
>
> Ein prosit!
>

1906. Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 04:43:23 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <K1Oeb.906$E83.61534@news.uswest.net>
Source record: 107172

Sorry for the dumb question, but the ARRL antenna books just confuse me sometimes. I seem to get more questions than I get answers to.

Question: In an HF beam antenna, such as a Yagi... the forward gain measurement... is this in terms of the output gain (ERP) or does this also mean the receiving gain as well?

The reason why I'm asking: I'm trying to come up with the ideal SWL antenna. I currently have a 75ft wire antenna using the RS kit. This does a pretty good job of pulling in signals. I'm just wondering if there's a better option.... such as a multi-band HF beam antenna..?
So what antenna would give me the best "gain" in terms of receiving power. I'm doing no transmitting here...

Thanks

--
-Nick

"The metric system did not really catch on in the United States, unless you count the increasing popularity of the nine-millimeter bullet."

1907. Re: 160 Inverted L and tall tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 05:48:14 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <oiennvcp254dui98h7gltuvrbab4q390d3@4ax.com>
Source record: 107173

On Wed, 1 Oct 2003 15:11:29 -0500, "Crazy George"
<munschNO@attglobal.net.SPAM> wrote:

>Roger:
>
>I think you are trying to make a simple task difficult. Think about why you
>can't just hook a feeder to the base of the tower. Actually, you can,
>except matching it is a bitch because of the verrrry low impedance. So, go
>up a few feet (I use 20', as it is a common tubing length), and make it a
>gamma, delta, or whatever is convenient. Then use a "tuner" to match

That's kinda, sorta, something like I'm thinking of doing. Other than
at 160 meters the tap will probably be some where around 70 feet with
a spacing of (SWAG here) of 18 to 24 inches. Then a series matching
cap, just like in a gamma match,

Then check with noise bridge and adjust accordingly.

>whatever appears to 50 ohms. Mine is a few microhenries of series
>inductance, with a few hundred picofarads of shunt capacitance at the 50 ohm

I'd like to get it set so I don't need any series inductance, just a
little capacitance.

I'm currently trying to finish up a rebuild on the old Henry 2K4 in
the shop, repaint the cabinet on an HT-33 that has a great front panel
and nice chassis, and unfortunately I'm waiting for the wind to let up
so I can let the top mast down to check the antenna hardware as well
as replacing the pigtails. (That means about 6 to 7 hours on the
tower). Oh..I forgot the HyGain AV640 that is ready to go on top of
the 32 foot tower at the end of the shop. (which naturally has a big
tree limb in the way which is too high to reach even with a big
extension ladder)

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>end. I actually use a fixed inductance and a series capacitor instead of a
>variable inductor, but that is a construction detail.

1908. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 05:52:29 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <j4fnnvksilgp8hus6c5s90qrnuijpcv4mh@4ax.com>
Source record: 107174

On Wed, 01 Oct 2003 21:22:46 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
>news:20030930191741.10332.00000073@mb-m14.aol.com...
>> Is this test open game? Basically, are all characters, q-codes, and
>prosigns
>> fair game on this test. I have studied relentlessly and know a majority
>of
>> them and can receive at 10wpm but everytime I look at a different book or
>> website I find more stuff.
>>
>> Thanks for the input
>>
>> 73
>> G. Doughty
>> KI4BBL
>
>It is the letters of the alphabet, numerals, period, comma, question mark,
>/, and the following prosigns: BT (written as =), K, KN, and AR. The test

BT should be the double dash "- - " At least I've never seen it as
anything else.

>is sent in the form of a simulated QSO (conversation or contact) between two
>stations. It runs for 5 minutes and you copy as much as you can. Then you
>will either need to answer 7 out of 10 questions correctly on the content of
>the QSO or have 1 minute of solid copy (i.e. no errors) to pass. At 5wpm,

Did they drop the requirement from two minutes to one minute?

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>one minute is 25 characters, however the numerals, punctuation and prosigns
>count as if they were two characters due to their length.
>
>The Q-codes are composed of individual letters so there is no problem there.
>Even so, probably the only ones that will occur is QTH (location), QSO
>(conversation or contact), and QSL (acknowledge receipt of transmission).
>
>As far as Q-codes (and abbreviations) copy exactly what you hear not what
>you think they might be sending and you should be all right.
>

>Dee D. Flint, N8UZE

1909. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 07:20:11 UTC
From: expeditionradio@aol.com
Message-ID: <20031002032011.05841.00000146@mb-m10.aol.com>
Source record: 107175

Nothing subjective about it, Cecil.

The Shootout uses actual measurements with a calibrated receiver system, and a "level playing field".
:-)
Check out the HFpack website for previous Shootout Reports from 2001 and 2002, and if you think you could do a better job, Cecil, please join us and show up at the Shootout to help with the measurements and setup. We would be happy to welcome you as a volunteer.
http://www.hfpack.com

In the past few years, we have simply measured antennas vs a reference dipole. This year we are measuring complete systems vs each other.

5MHz in USA has an authorized power limit of 50W_into_a_dipole. The 5MHz reference dipole has been clarified by FCC as a "free space" comparison for calculation purposes. Most pedestrian and bicycle antennas for 5MHz have way more than 3 dB loss. Some of the antennas have 6dB loss or worse.

By the way, only USB voice is permitted on 5MHz in USA.

Bonnie KQ6XA

1910. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 07:29:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnnkvoqsr4thf2@corp.supernews.com>
Source record: 107176

The gain (that is, the strength of a signal sent or received in a given direction compared to a reference antenna) is the same for transmitting and receiving. However, gain is often the least important criterion for a receiving antenna. The reasons why are summarized in a posting I made just a few days ago. Go to http://www.groups.google.com, choose "Advanced search", and locate the posting I made on Sept. 20 on this newgroup, on the thread "Ten-tec vee beam". I and others have also made similar postings in the past on the topic, which you should be able to locate by searching for a few key words or phrases such as "receiving antennas".

Roy Lewallen, W7EL

Nick C wrote:
> Sorry for the dumb question, but the ARRL antenna books just confuse me
> sometimes. I seem to get more questions than I get answers to.
>
> Question: In an HF beam antenna, such as a Yagi... the forward gain
> measurement... is this in terms of the output gain (ERP) or does this also
> mean the receiving gain as well?
>
> The reason why I'm asking: I'm trying to come up with the ideal SWL
> antenna. I currently have a 75ft wire antenna using the RS kit. This does
> a pretty good job of pulling in signals. I'm just wondering if there's a
> better option.... such as a multi-band HF beam antenna..?
> So what antenna would give me the best "gain" in terms of receiving power.
> I'm doing no transmitting here...
>
>
> Thanks
>

1911. Re: HF9V9

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 08:25:32 UTC
From: Mogens <Fister@loegsovs.dk>
Message-ID: <3f7be0fd$0$32445$edfadb0f@dread16.news.tele.dk>
Source record: 107177

Hi Mouse

The lenght of the 75 Ohm cable should be an electrical 1/4 wave lenght.

This is free air wave lenght multiplied with the velocity factor of 75 ohm cable (typical .66).

In meters this should give (300/14.2)*.66 wich should give 3.49 meters.

Best 73 de OZ1AKN, Mogens

"Mouse" <mouse@hotmail.com> wrote in message news:<G_Feb.296$qq2.120@edtnps84>...

> Hi guys. I just bought a Butternut HF9V9 vertical. I notice it calls for a

> length of 75 ohm coax to match - how long should this be?

> Tnx

>

>

1912. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 10:39:59 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <6gTeb.6$G%4.5200@news.uswest.net>
Source record: 107178

Roy,

Thanks for the update. I just read those postings. That V antennas looks similiar to what I have, except I feed at the end of my wire. Also, my wire isn't terminated and is not grounded. (Whenever I ground my wire, I get a severe loss of signal...?)

Anyway, after seeing the price of their antenna, I quickly decided that mine isn't so bad after all...

A couple of quick questions:

1. It sounds like, at least for my suburb environment, I'm probably not going to improve my reception by having a yagi antenna. So, as you said, it's better to reduce the noise coming into the receiver. I get a lot of QRM from non-atmospheric noise... although it seems like recently, the atmospheric noise has been really bad. (Even WWV doesn't come in without extra noise.)

2. I've never measured the SWR of my antenna. Will this have any affect on my signal reception? I was under the impression that SWR was really only valid if you're transmitting energy..?

3. Really dumb question here. If a branch from a tree is touching my wire, then is my antenna effectively cut in length... from that point to my feedpoint? My construction of the antenna was done rather quickly, so if this is the case, then I'll need to relocate the wire.

(FYI, currently, I have rougly a 100ft length of wire, which actually is in a V-shape... almost the shape of the house. The wire itself is a good 30ft off the ground... which should be 'above' the QRM levels of the surrounding houses. My endpoint is a simple balun which converts the wire Z to 50ohms ... and then I use low-loss coax to my rig.)

I'm just looking to 'improve' my design if that's possible... and definitely increase my S/N ratio as you suggested.

Thanks for your time.
-Nick

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vnnkvoqsr4thf2@corp.supernews.com...
> The gain (that is, the strength of a signal sent or received in a given
> direction compared to a reference antenna) is the same for transmitting
> and receiving. However, gain is often the least important criterion for
> a receiving antenna. The reasons why are summarized in a posting I made
> just a few days ago. Go to http://www.groups.google.com, choose

> "Advanced search", and locate the posting I made on Sept. 20 on this
> newgroup, on the thread "Ten-tec vee beam". I and others have also made
> similar postings in the past on the topic, which you should be able to
> locate by searching for a few key words or phrases such as "receiving
> antennas".
>
> Roy Lewallen, W7EL
>
> Nick C wrote:
> > Sorry for the dumb question, but the ARRL antenna books just confuse me
> > sometimes. I seem to get more questions than I get answers to.
> >
> > Question: In an HF beam antenna, such as a Yagi... the forward gain
> > measurement... is this in terms of the output gain (ERP) or does this
also
> > mean the receiving gain as well?
> >
> > The reason why I'm asking: I'm trying to come up with the ideal SWL
> > antenna. I currently have a 75ft wire antenna using the RS kit. This
does
> > a pretty good job of pulling in signals. I'm just wondering if there's
a
> > better option.... such as a multi-band HF beam antenna..?
> > So what antenna would give me the best "gain" in terms of receiving
power.
> > I'm doing no transmitting here...
> >
> >
> > Thanks
> >
>

1913. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 10:49:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blgvs7$k16$1@hercules.btinternet.com>
Source record: 107179

```
> Reg Edwards wrote:
> > You can do no better than to begin with a bottom-fed, bottom-tuned,
vertical
> > or sloping wire, or pole or mast as high as you can manage.
>
> But don't allow the vertical radiator to be longer than 5/8WL
> on the highest frequency of interest.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
------------------------------------------------------------

Cecil, The difference between 3/4-wave and 5/8ths wave insofar as low and
medium-angle stuff is concerned is not worth thinking about. It is
unnoticeable in normal use. You ought NOT to go around unnecessarily
frightening people into hacking the tops off perfectly good antennas.
---
Reg
```

1914. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 11:47:29 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <lfUeb.5425$Hd6.3359165@newssvr28.news.prodigy.com>
Source record: 107180

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:j4fnnvksilgp8hus6c5s90qrnuijpcv4mh@4ax.com...
> On Wed, 01 Oct 2003 21:22:46 GMT, "Dee D. Flint" <deehays@qix.net>
> wrote:
>
> >
> >"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
> >news:20030930191741.10332.00000073@mb-m14.aol.com...
> >> Is this test open game? Basically, are all characters, q-codes, and
> >prosigns
> >> fair game on this test. I have studied relentlessly and know a
majority
> >of
> >> them and can receive at 10wpm but everytime I look at a different book
or
> >> website I find more stuff.
> >>
> >> Thanks for the input
> >>
> >> 73
> >> G. Doughty
> >> KI4BBL
> >
> >It is the letters of the alphabet, numerals, period, comma, question
mark,
> >/, and the following prosigns: BT (written as =), K, KN, and AR. The
test
>
> BT should be the double dash "- - " At least I've never seen it as
> anything else.
>

Double dash is also "=". And is the only way I've seen it written in the books on code such as "Morse Code: The Essential Language". It is also written "=" on the check sheet that the VEs use to check copy. The sequence for BT is the same as the sequence for the equals sign. For example if you wanted to send 1 + 1 = 2, it would be

di-dah-dah-dah-dah di-dah-di-dah-dit di-dah-dah-dah-dah dah-di-di-di-dah di-di-dah-dah-dah

Note that the prosign AR is the same as the "+" sign.

>
> >is sent in the form of a simulated QSO (conversation or contact) between

two
> >stations. It runs for 5 minutes and you copy as much as you can. Then
you
> >will either need to answer 7 out of 10 questions correctly on the content
of
> >the QSO or have 1 minute of solid copy (i.e. no errors) to pass. At
5wpm,
>
> Did they drop the requirement from two minutes to one minute?
>

It has been one minute solid copy since I got into amateur radio in 1992.
Before that, I couldn't say.

Dee D. Flint, N8UZE
(VE for ARRL & W5YI)

1915. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 12:21:30 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <qNUeb.10641$Rd4.8064@fed1read07>
Source record: 107181

> Expeditionradio wrote:
> > The purpose of the shootout is to measure signal
> > strength of pedestrian and human mobile HF systems
> > on 18MHz and 5MHz ...
> > ==
> > Category 3 = Human Mobile 100W Class
> > ==

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
> Seems 5 MHz has a legal power limit of 50 watts.

Well, that's 50 watts, effective radiated power. For
a 100-watt backpack, I would estimate that at least
50 watts would be dissipated in the "antenna mount".

> > 2) The entrant operator's voice transmission shall be
> > measured ...

> Whoever can shout the loudest wins? Seems this test is
> far too subjective.

It's an end-to-end system test. Efficient antenna AND
rachet-jawed operator.

--
Jim Bromley, K7JEB
Glendale, Arizona

1916. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 12:38:02 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031002083802.21447.00000138@mb-m02.aol.com>
Source record: 107182

>Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
>TW-4000A? any hints/suggestions/recommendations greatly appreciated!
>thank you for your time......73's....tony...wa9yoz

I tried one, then took it down and bought a nice dualband vertical. If you have limited space and only need to work local stuff, I suppose the discone would work.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

1917. Re: Converting a 2M antenna to 224MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 13:05:05 UTC
From: KB9WMJ <Kbeckmann.spankme@wi.rr.com>
Message-ID: <5oVeb.4480$pg7.2845@twister.rdc-kc.rr.com>
Source record: 107183
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

It's not as hard as people are making it sound.

This sounds like you have a 5/8's 2M antenna, with 49" of whip. The loading coil is not DC grounded, meaning that the coil is simply in series with the center conductor of the antenna.

Electrically your antenna is approximately 54" in length (You'll notice your current antenna works well on the 6M band too!), meaning that the coil is providing 5" or so of the length (It doesn't really work this way, but it's close enough). 5/8 on the 220 ham band is about 33", so if you subtract the 5" of the coil, the whip should be about 28".

Go find some solid #12 copper wire, and replace the 49" whip with about 30" of copper wire. Then with an SWR meter, determine what the correct whip length needs to be.

With the SWR meter in-line, do a plot of the SWR, say every 1 MHz. You should see something like this:

MHz SWR
222. 2.5:1
223 2.7:1
224 3.0:1
225 4.0:1

This is telling you the resonant frequency is somewhere below 222 MHz. Cut 1/4" off the copper, and try again and repeat till you have a good SWR. You are looking for at least a 2:1 SWR maximum across the entire band.

Once you find the length in copper, cut your 49" whip down to the same length, plus 1/4", and re-test the SWR. You may find you have to adjust the length of the stainless whip just slightly, as the copper has different properties than the stainless whip, but it shouldn't be more than 1/4" (Which is why you added 1/4" to the length before cutting).

If the SWR appears lower at 225 MHz, then the antenna is too short, try a longer piece of copper.

Stay away from the 3/4 wave resonant point, which would be about 34" of whip. It will be resonant, but you will not be happy with the performance.

When you get all this done you may also find your not real happy with the 5/8's 222 antenna either. I have one, and like the 1/4 wave 222 antenna much better. If you decide to go the 1/4 wave route, remove the coil entirely, and cut a 13" whip. This should be perfect for 222 MHz. You can also make a nice 1/4 wave 222 antenna from all the extra Motorola whips you

find at the hamfest for $1. They are too short for 2M, but are perfect for 222. Simply heat the whip with a propane torch to remake the little curl in it's base.

"Darrin" <darrin99@nj.rr.com> wrote in message news:ilsjnvg3v5nulol6c4uq4qphp4sm81l6o3@4ax.com...
> I found an old mag mount 2 meter antenna, and want to convert it for
> use on 224MHz. The whip is 49". Is there a simple formula to figure
> out how short to cut it?

1918. Re: WTB; 10M thru 20M log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 13:20:25 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <blekar$t6c$1@f04n12.cac.psu.edu>
Source record: 107220

I know it doesn't really mean anything but I started working on DXCC when I put the T6 up 2 years ago. I now have 273 countries worked and have DXCC on 20/15/10 and I'm waiting for cards for 17m, all on phone. My antenna is at 40' due to local height restrictions. I couldn't be happier, well not true, the SWR on all bands meets specifications but is higher than I would like, A maximum of 1:1 would be nice but it's not realistic. The T8 specifications are for a bit lower maximum SWR. I keep thinking it would have been better to have. But with size, cost and my location considered, the T6 does the job very well.

--
John Passaneau W3JXP
State College Pa
w3jxp@arrl.net

"hasan schiers" <schiers@netins.net> wrote in message
news:blebjo$6dp$1@ins22.netins.net...
> I would also chime in as a very satisfied current owner/user of the
> Tennadyne T-6 Log Periodic and formerly a T-10 at the old qth. Very well
> built and does what an antenna of it's size should. At the prior qth the
> T-10 (24' boom) went through FIVE major ice storms without obvious damage
> (although when I took it down to move I did notice a crack in the boom at
> the rear of the antenna (largest element)). Tennadyne has since
re-designed
> the booms, and the T-6 now uses two rectangular booms. If you're not a
> big-gun dx'er and just want an antenna that does a very good job from
20-10m
> with moderate gain and excellent f/b, then the T-6 would be a wise choice.
> It's also quite reasonably priced, has low wind loading and weight.
>
> ...hasan, N0AN
> <bob_weiss@prodigy.net> wrote in message
> news:gRWdb.8429$iC7.5294@newssvr32.news.prodigy.com...
> > very interesred in obtaining data and pricing on smallest possible 10M
thu
> > 20M
> > log periodic antenna..........what have you got?
> > Bob_Weiss@prodigy.net....W6NKC San Diego
> >
> >
>
>

1919. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 14:38:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7c3a50$1_1@corp.newsgroups.com>
Source record: 107185

Expeditionradio wrote:
> Nothing subjective about it, Cecil.

On SSB, I can double my power output by whistling into the
microphone. That seems pretty subjective to me.

On the 5 MHz thing, since a dipole is almost 100% efficient,
does the 50 watt rule mean radiated power? Can I run 500 watts
mobile if my mobile antenna is 9% efficient?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1920. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 14:52:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7c3d99_1@corp.newsgroups.com>
Source record: 107186

Reg Edwards wrote:

> W5DXP wrote:
>>But don't allow the vertical radiator to be longer than 5/8WL
>>on the highest frequency of interest.
>
> Cecil, The difference between 3/4-wave and 5/8ths wave insofar as low and
> medium-angle stuff is concerned is not worth thinking about. It is
> unnoticeable in normal use. You ought NOT to go around unnecessarily
> frightening people into hacking the tops off perfectly good antennas.

I wasn't thinking about a 3/4-wave, Reg. I was thinking more about two or three wavelengths long where most of the radiation is high angle when low angle is what one needs on the higher frequencies. You said to make the vertical "as high as you can manage". So don't make it longer than 3/4WL.

However, a 3/4WL vertical has its maximum gain at a take-off angle of 46 degrees. A 5/8WL vertical has its maximum gain at a take-off angle of 16 degrees. At 16 degrees, the 5/8WL vertical has about 3dB gain over a 3/4WL vertical.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1921. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 14:57:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7c3ed2_1@corp.newsgroups.com>
Source record: 107187

K7JEB wrote:

>>Seems 5 MHz has a legal power limit of 50 watts.
>
> Well, that's 50 watts, effective radiated power. For
> a 100-watt backpack, I would estimate that at least
> 50 watts would be dissipated in the "antenna mount".

Hi Jim,
That's what I get for speed reading. Sounds like 5 MHz
will be an ideal mobile band. If my mobile antenna is 10%
efficient, I can just run my SGC-500 watt amp and radiate
as much power as anyone else on the band.

> It's an end-to-end system test. Efficient antenna AND
> rachet-jawed operator.

:-)
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1922. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 15:02:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7c3fda_1@corp.newsgroups.com>
Source record: 107188

Lushy wrote:
> Can anyone point me to a site that shows how to build a multi freq hf
> vertical, thanks in advance

The easiest system is to cut the vertical for 5/8WL on your highest
frequency of interest and feed it at the base with an SGC-230 autotuner.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1923. Re: HF9V9

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:16:27 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F7C4F53.3040508@get.lost>
Source record: 107189

Mogens wrote:

> The lenght of the 75 Ohm cable should be an electrical 1/4 wave lenght.
> This is free air wave lenght multiplied with the velocity factor of 75 ohm
> cable (typical .66).
> In meters this should give (300/14.2)*.66 wich should give 3.49 meters.

>
>>Hi guys. I just bought a Butternut HF9V9 vertical. I notice it calls for a
>>length of 75 ohm coax to match - how long should this be?

I'm just curious: how do you figure out a 1/4 wavelength on a nine-band
antenna?

73 .... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1924. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:22:38 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F7C50C7.2040801@get.lost>
Source record: 107190

Cecil Moore wrote:

> On the 5 MHz thing, since a dipole is almost 100% efficient,
> does the 50 watt rule mean radiated power? Can I run 500 watts
> mobile if my mobile antenna is 9% efficient?

That would appear to be the case:

http://www.arrl.org/FandES/field/regulations/faq.html#three

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

1925. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:25:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C5182.F6B6011C@uci.edu>
Source record: 107192

Gene Nygaard wrote:
> >What physical quantity do you think a grocery store scale measures?
>
> You can probably figure that out for yourself, if you stop to think
> about how they are tested and certified.

You misunderstand, Gene. It's not at all clear what _you_ think they measure. I'm not asking about the units displayed on them. What physical quantity do you think is actually being measured?

> >And so a torque wrench has what kind of units printed on its scale -
> >mass and distance, or force and distance?
>
> Once again, it doesn't cost you any more to pay attention.

> They are units of force and distance,

There's the point.

> That the poundal system is much older than the slug system is merely
> one of the many clues as to which is older, the pound mass or the
> pound force.

Ah, older. So that means.....what?

73, Jim AC6XG

1926. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:27:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C51E4.B5A2B707@uci.edu>
Source record: 107193

Cecil Moore wrote:
> All that proves is that you are not omniscient. :-)

Do you know anybody who is? :-)

73 de ac6xg

1927. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:36:23 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7C5407.417CC35D@cwis.net>
Source record: 107191

Yuri,
Yes, and here, the city comes by and picks up all
the CFA and Fractal files on Tuesdays and Fridays...
'Doc

1928. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:36:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C5416.8AC44E29@uci.edu>
Source record: 107194

Cecil Moore wrote:
>
> Unfortunately, only the index of refraction of one of the boundaries
> is known in my statement above. The index of refraction of the second
> boundary is unknown, i.e. only the impedances at the two-port network
> are known - the load is unknown.

Only if you've forgotten what you said it was. :-) If it's unknown,
how could you have known what it was a half wavelength away? We are
speaking about the problem you posed yesterday, right?

> > No question that rho is the end result of a ratio of impedances. It's
> > been my view that, like the V/I ratios we were speaking about, rho is
> > not a cause but a result.

> But earlier, I thought you said rho caused a result.

I'll repost what I said. If you find something in error, please
advise. Thanks.

"To my way of thinking, rho is entirely dependent upon the impedances,
and the voltages (reflected voltages in particular) are dependent upon
rho. Not the other way around."

73, Jim AC6XG

1929. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 16:53:05 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <TemeYGExfFf$EA+P@ifwtech.co.uk>
Source record: 107195

Cecil Moore wrote:
>Lushy wrote:
>> Can anyone point me to a site that shows how to build a multi freq hf
>> vertical, thanks in advance
>
>The easiest system is to cut the vertical for 5/8WL on your highest
>frequency of interest and feed it at the base with an SGC-230 autotuner.

Agreed - for example, about 10m (33ft) high will nicely cover 7-10-14-18MHz. You're only highly dependent on grounding at 7MHz or below.

But as you rightly say, beyond 5/8 wavelength the high-angle lobe grows very rapidly and the low-angle lobe shrinks rapidly too. By 21MHz, a 10m high vertical is noticeably beginning to "lose it", for example in terms of cracking pileups.

It's only a few dB, but if you "need" to work certain specific stations - like DXpeditions and contest multipliers - then those few dBs make a big difference to how long it takes. On the higher HF bands, stations with verticals are already one layer below the stations with beams, so unless your vertical is the best it can possibly be, you'll be at the bottom of the second layer too.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1930. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:10:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c5cb5$1_2@127.0.0.1>
Source record: 107197

Zoran Brlecic wrote:
> Cecil Moore wrote:
>> On the 5 MHz thing, since a dipole is almost 100% efficient,
>> does the 50 watt rule mean radiated power? Can I run 500 watts
>> mobile if my mobile antenna is 9% efficient?
>
> That would appear to be the case:
> http://www.arrl.org/FandES/field/regulations/faq.html#three

Has anyone realized that will make a hamstick get out just as
well as a bugcatcher?
--
73, Cecil, W5DXP

1931. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:20:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c5f0e_2@127.0.0.1>
Source record: 107198

Zoran Brlecic wrote:
> http://www.arrl.org/FandES/field/regulations/faq.html#three

Wow, all sorts of ramifications. A one-wavelength dipole has
about 3dB gain over a 1/2WL dipole so one must reduce one's
power to 25 watts.

OTOH, since a 1/2WL dipole over ground has about 6dB gain over
a 1/4WL ground-mounted vertical, can one run 200 watts when
using a 1/4WL vertical?
--
73, Cecil, W5DXP

1932. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:21:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c5f59$1_2@127.0.0.1>
Source record: 107199

Jim Kelley wrote:

> Cecil Moore wrote:
>>All that proves is that you are not omniscient. :-)
>
> Do you know anybody who is? :-)

I know people who think they are. :-)
--
73, Cecil, W5DXP

1933. 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:22:05 UTC
From: Tom Sedlack <cts050@nospamhere.email.mot.com>
Message-ID: <blhmdv$1bs$1@avnika.corp.mot.com>
Source record: 107200

I asked this before and was told that for relatively short runs (under 50 ft), using 50 ohm coax to feed dipoles is fine.

I keep coming back to this in my head because I model a dipole and I get a VSWR of 1.5 using 50 ohm feed and I get 1:1 if I model with 75 ohm feed.

My plan for my little antenna farm is to have a run of 50 ohm coax to a remote antenna switch. Create a few dipoles and feed them with 75 ohm coax. I saw an equation someplace that, I believe, gave the length of 75 ohm feed required to transform the impedance to 50 ohms at a given frequency. I would cut the cable to this length then connect to the 50 ohm antenna switch.

$$L = \frac{246 \times \text{Velocity Factor}}{\text{Freq}}$$

Does all this make sense? Am I going overboard (a curse of trying to be a perfectionist)? I don't want to use a tuner because; 1 - I don't own one and 2 - they waste power (I want to try QRPish operation).

Also, if the above is correct, would I still need to put a current choke (coil of coax) or would the "fact" that the feed and dipole are matched, there wouldn't be RF on the jacket?

My head is starting to hurt.....

Tom

1934. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:43:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c63a0$1_2@127.0.0.1>
Source record: 107201

Jim Kelley wrote:
> If it's unknown,
> how could you have known what it was a half wavelength away? We are
> speaking about the problem you posed yesterday, right?

No, we are speaking about a statement I made unrelated to the problem
I posted. For that statement, the length of the feedline is unknown
and the load is unknown. What is known is the forward power and reflected
power on each side of the impedance discontinuity.

>>>No question that rho is the end result of a ratio of impedances. It's
>>>been my view that, like the V/I ratios we were speaking about, rho is
>>>not a cause but a result.
>
>>But earlier, I thought you said rho caused a result.
>
> "To my way of thinking, rho is entirely dependent upon the impedances,
> and the voltages (reflected voltages in particular) are dependent upon
> rho.

You said "rho is not a cause but a result" but then implied that
voltages are caused by (dependent upon) rho. Seems to me, rho
cannot both cause a voltage and be caused by a (voltage divided
by a current) which is an impedance upon which rho is dependent.
--
73, Cecil, W5DXP

1935. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:46:17 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <cvoonvsd1odsnrrg0bh836du9jqn3b47kk@4ax.com>
Source record: 107202

On Wed, 1 Oct 2003 21:43:23 -0700, "Nick C" <cnick6@qwest.net> wrote:

>Sorry for the dumb question, but the ARRL antenna books just confuse me
>sometimes. I seem to get more questions than I get answers to.
>
>Question: In an HF beam antenna, such as a Yagi... the forward gain
>measurement... is this in terms of the output gain (ERP) or does this also
>mean the receiving gain as well?

Yes, it works in both transmit and receive.

>
>The reason why I'm asking: I'm trying to come up with the ideal SWL
>antenna. I currently have a 75ft wire antenna using the RS kit. This does

If there were an "ideal" antenna we'd all be using it. Much depends
on the space available, (length, area, and height) and how wide a
frequency range (or frequency segments) you wish to cover.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>a pretty good job of pulling in signals. I'm just wondering if there's a
>better option.... such as a multi-band HF beam antenna..?
>So what antenna would give me the best "gain" in terms of receiving power.
>I'm doing no transmitting here...
>
>
>Thanks

1936. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 17:58:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c6741_2@127.0.0.1>
Source record: 107203

Tom Sedlack wrote:
> I don't want to use a tuner because; 1 - I don't own one
> and 2 - they waste power (I want to try QRPish operation).

Check out my webpage for a method of avoiding a conventional
antenna tuner while using low-loss ladder-line.
--
73, Cecil, http://www.qsl.net/w5dxp

1937. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 18:00:08 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C67A8.50AE065A@uci.edu>
Source record: 107205

Cecil Moore wrote:

> For that statement, the length of the feedline is unknown
> and the load is unknown.

I was commenting on this, the subject of our conversation:

"Consider the following:

Source---50 ohm feedline---+---1/2WL 150 ohm---50 ohm load"

As I was saying, for the two boundaries as a network, and we call rho at the first boundary r12 and rho at the second boundary r23 then rho(network) = (r12 + r23)/(1 + r12*r23) = 0. Note that if we use your value for r12, the network generates a reflection. I note the utility of negative rho in this example.

> Seems to me, rho
> cannot both cause a voltage and be caused by a (voltage divided
> by a current) which is an impedance upon which rho is dependent.

Voltages on a transmission line do not determine reflection coefficients.
Reflection coefficients are determined by characteristic impedances, not virtual ones.

73, Jim AC6XG

1938. Re: NYC, NNJ, EPA Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 18:15:42 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <iXZeb.8637$3S.2212@newsread2.news.atl.earthlink.net>
Source record: 107204

Yuri:

[snip]
I thought it would be good oportunity for some antenna gurus to get
together,
tell few lies, stretch few dBs and rotate few heads. Last year we had two
tables of hams, so we hope to grow.
Anyone from NYC, NNJ or EPA interested, please check
www.K3BU.us for poster and directions.
Email me with reservations at K3BU@aol.com by Oct. 4th.

Dr. Atkins allowed to sin here and there if there is no light version
available.

73
Yuri, K3BU
[snip]

I'm glad that Dr. Atkins followers are allowed to sin!

I assume it is because Spaten has no carbohydrates! :-)

Sorry I can't attend in person, will be there in "spirit".

--
Peter K1PO [Oktoberfest survivor]
Indialantic By-the-Sea, FL

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031001175016.10042.00000136@mb-m21.aol.com...
> Howdy Antenna Aficionados and regular hams !
>
> Reminder, reservations needed by Oct. 4th to K3BU@aol.com
>
> There will be special Ham tables or you can book your exclusive. The price
is
> paltry $25 per person, if table of 8 or more is reserved $20/person, no
need
> for donations, bribes or taxes. Unbelievable fun fueled by original,
direct
> from Schwartzwald - Spaten Oktoberfest Bier on tap, all you can drink! You
can
> also bring your favorite booze, setups - glasses, ice will be provided.
Don't
> miss it, make your reservations now before we run out of tables.
>
> Directions and poster are at http://www.k3bu.us/octoberfest_2003.htm

>
> See you all there!
>
> Oktoberfest Oberchairman
> Yuri Blanarovich
>
>
> Montville Oktoberfest Dinner - Dance
>
> Saturday, October 11, 2003 7 - 11 p.m.
>
> Dinner includes:
> Main course:
> Sauerbraten mit gravy, Bratwurst,
> Spaetzel, Red Cabbage
>
> Desert:
> Applestrudel, Coffee, Soft drinks
>
> Main attraction:
> Spaten Oktoberfest Beer on tap
>
> For dancing and listening pleasure:
> DJ music by popular European bands
>
>
> by Knights of Columbus
> at Msgr. Meyer Parish Center
> St. Pius X RC Church
> 24 Changebridge Rd., Montville, NJ 07045
>
> Admission $25/person, dinner and drinks included, BYOB setups
>
> Reservations required by 10/4, tables for groups of 8 - 12 available at
> $20/person
>
> Call Yuri Blanarovich, tel. 973 808-1981, Email K3BU@aol.com
> or mail your reservations by Oct. 4th with checks made to
> St. Pius X KoC,
> Box 282, Pine Brook, NJ 07058
>
> Bring your friends and have a great time!
>
> Ein prosit!
>

1939. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 18:28:10 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031002142810.02376.00000135@mb-m01.aol.com>
Source record: 107206

Well, my experience was that my 2m/70cm vertical works much better than the discone ever did.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

1940. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 18:47:38 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <tnoonvcl59q2434r0up0i351l96n0fcmsn@4ax.com>
Source record: 107207

On Thu, 02 Oct 2003 09:25:38 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> >What physical quantity do you think a grocery store scale measures?
>>
>> You can probably figure that out for yourself, if you stop to think
>> about how they are tested and certified.
>
>You misunderstand, Gene. It's not at all clear what _you_ think they
>measure. I'm not asking about the units displayed on them. What
>physical quantity do you think is actually being measured?

I think that is probably obvious to anybody with half a brain. But it
really doesn't matter, that shouldn't be any impediment to your
telling us where my clues have led you.

Where are you trying to lead me? Maybe you have some strange notion
of what the verb "to measure" means? It wouldn't hurt you to stop and
reflect on that for a moment, and answer it at least to yourself,
before you get to the "Open mouth, insert foot" stage.

>> >And so a torque wrench has what kind of units printed on its scale -
>> >mass and distance, or force and distance?
>>
>> Once again, it doesn't cost you any more to pay attention.
>
>> They are units of force and distance,
>
>There's the point.

Why are you still refusing to deal with the "meter kilograms" on my
torque wrench, even going so far as to dishonestly snip that out from
the middle of what you quoted, in between your own comments, without
telling us that you were doing so?

Since this involves only force and distance, what could it possibly
tell you about the existence of a unit of mass called a kilogram?
Since this involves only force and distance, what could it possibly
tell you about the existence of a unit of mass called a pound?

>> That the poundal system is much older than the slug system is merely
>> one of the many clues as to which is older, the pound mass or the
>> pound force.

>
>Ah, older. So that means.....what?

Let's not overlook the obvious. Perhaps most the most important thing for your education, and that of several other fools in this thread as well, that it exists. That's something you weren't willing to admit in the beginning. But if it didn't exist, we certainly wouldn't be able to say that it is older. (A corollary, of course, is that if pound force didn't exist, there would be nothing for these units to be older than.)

Thus, what you quoted from the appendix of Halliday and Resnick (1981) was incorrect. Do you agree?

That it is legitimate. Conversely, that it is the pound force that is the bastard child.

This is also one important factor in the usage rules as spelled out by the ASTM and followed by NIST, the U.S. national standards laboratory, and the National Physical Laboratory, the U.K. national standards laboratory. That is indeed one reason why this unit gets to use the unadorned name "pound" and the original symbol "lb," while the newer spinoff needs to be identified as a "pound force" and use the symbol "lbf" to distinguish itself.

That the troy pounds, in terms of which the avoirdupois pound was defined for centuries, are units of mass. This doesn't tell you that they have never spawned units of force of the same name; you have to figure that fact out by other means.
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1941. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 19:06:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnotqeosql8l73@corp.supernews.com>
Source record: 107208

Jim Kelley wrote:
> . . .
> Voltages on a transmission line do not determine reflection
> coefficients.
> Reflection coefficients are determined by characteristic impedances, not
> virtual ones.
>
> 73, Jim AC6XG

I disagree with this. When applied to transmission lines, the (voltage) reflection coefficient is, as far as I can tell, universally defined as the ratio of reflected to forward voltage to reverse voltage at a point. So a reflection coefficient can be, and often is, calculated for every point along a line, not just at discontinuities or points of actual reflection. This can be done with nothing more than the knowledge of the values of forward and reflected voltages at the point of calculation.

As it turns out, the value of the reflection coefficient at any point will be equal to (Z - Z0) / (Z + Z0), where Z is the impedance seen looking down the line toward the load at the point of calculation. I'm very leery of the use of "virtual" anything, since it often adds an unnecessary level of confusion. But if I were to calculate a reflection coefficient at some point along a continuous line, I could replace the remainder of the line and the load with a lumped load of impedance Z, and maintain exactly the same reflection coefficient and forward and reverse traveling waves in the remaining line. I wouldn't object, then, if someone would say that there was a "virtual impedance" of Z at that point when the line was intact, since all properties prior to that point are unchanged if a lumped Z of that value is substituted for the remainder. (I personally wouldn't call it "virtual" -- I'd just call it the Z at that point, since it's the ratio of V to I there.) The point is that the reflection coefficient was the same before and after the substitution of the remaining line with a real lumped Z. Before the substitution, reflection was occurring at the load. After, the reflection is occurring at the new, substituted Z load. Yet the reflection coefficient and traveling waves remain the same on the remaining line.

A reflection coefficient isn't the cause of anything. It's simply a calculated quantity used for computational and conceptual convenience. Only an impedance discontinuity causes reflections, but we can calculate a reflection coefficient at any point we choose, with its value being well defined and unambiguous.

Roy Lewallen, W7EL

1942. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 19:41:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.org>
Message-ID: <3f7c7f62_2@127.0.0.1>
Source record: 107209

Jim Kelley wrote:

>
> Cecil Moore wrote:
>>For that statement, the length of the feedline is unknown
>>and the load is unknown.
>
> I was commenting on this, the subject of our conversation:

My statement that you objected to didn't have anything to
do with the following.

> "Consider the following:
>
> Source---50 ohm feedline---+---1/2WL 150 ohm---50 ohm load"
>
> Reflection coefficients are determined by characteristic impedances, not
> virtual ones.

On the contrary, the reflection coefficient, rho, at '+' in
the example above, is NOT determined by the characteristic
impedances. Above, rho (looking at '+' from the left) is determined
by taking the square root of (Pref/Pfwd) = 0. (150-50)/(150+50) is
NOT rho. I was mistaken to call that quantity "rho" in my article.
That quantity that I called "rho" is actually 's11' and I need to
update my article.
--
73, Cecil, W5DXP

1943. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 19:47:08 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <blhvbs$23p6$1@news1.tribune.com>
Source record: 107210

My Quad is a 5 band. It ranges from 112 ohms down to 75 ohms on various bands.

There is 50 ohm cable from my shack to the remote switch (a set of relays).

There are "series section transformers" That is lengths of line that are not either 50 ohm, or the impeadence of the antenna, which convert the impeadence of the antenna to something near 50 ohms. I think this is what you are trying to do.

You need a piece of coax that is the "geometric mean" of the two impeadences, and 1/4 wave long at the operating frequency.
OR
You need a common value of coax, such as 63 ohm (a standard older computer cable, used for matching some UHF antennas) Then use the appropriate math (beyond me) or modeling program to tell you what length to make the line.

Check out matchsec.exe
at
http://www.btinternet.com/~g4fgq.regp/

KA9CAR

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f7c6741_2@127.0.0.1...
> Tom Sedlack wrote:
> > I don't want to use a tuner because; 1 - I don't own one
> > and 2 - they waste power (I want to try QRPish operation).
>
> Check out my webpage for a method of avoiding a conventional
> antenna tuner while using low-loss ladder-line.
> --
> 73, Cecil, http://www.qsl.net/w5dxp
>

1944. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 19:54:24 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <blhvpf$24a0$1@news1.tribune.com>
Source record: 107211

I have a (Diamond) Discone 35 feet above ground, fed with reasonable quality coax. My radio can run 5 /25 /50 watts.

Simplex to 35 miles base to base is easy if the other guy has elevation.

I routinely work amatuer repeaters on 145 and listen to commercial repeaters on 450 that are 40 miles by air from here and they are full scale. I have worked mobiles 25 miles away. The verticle pattern has nulls in it (so does a ground plane) so when the ISS passes overhead I may lose a few words as they go through a null.

Stainless steel is a terrible thing to use for an antenna due to eddy current losses and lower condutivity than copper. The only way to avoid that is with an aluminum, or copper and fiberglass antenna.

Mine is stainless steel and has been up several years. I have no intention of changing it!

KA9CAR

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message news:20031002083802.21447.00000138@mb-m02.aol.com...
> >Greetings all!...will a uhf/vhf discone antenna work with my Kenwood
> >TW-4000A? any hints/suggestions/recommendations greatly appreciated!
> >thank you for your time......73's....tony...wa9yoz
>
> I tried one, then took it down and bought a nice dualband vertical. If you have
> limited space and only need to work local stuff, I suppose the discone would
> work.
> =-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

1945. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 20:02:48 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C8468.30B3CF90@uci.edu>
Source record: 107212

Roy Lewallen wrote:
>
> Jim Kelley wrote:
> > . . .
> > Voltages on a transmission line do not determine reflection
> > coefficients.
> > Reflection coefficients are determined by characteristic impedances, not
> > virtual ones.
> >
> > 73, Jim AC6XG
>
> I disagree with this. When applied to transmission lines, the (voltage)
> reflection coefficient is, as far as I can tell, universally defined as
> the ratio of reflected to forward voltage to reverse voltage at a point.

That rho is equivalent to that ratio of voltages is not in dispute. I might dispute that it's 'defined' by that ratio. We agree the reflection is caused by an impedance discontinuity. It is the relationship of those impedances that determines how much of an incident voltage will be reflected. From my perspective, one builds a network of impedances in order to achieve the desired voltage relationships. But one cannot build voltage relationships in order to obtain a network of impedances.

Maybe it's another chicken and egg argument.

> Only an impedance discontinuity causes reflections, but we can calculate
> a reflection coefficient at any point we choose, with its value being
> well defined and unambiguous.

Wouldn't the most well defined and unabiguous be at a point of reflection? ;-)

73, Jim AC6XG

1946. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 20:24:23 UTC
From: richardharrison@webtv.net
Message-ID: <20434-3F7C8977-241@storefull-2311.public.lawson.webtv.net>
Source record: 107215

Gene Nygaard wrote:
"Why are you still refusing to deal with the "meter kilograms" on my torque wrench---?"

Multiply the meters by 3.28 and multiply the kilograms by 2.2, and you will have torque in their product computed in foot pounds. Or, just multiply the dial reading by 7.22 for ft.lbs. Torque is the product of force and distance.

Weight is a force produced by gravity on a particular mass.

The indication on a torque wrench is muscle force times lever length. It directly has little relation to gravity in most torque wrench applications.

Weight is the easy way to determine mass. Computing mass from collection of acceleration data would be more complicated. M = F/A

Best regards, Richard Harrison, KB5WZI

1947. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 20:30:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnp2o5j8klt520@corp.supernews.com>
Source record: 107213

People seem to have a need to sort everything into binary categories -- like good or bad. And you've pointed out the limitations of doing that.

Stainless steel is fairly resistive stuff to begin with, although resistivity varies widely depending on the alloy. But the RF resistivity rises dramatically if the material is magnetic. Some stainless alloys are magnetic and some aren't. The RF resistivity is proportional to the square root of the permeability (because of its effect on skin depth), so a magnetic stainless can easily have ten times the resistivity of a non-magnetic alloy.

But even a magnetic stainless alloy isn't necessarily "bad". There are plenty of cases where even that much resistivity is still insignificant, and won't cause noticeable loss. In particular, if the conductor diameter is relatively large, or its length is short (in absolute terms, not in terms of wavelength), the loss will usually be small. This describes just about all VHF and UHF applications. I wouldn't use small stainless wire for an 80 meter dipole (unless I wanted to trade a bit of efficiency for increased bandwidth, which might actually be a good trade), and certainly not for an electrically small transmitting loop, where the current is extremely high. But it's definitely a suitable material for a lot of antenna applications. And it's certainly durable, as you've noted.

If you were to trade your stainless antenna for one that isn't, there'd be no perceptible difference in performance, and the replacement wouldn't last as long. I wouldn't change it either.

Roy Lewallen, W7EL

KA9CAR wrote:
> . . .
> Stainless steel is a terrible thing to use for an antenna due to eddy
> current losses and lower condutivity than copper. The only way to avoid
> that is with an aluminum, or copper and fiberglass antenna.
>
> Mine is stainless steel and has been up several years. I have no intention
> of changing it!
>
> KA9CAR

1948. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 20:48:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnp3ps3g4ng8b2@corp.supernews.com>
Source record: 107214

Nick C wrote:
> Roy,
>
> Thanks for the update. I just read those postings. That V antennas looks
> similiar to what I have, except I feed at the end of my wire. Also, my wire
> isn't terminated and is not grounded. (Whenever I ground my wire, I get a
> severe loss of signal...?)
>
> Anyway, after seeing the price of their antenna, I quickly decided that mine
> isn't so bad after all...
>
> A couple of quick questions:
>
> 1. It sounds like, at least for my suburb environment, I'm probably not
> going to improve my reception by having a yagi antenna. So, as you said,
> it's better to reduce the noise coming into the receiver. I get a lot of
> QRM from non-atmospheric noise... although it seems like recently, the
> atmospheric noise has been really bad. (Even WWV doesn't come in without
> extra noise.)

It's hard to say. If the noise is primarily from one direction, AND it's not the direction of signals you want to listen to, AND the Yagi has reasonable rejection of signals coming from the noise source (which might be at an elevation angle where Yagi rejection isn't very good), then a Yagi would help. Otherwise, you're right, it wouldn't. I agree that the odds are against it helping much.

> 2. I've never measured the SWR of my antenna. Will this have any affect on
> my signal reception? I was under the impression that SWR was really only
> valid if you're transmitting energy..?
>
No, the SWR won't affect your reception. If the noise level drops when you disconnect your antenna, then improving the SWR won't help a bit.

> 3. Really dumb question here. If a branch from a tree is touching my wire,
> then is my antenna effectively cut in length... from that point to my
> feedpoint? My construction of the antenna was done rather quickly, so if
> this is the case, then I'll need to relocate the wire.
>
A dry tree touching the wire probably won't have any effect. If the tree is wet, its effect on the antenna depends on the frequency and where it touches the antenna. If it touches at a high-impedance point (near an integral number of half wavelengths from an end), it'll effectively connect the tree to the antenna. If it's at a low impedance point (near an odd number of quarter wavelengths from an end), it won't have an

appreciable effect.

> (FYI, currently, I have rougly a 100ft length of wire, which actually is in
> a V-shape... almost the shape of the house. The wire itself is a good 30ft
> off the ground... which should be 'above' the QRM levels of the surrounding
> houses. My endpoint is a simple balun which converts the wire Z to 50ohms
> ... and then I use low-loss coax to my rig.)
>
> I'm just looking to 'improve' my design if that's possible... and definitely
> increase my S/N ratio as you suggested.

It sounds like you're end feeding the antenna. If so, even with the balun, your feedline is almost certainly a major part of the antenna. You might make a substantial improvement by center feeding your antenna, with a balun at the feedpoint. The balun won't be effective at all frequencies, but even where it isn't, your feedline will be much less part of the antenna than when it's end fed. It's quite possible that the feedline is picking up the local noise more strongly than it's getting distant signals, because it's closer to potential noise sources and because it's probably more vertical than the antenna itself. So reducing feedline pickup could improve your signal-to-noise ratio. I recommend giving center feeding a try.

Ironically, you might have found that the Yagi makes quite an improvement -- but not because of its gain. People replacing something like you've got with a properly fed Yagi that's high and in the clear often find a big improvement, and mistakenly attribute it to the Yagi's gain. What they don't realize is that if they'd put a dipole up in the same place with the same care, they'd see just about the same improvement.
>
>
> Thanks for your time.
> -Nick

Hope this is helpful. If it is, it's time well spent.

Roy Lewallen, W7EL

1949. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 21:00:26 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7C91EA.FADAFEF1@uci.edu>
Source record: 107216

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Reflection coefficients are determined by characteristic impedances, not
> > virtual ones.
>
> On the contrary, the reflection coefficient, rho, at '+' in
> the example above, is NOT determined by the characteristic
> impedances.

I just showed you how characteristic impedances are used to calculate
the reflection coefficient at '+'. But you can wish it into the
cornfield if you like, Anthony. :-)

> (150-50)/(150+50) is
> NOT rho.

Is it the reflection coefficient for a 50 ohm to 150 ohm impedance
discontinuity?

> I was mistaken to call that quantity "rho" in my article.
> That quantity that I called "rho" is actually 's11' and I need to
> update my article.

Since S-parameters were never even mentioned in your article, updating
it seems an understatement.

73, Jim AC6XG

1950. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 21:32:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k96pnvohsgmfp00a8gff1c3mutvgklc97b@4ax.com>
Source record: 107217

On Thu, 02 Oct 2003 14:00:26 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:
>updating it seems an understatement.
:-)

1951. Re: Discone ant on 144/440?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 21:57:58 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bli716atb1@hercules.btinternet.com>
Source record: 107119

- - - - on the other hand a magnetic stainless steel tube or radio mast, used as an antenna element, may/will have an RF resistance loss smaller than a 14-gauge copper wire which otherwise would have been adequate.

Why? Simply by virtue of its far greater diameter and surface area.

You have the advantages of self-supporting structural ability, durability, AND lower RF loss, AND wider bandwidth.

A deprived quantitaive familiarity, engineering dependence on popular, plagiarised "Bibles" are dangerous things.

What was it the later, oft-quoted, Lord Kelvin said ?

1952. Re: Converting a 2M antenna to 224MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 22:03:32 UTC
From: KB9WMJ <Kbeckmann.spankme@wi.rr.com>
Message-ID: <ke1fb.5336$%C5.4282@twister.rdc-kc.rr.com>
Source record: 107120
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

Well, don't measure your SWR in the garage.

It's best to be at least 1 wavelength away from metal objects when you are adjusting the antenna, which for 220 is 4.5'.

"Darrin" <darrin99@nj.rr.com> wrote in message news:8dmonvc8v7017pj4da8kj256jb1iogkpfb@4ax.com...
> On Thu, 02 Oct 2003 13:05:05 GMT, "KB9WMJ"
> <Kbeckmann.spankme@wi.rr.com> wrote:
>
> >It's not as hard as people are making it sound.
> >
> >This sounds like you have a 5/8's 2M antenna, with 49" of whip. The loading
> >coil is not DC grounded, meaning that the coil is simply in series with the
> >center conductor of the antenna.
> >
> >Electrically your antenna is approximately 54" in length (You'll notice your
> >current antenna works well on the 6M band too!), meaning that the coil is
> >providing 5" or so of the length (It doesn't really work this way, but it's
> >close enough). 5/8 on the 220 ham band is about 33", so if you subtract the
> >5" of the coil, the whip should be about 28".
> >
> >Go find some solid #12 copper wire, and replace the 49" whip with about 30"
> >of copper wire. Then with an SWR meter, determine what the correct whip
> >length needs to be.
> >
> >With the SWR meter in-line, do a plot of the SWR, say every 1 MHz. You
> >should see something like this:
> >
> >MHz SWR
> >222. 2.5:1
> >223 2.7:1
> >224 3.0:1
> >225 4.0:1
> >
> >This is telling you the resonant frequency is somewhere below 222 MHz. Cut
> >1/4" off the copper, and try again and repeat till you have a good SWR.

You
> >are looking for at least a 2:1 SWR maximum across the entire band.
> >
> >Once you find the length in copper, cut your 49" whip down to the same
> >length, plus 1/4", and re-test the SWR. You may find you have to adjust
the
> >length of the stainless whip just slightly, as the copper has different
> >properties than the stainless whip, but it shouldn't be more than 1/4"
> >(Which is why you added 1/4" to the length before cutting).
> >
> >If the SWR appears lower at 225 MHz, then the antenna is too short, try a
> >longer piece of copper.
> >
> >Stay away from the 3/4 wave resonant point, which would be about 34" of
> >whip. It will be resonant, but you will not be happy with the
performance.
> >
> >When you get all this done you may also find your not real happy with the
> >5/8's 222 antenna either. I have one, and like the 1/4 wave 222 antenna
> >much better. If you decide to go the 1/4 wave route, remove the coil
> >entirely, and cut a 13" whip. This should be perfect for 222 MHz. You
can
> >also make a nice 1/4 wave 222 antenna from all the extra Motorola whips
you
> >find at the hamfest for $1. They are too short for 2M, but are perfect
for
> >222. Simply heat the whip with a propane torch to remake the little curl
in
> >it's base.
> >
>
> Thanks for the advice. I'm going to print it out, and maybe save this
> project for a rainy day in the garage. :)

1953. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 22:33:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnp9urlphebu07@corp.supernews.com>
Source record: 107121

Jim Kelley wrote:
> Roy Lewallen wrote:
>
>>Jim Kelley wrote:
>> > . . .
>> > Voltages on a transmission line do not determine reflection
>> > coefficients.
>> > Reflection coefficients are determined by characteristic impedances, not
>> > virtual ones.
>> >
>> > 73, Jim AC6XG
>>
>>I disagree with this. When applied to transmission lines, the (voltage)
>>reflection coefficient is, as far as I can tell, universally defined as
>>the ratio of reflected to forward voltage to reverse voltage at a point.
>
>
> That rho is equivalent to that ratio of voltages is not in dispute. I
> might dispute that it's 'defined' by that ratio.

I stand corrected on that point. I did a quick scan of ten electromagnetics references. Seven quite clearly defined it that way. One (Magnusson) was vague, and one (Jordan & Balmain) gave pretty equal weight to both V and Z ratios as a definition. Holt, whom I consider one my best references, clearly defines reflection coefficient in terms of impedances. Regardless of definition, virtually all give both the V and Z relationships which are, of course, mathematically equivalent.

> We agree the
> reflection is caused by an impedance discontinuity. It is the
> relationship of those impedances that determines how much of an incident
> voltage will be reflected. From my perspective, one builds a network of
> impedances in order to achieve the desired voltage relationships. But
> one cannot build voltage relationships in order to obtain a network of
> impedances.
>
> Maybe it's another chicken and egg argument.

I think so. One sees different impedances, i.e., V/I ratios, along a transmission line, so it could be argued that impedances have been created from voltages and currents. But I'll leave the arguing to those people more interested in philosophy than engineering. As long as the principles are understood and communicated, the point of view is largely a matter of taste.

>
>>Only an impedance discontinuity causes reflections, but we can calculate
>>a reflection coefficient at any point we choose, with its value being
>>well defined and unambiguous.
>
>
> Wouldn't the most well defined and unabiguous be at a point of
> reflection? ;-)
>

I don't think so. It's completely well defined and unambiguous at any point along the line. At any point, there's only one value of Vf and Vr, and only one value of Z and Z0, so there can only be one value of reflection coefficient. Knowing the reflection coefficient and Z0, for example, one knows for sure what the value of Z is at that point. I find that a number of the text authors freely use the concept of reflection coefficient at any point along a line, not necessarily a point of reflection. I don't have any problem with it, either. I see requiring a reflection in order to have a reflection coefficient as sort of like requiring dissipation in order to have a resistance. It's not really necessary, and the calculated value can still have meaning.

Please don't let this detract from the ongoing discussion. It's really a minor point.

Roy Lewallen, W7EL

1954. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 23:07:35 UTC
From: Greg Queen <GregQueen@cal.berkeley.edu>
Message-ID: <Xc2fb.11155$NM1.6063@newssvr25.news.prodigy.com>
Source record: 107122

Cecil,

I am no expert on the "legalese", but it appears the FCC has specified power in terms of Effective Radiated Power (ERP). The standard is no more than 50-watts radiated by a dipole in free space. My interpretation is that you look at the performance of your antenna at its maximum radiation point (i.e., the azimuth & elevation) and compare it to the radiation from a dipole in free space at its maximum radiation point(s). If your antenna has less radiated power than the dipole, then you can feed more power to the antenna (up to the point that you get the same radiation as a dipole in free space).

I think this is the first time the FCC has used ERP (which includes antenna gain and feedline loss) as a power specification for amateur radio.

Greg Queen
AE6MF

"Cecil Moore" <Cecil.A.Moore@ieee.org> wrote in message
news:3f7c5f0e_2@127.0.0.1...
> Zoran Brlecic wrote:
> > http://www.arrl.org/FandES/field/regulations/faq.html#three
>
> Wow, all sorts of ramifications. A one-wavelength dipole has
> about 3dB gain over a 1/2WL dipole so one must reduce one's
> power to 25 watts.
>
> OTOH, since a 1/2WL dipole over ground has about 6dB gain over
> a 1/4WL ground-mounted vertical, can one run 200 watts when
> using a 1/4WL vertical?
> --
> 73, Cecil, W5DXP
>

1955. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 23:21:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnpcne21pv9kb5@corp.supernews.com>
Source record: 107123

Hm. That means that you can't run more than about 16-20 watts to an ordinary dipole, since a dipole over ground produces a field strength that's typically 4-5 dB greater than a dipole in free space. See, for example, the EZNEC example BYDipole.EZ, which shows a field strength of 6.82 dBi, or about 4.7 dB greater than a free space dipole.

Roy Lewallen, W7EL

Greg Queen wrote:
> Cecil,
>
> I am no expert on the "legalese", but it appears the FCC has specified power
> in terms of Effective Radiated Power (ERP). The standard is no more than
> 50-watts radiated by a dipole in free space. My interpretation is that you
> look at the performance of your antenna at its maximum radiation point
> (i.e., the azimuth & elevation) and compare it to the radiation from a
> dipole in free space at its maximum radiation point(s). If your antenna has
> less radiated power than the dipole, then you can feed more power to the
> antenna (up to the point that you get the same radiation as a dipole in free
> space).
>
> I think this is the first time the FCC has used ERP (which includes antenna
> gain and feedline loss) as a power specification for amateur radio.
>
> Greg Queen
> AE6MF

1956. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-02 23:26:26 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <1P6dnYeM6IStKeGiXTWJkw@comcast.com>
Source record: 107124

Tom,

There is a way of doing it, using two matching sections. It is described in either the ARRL Handbook, or Antenna Manual. It takes a length of 50 Ohm coax (NOT 1/4 wave) + a length of 75 Ohm coax (NOT 1/4 wave) to match to 50 Ohms. If I run across it, I will post it.

Before you do all that, put up the antenna and feed it with 50 Ohm coax. Measure the SWR. Often the dipole impedance is closer to 50 than 75 Ohms, and it is not worth doing anything about it, especially an inverted V. Certainly, don't do anything if your radio has a built in antenna tuner.

Tam/WB2TT
"Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message news:blhmdv$1bs$1@avnika.corp.mot.com...
> I asked this before and was told that for relatively short runs (under 50
> ft), using 50 ohm coax to feed dipoles is fine.
>
> I keep coming back to this in my head because I model a dipole and I get a
> VSWR of 1.5 using 50 ohm feed and I get 1:1 if I model with 75 ohm feed.
>
> My plan for my little antenna farm is to have a run of 50 ohm coax to a
> remote antenna switch. Create a few dipoles and feed them with 75 ohm
coax.
> I saw an equation someplace that, I believe, gave the length of 75 ohm
feed
> required to transform the impedance to 50 ohms at a given frequency. I
would
> cut the cable to this length then connect to the 50 ohm antenna switch.
>
> 246 x Velocity Factor
> L = ----------------------------
> Freq
>
>
> Does all this make sense? Am I going overboard (a curse of trying to be a
> perfectionist)? I don't want to use a tuner because; 1 - I don't own one
> and 2 - they waste power (I want to try QRPish operation).
>
> Also, if the above is correct, would I still need to put a current choke
> (coil of coax) or would the "fact" that the feed and dipole are matched,
> there wouldn't be RF on the jacket?
>
> My head is starting to hurt.....
>

>
> Tom
>
>
>

1957. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 00:18:13 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blif84$6ve$1@titan.btinternet.com>
Source record: 107125

> I disagree with this. When applied to transmission lines, the (voltage)
> reflection coefficient is, as far as I can tell, universally defined as
> the ratio of reflected to forward voltage to reverse voltage at a point.
> So a reflection coefficient can be, and often is, calculated for every
> point along a line, not just at discontinuities or points of actual
> reflection.

> This can be done with nothing more than the knowledge of the
> values of forward and reflected voltages at the point of calculation.
>
==========

Sorry! Just to continue and further confuse the haggling, the forward voltages are unknown because one does not know, in the case of amateur systems, what is the internal voltage and internal impedance of the transmitter.

It is this unknown voltage and internal impedance which the so-called SWR (Rho) meter merely ASSUMES.

1958. verticle?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 00:32:21 UTC
From: Lesedan <lesedan@entermail.net>
Message-ID: <ps3fb.2$Yj.8023@monger.newsread.com>
Source record: 107126

I have a verticle antenna about 18 ft. long it is green fibrglass and has Kearny, N.J. on the tag.
It is too long for 10 or 6 meters according to swr meter. Anyone have any idea who made it or band it is for. I figure at least 40meters.

1959. Re: Vertical HF antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 00:47:36 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <3jhpnvcdt0eesmhjgdooiavqcf4sfb5hht@4ax.com>
Source record: 107184

On Thu, 2 Oct 2003 08:24:10 +1000, "Lushy" <showbag@alphalink.com.au>
wrote:

>Can anyone point me to a site that shows how to build a multi freq hf
>vertical, thanks in advance
>LUSHY
>VK3HDL
>Victoria
>

See

http://www.cebik.com/radio.html

Bob
k5qwg

1960. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 00:47:50 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <UG3fb.123$Ng1.47290@news.uswest.net>
Source record: 107127

Roy,

Yes, thanks. That confirms most of what I already knew.

About that tree question though... that one threw me. I thought for sure, if the tree was wet (which will be about 99% of the time from now on)... would 'remove' the energy from any signal hitting the wire..? The reception quality with aspect to it's wavelength makes sense, and I understand that.

And yes, I have thought about using a dipole, but you clarified one point -- that it's not multiband. Although there are a few vendors who sell these SWL type antennas. Most are end-fed, but there are a few that are center-fed. Center feeding would be a lot harder for me to set up -- a lot more coax cable to run to my rig!

PS. My coax is actually pretty horizontal. I have to fling it over some other objects, so it actually stays about 90% horizontal. My computers/tv/video don't seem to affect it too much with coax. My old set up -- with just plain incoming wire... was really bad with QRM -- as expected.

Thanks
-Nick
n7zya

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vnp3ps3g4ng8b2@corp.supernews.com...
> Nick C wrote:
> > Roy,
> >
> > Thanks for the update. I just read those postings. That V antennas
looks
> > similiar to what I have, except I feed at the end of my wire. Also, my
wire
> > isn't terminated and is not grounded. (Whenever I ground my wire, I get
a
> > severe loss of signal...?)
> >
> > Anyway, after seeing the price of their antenna, I quickly decided that
mine
> > isn't so bad after all...
> >
> > A couple of quick questions:
> >
> > 1. It sounds like, at least for my suburb environment, I'm probably
not

> > going to improve my reception by having a yagi antenna. So, as you
said,
> > it's better to reduce the noise coming into the receiver. I get a lot
of
> > QRM from non-atmospheric noise... although it seems like recently, the
> > atmospheric noise has been really bad. (Even WWV doesn't come in
without
> > extra noise.)
>
> It's hard to say. If the noise is primarily from one direction, AND it's
> not the direction of signals you want to listen to, AND the Yagi has
> reasonable rejection of signals coming from the noise source (which
> might be at an elevation angle where Yagi rejection isn't very good),
> then a Yagi would help. Otherwise, you're right, it wouldn't. I agree
> that the odds are against it helping much.
> >
> > 2. I've never measured the SWR of my antenna. Will this have any
affect on
> > my signal reception? I was under the impression that SWR was really
only
> > valid if you're transmitting energy..?
> >
> No, the SWR won't affect your reception. If the noise level drops when
> you disconnect your antenna, then improving the SWR won't help a bit.
>
> > 3. Really dumb question here. If a branch from a tree is touching my
wire,
> > then is my antenna effectively cut in length... from that point to my
> > feedpoint? My construction of the antenna was done rather quickly, so
if
> > this is the case, then I'll need to relocate the wire.
> >
> A dry tree touching the wire probably won't have any effect. If the tree
> is wet, its effect on the antenna depends on the frequency and where it
> touches the antenna. If it touches at a high-impedance point (near an
> integral number of half wavelengths from an end), it'll effectively
> connect the tree to the antenna. If it's at a low impedance point (near
> an odd number of quarter wavelengths from an end), it won't have an
> appreciable effect.
>
> > (FYI, currently, I have rougly a 100ft length of wire, which actually is
in
> > a V-shape... almost the shape of the house. The wire itself is a good
30ft
> > off the ground... which should be 'above' the QRM levels of the
surrounding
> > houses. My endpoint is a simple balun which converts the wire Z to
50ohms
> > ... and then I use low-loss coax to my rig.)
> >

> > I'm just looking to 'improve' my design if that's possible... and
definitely
> > increase my S/N ratio as you suggested.
>
> It sounds like you're end feeding the antenna. If so, even with the
> balun, your feedline is almost certainly a major part of the antenna.
> You might make a substantial improvement by center feeding your antenna,
> with a balun at the feedpoint. The balun won't be effective at all
> frequencies, but even where it isn't, your feedline will be much less
> part of the antenna than when it's end fed. It's quite possible that the
> feedline is picking up the local noise more strongly than it's getting
> distant signals, because it's closer to potential noise sources and
> because it's probably more vertical than the antenna itself. So reducing
> feedline pickup could improve your signal-to-noise ratio. I recommend
> giving center feeding a try.
>
> Ironically, you might have found that the Yagi makes quite an
> improvement -- but not because of its gain. People replacing something
> like you've got with a properly fed Yagi that's high and in the clear
> often find a big improvement, and mistakenly attribute it to the Yagi's
> gain. What they don't realize is that if they'd put a dipole up in the
> same place with the same care, they'd see just about the same improvement.
> >
> >
> > Thanks for your time.
> > -Nick
>
> Hope this is helpful. If it is, it's time well spent.
>
> Roy Lewallen, W7EL
>

1961. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 01:09:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnpj1urruvhq54@corp.supernews.com>
Source record: 107128

Are you disagreeing with something I said, or just adding a note? If disagreeing, what again was it that you disagree with?

The source voltage and internal impedance have nothing to do with the reflection coefficient at any point. The forward and reverse voltages are indeed known if one knows, for example, the line Z0 and the load impedance and the load power, voltage, or current. It's not necessary to know the source impedance to find these values, the forward and reverse voltages, or the reflection coefficient.

Roy Lewallen, W7EL

Reg Edwards wrote:
>>I disagree with this. When applied to transmission lines, the (voltage)
>>reflection coefficient is, as far as I can tell, universally defined as
>>the ratio of reflected to forward voltage to reverse voltage at a point.
>>So a reflection coefficient can be, and often is, calculated for every
>>point along a line, not just at discontinuities or points of actual
>>reflection.
>
>
>>This can be done with nothing more than the knowledge of the
>>values of forward and reflected voltages at the point of calculation.
>>
>
> ============================
>
> Sorry! Just to continue and further confuse the haggling, the forward
> voltages are unknown because one does not know, in the case of amateur
> systems, what is the internal voltage and internal impedance of the
> transmitter.
>
> It is this unknown voltage and internal impedance which the so-called SWR
> (Rho) meter merely ASSUMES.
>
>

1962. Re: NYC, NNJ, EPA Radio Octoberfest

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 01:21:10 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031002212110.04818.00000182@mb-m18.aol.com>
Source record: 107129

>
>When I was a kid in the '50's and '60's, I grew up in Newark. Once a
>month, my folks would take me for a drive to the "Pine Brook Auction
>House". They had just about everything for sale there!
>
>Are they still in business?
>
>Alain...WPE2OLR [Newark News Radio Club member, circa 1962]

I am affraid, that was before my time in W2, I got here in 86.
Just wondering where it would have been. Have not seen anything like it now.

In 1958 (till 69) I was back in OK3 (BU, KGH, KAH, KAG) and remember quite a few cards from WPE2 gang. I was also OK3-5292 and recall my days of SWLing on a modified broadcast receiver (best training). I wondered that NNRC must have been big club of active members. Nice to hear from you, come and join us for good food, beer and fun!

73 Yuri

www.K3BU.us

1963. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 02:27:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ce096_7@corp.newsgroups.com>
Source record: 107130

Jim Kelley wrote:
> I just showed you how characteristic impedances are used to calculate
> the reflection coefficient at '+'. But you can wish it into the
> cornfield if you like, Anthony. :-)

Absolutely no chance that you are simply wrong?

>>(150-50)/(150+50) is NOT rho.
>
> Is it the reflection coefficient for a 50 ohm to 150 ohm impedance
> discontinuity?

It is the 's11' reflection coefficient for that impedance discontinuity.
It is NOT the 'rho' at '+' unless the signals are orthogonal to each
other at '+'. Chances are they are not orthogonal.

>>I was mistaken to call that quantity "rho" in my article.
>>That quantity that I called "rho" is actually 's11' and I need to
>>update my article.
>
> Since S-parameters were never even mentioned in your article, updating
> it seems an understatement.

In my article, I called (Z1-Z0)/(Z1+Z0) the RHO(fv) and said it was
equal to S11. I should just have called it 'S11'. And I just checked
my web page. S11 is definitely mentioned in my article.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1964. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 02:39:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ce373_7@corp.newsgroups.com>
Source record: 107131

Greg Queen wrote:
> I am no expert on the "legalese", but it appears the FCC has specified power
> in terms of Effective Radiated Power (ERP). The standard is no more than
> 50-watts radiated by a dipole in free space. My interpretation is that you
> look at the performance of your antenna at its maximum radiation point
> (i.e., the azimuth & elevation) and compare it to the radiation from a
> dipole in free space at its maximum radiation point(s). If your antenna has
> less radiated power than the dipole, then you can feed more power to the
> antenna (up to the point that you get the same radiation as a dipole in free
> space).

But a horizontal dipole over ground has a gain over a dipole in free space.
Consider a horizontal dipole with a maximum gain of 6 dBi Vs a free space
dipole with a maximum gain of 2.14 dBi. Do you have to decrease the power
to the horizontal dipole over ground to bring it down to 2.14 dBi?

Consider a vertical dipole with a maximum gain of 0 dBi. Can the power
be increased to obtain the free space 2.14 dBi or 6 dBi over ground?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1965. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 02:44:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ce472_7@corp.newsgroups.com>
Source record: 107132

Reg Edwards wrote:
> Sorry! Just to continue and further confuse the haggling, the forward
> voltages are unknown because one does not know, in the case of amateur
> systems, what is the internal voltage and internal impedance of the
> transmitter.

There are an infinite number of internal voltages and internal impedances
that will give the same voltage on the line. All you need to know is the
forward power and reflected power.

> It is this unknown voltage and internal impedance which the so-called SWR
> (Rho) meter merely ASSUMES.

Pretty easy to measure the forward and reflected powers and take the
square root of Pref/Pfwd to find 'rho' based on those assumptions.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1966. Re: verticle?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 02:48:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ce56e$1_7@corp.newsgroups.com>
Source record: 107133

Lesedan wrote:
> I have a verticle antenna about 18 ft. long it is green fibrglass and has
> Kearny, N.J. on the tag.
> It is too long for 10 or 6 meters according to swr meter. Anyone have any
> idea who made it or band it is for. I figure at least 40meters.

If it's a 1/4WL, you have a 13 MHz antenna.
If it's a 5/8WL, it's for 32.5 MHz. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1967. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 03:40:31 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <FaqdnR3pLMQjcuGiXTWJkQ@comcast.com>
Source record: 107134

"Nick C" <cnick6@qwest.net> wrote in message
news:UG3fb.123$Ng1.47290@news.uswest.net...
>> ....About that tree question though... that one threw me. I
thought for sure,
> if the tree was wet (which will be about 99% of the time from now on)...
> would 'remove' the energy from any signal hitting the wire..? The
reception
> quality with aspect to it's wavelength makes sense, and I understand
that.....

Nick,

My 75 meter antenna goes through several tree branches. Never saw any change
in SWR, wet or dry.

Tam/WB2TT

1968. 5MHz Ant FCC Calculations (x: New Type of HF Shootout)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 05:16:50 UTC
From: expeditionradio@aol.com
Message-ID: <20031003011650.13183.00000275@mb-m24.aol.com>
Source record: 107135

><From: Roy W7EL wrote><
>Hm. That means that you can't run more than about 16-20 watts to a n
>ordinary dipole, since a dipole over ground produces a field strength
>that's typically 4-5 dB greater than a dipole in free space.

Roy, the FCC has clarified this issue recently in communications with ARRL. The FCC indicated we should do all our compliance calculations for 5MHz as if the antennas are in free space.
That certainly makes it a lot easier, doesn't it?

Bonnie KQ6XA

1969. Re: HF9V9

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 06:02:32 UTC
From: Mogens <Fister@loegsovs.dk>
Message-ID: <3f7d10fa$0$32540$edfadb0f@dread16.news.tele.dk>
Source record: 107136

Hi Zoran

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3F7C4F53.3040508@get.lost...

> I'm just curious: how do you figure out a 1/4 wavelength on a nine-band
> antenna?

OK it sounds funny I know. But on 20 meters the HF6/HF9 works as a 3/8
wavelenght antenna, which has a big feedpoint impedance. It would exibit a
high impedance to the tranciever resulting in a high swr.
This is solved by having a piece of 75 Ohms cable which acts as a quater
wave transformer. The resulting impedance is 50 Ohms.
On other bands the 75 Ohm cable has no influence and is also not needed.

Best 73 de OZ1AKN, Mogens

1970. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 06:39:15 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Or+JVUCTmRf$EAeo@ifwtech.co.uk>
Source record: 107137

Reg Edwards wrote:

>> I disagree with this. When applied to transmission lines, the (voltage)
>> reflection coefficient is, as far as I can tell, universally defined as
>> the ratio of reflected to forward voltage to reverse voltage at a point.
>> So a reflection coefficient can be, and often is, calculated for every
>> point along a line, not just at discontinuities or points of actual
>> reflection.
>
>> This can be done with nothing more than the knowledge of the
>> values of forward and reflected voltages at the point of calculation.
>>
>============================
>
>Sorry! Just to continue and further confuse the haggling, the forward
>voltages are unknown because one does not know, in the case of amateur
>systems, what is the internal voltage and internal impedance of the
>transmitter.
>
>It is this unknown voltage and internal impedance which the so-called SWR
>(Rho) meter merely ASSUMES.
>

Reg, that can't possibly be you. Someone has hijacked your e-mail.

Where is either of those assumptions required? Those are transmitter properties, and they only affect the overall level of power/voltage/current on the line. Reflection coefficient (rho) and SWR are properties exclusively of the line and its load, not the transmitter.

If you change anything at the transmitter, all forward and reflected quantities change by the same scaling factor so their ratio stays the same.

The SWR/rho meter measures reflection coefficient as a ratio of forward and reflected signals. Either you yourself calculate the ratio of the forward and reverse readings, or else you adjust the meter for full-scale on the forward setting (which amounts to the same thing).

If you believe that rho has anything to do with the transmitter, you'd expect to find some transmitter properties in the fundamental definitions of what rho *is*. But they ain't there.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)

Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1971. Re: 80M antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 09:17:52 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ggfqnvs83chs9ka4rbeb0dve1np7f8a3kq@4ax.com>
Source record: 107218

On 01 Oct 2003 08:15:35 GMT, theplanters95@aol.comnospam
(Theplanters95) wrote:

> I am thinking of mounting a DK3
>screwdriver on a tripod, and when I want to operate, move it to the parking
>area, and then move it back when done. Not quite sure how to mount it on a
>tripod. Any advice?

High Sierra has a tripod mount for their screwdrivers -- see their web
site. Or, you could probably build your own cheaper...get a Xmas tree
stand, set a post in it, attach your screwdriver antenna, spread out a
few wire radials attached to the ground side of the coax.

Bob
k5qwg

> For 20m & 17m I have Par Electronics end feed hertz,
>which could be run to the tree.
>
>Randy ka4nma

1972. Quad Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 11:38:15 UTC
From: g3cwi@tesco.net
Message-ID: <b8480e86.0310030338.60d37761@posting.google.com>
Source record: 107138

I have been designing a 10MHz quad loop. It is roughly rectangular and the bottom wire is about 3m above the ground. EZNEC shows the feed impedance to be about 130 Ohms (verical side). Now going to reality - I have put it up and, at the end of a quarterwave transformer (75 ohm) I measure 93 Ohms at resonance. Back calculating gives me a feed impedance of 60 Ohms - half what I was expecting. Any ideas?

1973. Re: HF9V9

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 12:31:29 UTC
From: Kevin Gunther <beeltee@optonline.net>
Message-ID: <B_dfb.23768$E95.5397146@news4.srv.hcvlny.cv.net>
Source record: 107139

"Mogens" <Fister@loegsovs.dk> wrote in message
news:3f7d10fa$0$32540$edfadb0f@dread16.news.tele.dk...
> Hi Zoran
>
> "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> news:3F7C4F53.3040508@get.lost...
>
>
> > I'm just curious: how do you figure out a 1/4 wavelength on a nine-band
> > antenna?
>
> OK it sounds funny I know. But on 20 meters the HF6/HF9 works as a 3/8
> wavelenght antenna, which has a big feedpoint impedance. It would exibit a
> high impedance to the tranciever resulting in a high swr.
> This is solved by having a piece of 75 Ohms cable which acts as a quater
> wave transformer. The resulting impedance is 50 Ohms.
> On other bands the 75 Ohm cable has no influence and is also not needed.
>
> Best 73 de OZ1AKN, Mogens
>
>

I dont know about the HF9, but Butternut calls for "RG-11 75 ohm coax,
11'4" if solid dielectric, 13'6" if foam type"

Hope this helps.

This is if the antenna shows high SWR on 20 mtrs, other bands OK.

Kevin

1974. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 12:59:32 UTC
From: Tom Sedlack <cts050@nospamhere.email.mot.com>
Message-ID: <bljrdg$7l1$1@avnika.corp.mot.com>
Source record: 107140

Thanks to all who have responded!

I have ordered the Antenna Manual and will take a peak "to see what they know" ;-)

As a vast majority of dipoles have been successfully fed with 50 ohm cable, I'm sure I'll do the same thing. I was looking at this more from the theoretical side in that it just seems to make sense to try and change the impedance. All I read states that the dipole will have a characteristic impedance of 70 ohms, the coax will have a characteristic impedance of 50 ohms. The best possible VSWR is 1.5:1 which equates to about 14 dB return loss (this is the unit of measure I am most familiar with). 14 dB is good, but in my line of work, I usually see better then 25 dB (VSWR < 1.12:1). It's probably overkill on my part but the experimenter in me may give this a whirl.

Tom

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:1P6dnYeM6IStKeGiXTWJkw@comcast.com...
> Tom,
>
> There is a way of doing it, using two matching sections. It is described
in
> either the ARRL Handbook, or Antenna Manual. It takes a length of 50 Ohm
> coax (NOT 1/4 wave) + a length of 75 Ohm coax (NOT 1/4 wave) to match to
50
> Ohms. If I run across it, I will post it.
>
> Before you do all that, put up the antenna and feed it with 50 Ohm coax.
> Measure the SWR. Often the dipole impedance is closer to 50 than 75 Ohms,
> and it is not worth doing anything about it, especially an inverted V.
> Certainly, don't do anything if your radio has a built in antenna tuner.
>
> Tam/WB2TT
> "Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message
> news:blhmdv$1bs$1@avnika.corp.mot.com...
> > I asked this before and was told that for relatively short runs (under
50
> > ft), using 50 ohm coax to feed dipoles is fine.
> >
> > I keep coming back to this in my head because I model a dipole and I get
a
> > VSWR of 1.5 using 50 ohm feed and I get 1:1 if I model with 75 ohm feed.
> >

> > My plan for my little antenna farm is to have a run of 50 ohm coax to a
> > remote antenna switch. Create a few dipoles and feed them with 75 ohm
> coax.
> > I saw an equation someplace that, I believe, gave the length of 75 ohm
> feed
> > required to transform the impedance to 50 ohms at a given frequency. I
> would
> > cut the cable to this length then connect to the 50 ohm antenna switch.
> >
> > 246 x Velocity Factor
> > L = ----------------------------
> > Freq
> >
> >
> > Does all this make sense? Am I going overboard (a curse of trying to be
a
> > perfectionist)? I don't want to use a tuner because; 1 - I don't own
one
> > and 2 - they waste power (I want to try QRPish operation).
> >
> > Also, if the above is correct, would I still need to put a current choke
> > (coil of coax) or would the "fact" that the feed and dipole are matched,
> > there wouldn't be RF on the jacket?
> >
> > My head is starting to hurt........
> >
> >
> > Tom
> >

1975. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 13:42:53 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <52ffb.11431$Rd4.1228@fed1read07>
Source record: 107141

>> Greg Queen wrote:
>> I am no expert on the "legalese", but it appears
>> the FCC has specified power in terms of Effective
>> Radiated Power (ERP). The standard is no more than
>> 50-watts radiated by a dipole in free space.

% Bonnie KQ6XA (in a slightly different thread):
% Roy, the FCC has clarified this issue recently
% in communications with ARRL. The FCC indicated
% we should do all our compliance calculations
% for 5MHz as if the antennas are in free space.

Cecil, W5DXP:
> Consider a vertical dipole with a maximum gain of
> 0 dBi. Can the power be increased to obtain the
> free space 2.14 dBi or 6 dBi over ground?

Don't ask.
Don't tell.
Don't pursue.

K7JEB

1976. Re: verticle?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 14:22:57 UTC
From: Gary McAdams <g.m.mcadams@worldnet.att.net>
Message-ID: <5Dffb.167872$3o3.12176900@bgtnsc05-news.ops.worldnet.att.net>
Source record: 107142

Lesedan

18 feet is about a half wave on 11 meters.

Most likely what you have there is one of the many
half wave CB antennas made.

73, Gary

"Lesedan" <lesedan@entermail.net> wrote in message
news:ps3fb.2$Yj.8023@monger.newsread.com...
> I have a verticle antenna about 18 ft. long it is green fibrglass and has

1977. Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 14:54:50 UTC
From: g3cwi@tesco.net
Message-ID: <b8480e86.0310030654.120499bf@posting.google.com>
Source record: 107143

What would be the best way to adjust a quarter wave of 75 Ohm twin line using an antenna analyser? I just connected mine across the analyser (open circuit) and looked for the freq where a short showed - is that likely to be accurate? At 10.1 MHZ I ended up with a 15.7 foot line which seems a bit short (low velocity factor).

73

Richard
G3CWI

1978. Re: Quad Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 15:21:39 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7D9403.45194DC4@cwis.net>
Source record: 107144

Richard,
The shape of the loop, and the height above ground has
quite a lot to do with the input impedance of the antenna.
Your loop is wider than it is tall, right? If you made the
loop twice as tall as it is wide, and mounted it the width
of the loop above ground, the input impedance would be very
close to 50 ohms, feeding it at the bottom center. The
shape...
'Doc

1979. Re: verticle?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 15:22:34 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F7D943A.B767025E@cwis.net>
Source record: 107145

...ditto
'Doc

1980. Re: Quad Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 15:48:02 UTC
From: Steve <yzf1000r1_99@yahoo.com>
Message-ID: <RSgfb.5767$QH3.3450@newsfep4-winn.server.ntli.net>
Source record: 107146

Hi,

Just built a quad loop myself for 15m and used the 1/4 wave 75 ohm matching section.

Antenna was tested at only 12feet off the ground and SWR was excellent across the 500kHz bandwidth.

One thing that springs to mind is to check the velocity factor of your 75ohm coax. It can vary between 0.66 and 0.88 having quite a difference on the length of the matching section.

Hope this helps,

Steve

Homepage: http://www.stevebb.com
Email: steve@stevebb.com

1981. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:20:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f08rnvoqu96qc1e3b9dmnnqsfe323mevjo@4ax.com>
Source record: 107147

On Fri, 3 Oct 2003 07:39:15 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>>Sorry! Just to continue and further confuse the haggling, the forward
>>voltages are unknown because one does not know, in the case of amateur
>>systems, what is the internal voltage and internal impedance of the
>>transmitter.
>>
>>It is this unknown voltage and internal impedance which the so-called SWR
>>(Rho) meter merely ASSUMES.
>>
>
>Reg, that can't possibly be you. Someone has hijacked your e-mail.
>
>Where is either of those assumptions required? Those are transmitter
>properties, and they only affect the overall level of
>power/voltage/current on the line. Reflection coefficient (rho) and SWR
>are properties exclusively of the line and its load, not the
>transmitter.
>

Hi Ian,

There are one of two possible explanations for your posting:
1. You have not obtained that copy of Chipman that you ordered.
2. You have not read it.
Of course, you can add a third, fourth or fifth... in complete absence
of Chipman's discussion if his material does not agree with your
interpretations.

This is not an unexplored topic, and in fact dates back to earlier
discussions whose citations to Chipman were offered by me to no refute
- merely denial and the general wholesale abandonment of learned
posters who preferred to chase after specious claims (simpler game).

73's
Richard Clark, KB7QHC

1982. Re: New Type of HF Shootout (antennas, pedestrian, bicycle)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:24:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7da2cc_2@127.0.0.1>
Source record: 107149

K7JEB wrote:
> Don't ask. Don't tell. Don't pursue.

Darn, I was about to lay down a perfect ground for my dipole
but EZNEC says that would only gain me 1.5 dB over normal
ground.

Wonder how many 5 MHz hams have already violated the FCC
guidelines by running 50 watts into a dipole over ground?
Oops, that's asking and pursuing, isn't it?
--
73, Cecil, W5DXP

1983. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:24:31 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ReednfvIGdZRP-CiXTWJkQ@comcast.com>
Source record: 107148

Richard,

Interesting situation. You are short by a couple of inches from what one would expect. I wonder if you have to take into account the few inches of line inside the meter. Does the manual say anything about that? You should certainly count the length of any connectors/adapters as part of the line length.

Here is something else you could do. Connect a 50 Ohm, or so resistor from the MFJ to the cable. Then a diode (1N914, etc) from that junction to a DC voltmeter. Now adjust the frequency for minimum DC voltage. You may have to interpolate between the two points where the meter goes to 0. If it tunes too broadly, make the resistor 0. I have done this with a 'scope, but not a voltmeter,

Tam/WB2TT

"Richard" <g3cwi@tesco.net> wrote in message
news:b8480e86.0310030654.120499bf@posting.google.com...
> What would be the best way to adjust a quarter wave of 75 Ohm twin
> line using an antenna analyser? I just connected mine across the
> analyser (open circuit) and looked for the freq where a short showed -
> is that likely to be accurate? At 10.1 MHZ I ended up with a 15.7 foot
> line which seems a bit short (low velocity factor).
>
> 73
>
> Richard
> G3CWI

1984. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:30:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <av8rnvkjqi7kjme54geqn1en8tstin8t0u@4ax.com>
Source record: 107150

On Thu, 2 Oct 2003 23:40:31 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>My 75 meter antenna goes through several tree branches. Never saw any change
>in SWR, wet or dry.

Hi Tam,

Never saw? Could he prune?

73's
Richard Clark, KB7QHC

1985. Are We Active?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:37:24 UTC
From: rmurray@geeksnet.com
Message-ID: <3f7da621$1_6@corp.newsgroups.com>
Source record: 107151

I've received no new post from this group since early September. Do we still exist?

Thanks,

Ron

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1986. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:38:51 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <kp8rnvgasg08v638juet355aes70nag573@4ax.com>
Source record: 107152

On 3 Oct 2003 07:54:50 -0700, g3cwi@tesco.net (Richard) wrote:

>What would be the best way to adjust a quarter wave of 75 Ohm twin
>line using an antenna analyser? I just connected mine across the
>analyser (open circuit) and looked for the freq where a short showed -
>is that likely to be accurate? At 10.1 MHZ I ended up with a 15.7 foot
>line which seems a bit short (low velocity factor).
>
>73
>
>Richard
>G3CWI

Hi Richard,

I believe your data may be correct. Electrical length Lamda at 10.1 MHz is 97.24 feet, and Lambda/4 is 24.35 feet. And 15.7/24.35 = 0.645 for the VF. Although this VF is in the vicinity of what you'd find in coax, if there's a lot of dielectric surrounding the conductors, this value could be correct.

Suggest you check the impedance at 20.2 MHz to see if the input impedance goes to a very high value, as one would expect for an open-circuited half wave. In addition, if you record the actual resistance values for both measurements and take the square root of the product you will have the Zo of the line. If it comes out close to 75 ohms it will prove the measurements are valid.

Hope this helps,

Walt Maxwell, W2DU

1987. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:50:29 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DA8D5.EE56707F@uci.edu>
Source record: 107156

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > I just showed you how characteristic impedances are used to calculate
> > the reflection coefficient at '+'. But you can wish it into the
> > cornfield if you like, Anthony. :-)
>
> Absolutely no chance that you are simply wrong?

Only if Born and Wolfe are wrong. Since people use these formulas every day, proving them wrong might be quite a challenge. I should think the fact that their formula produces the correct answer to your problem should lend Born and Wolfe at least some credence.

> >>(150-50)/(150+50) is NOT rho.
> >
> > Is it the reflection coefficient for a 50 ohm to 150 ohm impedance
> > discontinuity?

> It is the 's11' reflection coefficient for that impedance discontinuity.
> It is NOT the 'rho' at '+' unless the signals are orthogonal to each
> other at '+'. Chances are they are not orthogonal.

If the 150 ohm line was terminated in 150 ohms or was infinitely long would
Vr = Vf * (150-50)/(150+50)?

73, Jim AC6XG

1988. Re: Are We Active?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 16:51:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v0arnv07mua5vvm4asm9vhjtuuq9laak7l@4ax.com>
Source record: 107153

On Fri, 3 Oct 2003 12:37:24 -0400, <rmurray@geeksnet.com> wrote:

>I've received no new post from this group since early September. Do we
>still exist?
>
>Thanks,
>
>Ron

Hi Ron,

No posts since early Sept? Where are you looking?
rec.sartre.existentialism?

According to my credit report, I owe, therefore I exist.

73's
Richard Clark, KB7QHC

1989. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:01:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dab93_2@127.0.0.1>
Source record: 107154

Richard Clark wrote:
> There are one of two possible explanations for your posting:
> 1. You have not obtained that copy of Chipman that you ordered.
> 2. You have not read it.
> Of course, you can add a third, fourth or fifth... in complete absence
> of Chipman's discussion if his material does not agree with your
> interpretations.

Richard, you might be interested to know that HP's s-parameter ap note,
AN 95-1, page 22 under Transducer Power Gain, lists the power available
from the source as the (square of the magnitude of the source voltage)
divided by [one minus the (square of the magnitude of the source's complex
reflection coefficient)], i.e. |Vs|^2/(1-|rho|^2)=power available from
the source where presumably source-rho = (Zs-Z0)/(Zs+Z0)
--
73, Cecil, W5DXP

1990. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:13:42 UTC
From: K7JEB <k7jeb@arrl.no_spam.net>
Message-ID: <Q7ifb.12197$Rd4.5283@fed1read07>
Source record: 107155

Richard, G3CWI, wrote:

> What would be the best way to adjust a quarter wave
> of 75 Ohm twin line using an antenna analyser? I just
> connected mine across the analyser (open circuit) and
> looked for the freq where a short showed - is that
> likely to be accurate? At 10.1 MHZ I ended up with a
> 15.7 foot line which seems a bit short (low velocity
> factor).

With an open-circuited stub, there is always a bit of
fringing capacitance around the open end which will
throw the measurement off a bit. A short-circuit
measurement is generally more accurate.

Jim, K7JEB

1991. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:22:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7db06c_2@127.0.0.1>
Source record: 107157

Jim Kelley wrote:
>>(150-50)/(150+50) is NOT rho.
>
> Is it the reflection coefficient for a 50 ohm to 150 ohm impedance
> discontinuity?

Relating this question to the s-parameters as explained in HP's
ap note AN 95-1, s11 is the input reflection coefficient when the
load reflection coefficient is zero. s'11 is the input reflection
coefficient with an arbitrary load reflection coefficient.

s'11 = s11 + [s12*s21(ZL-Z0)/(ZL+Z0)]/[1-s22(ZL-Z0)/(ZL+Z0)]

So s'11 is the rho to the left of '+' in the previous diagram.
That's the rho on the 50 ohm line.

s'11 = rho

s11 equals rho only when Z-Load = Z0, i.e. (ZL-Z0)/(ZL+Z0)=0
--
73, Cecil, W5DXP

1992. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:30:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7db253_2@127.0.0.1>
Source record: 107158

Jim Kelley wrote:

> Cecil Moore wrote:
>>Absolutely no chance that you are simply wrong?
>
> Only if Born and Wolfe are wrong. Since people use these formulas every
> day, proving them wrong might be quite a challenge. I should think the
> fact that their formula produces the correct answer to your problem
> should lend Born and Wolfe at least some credence.

Absolutely no chance that there is a small detail that you do not
understand and are therefore misinterpreting something?

> If the 150 ohm line was terminated in 150 ohms or was infinitely long
> would
> Vr = Vf * (150-50)/(150+50)?

Yes, it would, and all three reflection coefficients, rho, s11, and
s'11 would be equal in that particular case. Please see my other posting
on this subject and you will comprehend the small mental error you are
making. In short,

s'11 = rho but s11 doesn't equal rho unless the load-rho equals zero.
--
73, Cecil, W5DXP

1993. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:32:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DB2A8.DEF07FE4@uci.edu>
Source record: 107160

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > Cecil Moore wrote:
> >>Absolutely no chance that you are simply wrong?
> >
> > Only if Born and Wolfe are wrong. Since people use these formulas every
> > day, proving them wrong might be quite a challenge. I should think the
> > fact that their formula produces the correct answer to your problem
> > should lend Born and Wolfe at least some credence.
>
> Absolutely no chance that there is a small detail that you do not
> understand and are therefore misinterpreting something?

In this instance: It's no greater than, and probably less than the
chance that you do not understand and are therefore misinterpreting
something.

Here's an idea, Cecil. Instead of simply trying to discredit your
correspondent, why don't actually find something wrong with the
equations?

> s'11 = rho but s11 doesn't equal rho unless the load-rho equals zero.

Hence the utiltity of the Born and Wolfe equations.

73, Jim AC6XG

1994. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 17:35:16 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <0gkpnvodor6vu257v200hi44m0r6u46jer@4ax.com>
Source record: 107159

On Thu, 2 Oct 2003 15:24:23 -0500 (CDT), richardharrison@webtv.net (Richard Harrison) wrote:

>Gene Nygaard wrote:
>"Why are you still refusing to deal with the "meter kilograms" on my
>torque wrench---?"
>
>Multiply the meters by 3.28 and multiply the kilograms by 2.2, and you
>will have torque in their product computed in foot pounds. Or, just
>multiply the dial reading by 7.22 for ft.lbs. Torque is the product of
>force and distance.

It's no surprise that you don't have any problem with this. Don't you remember when I told you that your views were at odds with those of Jim Kelley (and half a dozen others in this thread as well)?

It's Jim Kelley who is having great difficulty dealing with these "meter kilograms." Their existence demolishes one of his major arguments. Will he, or any of the others making similar foolish arguments, ever address this?

I don't think it's that you understand all this a whole lot better than those others. Rather, you are more like those rocket scientists who blissfully get specific impulse in "seconds" by using pounds mass to cancel out pounds force. In SI, the units of specific impulse are Nï¿½s/kg, or the equivalent m/s.

>Weight is a force produced by gravity on a particular mass.

One definition of weight, yes.

>The indication on a torque wrench is muscle force times lever length. It
>directly has little relation to gravity in most torque wrench
>applications.

I don't understand why you think that's even something worth bothering to point out. Do you think this would have some bearing on the fact that both Jim and I have characterized torque as "force times distance"? How? The word "weight" didn't enter into those discussions of torque, as far as I can remember.

Or are you just pointing out the unrelated (at least in the sense that it wasn't part of our discussion of torque) fact that pounds force are often used for things that are never called "weight," so identifying them as "units of weight" is pretty stupid? At least, compared to the identification of pounds mass as "units of weight" since in the definition of weight as a synonym for the "mass" of physics jargon,

that's what mass units such as troy ounces or avoirdupois pounds or kilograms are always used for--something that can be called "weight"?

>Weight is the easy way to determine mass. Computing mass from collection
>of acceleration data would be more complicated. M = F/A

Principle of equivalence. Look that up.

OTOH, computing force due to gravity with a balance is not merely "more complicated," it is impossible without additional information you don't get from the process of weighing it with the balance.

For example, suppose I have a bar of gold that weighs 401.23 troy ounces on my balance. How much force does it exert due to gravity, at my location on Earth? Use any force units you choose--poundals, newtons, kilograms force, sthenes, whatever--just remember that troy ounces are not units of force.

Now suppose I take the whole works to the middle of the Sea of Tranquillity on the Moon, and weigh it again. It weighs 401.25 troy ounces. How much force is it exerting due to gravity now? Once again, any units of force will be fine.

Now, I'm also sure that you are well aware that we call what we measure with a balance "weight," aren't you? Can you tell me why so many science textbook authors appear to be unaware of this commonly known fact? (They aren't really, it is a sham in most cases, and others try to weasel out of it by imagining some "error" is that usage.) Would you suppose that this might have something to do with the great emphasis some of them place on the operation of a spring scale, going into great detail about how they work, while ignoring the only weighing devices anybody had ever used for the 7000 years or so that people had been weighing things, before those spring scales first appeared in the 19th century?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

1995. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:01:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DB965.C37062E@uci.edu>
Source record: 107163

Gene Nygaard wrote:
> It's Jim Kelley who is having great difficulty dealing with these
> "meter kilograms." Their existence demolishes one of his major
> arguments. Will he, or any of the others making similar foolish
> arguments, ever address this?

If you have a point, sir, I think it's time you should make it. If your intent is nothing more than to blither inanities, then when will you have your fill?

73 de ac6xg

1996. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:04:27 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310031004.1fb29c75@posting.google.com>
Source record: 107161

V.F.=.64 does seem a bit low, but if it's the type of line where the wires are very close together, embedded in thick, solid polyethylene, it's not too far out of line. It's easier to get a good short than a good open, because of fringing effects, but the error from that should be very tiny with small line at that frequency. If your analyzer finds high impedance, too, try shorting the other end of the line and see if you get the same result. Or look for a half-wave reflection of the short back to a near-short again. Also, check the analyzer with a physical short right at the analyzer. Is the analyzer for unbalanced lines? If so, see if a simple ferrite bead choke balun on the line at the analyzer makes a difference in the measurement.

Cheers,
Tom

g3cwi@tesco.net (Richard) wrote in message
news:<b8480e86.0310030654.120499bf@posting.google.com>...
> What would be the best way to adjust a quarter wave of 75 Ohm twin
> line using an antenna analyser? I just connected mine across the
> analyser (open circuit) and looked for the freq where a short showed -
> is that likely to be accurate? At 10.1 MHZ I ended up with a 15.7 foot
> line which seems a bit short (low velocity factor).
>
> 73
>
> Richard
> G3CWI

1997. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:11:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1cdrnvs36vahlpbuia6gcsdo659vshspn2@4ax.com>
Source record: 107162

On Fri, 03 Oct 2003 12:01:08 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> There are one of two possible explanations for your posting:
>> 1. You have not obtained that copy of Chipman that you ordered.
>> 2. You have not read it.
>> Of course, you can add a third, fourth or fifth... in complete absence
>> of Chipman's discussion if his material does not agree with your
>> interpretations.
>
>Richard, you might be interested to know that HP's s-parameter ap note,
>AN 95-1, page 22 under Transducer Power Gain, lists the power available
>from the source as the (square of the magnitude of the source voltage)
>divided by [one minus the (square of the magnitude of the source's complex
>reflection coefficient)], i.e. |Vs|^2/(1-|rho|^2)=power available from
>the source where presumably source-rho = (Zs-Z0)/(Zs+Z0)

Hi Cecil,

-sigh- even when you offer confirmatory recitations you still miss the
details. There are only 11 pages in Application Note 95-1 and the
material you describe appears on page 4 not 22.

The voltage from the generator is also portrayed in Fig. 3 entitled
"Flow graph of network of Fig. 2." Figure 2, of course, shows the
generator complete with Zs which most here deny exists, or dismiss as
immaterial to any discussion. This is due entirely to their speed
reading past their own sources' discussion that ALL DISCUSSION OF SWR
assumes the source matches the line it feeds. Such an explicit or
implicit relationship is fundamentally required, or the entire text
that they cite is rendered useless gibberish. The most garbled of
those proclamations is that the source Z has no bearing on line SWR.

This same flowgraph is present in many similar works (AN 95-1 is
hardly unique) and being presented early in the work (like Chipman's
similar observation of requiring source-line matching) is skipped so
that the reader (sic) can scrounge their favorite snippet of math and
remove it from its required context. Chipman also presents much the
same treatment in non S-Parameter discussion, but that is quite
obviously from the part unread by the great mass of so called
adherents to his discussion.

However, to give some flexibility to the discussion; such shortfalls
of understanding how SWR works is simply through lack of experience in
the matter. It is understandable when the usual approach to this

topic is taken by employing a transmitter that both specifies its output at a Z of 50 Ohms and exhibits a Z of 50 Ohms. Given such a source, the casual debater is lulled into the comfortable illusion of having been born on third base thinking they hit a triple in the debate against source Z (no, the count is three strikes).

Simply because they encounter no ill consequence of source mismatch is NOT evidence of the source Z being immaterial to the process of measuring SWR. Luck counts for nothing in debate - unless it is admitted to. None here count themselves lucky - it would diminish their sense of erudition.

I don't expect there will be any substantive discussion following this that will change physics to conform to those illusions (my comments here will not "change their minds").

73's
Richard Clark, KB7QHC

1998. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:31:32 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DC084.A37ADB5C@uci.edu>
Source record: 107167

Sour grapes, or what?

As I said, the reflection coefficient at '+' can be calculated
accurately using just the characteristic impedances, as shown by Born
and Wolf.

Or you could use s-parameters. Why does it bother you so much that
there might be another way to do it? I suspect they're really one in
the same.

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Here's an idea, Cecil. Instead of simply trying to discredit your
> > correspondent, why don't actually find something wrong with the
> > equations?
>
> It's obvious you didn't comprehend the difference between
> s11=(Z1-Z0)/(Z1+Z0) and rho=s'11=Vref/Vfwd, at least for
> awhile. Anyone can copy equations out of a book while maintaining
> a misunderstanding of a definition. There is no problem with the
> equations. The only problem is with the correspondent's definitions
> and it is a minor one that is easy to fix just by getting the
> definitions correct.
> --
> 73, Cecil, W5DXP

1999. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:37:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dc1f3_2@127.0.0.1>
Source record: 107164

Jim Kelley wrote:
> Here's an idea, Cecil. Instead of simply trying to discredit your
> correspondent, why don't actually find something wrong with the
> equations?

It's obvious you didn't comprehend the difference between
s11=(Z1-Z0)/(Z1+Z0) and rho=s'11=Vref/Vfwd, at least for
awhile. Anyone can copy equations out of a book while maintaining
a misunderstanding of a definition. There is no problem with the
equations. The only problem is with the correspondent's definitions
and it is a minor one that is easy to fix just by getting the
definitions correct.
--
73, Cecil, W5DXP

2000. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:49:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dc4b8_2@127.0.0.1>
Source record: 107165

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> -sigh- even when you offer confirmatory recitations you still miss the
> details. There are only 11 pages in Application Note 95-1 and the
> material you describe appears on page 4 not 22.

-sigh- The PDF version of HP ap note AN 95-1 contains 79 pages.

> Simply because they encounter no ill consequence of source mismatch is
> NOT evidence of the source Z being immaterial to the process of
> measuring SWR.

A source mismatch affects the power available from the source. The
SWR does not depend upon the power available from the source. The
SWR is the same whether the source is 1% efficient or 99% efficient.
Efficiency depends upon Zs. SWR does not.
--
73, Cecil, W5DXP

2001. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:54:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DC5C8.1BBD9B25@uci.edu>
Source record: 107019

Gene Nygaard wrote:
> So my followup to you is along the same lines: Do you claim that
> those "meter kilograms" prove that kilograms are not units of mass?
>
> Not a very difficult question to answer, is it, Jim?

Nope. As I recall, the reason it came up was that you were denying that pounds were a unit of force. I cited the torque wrench, and you pointed out that kg-f are also units of force. I still think you lose on that account. Don't you?

73 ac6xg

2002. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 18:59:10 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <olgrnvkhudf94kfv8lcs79acn4afuumdl1@4ax.com>
Source record: 107166

On Fri, 03 Oct 2003 11:01:09 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> It's Jim Kelley who is having great difficulty dealing with these
>> "meter kilograms." Their existence demolishes one of his major
>> arguments. Will he, or any of the others making similar foolish
>> arguments, ever address this?
>
>If you have a point, sir, I think it's time you should make it. If your
>intent is nothing more than to blither inanities, then when will you
>have your fill?

You can be pretty dense when you want to be.

Here's what you, Jim Kelley, wrote earlier in this thread:

Date: Fri, 26 Sep 2003 15:44:09 -0700
Message-ID: <3F74C139.774BCEB1@uci.edu>

>> Why do you think torque wrenches have the unit
>> 'foot-pounds' printed on them if the pound is a unit
>> of mass?

Date: Wed, 01 Oct 2003 10:32:56 -0700
Organization: University of California, Irvine
Lines: 53
Message-ID: <3F7B0FC8.3F6E4C1B@uci.edu>

>> And so a torque wrench has what kind of units printed on its
>> scale - mass and distance, or force and distance?

What was your point in asking these questions? Quite simple. You
were offering those "foot-pounds" as proof of the supposed fact that
pounds are units of force and not units of mass. In fact, you
specifically claimed, by asking a rhetorical question in last Friday's
message, that torque wrenches would not have these units on them if a
pound is a unit of mass.

So my followup to you is along the same lines: Do you claim that
those "meter kilograms" prove that kilograms are not units of mass?

Not a very difficult question to answer, is it, Jim?

Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

2003. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:18:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <onhrnv0nig8k7lveb75atem284t49bfn1k@4ax.com>
Source record: 107168

On Fri, 03 Oct 2003 13:49:15 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>A source mismatch affects the power available from the source. The
>SWR does not depend upon the power available from the source. The
>SWR is the same whether the source is 1% efficient or 99% efficient.
>Efficiency depends upon Zs. SWR does not.

Hi Cecil,

So, a source exhibiting 200 Ohms Resistive feeding a 50 Ohm line that is then terminated in a load of 200 Ohms Resistive exhibits what SWR?

The absence of a numeric answer is par for the course here. The answer, of course, can be found in Chipman's text but that requires the act of reading, not snipping (which would still be available to the literate). Many here stumble when it comes to measuring SWR employing (in this case) 2 resistors and a hank of line - how they could imagine they respond faithfully to more elaborate enquiries is quite amusing, especially when they argue the Source Z has nothing to do with it.

My mental image of that assemblage of pundits is that of them crowded on a small desert isle, each proclaiming it to be a vast, lush continent. Another SWR Don added to that bunch will teeter someone into the brine. ;-)

Do any of you know how to tread water? Seems to be the perfect Darwinian thinning mechanism; but in fact most already tread water at high tide.

73's
Richard Clark, KB7QHC

2004. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:48:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dd2a2_2@127.0.0.1>
Source record: 107020

Jim Kelley wrote:
> As I said, the reflection coefficient at '+' can be calculated
> accurately using just the characteristic impedances, as shown by Born
> and Wolf.

Why is this so hard for you to understand? What is the rho
of the following?

source---50 ohm feedline---+---150 ohm feedline---load<>150

"Just the characteristic impedances" are given. You say you
can "calculate rho accurately" from just that. So prove your
statement. (load<>150 means the load is not equal to 150 ohms)

If you say rho = (150-50)/(150+50) then you are mistaken. If
Born and Wolf say rho = (150-50)/(150+50) then Born and Wolf
are mistaken. rho = Vref/Vfwd and, contrary to what you say,
there is *NOT* enough information given to calculate rho.
--
73, Cecil, W5DXP

2005. Re: Quad Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:51:28 UTC
From: richardharrison@webtv.net
Message-ID: <12993-3F7DD340-44@storefull-2317.public.lawson.webtv.net>
Source record: 107027

Richard, G3CWI wrote:
"---a feed impedance of 60 Ohms - half what I was expecting. Any ideas?"

The ancestor of the quad loop is the folded dipole. 72 ohms is a free-space impedance and the impedance of any antenna may be affected by proximity to nearby objects.

3 meters elevation above the earth is only 0.1 wavelength at 10 MHz, so poor earth absorbs much energy from a low element which is nearly parallel with the earth. This is the likely cause of low drivepoinnt impedance and of low performance too.

ON4UN in "Low-Band DXing" has a chapter (10) on large loop antennas, which will probably answer your questions on quads. ARRL is the publisher of ON4UN`s book. Another good reference is William Orr, W6SAI`s "All About Cubical Quad Antennas".

Best regards, Richard Harrison, KB5WZI

2006. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:55:34 UTC
From: dplatt@radagast.org
Message-ID: <vnrl1moislendf@corp.supernews.com>
Source record: 107021

>>What would be the best way to adjust a quarter wave of 75 Ohm twin
>>line using an antenna analyser? I just connected mine across the
>>analyser (open circuit) and looked for the freq where a short showed -
>>is that likely to be accurate? At 10.1 MHZ I ended up with a 15.7 foot
>>line which seems a bit short (low velocity factor).

>I believe your data may be correct. Electrical length Lamda at 10.1 MHz is 97.24
>feet, and Lambda/4 is 24.35 feet. And 15.7/24.35 = 0.645 for the VF. Although
>this VF is in the vicinity of what you'd find in coax, if there's a lot of
>dielectric surrounding the conductors, this value could be correct.

I believe I recall reading an admonition (in a grid-dip or analyzer
manual) that measurements of open-circuited stubs were rather tricky
to do accurately. There's always some amount of capacitive coupling
at the open end of the cable which leads to it being less than a
perfect open circuit, and thus won't necessarily look like a perfect
short at the other end of a quarter-wave line. This can throw off the
calculations a bit.

Might be better to short the far end, measure at twice the desired
frequency, and trim until you find the short being perfectly mirrored
at the end of the resulting half-wavelength line.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2007. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:57:53 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F7DD4C1.7005F917@uci.edu>
Source record: 107028

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > As I said, the reflection coefficient at '+' can be calculated
> > accurately using just the characteristic impedances, as shown by Born
> > and Wolf.
>
> Why is this so hard for you to understand?

Answer: it isn't hard for me to understand.

Question: Why must you inevitably get personal in these technical
discussions?

> What is the rho
> of the following?

> source---50 ohm feedline---+---150 ohm feedline---load<>150
>
> "Just the characteristic impedances" are given. You say you
> can "calculate rho accurately" from just that. So prove your
> statement. (load<>150 means the load is not equal to 150 ohms)

That's a different problem, isn't it.

> If you say rho = (150-50)/(150+50) then you are mistaken.

Let the record show that I didn't say it. ;-)

> If
> Born and Wolf say rho = (150-50)/(150+50) then Born and Wolf
> are mistaken.

You mean to tell me you don't even know what you're arguing about here?
If you understood and had paid any attention at all you'd have known
what Born and Wolf would say, and you wouldn't be speculating so wildly
about it.

> rho = Vref/Vfwd and, contrary to what you say,
> there is *NOT* enough information given to calculate rho.

That's _exactly_ what I would say about it.

It wouldn't be possible to evaluate r23 without knowing the load
impedance. And as I pointed out before, the 150 ohm feedline must be
some known number of quarter wavelengths in order to know which form of
the equation to use.

73, Jim AC6XG

2008. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:58:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gtkrnvcoki2ih9h01v5lq3bc57c9344o1i@4ax.com>
Source record: 107022

On Fri, 03 Oct 2003 14:48:38 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Jim Kelley wrote:
>> As I said, the reflection coefficient at '+' can be calculated
>> accurately using just the characteristic impedances, as shown by Born
>> and Wolf.
>
>Why is this so hard for you to understand? What is the rho
>of the following?
>
>source---50 ohm feedline---+---150 ohm feedline---load<>150
>
>"Just the characteristic impedances" are given. You say you
>can "calculate rho accurately" from just that. So prove your
>statement. (load<>150 means the load is not equal to 150 ohms)
>

Howzabout (as a variation of another posting):
source<>50---50 ohm feedline---+---150 ohm feedline---load<>150

If it is so easy for you, and difficult for Jim, this should be a
slam-dunk.... But I won't hold my breath for either of my posts to
find a literal, numeric answer.

I also promise no more follow-up responses to either thread where no
solution (a numeric one, not a philosophical treatise) is presented.
;-)

73's
Richard Clark, KB7QHC

2009. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 19:58:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dd4e5_2@127.0.0.1>
Source record: 107023

Richard Clark wrote:
> So, a source exhibiting 200 Ohms Resistive feeding a 50 Ohm line that
> is then terminated in a load of 200 Ohms Resistive exhibits what SWR?

Assuming a lossless 50 ohm line, the steady-state SWR is 4:1 no
matter what the source impedance (assuming there exists a source
voltage not equal to zero volts). Steady-state SWR in a lossless
feedline is a constant fixed voltage ratio from end to end.
--
73, Cecil, W5DXP

2010. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 20:03:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7dd62e_2@127.0.0.1>
Source record: 107024

Richard Clark wrote:
> Howzabout (as a variation of another posting):
> source<>50---50 ohm feedline---+---150 ohm feedline---load<>150
>
> If it is so easy for you, and difficult for Jim, this should be a
> slam-dunk....

It is not easy for me or anyone else. It is impossible to accurately
calculate rho just from the above information. Jim is the one who
says it's easy. I say it's impossible. Did you read Roy's thoughts
on the subject?
--
73, Cecil, W5DXP

2011. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 20:09:11 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <P_ScneSuQrruSuCiXTWJjw@comcast.com>
Source record: 107025

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:av8rnvkjqi7kjme54geqn1en8tstin8t0u@4ax.com...
> On Thu, 2 Oct 2003 23:40:31 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
> >My 75 meter antenna goes through several tree branches. Never saw any
change
> >in SWR, wet or dry.
>
> Hi Tam,
>
> Never saw? Could he prune?
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

The antenna is 70 feet up, as are the branches. I am beyond tree climbing
age. Still good with the bow & arrow, though.

Tam/WB2TT

2012. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 20:16:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3hlrnv4afpqtrpnfj9r25h8ge26tuigeco@4ax.com>
Source record: 107026

On Fri, 03 Oct 2003 14:58:15 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> So, a source exhibiting 200 Ohms Resistive feeding a 50 Ohm line that
>> is then terminated in a load of 200 Ohms Resistive exhibits what SWR?
>
>Assuming a lossless 50 ohm line, the steady-state SWR is 4:1 no
>matter what the source impedance (assuming there exists a source
>voltage not equal to zero volts). Steady-state SWR in a lossless
>feedline is a constant fixed voltage ratio from end to end.

Hi Cecil,

WRONG!

The method of computation you employ violates Chipman and any other of a host of authoritative sources on the topic. If you actually attempted to verify this at the bench you would "perhaps" find it at only one point, or at harmonic distances (wavelength specific) along the line. That means you would stand only a couple of percent chance of that with a random choice. Guesses are not responsive to the intent and no points are awarded.

I will leave you to discover Chipman's means to find SWR any where along any line for yourself. You might enjoy the celebrity of being the second to do so. ;-)

73's
Richard Clark, KB7QHC

2013. Re: Quad Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 20:50:28 UTC
From: g3cwi@tesco.net
Message-ID: <b8480e86.0310031250.a79301e@posting.google.com>
Source record: 107029

I have now solved the problem. The line that was described as 75 Ohms measures 120 Ohms. That threw the matching out!

2014. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 20:55:16 UTC
From: g3cwi@tesco.net
Message-ID: <b8480e86.0310031255.391e7ddc@posting.google.com>
Source record: 107030

Thanks for all the comments. I did it open and shorted and averaged the results (very similar). The cable measured a VF of 0.63 and Z of 120 Ohms - was described as 75 Ohms. The difference caused a big mismatch and an hour of head scratching and calculator button pressing.

73

Richard
G3CWI

2015. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 21:12:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7de848_8@corp.newsgroups.com>
Source record: 107031

Richard Clark wrote:
> The method of computation you employ violates Chipman and any other of
> a host of authoritative sources on the topic. If you actually
> attempted to verify this at the bench you would "perhaps" find it at
> only one point, or at harmonic distances (wavelength specific) along
> the line.

-sigh- One cannot verify anything about lossless lines on the bench.
The only verifications about lossless lines that are possible have to
be done in one's head because that's the only place lossless lines
exist. One can come close with open-wire line and extrapolate the
results to lossless lines. You see the effects more on coax than on
open-wire line simply because coax is lossier than open-wire line.

> I will leave you to discover Chipman's means to find SWR any where
> along any line for yourself.

You told me to reference page 139 which I did. All that page talks
about is lossy feedline with a complex Z0. The purely resistive feedline,
given by you in your example, cannot have a complex Z0. So what Chipman
has to say is irrelevant to the problem you posed, i.e. purely resistive
Z0, purely resistive source impedance, and purely resistive load. You
apparently should have posed a complex Z0.

Chipman explains perfectly why the measured SWR may vary with a
lossy line, i.e. with a complex Z0. There are points of conjugate
matching up and down the line where an oscillation takes place. The
oscillation causes extra reflections and re-reflections at the
conjugate match point, an exchange of a third energy between the
capacitive reactance and the inductive reactance at that point,
that affects the SWR readings. But such is not possible with the
purely resistive Z0 that you posed.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2016. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 21:41:15 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <anprnvs4jbhrm0gegjhi063k218l4r4oo5@4ax.com>
Source record: 107032

On Fri, 03 Oct 2003 18:11:14 GMT, Richard Clark <kb7qhc@comcast.net> wrote:

>On Fri, 03 Oct 2003 12:01:08 -0500, Cecil Moore
><Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
>>Richard Clark wrote:
>>> There are one of two possible explanations for your posting:
>>> 1. You have not obtained that copy of Chipman that you ordered.
>>> 2. You have not read it.
>>> Of course, you can add a third, fourth or fifth... in complete absence
>>> of Chipman's discussion if his material does not agree with your
>>> interpretations.
>>
>>Richard, you might be interested to know that HP's s-parameter ap note,
>>AN 95-1, page 22 under Transducer Power Gain, lists the power available
>>from the source as the (square of the magnitude of the source voltage)
>>divided by [one minus the (square of the magnitude of the source's complex
>>reflection coefficient)], i.e. |Vs|^2/(1-|rho|^2)=power available from
>>the source where presumably source-rho = (Zs-Z0)/(Zs+Z0)
>
>Hi Cecil,
>
>-sigh- even when you offer confirmatory recitations you still miss the
>details. There are only 11 pages in Application Note 95-1 and the
>material you describe appears on page 4 not 22.
>
>The voltage from the generator is also portrayed in Fig. 3 entitled
>"Flow graph of network of Fig. 2." Figure 2, of course, shows the
>generator complete with Zs which most here deny exists, or dismiss as
>immaterial to any discussion. This is due entirely to their speed
>reading past their own sources' discussion that ALL DISCUSSION OF SWR
>assumes the source matches the line it feeds. Such an explicit or
>implicit relationship is fundamentally required, or the entire text
>that they cite is rendered useless gibberish. The most garbled of
>those proclamations is that the source Z has no bearing on line SWR.
>
>This same flowgraph is present in many similar works (AN 95-1 is
>hardly unique) and being presented early in the work (like Chipman's
>similar observation of requiring source-line matching) is skipped so
>that the reader (sic) can scrounge their favorite snippet of math and
>remove it from its required context. Chipman also presents much the
>same treatment in non S-Parameter discussion, but that is quite
>obviously from the part unread by the great mass of so called
>adherents to his discussion.

>
>However, to give some flexibility to the discussion; such shortfalls
>of understanding how SWR works is simply through lack of experience in
>the matter. It is understandable when the usual approach to this
>topic is taken by employing a transmitter that both specifies its
>output at a Z of 50 Ohms and exhibits a Z of 50 Ohms. Given such a
>source, the casual debater is lulled into the comfortable illusion of
>having been born on third base thinking they hit a triple in the
>debate against source Z (no, the count is three strikes).
>
>Simply because they encounter no ill consequence of source mismatch is
>NOT evidence of the source Z being immaterial to the process of
>measuring SWR. Luck counts for nothing in debate - unless it is
>admitted to. None here count themselves lucky - it would diminish
>their sense of erudition.
>
>I don't expect there will be any substantive discussion following this
>that will change physics to conform to those illusions (my comments
>here will not "change their minds").
>
>73's
>Richard Clark, KB7QHC

Richard, I'm dismayed with your statements above. Are you really serious? Or are you just giving Cecil a bad time?

I've been grappling with your last email to me concerning the nature of the source resistance of RF amps, and as with your statements above, I'm at a loss as to how to respond, because we are 180 degrees apart on the source resistance issue. I'm still going to respond to it, but right now I want to address the SWR issue.

Richard, how can you possibly believe that the output impedance of the source has any effect on the SWR on a transmission line? The only conditions responsible for SWR are the Zo of the line and the ZL of the load--nothing else. I've been bench measuring SWR for more than 50 years, beginning with using the slotted line before more sophisticated machinery was available. It didn't matter what the source impedance was, the SWR remained the same, whatever the source. Ian told it like it is, and so does Walter C. Johnson in his "Transmission Lines and Networks, Page 100, where he says:

"The steady state ratio Eplus/Eminus was determined in Eq 11 as the reflection coefficient k...This ratio is determined only by the load and the line, not by the generator. It is completely unaffected by the quantity kg = (Zg - Zo)/(Zg + Zo), which is the reflection coefficient seen by an individual backward-traveling wave as it reaches the generator terminals. ...the latter affects the steady state solution only on its influence on the sending-end voltage, i.e., through its influence on the magnitude of the entire solution."

Your reply comments, please.

Walt, W2DU

2017. Re: Supporting theory that Antennas "Match" to 377 Ohms (Free space)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 21:59:16 UTC
From: Gene Nygaard <gnygaard@nccray.com>
Message-ID: <s7jrnv0296j6m7vdjdv5gpm0rlm7goiapn@4ax.com>
Source record: 107033

On Fri, 03 Oct 2003 11:54:00 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Gene Nygaard wrote:
>> So my followup to you is along the same lines: Do you claim that
>> those "meter kilograms" prove that kilograms are not units of mass?
>>
>> Not a very difficult question to answer, is it, Jim?
>
>Nope. As I recall, the reason it came up was that you were denying that
>pounds were a unit of force.

Then why did you claim something entirely different--not that this
proved that pounds force exist, but rather that it proved that pounds
could not be units of mass?

That official definition of a pound as a unit of force still remains
an elusive little devil, however. Don't you agree? Or are you good
enough to find it?

> I cited the torque wrench, and you pointed
>out that kg-f are also units of force. I still think you lose on that
>account. Don't you?

Certainly not.

Thanks for correcting your earlier claims. You are making progress,
now admitting both that pounds are units of mass, and that kilograms
force exist just as well as pounds force do. Have you realized yet
that you are now aligning yourself with me, rather than with fools
like Richard Clark and KU2S, Raymond Sirois. With me, and with the
younger Resnick and Halliday (1960) that I quoted, not with the fools
you quoted, Halliday and Resnick (1981 appendix, and appendix of most
or all later editions).
Gene Nygaard
http://ourworld.compuserve.com/homepages/Gene_Nygaard/

2018. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-03 22:57:54 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blkutikd1@titan.btinternet.com>
Source record: 107035

Just a comment.

Whereas it is true the SWR remains relatively constant along a relatively low loss line, it is NOT true that the reflection coefficint remains constant. Its phase angle (1/2 of the information it contains) varies in proportion the distance from the termination.

2019. FS: Antenna Engineering Handbook

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 00:41:45 UTC
From: Doug Davis <dougd@buckeye-horsenose-express.com>
Message-ID: <PL6dncCZ7ZzaiuOiXTWJjw@buckeye-express.com>
Source record: 107036

ANTENNA ENGINEERING HANDBOOK

Richard C. Johnson
Henry Jasik

Second Edition

ISBN: 0-07-032291-0

1408 pages, 946 illustrations

Brand New Condition

$30.00 + actual shipping from 44870

Doug

2020. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 00:41:53 UTC
From: Vi&#65533;arr <Vitharr@nospam.net>
Message-ID: <lHofb.18912$f11.7026@newsread1.news.atl.earthlink.net>
Source record: 107037

> Measure the SWR. Often the dipole impedance is closer to 50 than 75 Ohms,
> and it is not worth doing anything about it, especially an inverted V.

If I remember correctly, an article on Inverted Vs a long time ago in _QST_ reported that an inverted V with its element at 45&#65533; from the horizontal (or from the vertical!) had a 50-Ohm impedance, and a horizontal and vertical radiation pattern kind of midway between a vertical and a dipole. I fed my 40m inverted V with 45&#65533; element angles with 50-Ohm coax. It had a design-frequency SWR of ~1.1. SWR went up to ~1.5 at the CW high band edge.

N&#65533;KF

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:1P6dnYeM6IStKeGiXTWJkw@comcast.com...
> Tom,
>
> There is a way of doing it, using two matching sections. It is described
in
> either the ARRL Handbook, or Antenna Manual. It takes a length of 50 Ohm
> coax (NOT 1/4 wave) + a length of 75 Ohm coax (NOT 1/4 wave) to match to
50
> Ohms. If I run across it, I will post it.
>
> Before you do all that, put up the antenna and feed it with 50 Ohm coax.
> Measure the SWR. Often the dipole impedance is closer to 50 than 75 Ohms,
> and it is not worth doing anything about it, especially an inverted V.
> Certainly, don't do anything if your radio has a built in antenna tuner.
>
> Tam/WB2TT
> "Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message
> news:blhmdv$1bs$1@avnika.corp.mot.com...
> > I asked this before and was told that for relatively short runs (under
50
> > ft), using 50 ohm coax to feed dipoles is fine.
> >
> > I keep coming back to this in my head because I model a dipole and I get
a
> > VSWR of 1.5 using 50 ohm feed and I get 1:1 if I model with 75 ohm feed.
> >
> > My plan for my little antenna farm is to have a run of 50 ohm coax to a
> > remote antenna switch. Create a few dipoles and feed them with 75 ohm
> coax.
> > I saw an equation someplace that, I believe, gave the length of 75 ohm
> feed
> > required to transform the impedance to 50 ohms at a given frequency. I

> would
> > cut the cable to this length then connect to the 50 ohm antenna switch.
> >
> > 246 x Velocity Factor
> > L = ----------------------------
> > Freq
> >
> >
> > Does all this make sense? Am I going overboard (a curse of trying to be
a
> > perfectionist)? I don't want to use a tuner because; 1 - I don't own
one
> > and 2 - they waste power (I want to try QRPish operation).
> >
> > Also, if the above is correct, would I still need to put a current choke
> > (coil of coax) or would the "fact" that the feed and dipole are matched,
> > there wouldn't be RF on the jacket?
> >
> > My head is starting to hurt........
> >
> >
> > Tom
> >
> >
> >
>
>

2021. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 00:44:38 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <s7WdnWPI2cOZheOiXTWJjw@comcast.com>
Source record: 107038

Tom,

I found the procedure in the Antenna Manual for what you want to do. In the 19 th edition, it is listed in the index under "Series Section Transformers", and is on page 26-5. Lot of terms in the formula, but nothing fancier than an arctangent.

For a 70 Ohm load, you calculate the SWR for a 50 Ohm system as 1.4. The MINIMUM impedance for the second coax is
50*SQRT(1.4)=59.16. So, 75 Ohm coax will work. The formulas will give you the lengths for L1 and L2, where L1 is 50 Ohm and L2 is 75 Ohm coax.

Have fun when you get the book!

If you can't wait for the book, here are the formulas

n=Z1/Z0, where Z1 would be 75.

r=RL/Z0

x=XL/Z0

num= (r-1)^2 +x^2

den=r(n-(1/n))^2 -(r-1)^2 -x^2

B=SQRT(num/den)
L2=ARCTAN(B)

A={B(n-(r/n))+x}/{r + xnB -1}
L1=ARCTAN(A)

I don't guarantee error free typing.

Tam/WB2TT

2022. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 01:23:13 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <QtadnVhT0NKNvOOiU-KYiA@comcast.com>
Source record: 107039

The length will be in electrical degrees, where 360 deg = 1 wavelength.

2023. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 02:25:04 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vnsbpvaikdme8f@corp.supernews.com>
Source record: 107041

Dear Neighbor Roger:
It has been one minute of perfect copy (out of five) since at least
the early 50s. That was the only receiving standard. One also had to
demonstrate that one could send CW - you were allowed to bring your own
key.
73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
<snip>
>
> Did they drop the requirement from two minutes to one minute?
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
>
>

2024. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 02:26:27 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <imasnvo0ufmocoj6e88km87kkv7dqdakf9@4ax.com>
Source record: 107042

On Fri, 3 Oct 2003 22:57:54 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Just a comment.
>
>Whereas it is true the SWR remains relatively constant along a relatively
>low loss line, it is NOT true that the reflection coefficint remains
>constant. Its phase angle (1/2 of the information it contains) varies in
>proportion the distance from the termination.
>

A little further comment.

The magnitude of rho is always the ratio of reflected to forward voltage at whatever whatever point it is measured on any lossless or non-lossless line. On lossless line the magnitude of rho is constant along the entire line, but decreases logarithmically with distance from the load,depending on the attenuation of the line.

However, the phase angle of rho equals the angular difference between the forward and reflected waves. Because they are traveling in opposite directions the rate of angular change is twice the change in electrcal distance along the line. Thus the phase angle of rho changes at twice the change in electrical distance along the line, varying between zero and 180 degrees for every 1/4wl.

Walt, W2DU

2025. Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 03:10:56 UTC
From: alertjean_fake_id@rediffmail.com
Message-ID: <abd5b578.0310031910.736f0c7c@posting.google.com>
Source record: 107043

When will a wire radiate?
Can we make an oscillator circuit to radiate by simply connecting its
output to a long wire ?
Where can I get suitable study material on net about the topic?

2026. BIG**AL** IS NOW IN CHARGE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 03:18:59 UTC
From: ◆K4OKA◆BIG**AL** <◆K◆◆4◆◆O◆◆K◆◆A◆@OICU812.COM>
Message-ID: <vnrtenh67jkfae@corp.supernews.com>
Source record: 107034

OF THIS GROUP.

2027. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 05:16:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eklsnvoksvsr7s8ju5shtffjs2tkfv428m@4ax.com>
Source record: 107044

On Fri, 03 Oct 2003 16:12:48 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>One cannot verify anything about lossless lines on the bench.

You can't, that's for sure, and not even with a line so short you
couldn't measure its loss - so what's the point of arguing lossless?

>So what Chipman
>has to say is irrelevant to the problem you posed

Hi Cecil,

I have already provided quotes, chapter and verse that refute your
statement. No point in going further.

73's
Richard Clark, KB7QHC

2028. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 05:35:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ktlsnvo8d990et2kb04ufco7ddtlm80b8e@4ax.com>
Source record: 107045

On Fri, 03 Oct 2003 21:41:15 GMT, Walter Maxwell <w2du@iag.net> wrote:

>
>Richard, I'm dismayed with your statements above. Are you really serious? Or are
>you just giving Cecil a bad time?

That wouldn't take much to push Cecil off dead center.

>
>I've been grappling with your last email to me concerning the nature of the
>source resistance of RF amps, and as with your statements above, I'm at a loss
>as to how to respond, because we are 180 degrees apart on the source resistance
>issue. I'm still going to respond to it, but right now I want to address the SWR
>issue.
>
>Richard, how can you possibly believe that the output impedance of the source
>has any effect on the SWR on a transmission line?

Stephen Adam of HP using Beatty describes it quite well. The data you
have by email and has been posted here demonstrates it equally well.
It takes no more than two resistors and a length of line to confirm or
deny. My data confirms it, absolutely no one has offered negative
evidence, simply denials.

>The only conditions
>responsible for SWR are the Zo of the line and the ZL of the load--nothing else.
>I've been bench measuring SWR for more than 50 years, beginning with using the
>slotted line before more sophisticated machinery was available. It didn't matter
>what the source impedance was, the SWR remained the same, whatever the source.
>Ian told it like it is, and so does Walter C. Johnson in his "Transmission Lines
>and Networks, Page 100, where he says:

If Walter Johnson was not explicit about it, he was certainly implicit
about the requirement that the source match the line it is driving for
any discussion of SWR. This is so commonplace that no one ever
examines the situation where the source is a mismatch.

Too many here simply flip to the section in their favorite book about
SWR and wholly neglect the fundamentals that present this simple
requirement. I have presented quotes, chapter and verse from Chipman
where he explicitly says as much, and those who hold Chipman have
abandoned discussion rather than refute those quotes or accept their
error. As one scribbler put it I was not going to "change his mind."
I have no doubt of that, such a statement paints one into an extremely
embarrassing corner once having uttered it. One thing I learned as a
Metrologist is that I am always wrong, the significance is in the

degree of error, not the philosophy of sin and the rejection in ignorance.

Any number of correspondents here "might" have the capacity to simply repeat my methods and report their data; but absolutely none demonstrate it. I might be so far in error the meter is pegged, but the quality of "sneer review" absolves me of sin. ;-)

Hi Walt,

I await your response by email for our last round of discussion. What is presented above is old material already discussed. There is nothing new presented by me in it that has not found its way to your mailbox.

73's
Richard Clark, KB7QHC

2029. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 06:59:42 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3F7E6FDE.A9D94931@rickfrazier.com>
Source record: 107048

alertjean_fake_id@rediffmail.com wrote:

> When will a wire radiate?

Whenever there is an alternating signal on it. The amount of radiation that is detected will depend on the strength of the original signal and the "efficiency" of the wire relative to the length of the wire in relation to the applied frequency. If the wire is shielded, the radiation will be much lower, perhaps to nearly undetectable limits depending upon the type of shielding and the frequency involved. Yes, the wires in your house radiate a signal at 60 Hz (60 cycles per second) if you are in the United States or another country that uses the 60Hz AC standard. Much of Europe uses a 50Hz standard. A wire with a DC current flowing through it develops a magnetic field, but most people don't characterize this as radiation, because most people tend to define radiation at a specific frequency of interest for a particular measurement.

A radiating wire is essentially an antenna. Typically, in popular use, wires or equivalent metallic structures are not automatically considered antennas unless they are intended to transmit or receive a specific frequency range. This tends to increase confusion for people learning about electromagnetic radiation.

>
> Can we make an oscillator circuit to radiate by simply connecting its
> output to a long wire ?

It already radiates, unless it is in a shielded box or enclosure. Of course, the amount of radiation is typically pretty small unless it is a very high power oscillator. Hooking a long wire to it may detune it and cause the frequency of the oscillator to change, unless there is a buffer amplifier between the oscillator and the wire. Again, the amount of radiated signal will depend on the initial strength of the signal, and the efficiency of the wire relative to the length of the wire in relation to the frequency of the oscillator.

>
> Where can I get suitable study material on net about the topic?

You might try searching for "rf fundamentals" or similar topics, which will provide information about radiation in the Radio Frequency (RF) regions. Other frequencies follow the same principles, but as long as it is an alternating field, though the name may be different, essentially the same effect is produced. As the frequency increases, there are some interesting propagation effects (like, the received signal strength is

different for higher frequencies of the same power, given similar distances, and reflections are more apparent at higher frequencies than low ones, etc.,). There are tons of books about radiation in relationship to antennas, so searching for "antenna fundamentals" or such may also bring a bunch of information to light.

Good Luck
--Rick AH7H

2030. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 07:19:16 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310032319.5f82e46c@posting.google.com>
Source record: 107047

g3cwi@tesco.net (Richard) wrote in message
news:<b8480e86.0310031255.391e7ddc@posting.google.com>...
> Thanks for all the comments. I did it open and shorted and averaged
> the results (very similar). The cable measured a VF of 0.63 and Z of
> 120 Ohms - was described as 75 Ohms. The difference caused a big
> mismatch and an hour of head scratching and calculator button
> pressing.

A comment on the Zo measurement: analyzers are commonly most accurate
for impedances near 50 ohms, and the errors for very low and very high
impedances may be fairly large. Better to do an iteration on the
measurement: put a 120 ohm resistor on the end of the line and see if
the impedance presented to the analyzer is independent of frequency,
or nearly so... or if you have a known 1/4 wavelength, see if at that
frequency you get the same result measuring the 120 ohm resistor and
the line when terminated in that resistor. If you get two different
results and the 120 measured as 120, then take the square root of the
product of the two and try again. When you find a load that gives the
same result directly and through 1/4 wave of line, you know that load
is the same as Zo (at that frequency).

Cheers,
Tom

2031. Re: 5MHz Ant FCC Calculations (x: New Type of HF Shootout)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 07:37:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnsqldicohbba0@corp.supernews.com>
Source record: 107046

Thanks for the info. It sure does make it easier. Grounded antennas like
a ground mounted vertical or inverted L could be modeled by removing
ground and adding a mirror image in free space, or by using perfect
ground and subtracting 3 dB from the resulting field.

Roy Lewallen, W7EL

Expeditionradio wrote:
>><From: Roy W7EL wrote><
>>Hm. That means that you can't run more than about 16-20 watts to a n
>>ordinary dipole, since a dipole over ground produces a field strength
>>that's typically 4-5 dB greater than a dipole in free space.
>
>
> Roy, the FCC has clarified this issue recently in communications with ARRL. The
> FCC indicated we should do all our compliance calculations for 5MHz as if the
> antennas are in free space.
> That certainly makes it a lot easier, doesn't it?
>
> Bonnie KQ6XA

2032. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 08:07:53 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <q1vsnvoj7v76hdesrp9vqh09tpjv471089@4ax.com>
Source record: 107049

On Thu, 02 Oct 2003 11:47:29 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
>news:j4fnnvksilgp8hus6c5s90qrnuijpcv4mh@4ax.com...
>> On Wed, 01 Oct 2003 21:22:46 GMT, "Dee D. Flint" <deehays@qix.net>
>> wrote:
>>
>> >
>> >"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
>> >news:20030930191741.10332.00000073@mb-m14.aol.com...
>> >> Is this test open game? Basically, are all characters, q-codes, and
>> >prosigns
>> >> fair game on this test. I have studied relentlessly and know a
>majority
>> >of
>> >> them and can receive at 10wpm but everytime I look at a different book
>or
>> >> website I find more stuff.
>> >>
>> >> Thanks for the input
>> >>
>> >> 73
>> >> G. Doughty
>> >> KI4BBL
>> >
>> >It is the letters of the alphabet, numerals, period, comma, question
>mark,
>> >/, and the following prosigns: BT (written as =), K, KN, and AR. The
>test
>>
>> BT should be the double dash "- - " At least I've never seen it as
>> anything else.
>>
>
>Double dash is also "=". And is the only way I've seen it written in the
>books on code such as "Morse Code: The Essential Language". It is also
>written "=" on the check sheet that the VEs use to check copy. The sequence
>for BT is the same as the sequence for the equals sign. For example if you
>wanted to send 1 + 1 = 2, it would be
>
>di-dah-dah-dah-dah di-dah-di-dah-dit di-dah-dah-dah-dah dah-di-di-di-dah
>di-di-dah-dah-dah

>
>Note that the prosign AR is the same as the "+" sign.

I've never seen either written that way, but I learned the code in
1961<:-)) I use it, but haven't looked at a book on it since.

We never bothered to write out KN, or AR as they had a significance to
the transmission. If you heard KN you did not break in. As with SK
it means this is the last transmission and we didn't write that out
either. Non of those were on the test, but again that was in 61. The
only prosigns were the comma, period, slash bar, and double dash which
was nothing more than adding space. I didn't get any more than that
on the extra and I took that at the FCC Detroit office. Actually I
don't think there was a double dash on the extra.

Times sure change....

>
>>
>> >is sent in the form of a simulated QSO (conversation or contact) between
>two
>> >stations. It runs for 5 minutes and you copy as much as you can. Then
>you
>> >will either need to answer 7 out of 10 questions correctly on the content
>of
>> >the QSO or have 1 minute of solid copy (i.e. no errors) to pass. At
>5wpm,
>>
>> Did they drop the requirement from two minutes to one minute?
>>
>
>It has been one minute solid copy since I got into amateur radio in 1992.
>Before that, I couldn't say.

It was 2 minutes solid when I took the Novice, General, and Extra.
(61, 62, and 73??.. I think it was 73 or at least there abouts.)

At least we didn't have essay questions<:-)) which I believe they
phased out in the 50s.
And...I haven't seen any math that couldn't be worked out in the
applicant's head (if they know the material and "rules of thumb"). db
being the easiest of all which a lot of students find difficult.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Dee D. Flint, N8UZE
>(VE for ARRL & W5YI)

2033. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 08:17:11 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ovvsnv4v7fodgcv97mnr115n471vip6l98@4ax.com>
Source record: 107050

On Fri, 3 Oct 2003 22:25:04 -0400, "J. McLaughlin" <JCM@Power-Net.Net>
wrote:

>Dear Neighbor Roger:
> It has been one minute of perfect copy (out of five) since at least
>the early 50s. That was the only receiving standard. One also had to
>demonstrate that one could send CW - you were allowed to bring your own
>key.

Well, my memory ain't what it used to be and that was a long time
back, but I'll swear it was a total of 2 minutes when I took the
Novice, General, and Extra...but I do remember being able to bring
your own key down to Detroit.

Sending may sound simple, but trying to do so when really nervous was
a true challenge. <LOL> I remember one guy at out session who failed
on the transmitt...although it "seems like" they let him redo the
sending test. which wasn't typical. It seems like I remember a couple
of dropped keys too.

I do remember that "for me" the Advanced was the easiest and took
about 10 minutes. The Extra took about 15 to 20 minutes. BUT I worked
in the field and knew the stuff forward and backwards by then. I
hasten to add that it didn't cover a lot of the stuff now covered. It
had about two questions on any phase of Amateur Radio...Now I'd think
it would be impossible to get one question on every phase.

73

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

> 73 Mac N8TT

2034. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 08:21:00 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ui0tnvs33fr4ibm4kd9n6uej323l7477h3@4ax.com>
Source record: 107051

On Thu, 2 Oct 2003 23:40:31 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Nick C" <cnick6@qwest.net> wrote in message
>news:UG3fb.123$Ng1.47290@news.uswest.net...
>>> ....About that tree question though... that one threw me. I
>thought for sure,
>> if the tree was wet (which will be about 99% of the time from now on)...
>> would 'remove' the energy from any signal hitting the wire..? The
>reception
>> quality with aspect to it's wavelength makes sense, and I understand
>that...
>
>Nick,
>
>My 75 meter antenna goes through several tree branches. Never saw any change
>in SWR, wet or dry.

I have two 80 meter slopers. They are identical except for position.
The were even cut together and use identical (hopefully) baluns.

The tuning is quite different when I move away from resonance. One
runs through trees and the other is over an open yard.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Tam/WB2TT
>

2035. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 09:50:41 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blm55hjdd1@titan.btinternet.com>
Source record: 107052

> Can we make an oscillator circuit to radiate by simply connecting its
> output to a long wire ?

==========

Congratulations - you have just re-invented the radio transmitter! ;o)

2036. Re: EH antenna, FCC certification is arrived

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 13:47:19 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ccjtnv89br3k9ghrr6up66fd7bqkvl2d90@4ax.com>
Source record: 107040

On Mon, 29 Sep 2003 18:16:13 -0500, 'Doc <w5lz@cwis.net> wrote:

>
>
>Stefano,
> It isn't? Then why does it say it's a press
>release? And you are right, I didn't read ALL
>the documents. After going through most of them
>I had seen enough to know that my 'garden' wasn't
>large enough for ALL the documents.
> I'm sorry Stefano, until there is documented
>proof from a reliable source, presented in a
>straight forward manner, my credulity meter will
>stay stuck on 'B.S.'...
> 'Doc

Not sure which documents y'all are talking about, by my Sept. issue of RadCom arrived today, with a review of the Arno Elettronica EH antennas. Bottom line, the EH 20m. and 40m. antennas, transmitting to different stations, were received as .5 to 3 S-units down from the reference transmitting antenna, a G5RV.

EH sounds like a sorta okay antenna for those with limited space.

Bob
k5qwg

2037. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 14:01:24 UTC
From: Pappy127@usa.net
Message-ID: <3F7ED2B4.2F6256B5@usa.net>
Source record: 107053

That will be the day!!!!!!!!!!!!!!!!!!!!!!

"ï¿½K4OKAï¿½BIG**AL**" wrote:
>
> OF THIS GROUP.

2038. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 14:37:55 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <7XAfb.50587$Ms2.14819@fed1read03>
Source record: 107054

Why not call your VE and ask what is sent on the test.
Here in San Diego, a pre-test info sheet it available -- see URL:
http://ac6v.com/morseaids.htm#CWPASS

A snip from the San Diego pre-test info sheet

"You will want to know in what manner to study, note that in the example,
code characters are sent at 13 wpm, with the spacing adjusted for overall 5
wpm speed study accordingly is recommended. The VEC s in your particular
area can be found at URL: http://www.arrl.org/arrlvec/veclist.html
You will note that the sample QSO contains all of the alphabet letters,
numbers 1 thru 0, punctuation such as the period, comma, question mark,
slant bar, and the prosigns BT, AR, and SK. All of these are required by the
FCC to demonstrate your knowledge of the Morse Code."

End Snip

Note callsigns with "de" is in the sample message.

I don't think Q-Signals are sent in the test. At least the sample does not
have any.

It may vary in your area, so call your VEC
http://www.arrl.org/arrlvec/veclist.html

Good Luck
73 From the Spurious Noise ';';;';x":.,";"'

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20030930191741.10332.00000073@mb-m14.aol.com...
> Is this test open game? Basically, are all characters, q-codes, and
prosigns
> fair game on this test. I have studied relentlessly and know a majority
of
> them and can receive at 10wpm but everytime I look at a different book or
> website I find more stuff.
>
> Thanks for the input
>
> 73
> G. Doughty
> KI4BBL

2039. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 14:59:51 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <HfBfb.5722$Hd6.3824947@newssvr28.news.prodigy.com>
Source record: 107055

"Spurious Noise" <HDA@zilch.com> wrote in message
news:7XAfb.50587$Ms2.14819@fed1read03...
> Why not call your VE and ask what is sent on the test.
> Here in San Diego, a pre-test info sheet it available -- see URL:
> http://ac6v.com/morseaids.htm#CWPASS
>
> A snip from the San Diego pre-test info sheet
> ------------------------------------
> "You will want to know in what manner to study, note that in the example,
> code characters are sent at 13 wpm, with the spacing adjusted for overall
5
> wpm speed - study accordingly is recommended. The VEC's in your particular
> area can be found at URL: http://www.arrl.org/arrlvec/veclist.html
> You will note that the sample QSO contains all of the alphabet letters,
> numbers 1 thru 0, punctuation such as the period, comma, question mark,
> slant bar, and the prosigns BT, AR, and SK. All of these are required by
the
> FCC to demonstrate your knowledge of the Morse Code."
>
> --
>
> End Snip
>
> Note callsigns with "de" is in the sample message.
>
> I don't think Q-Signals are sent in the test. At least the sample does not
> have any.
>
> It may vary in your area, so call your VEC
> http://www.arrl.org/arrlvec/veclist.html
>
> Good Luck
> 73 From the Spurious Noise ';';;';x":.,";"'

From what I remember (and admittedly, it's been awhile), they may include
QTH in the simulated transmission since it is supposed to be representative
of an actual QSO but the question on the written might be phrased "What is
the location?" It's an easy way to include Q. However they will not ask
"What does QTH mean?"

Dee D. Flint, N8UZE

2040. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 15:02:43 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <niBfb.5723$Hd6.3825968@newssvr28.news.prodigy.com>
Source record: 107056

"Spurious Noise" <HDA@zilch.com> wrote in message
news:7XAfb.50587$Ms2.14819@fed1read03...
> Why not call your VE and ask what is sent on the test.
> Here in San Diego, a pre-test info sheet it available -- see URL:
> http://ac6v.com/morseaids.htm#CWPASS
>
> A snip from the San Diego pre-test info sheet
> ------------------------------------
> "You will want to know in what manner to study, note that in the example,
> code characters are sent at 13 wpm, with the spacing adjusted for overall
5
> wpm speed - study accordingly is recommended. The VEC's in your particular
> area can be found at URL: http://www.arrl.org/arrlvec/veclist.html
> You will note that the sample QSO contains all of the alphabet letters,
> numbers 1 thru 0, punctuation such as the period, comma, question mark,
> slant bar, and the prosigns BT, AR, and SK. All of these are required by
the
> FCC to demonstrate your knowledge of the Morse Code."
>
> --
>
> End Snip
>
> Note callsigns with "de" is in the sample message.
>
> I don't think Q-Signals are sent in the test. At least the sample does not
> have any.
>
> It may vary in your area, so call your VEC
> http://www.arrl.org/arrlvec/veclist.html
>
> Good Luck
> 73 From the Spurious Noise ';';;';x":.,";"'

Also since Q codes are sent as three separate letters with spaces between,
they count as just plain text and each letter is one character. This is
different from prosigns where the two letters are run together with no space
and thus make an extended character and are counted as if they were two
characters.

Dee D. Flint, N8UZE

2041. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 15:08:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ee471$1_1@corp.newsgroups.com>
Source record: 107057

Richard Clark wrote:
> I have already provided quotes, chapter and verse that refute your
> statement.

Here's a quote from Chipman. "These large reflection coefficients are an example of the phenomenon of 'resonant rise of voltage' in series resonant circuits... The large reflection coefficients are obtained only when the reactance of the load impedance is of opposite sign to the reactance component of the characteristic impedance." You posed a purely resistive Z0. The "resonant rise of voltage" cannot happen with a purely resistive Z0. Would you like to pose a complex Z0?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2042. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 15:12:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7ee543_1@corp.newsgroups.com>
Source record: 107058

Richard Clark wrote:
> I have presented quotes, chapter and verse from Chipman
> where he explicitly says as much, ...

And I have presented quotes, chapter and verse from Chipman,
that disprove your interpretations of what he said.
--
73, Cecil http://www.qsl.net/w5dxp

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2043. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 15:23:35 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blmolnji1@titan.btinternet.com>
Source record: 107059

>
> Reg, that can't possibly be you. Someone has hijacked your e-mail.
>
==========

Ian, it IS me! Please calm yourself.

Let me put what I said into somewhat different words.

SWR meters are designed to operate and provide indications of SWR, Rho, Fwd Power, Refl.Power, on the ASSUMPTION that the internal impedance of the transmitter is 50 ohms. It makes the same INCORRECT assumption as a lot of people do. This should not be surprising because it was people who designed it.

So SWR meters nearly always give FALSE indications about what actually exists.

Perfectionists may be upset at the repercussions of this alarming statement.

PS: In the whole of his excellent 236-page exceedingly comprehensive volume, Chipman, in 1969, makes not the slightest mention of SWR meters.

Reg, G4FGQ

2044. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 15:46:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7eed5b_1@corp.newsgroups.com>
Source record: 107060

Reg Edwards wrote:

> SWR meters are designed to operate and provide indications of SWR, Rho, Fwd
> Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
> transmitter is 50 ohms.

I believe that to be an incorrect statement, Reg. The assumption is that
a Z0 of 50 ohms exists and the transmission line is long enough to force
the ratio of V/I to be 50 ohms for the forward wave and the reflected wave.
The phase between the forward voltage and current is assumed to be zero.
The phase between the reflected voltage and current is assumed to be zero.
Given all those assumptions, the internal impedance of the transmitter is
irrelevant. I'm not saying all those assumptions are always met.

Put a 50 ohm dummy load on an SWR meter and feed it with a transmitter
of unknown source impedance. The SWR meter will always read 1:1 because
the dummy load forces the V/I ratio to be 50 no matter what the source
impedance. That's what the 50 ohm characteristic impedance of the
transmission is supposed to do to make the source impedance irrelevant.

> PS: In the whole of his excellent 236-page exceedingly comprehensive
> volume, Chipman, in 1969, makes not the slightest mention of SWR meters.

In 1969, virtually all ham transmitters had an adjustable pi-net output
so an SWR meter was not needed. When I started out as a ham in the 1950's,
just as many hams used 75 ohm coax as used 50 ohm coax, maybe more. The
pi-net output of a typical ham transmitter back then didn't care what the
Z0 was. I didn't own an SWR meter until the 1980's when I bought an IC-745.

In 1969, the "antenna tuner" was built into the transmitter. If wide-
range antenna tuners were built into transmitters today, there would be
little need for the SWR meter. I don't know of anyone who puts an SWR
meter between an SGC-230 and the antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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2045. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 17:12:55 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blmv2n$bn7$1@titan.btinternet.com>
Source record: 107061

```
--
>
> > SWR meters are designed to operate and provide indications of SWR, Rho,
Fwd
> > Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
> > transmitter is 50 ohms.
================================
> I believe that to be an incorrect statement, Reg. The assumption is that
> a Z0 of 50 ohms exists and the transmission line is long enough to force
> the ratio of V/I to be 50 ohms for the forward wave and the reflected
wave.

================================

But where have you hidden this remarkable transmission line which is long
enough to mug and hoodwink so-called SWR meters?

It does not exist!

Your argument falls flat at the start.

Reg, G4FGQ
```

2046. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 17:53:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f0b06_8@corp.newsgroups.com>
Source record: 107062

Reg Edwards wrote:

> But where have you hidden this remarkable transmission line which is long
> enough to mug and hoodwink so-called SWR meters?
>
> It does not exist!

Most resonant 50-ohm-coax-fed dipoles would meet those requirements.
All that is needed is for it to be long enough to force the forward
V/I ratio to Z0. Given the small diameter of a piece of coax compared
to a wavelength at HF, it doesn't seem that it take a very long length.
Waveguides may be a different story.
--
73, Cecil http://www.qsl.net/w5dxp

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2047. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:12:18 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <733unvk5n3tme0b1fjskji69b0bti5q5hg@4ax.com>
Source record: 107063

On Sat, 04 Oct 2003 10:46:41 -0500, Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
wrote:

>Reg Edwards wrote:
>
>> SWR meters are designed to operate and provide indications of SWR, Rho, Fwd
>> Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
>> transmitter is 50 ohms.
>
>I believe that to be an incorrect statement, Reg. The assumption is that
>a Z0 of 50 ohms exists and the transmission line is long enough to force
>the ratio of V/I to be 50 ohms for the forward wave and the reflected wave.
>The phase between the forward voltage and current is assumed to be zero.
>The phase between the reflected voltage and current is assumed to be zero.
>Given all those assumptions, the internal impedance of the transmitter is
>irrelevant. I'm not saying all those assumptions are always met.

Sorry, Cecil, the phase between reflected voltage and current is always 180
degrees, not zero. If it were not for this phenomenon the standing wave would
not be established as forward and reflected waves of both voltage and current
pass through each other otherwise undisturbed.

Walt, w2du

>Put a 50 ohm dummy load on an SWR meter and feed it with a transmitter
>of unknown source impedance. The SWR meter will always read 1:1 because
>the dummy load forces the V/I ratio to be 50 no matter what the source
>impedance. That's what the 50 ohm characteristic impedance of the
>transmission is supposed to do to make the source impedance irrelevant.
>
>> PS: In the whole of his excellent 236-page exceedingly comprehensive
>> volume, Chipman, in 1969, makes not the slightest mention of SWR meters.
>
>In 1969, virtually all ham transmitters had an adjustable pi-net output
>so an SWR meter was not needed. When I started out as a ham in the 1950's,
>just as many hams used 75 ohm coax as used 50 ohm coax, maybe more. The
>pi-net output of a typical ham transmitter back then didn't care what the
>Z0 was. I didn't own an SWR meter until the 1980's when I bought an IC-745.
>
>In 1969, the "antenna tuner" was built into the transmitter. If wide-
>range antenna tuners were built into transmitters today, there would be
>little need for the SWR meter. I don't know of anyone who puts an SWR
>meter between an SGC-230 and the antenna.

2048. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:18:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f110d$1_3@corp.newsgroups.com>
Source record: 107064

Walter Maxwell wrote:
> Sorry, Cecil, the phase between reflected voltage and current is always 180
> degrees, not zero.

Yep, I know better, I just mis-spoke. Did you know that there is no such convention for light? It's Kirchhoff's current convention that dictates a 180 degree phase between reflected voltage and reflected current. EM light doesn't follow Kirchhoff's convention.

For EM light, there is no phase shift in the reflection if the index of refraction is higher. If the index of refraction is lower, there is a 180 degree phase shift in both E and H fields.
--
73, Cecil http://www.qsl.net/w5dxp

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2049. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:23:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f1220_3@corp.newsgroups.com>
Source record: 107066

Reg Edwards wrote:
> But where have you hidden this remarkable transmission line which is long
> enough to mug and hoodwink so-called SWR meters?
>
> It does not exist! Your argument falls flat at the start.

I don't know the answer to this question but perhaps some lurker does.

On each side of my SWR meter, I have three feet of RG-400 coax. The
spacing between conductors must be about 0.1 inches. With a spacing
of 0.1 inch between conductors in the coax, what length of coax is
required to force a V/I ratio of 50 ohms? The ratio of 3 feet to 0.1
inches is 360. I suspect that three feet is plenty long enough.
--
73, Cecil http://www.qsl.net/w5dxp

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2050. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:26:37 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <5oacncxoFYN2jeKiU-KYvA@comcast.com>
Source record: 107065

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ktlsnvo8d990et2kb04ufco7ddtlm80b8e@4ax.com...
> >.....................................
> >Richard, how can you possibly believe that the output impedance of the
source
> >has any effect on the SWR on a transmission line?
>
> Stephen Adam of HP using Beatty describes it quite well. The data you
> have by email and has been posted here demonstrates it equally well.
> It takes no more than two resistors and a length of line to confirm or
> deny. My data confirms it, absolutely no one has offered negative
> evidence, simply denials.....................................
> 73's
> Richard Clark, KB7QHC

Richard,

Please humor me. If the source impedance has an effect on SWR, surely an
equation exists that spells that out. Perhaps you can divulge it for
everybody.

Tam/WB2TT

2051. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:52:38 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <FLOcnWM9oYCaiuKiXTWJkQ@comcast.com>
Source record: 107067

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:blmolnji1@titan.btinternet.com...
> >
> > Reg, that can't possibly be you. Someone has hijacked your e-mail.
> >
> ==========
>
> Ian, it IS me! Please calm yourself.
>
> Let me put what I said into somewhat different words.
>
> SWR meters are designed to operate and provide indications of SWR, Rho,
Fwd
> Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
> transmitter is 50 ohms. It makes the same INCORRECT assumption as a lot
of
> people do. This should not be surprising because it was people who
designed
> it.
>
> So SWR meters nearly always give FALSE indications about what actually
> exists.
>
> Perfectionists may be upset at the repercussions of this alarming
statement.
>
> PS: In the whole of his excellent 236-page exceedingly comprehensive
> volume, Chipman, in 1969, makes not the slightest mention of SWR meters.
> ----
> Reg, G4FGQ

Reg,
The SWR meter knows only by how much the load deviates from 50 Ohms.
Somebody has very cleverly interpreted this, and calculated how the meter
scale should be labeled. Actually, the SWR/Power meter has information that
is not displayed. For instance, for a 2:1 SWR it has the needed information
to differentiate between a 25 and 100 Ohm koad, but to display this
information would require adding extra parts

BTW, I did force the SWR meter to see a different source impedance. There
was no difference in SWR readings for either the 1:1 or 2:1 case.

2052. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 18:59:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mr5unvcmnefbfo7ak2r136uvb3cckj4lv6@4ax.com>
Source record: 107068

On Sat, 04 Oct 2003 10:08:40 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>Here's a quote from Chipman.
...
>Would you like to pose a complex Z0?

Hi Cecil,

What for? Random selections of quotation are hardly the basis for discussion. -Eh- let me take that back, it seems it's the ONLY basis for discussion.

I note, as posed before, that Ian who "might" hold a copy of Chipman has yet to respond to my points about its contents. My having offered chapter and verse, it would seem less than a monumental task to simply turn to the page and verify my selection, or refute Chipman's statements. Those who hold him dear seem the least likely to respond to his teachings.

73's
Richard Clark, KB7QHC

2053. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 19:11:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <666unvkubtfilk1f879pbjfuhhp0at7kv1@4ax.com>
Source record: 107069

On Sat, 4 Oct 2003 14:26:37 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>Richard,
>
>Please humor me. If the source impedance has an effect on SWR, surely an
>equation exists that spells that out. Perhaps you can divulge it for
>everybody.
>
>Tam/WB2TT
>

Hi Tam,

I could, but I won't. If you wish to be humored, email me as has
Walt. That venue is far more productive than me providing yet another
citation, its quote, its elaboration, its demonstration at the bench
with data, to only observe it won't "change my mind" sclerosis
mentality exhibited in this forum's sneer review.

I have offered several such matters direct to the point to have those
who could respond from actual verification by observing it in their
copy simply vanish from the debate. As I recall, you did exactly the
same thing with a Motorola application note about source Z that you
never confirmed or denied after introducing it as evidence against my
position.

As for humoring, I find that in the obvious logical disconnects and
exhibiting it here.

73's
Richard Clark, KB7QHC

2054. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 19:39:37 UTC
From: Herbert Khaury <Herbert@tiptoe.tp>
Message-ID: <RYedncvdrs5nvOKiU-KYuA@comcast.com>
Source record: 107070

Burn the witch!!

--

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:blm55hjdd1@titan.btinternet.com...
> > Can we make an oscillator circuit to radiate by simply connecting its
> > output to a long wire ?
>
> ============================
>
> Congratulations - you have just re-invented the radio transmitter! ;o)
>
>

2055. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 19:49:19 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bln87vsrf1@titan.btinternet.com>
Source record: 107071

> > SWR meters are designed to operate and provide indications of SWR, Rho,
> Fwd
> > Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
> > transmitter is 50 ohms. It makes the same INCORRECT assumption as a lot
> of
> > people do. This should not be surprising because it was people who
> designed
> > it.
> >
> > So SWR meters nearly always give FALSE indications about what actually
> > exists.
> >

> Reg,
>
> BTW, I did force the SWR meter to see a different source impedance. There
> was no difference in SWR readings for either the 1:1 or 2:1 case.
>

Tarmo,

And of course, as you and I know, on whatever line there is between the meter and transmitter, the swr is neither the indicated 1:1 nor 2:1 because the input impedance looking back towards the tranmitter is not the assumed 50 ohms. Both readings are false, even meaningless. There may in fact be no standing waves to measure.

To avoid confusing novices and budding engineers, retarding education, rename the meter the TLI (Transmitter Loading Indicator) which is what it really is.

Reg, G4FGQ

2056. Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 19:52:16 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <5vSdnQoUsftEuOKiU-KYuQ@ctc.net>
Source record: 107072

I picked up a used Hy-GAin TH3-MK3 and BN-86 balun used at a hamfest today with the paper work. It had only been in use a short time and looked new. I am a 30 year ham but most of my work has been weak signal on 144 and 432 mhz. This is my first beam for the DC bands. Most of my vhf/uhf beams are broad enough to cover the whole band without a tuner. I noticed the beam could be used with a home made coil of coax for a choke or the balun could be used. Nothing new sofar. Then the balun says not to use the the balun with a tuner because of high voltages causing arcing over. Still nothing new. I am planning on running the nominal 100 watt rig and maybe later getting an amp that will run about 600 watts out. I plan on mostly phone and the upper end of the cw portion of 20 meters for the digital modes. I am well awear of all the theory of baluns and chokes but what to people that have used the beam and choke/ balun have to say. Do I use the coax choke, use a ferrite current choke or the thing that HY-Gain supplies ? I don't really care if the patern is off to one side or some of the more common stories about radiating coax.

I can read theory all day but I would like to hear from people that have used or seen the beam in use.

2057. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 20:23:16 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <_8ydneVyvujfseKiU-KYuA@comcast.com>
Source record: 107073

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message > The tuning is quite different when I move away from resonance. One
> runs through trees and the other is over an open yard.
>
Roger,

Does the one that goes through trees change in SWR from day to day?

Tam/WB2TT

2058. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 20:43:03 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vnuc4pfddpvf9f@corp.supernews.com>
Source record: 107074

Dear Neighbor: I too took all of the tests, including commercial, at FCC Detroit. I too remember one fellow who failed the sending test. I also remember at least one question on transistors where none of the provided "answers" were correct! One just had to get into the mind of the person who wrote the exam and guess what that person was thinking.

I sure remember the pass requirement being 20 times 5 characters (100) correct in a row (with punctuation and numbers counting as two characters). The paper you wrote down the code on was collected immediately after the code stopped.

Perhaps others have a different recollection.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message news:ovvsnv4v7fodgcv97mnr115n471vip6l98@4ax.com...
> On Fri, 3 Oct 2003 22:25:04 -0400, "J. McLaughlin" <JCM@Power-Net.Net>
> wrote:
>
> >Dear Neighbor Roger:
> > It has been one minute of perfect copy (out of five) since at
least
> >the early 50s. That was the only receiving standard. One also had
to
> >demonstrate that one could send CW - you were allowed to bring your
own
> >key.
>
> Well, my memory ain't what it used to be and that was a long time
> back, but I'll swear it was a total of 2 minutes when I took the
> Novice, General, and Extra...but I do remember being able to bring
> your own key down to Detroit.
>
> Sending may sound simple, but trying to do so when really nervous was
> a true challenge. <LOL> I remember one guy at out session who failed
> on the transmitt...although it "seems like" they let him redo the
> sending test. which wasn't typical. It seems like I remember a couple
> of dropped keys too.
>
> I do remember that "for me" the Advanced was the easiest and took
> about 10 minutes. The Extra took about 15 to 20 minutes. BUT I worked

> in the field and knew the stuff forward and backwards by then. I
> hasten to add that it didn't cover a lot of the stuff now covered. It
> had about two questions on any phase of Amateur Radio...Now I'd think
> it would be impossible to get one question on every phase.
>
> 73
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

2059. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 21:04:16 UTC
From: ﾀK4OKAﾀBIG**AL** <ﾀKﾀﾀ4ﾀﾀOﾀﾀKﾀﾀAﾀ@OICU812.COM>
Message-ID: <vnudegktq8f5cb@corp.supernews.com>
Source record: 107075

<Pappy127@usa.net> wrote in message news:3F7ED2B4.2F6256B5@usa.net...
> That will be the day!!!!!!!!!!!!!!!!!!!!!!!!
>
> "ﾀK4OKAﾀBIG**AL**" wrote:
> >
> > OF THIS GROUP.

AND THAT DAY HAS ARRIVED.

2060. ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 21:07:31 UTC
From: ◆K4OKA◆BIG**AL** <◆K◆◆4◆◆O◆◆K◆◆A◆@OICU812.COM>
Message-ID: <vnudkke1d68u52@corp.supernews.com>
Source record: 107076

FROM THIS DAY FORWARD YOU WILL NEED TO ASK MY PERMISSION BEFORE POSTING A MESSAGE HERE. THOSE WHO DO NOT COMPLY WILL HAVE TO ANSWER TO ME DIRECTLY. SO BE GOOD LITTLE BOYS AND GIRLS AND SEE BIG AL BEFORE POSTING A MESSAGE. YOU MAY ALL RUN ALONG NOW.

2061. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 21:27:45 UTC
From: W6DKN <w6dkn-nospam-@qsl.net>
Message-ID: <3f7f3a44@news.qnet.com>
Source record: 107077

ï¿½K4OKAï¿½BIG**AL** wrote:

Absolutely nothing worthwhile.... so...

PLOINK!

2062. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 21:52:33 UTC
From: Dick <boleyd@yahoo.com>
Message-ID: <BiHfb.5403$qK1.4687025@news2.news.adelphia.net>
Source record: 107078

Another drunk on the loose. At least it is not on the highways!!

"W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
news:3f7f3a44@news.qnet.com...
> K4OKA BIG**AL** wrote:
>
> Absolutely nothing worthwhile.... so...
>
> PLOINK!
>
>
>

2063. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 22:01:43 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <brHfb.5406$qK1.4688264@news2.news.adelphia.net>
Source record: 107079

AL,

You can have it! When I first joined, it was a pretty good group, a good source of information. But, with assholes like you, and you bud's, hanging around, it's time to say good. Now AL, just think of the fun you will have playing with yourself while reading this message. You drove someone off the group.

Jim, KF4TUN

"�K4OKA�BIG**AL**" <�K��4��O��K��A�@OICU812.COM> wrote in message news:vnudkke1d68u52@corp.supernews.com...
> FROM THIS DAY FORWARD YOU WILL NEED TO ASK MY PERMISSION BEFORE POSTING A
> MESSAGE HERE. THOSE WHO DO NOT COMPLY WILL HAVE TO ANSWER TO ME DIRECTLY. SO
> BE GOOD LITTLE BOYS AND GIRLS AND SEE BIG AL BEFORE POSTING A MESSAGE. YOU
> MAY ALL RUN ALONG NOW.
>
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.522 / Virus Database: 320 - Release Date: 9/29/03

2064. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 22:31:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f4c3e_3@corp.newsgroups.com>
Source record: 107080

Richard Clark wrote:
> I note, as posed before, that Ian who "might" hold a copy of Chipman
> has yet to respond to my points about its contents.

I have ordered a copy. From what I have read of Chipman so far,
everything can be explained by achieving a conjugate match at
one point on the transmission line when the reactance looking
in either direction is at a maximum. This is simply a resonance
effect. Here's a bench experiment that might shed some light
on this problem.

source--50 ohm coax--(-j500)--SWR meter--(+j500)--50 ohm coax--50 ohm load

There is a localized high reactive energy exchange through the SWR meter
between the capacitance and the coil but nowhere else on the transmission
line. That has got to have an effect on the SWR reading which is probably
not good. What, exactly, is the big deal? It is just another distributed
circuit problem.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2065. Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-04 23:42:36 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0310041542.22d320a8@posting.google.com>
Source record: 107081

Ladder Line or Coax For Reception only?

I have a 500 foot SkyWire Loop Antenna, about 30 feet off the ground and I have it fed with Coax. I will only be using it to receive Shortwave broadcasts from 2Mhz to 30Mhz. It will never be used to transmit.

My questions are :

(1) Will using a Ladder Line instead of Coax improve my reception?

(2) If so, where do I change to coax? Or do I just run the Ladder line into the house and straight to the receiver?

(3) What about electrical interference since the ladder line isn't shielded?

Thanks.

2066. Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 00:10:25 UTC
From: Peter <peterlmiles@hotmail.com>
Message-ID: <3f7f6175$0$6523$afc38c87@news.optusnet.com.au>
Source record: 107083
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all.

This may seem like a fairly basic question. But here we go!

I want to performance test a 436MHz high gain antenna. My plan is to construct a simple dipole with a 1:1 balun for 436MHz as a reference antenna and construct another dipole with a 1:1 balun to receive the test signal, measure it with a diode detector and a milli-amp meter (field strength meter) at the shack. Do the calculation and have the antenna gain.
This seems to me to be fairly straight forward, but has anyone carried out similar measurements and concur with the approach or are there are there traps and pit falls that I need to be aware of. Or is their simply a better way?

Cheers

--
Peter Miles VK3YSF
Melbourne, Australia

2067. Re: Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 00:15:21 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <0OGcnW8Wj9k0_-KiXTWJhQ@comcast.com>
Source record: 107084

Ralph,

I used a BN86 with a Mosley TA33JR for about 25 years. A couple of years ago I got a new Hygain TH3MK4. At that time I replaced the balun with a generic 1:1 current balun. Either one will work just fine, although Hygain does not recommend the BN86 for high power use. What they do recommend costs an arm and a leg. The BN86 should be OK for anything less than 1KW.If you do buy a new balun, make sure it is meant to be used with a beam; that means it comes with a boom mounting bracket.

Have fun with the TH3. Great antenna.

Tam/WB2TT
"Ralph Mowery" <rmowery@ctc.net> wrote in message
news:5vSdnQoUsftEuOKiU-KYuQ@ctc.net...
> I picked up a used Hy-GAin TH3-MK3 and BN-86 balun used at a hamfest today

2068. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 01:00:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnunph8ljkkce5@corp.supernews.com>
Source record: 107082

Whenever you're dealing with current, you have to pay attention to the definition of positive direction. If you define the positive direction of forward current as being toward the load and of reflected current toward the source, then Vf is in phase with If and Vr is in phase with Ir. I suspect that a similar caution needs to be heeded when dealing with optics.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Walter Maxwell wrote:
>
>> Sorry, Cecil, the phase between reflected voltage and current is
>> always 180
>> degrees, not zero.
>
>
> Yep, I know better, I just mis-spoke. Did you know that there is no
> such convention for light? It's Kirchhoff's current convention that
> dictates a 180 degree phase between reflected voltage and reflected
> current. EM light doesn't follow Kirchhoff's convention.
>
> For EM light, there is no phase shift in the reflection if the index
> of refraction is higher. If the index of refraction is lower, there
> is a 180 degree phase shift in both E and H fields.

2069. Re: Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 02:26:16 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <asacnTDrfc7KH-KiXTWJkA@ctc.net>
Source record: 107085

>
> I used a BN86 with a Mosley TA33JR for about 25 years. A couple of years ago
> I got a new Hygain TH3MK4. At that time I replaced the balun with a generic
> 1:1 current balun. Either one will work just fine, although Hygain does not
> recommend the BN86 for high power use. What they do recommend costs an arm
> and a leg. The BN86 should be OK for anything less than 1KW.If you do buy a
> new balun, make sure it is meant to be used with a beam; that means it comes
> with a boom mounting bracket.
>

Thanks for the reply. I did get on the internet and found the mk4 book. It seems there is a setting about halfway between the phone and cw segments. I guess the mk3 could be set that way also. I think I am going to try that in about a year when I move and get a tower back up. I will probably use it for phone but would like to have it set for a reasonable swr on 20 meters down to about 14.07 for the digital modes. The other bands I don't really care about as I work mostly weak signals on 2 meters and above.

No more than I use the DC bands I am not sure why I got it but it looked almost new and was about half price..Last hamfest of the year for me and had some extra radio money :-)

73 de KU4PT

2070. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 02:31:24 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <yoSdnVhxr7iSGuKiU-KYvg@ctc.net>
Source record: 107086
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>
> This may seem like a fairly basic question. But here we go!
>
> I want to performance test a 436MHz high gain antenna. My plan is to
> construct a simple dipole with a 1:1 balun for 436MHz as a reference
antenna
> and construct another dipole with a 1:1 balun to receive the test signal,
> measure it with a diode detector and a milli-amp meter (field strength
> meter) at the shack. Do the calculation and have the antenna gain.
> This seems to me to be fairly straight forward, but has anyone carried out
> similar measurements and concur with the approach or are there are there
> traps and pit falls that I need to be aware of. Or is their simply a
better
> way?
>
You may want to use a small directional antenna on both ends. The ARRL
handbook gives a standard refferance gain antenna that you can use on the
end that you are going to replace with the antenna you are building. The
antenna is suspose to have a certain ammount of gain if constructed
exectally as given.
The directiona antennas will help eliminate some reflections. Also make
sure they are far enough apart to be out of the near field.

2071. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:00:15 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031004230015.15865.00000266@mb-m13.aol.com>
Source record: 107087

>You can have it! When I first joined, it was a pretty good group, a good
>source of information. But, with assholes like you, and you bud's, hanging
>around, it's time to say good. Now AL, just think of the fun you will have
>playing with yourself while reading this message. You drove someone off the
>group.
>
>Jim, KF4TUN

No need to leave the newsgroup. Just add people to your filters and the
newsgroups are actually fairly civil!
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

2072. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:01:20 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031004230120.15865.00000267@mb-m13.aol.com>
Source record: 107089

X-Complaints-To: abuse@supernews.com

I recommend everyone flood them with email.
=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

2073. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:03:01 UTC
From: **THE-RFI-EMI-GUY** <NoSpamBogus@NoSpamBogus.com>
Message-ID: <3F7F89E5.7040705@NoSpamBogus.com>
Source record: 107088
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

We just made a range dipole for 900 MHz. The balun we ordered from
Minicircuits (pay careful attention to pinouts) was a 1:1. It resonated
well once we took into account that the polyethelene mounting block
imparted a velocity factor which shortened the rods slightly.

Peter wrote:

>Hi all.
>
>This may seem like a fairly basic question. But here we go!
>
>I want to performance test a 436MHz high gain antenna. My plan is to
>construct a simple dipole with a 1:1 balun for 436MHz as a reference antenna
>and construct another dipole with a 1:1 balun to receive the test signal,
>measure it with a diode detector and a milli-amp meter (field strength
>meter) at the shack. Do the calculation and have the antenna gain.
>This seems to me to be fairly straight forward, but has anyone carried out
>similar measurements and concur with the approach or are there are there
>traps and pit falls that I need to be aware of. Or is their simply a better
>way?
>
>
>Cheers
>
>--
>Peter Miles VK3YSF
>Melbourne, Australia
>
>
>
>
>
>

--
Joe Leikhim K4SAT

"Jazz is not dead. It just smells funny." -F.Z.

2074. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:13:33 UTC
From: hrbcrb@aol.com.goaway
Message-ID: <20031004231333.07857.00000340@mb-m11.aol.com>
Source record: 107090

Peter

You are right on track, that is exactly how measurements are conducted on antenna ranges. Of course you will have to convert the linear voltage change from your dipole reference to what is measured from that 'high gain' antenna to dB's.

Enjoy, Hugh KF6HHS
Retired, now life moves at my pace.
please note spam filter

2075. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:24:00 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <263vnvk2a5h3olb3tmrltgc1u31pik3pjr@4ax.com>
Source record: 107091

On Sat, 04 Oct 2003 18:00:39 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>Whenever you're dealing with current, you have to pay attention to the
>definition of positive direction. If you define the positive direction
>of forward current as being toward the load and of reflected current
>toward the source, then Vf is in phase with If and Vr is in phase with
>Ir. I suspect that a similar caution needs to be heeded when dealing
>with optics.
>
>Roy Lewallen, W7EL

Well, Roy, if what you say above is true then why does the phase of reflected voltage change 180 degrees and reflected current does not change when the forward waves encounter a perfect short-circuit termination?

And on the other hand, why does the phase of reflected current change 180 degrees and reflected voltage does not change when the forward waves encounter a perfect open-circuit termination?

How then can the reflected voltage and current be other than 180 degrees regardless of the load?

If what you say is true then my explanation in Reflections concerning the establishment of the standing wave must be all wrong. Is this what you're saying?

Walt, W2DU

>Cecil Moore wrote:
>> Walter Maxwell wrote:
>>
>>> Sorry, Cecil, the phase between reflected voltage and current is
>>> always 180
>>> degrees, not zero.
>>
>>
>> Yep, I know better, I just mis-spoke. Did you know that there is no
>> such convention for light? It's Kirchhoff's current convention that
>> dictates a 180 degree phase between reflected voltage and reflected
>> current. EM light doesn't follow Kirchhoff's convention.
>>
>> For EM light, there is no phase shift in the reflection if the index
>> of refraction is higher. If the index of refraction is lower, there
>> is a 180 degree phase shift in both E and H fields.

2076. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 03:58:22 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <7j5vnv8stjn7uga0slodni77bvih7lphfg@4ax.com>
Source record: 107092

On Sat, 4 Oct 2003 17:07:31 -0400, "ï¿½K4OKAï¿½BIG**AL**"
<ï¿½Kï¿½ï¿½4ï¿½ï¿½Oï¿½ï¿½Kï¿½ï¿½Aï¿½@OICU812.COM> wrote:

>FROM THIS DAY FORWARD YOU WILL NEED TO ASK MY PERMISSION BEFORE POSTING A
>MESSAGE HERE. THOSE WHO DO NOT COMPLY WILL HAVE TO ANSWER TO ME DIRECTLY. SO
>BE GOOD LITTLE BOYS AND GIRLS AND SEE BIG AL BEFORE POSTING A MESSAGE. YOU
>MAY ALL RUN ALONG NOW.
>
>
Ok, dickless, here I am. I'm calling you out. You're just like every
other loudmouth, jerkoff asshole I've ever met - all mouth, no guts.
Have fun,

Russ

2077. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 04:07:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f9b05$1_6@corp.newsgroups.com>
Source record: 107093

Roy Lewallen wrote:
> Whenever you're dealing with current, you have to pay attention to the
> definition of positive direction. If you define the positive direction
> of forward current as being toward the load and of reflected current
> toward the source, then Vf is in phase with If and Vr is in phase with
> Ir. I suspect that a similar caution needs to be heeded when dealing
> with optics.

Optics doesn't have the luxury of only two directions so Kirchhoff's
conventions are meaningless for light. With light scattering in any
number of directions in 3D space, 3D optical engineers must be a little
more careful than 1D RF engineers. :-)

Obviously, light and RF waves obey the same physics but an RF transmission
line is essentially a one-dimensional environment with a plus and minus
direction. I assume fiber-optics is subject to that same simplification.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2078. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 04:23:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f7f9ec9$1_6@corp.newsgroups.com>
Source record: 107094

Walter Maxwell wrote:
> How then can the reflected voltage and current be other than 180 degrees
> regardless of the load?

Consider a transmission line driven by two identical sources which are
signal generators with circulators+loads designated by SGCL.

SGCL1----------50 ohm coax----------SGCL2

All the power sourced by SGCL1 is dissipated in SGCL2 and all the power
sourced by SGCL2 is dissipated in SGCL1. The system is perfectly
symmetrical. Will there be ordinary standing waves? Of course. The voltage
and current from SGCL1 are in phase. The voltage and current from SGCL2
are in phase. The only difference between the two currents is
Kirchhoff's convention. When the voltages are maximum at the same point,
they superpose to 2*V. When the two currents are maximum at the same point,
they superpose to zero because they are traveling in opposite directions.

We would say that SGCL2's voltage and current are 180 degrees out of
phase.

Someone looking at the experiment from the other side of the screen
would say that SGCL1's voltage and current are 180 degrees out of phase.

It is only a convention, one that doesn't exist for 3D light.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2079. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 06:34:37 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <6mevnv8kn4n0ev5ujhcajq3dboboe60b0i@4ax.com>
Source record: 107096

On Sat, 4 Oct 2003 16:23:16 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message > The tuning
>is quite different when I move away from resonance. One
>> runs through trees and the other is over an open yard.
>>
>Roger,
>
>Does the one that goes through trees change in SWR from day to day?

It doesn't appear to, but as I always have the tuner in line and do a
lot of band switching, I'd probably never notice. I can say that when
switching from one of the other bands the tuner settings can be set
very close by a chart. Nor do I remember having to retune with
changes in the weather.

One other thing to remember is that those trees are *wet* whether it's
raining or not as far as the antenna is concerned.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Tam/WB2TT
>

2080. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 07:27:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnveeubh824cc9@corp.supernews.com>
Source record: 107095

I'm not at all saying your explanation is wrong. I'm just pointing out the effect of defining the direction of current. You say that the phase of the reflected current changes 180 degrees. Another way to say the exactly the same thing is that the current doesn't change phase but reverses direction. The phase of the current depends on its direction, so is affected by how we define "positive" direction. The phase of voltage, on the other hand, isn't.

Consider a short circuit. At that point, Vr = -Vf. That, we know from the requirement that the total V, the sum of Vr and Vf, has to be zero. But how about the current? The magnitude of the reflected current equals the magnitude of the forward current. At the short, the current isn't zero -- it's twice If. Assuming that If is always defined as being positive toward the load, let's first define the positive direction of Ir as also being toward the load. Then the total current at any point is If + Ir. At the short, it's If + Ir = 2 * If, which says that Ir = If. You can say that the phase of the current hasn't changed as a result of the reflection. But if we define the positive direction of Ir as being toward the source, then the total current at any point on the line is If - Ir. At the short it's If - Ir = 2 * If, so Ir = -If. So the phase of Ir is 180 degrees relative to the phase of If. Of course, it's also traveling in the opposite direction, by definition. So you have your choice. You can say that the reflected current is flowing in the same direction as the forward current, and with the same phase. Or you can equally correctly say that the current has reversed both direction and phase due to the reflection. They're exactly equivalent, both give correct mathematical results, and are equally valid.

The same reasoning applied at an open circuit, where the total current is zero, shows that when Ir is defined as positive toward the load, the total current = If + Ir = 0 means Ir = -If. In other words, the reflected current, defined as being in the same direction as the forward current, has undergone a 180 degree phase shift. But if Ir is deemed positive toward the source, then the total current is If - Ir = 0, so we say that the reflected current has undergone a reversal of direction but no change in phase.

As long as we always calculate the total current by using Kirchoff's principle as If + Ir if Ir is positive toward the load, or If - Ir if it's positive toward the source, all results are valid.

Among the consequences of the two possible definitions of positive direction for Ir is that the current reflection coefficient Ir/If can be either equal to the voltage reflection coefficient, or its negative. And, as in earlier postings, one can conclude that Vr/Ir can equal

either Z0 or -Z0. Both depend on the definition of the positive
direction of Ir (assuming that If is consistently defined as positive
toward the load, which is a good assumption).

The need to be careful with the definition, and always making it clear,
is illustrated by the fact that of the first four fields/transmission
line texts I pulled off my shelf, two (Holt and Johnson) defined the
positive direction of If toward the load, and two (Johnk and Kraus)
toward the source. So you can't make an assumption that the definition
is even usually one way or the other.

Roy Lewallen, W7EL

Walter Maxwell wrote:
> On Sat, 04 Oct 2003 18:00:39 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>
>
>>Whenever you're dealing with current, you have to pay attention to the
>>definition of positive direction. If you define the positive direction
>>of forward current as being toward the load and of reflected current
>>toward the source, then Vf is in phase with If and Vr is in phase with
>>Ir. I suspect that a similar caution needs to be heeded when dealing
>>with optics.
>>
>>Roy Lewallen, W7EL
>
>
> Well, Roy, if what you say above is true then why does the phase of reflected
> voltage change 180 degrees and reflected current does not change when the
> forward waves encounter a perfect short-circuit termination?
>
> And on the other hand, why does the phase of reflected current change 180
> degrees and reflected voltage does not change when the forward waves encounter a
> perfect open-circuit termination?
>
> How then can the reflected voltage and current be other than 180 degrees
> regardless of the load?
>
> If what you say is true then my explanation in Reflections concerning the
> establishment of the standing wave must be all wrong. Is this what you're
> saying?
>
> Walt, W2DU
>
>
>>Cecil Moore wrote:
>>
>>>>Walter Maxwell wrote:
>>>
>>>
>>>>>Sorry, Cecil, the phase between reflected voltage and current is

>>>>always 180
>>>>degrees, not zero.
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>>>
>>>Yep, I know better, I just mis-spoke. Did you know that there is no
>>>such convention for light? It's Kirchhoff's current convention that
>>>dictates a 180 degree phase between reflected voltage and reflected
>>>current. EM light doesn't follow Kirchhoff's convention.
>>>
>>>For EM light, there is no phase shift in the reflection if the index
>>>of refraction is higher. If the index of refraction is lower, there
>>>is a 180 degree phase shift in both E and H fields.
>
>

2081. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 07:40:04 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <nDc5tHCUr8f$EwYu@b-howie.demon.co.uk>
Source record: 107098
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In message <3f7f6175$0$6523$afc38c87@news.optusnet.com.au>, Peter
<peterlmiles@hotmail.com> writes
>Hi all.
>
>This may seem like a fairly basic question. But here we go!
>
>I want to performance test a 436MHz high gain antenna. My plan is to
>construct a simple dipole with a 1:1 balun for 436MHz as a reference antenna
>and construct another dipole with a 1:1 balun to receive the test signal,
>measure it with a diode detector and a milli-amp meter (field strength
>meter) at the shack. Do the calculation and have the antenna gain.
>This seems to me to be fairly straight forward, but has anyone carried out
>similar measurements and concur with the approach or are there are there
>traps and pit falls that I need to be aware of. Or is their simply a better
>way?

I've done it on 1296MHz in a similar way. However I borrowed a
calibrated step attenuator and took the difference in readings between
the reference dipole and the antenna under test as the gain for the same
detector reading to avoid nonlinearities. You can also measure antenna
gain using sun noise on 70cm, but that's a bit trickier.

Brian GM4DIJ

--
Brian Howie

2082. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 07:44:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnvffcgsrubqdd@corp.supernews.com>
Source record: 107097
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

There are a lot of factors that can potentially affect measurements. The first and most obvious is impedance matching, which has to be done to extract the maximum possible power from the antennas (assuming that this is what you'll be doing when actually using the antenna) and delivering a known amount of power to each. Another is to make sure the feedlines aren't radiating or picking up signals, by using proper baluns, which you've mentioned. Move the feedlines around and change their lengths, making sure the results don't change. If they do, your baluns aren't adequate. If you want quantitative measurements, you'll have to carefully calibrate your signal strength meter at the power level involved. Don't make assumptions about its linearity. Better yet would be to carefully match the antennas to 50 ohms, then insert a step attenuator in series with the Yagi in the 50 ohm environment and increase the attenuation until it reads the same as the dipole. That way, the FS meter linearity is immaterial (although the attenuator accuracy is important). Then there's the possibility of signals radiated off the back of the dipole being reflected from near or distant objects which would affect the dipole's measured field strength more than it would the Yagi's. The different widths of the forward lobes can also cause unequal reflections. Although reflections can affect the forward gain up to several dB, their impact on nulls or front/back measurements is likely to be greater.

I'd do a couple of things. One is to build an NBS reference Yagi which is easy to construct and has a well known and documented gain. It's also easy to model. Modern modeling programs do very well with full size Yagis. Measure this on your range and verify that the measurements agree with its known properties. Another check would be to rotate the dipole and see if its pattern is what it should be. And rotate the NBS Yagi and verify that its pattern matches modeled results. Only after doing those tests would I have reasonable confidence in other measurements made with similar types of antennas.

Roy Lewallen, W7EL

Peter wrote:
> Hi all.
>
> This may seem like a fairly basic question. But here we go!
>
> I want to performance test a 436MHz high gain antenna. My plan is to
> construct a simple dipole with a 1:1 balun for 436MHz as a reference antenna
> and construct another dipole with a 1:1 balun to receive the test signal,
> measure it with a diode detector and a milli-amp meter (field strength

> meter) at the shack. Do the calculation and have the antenna gain.
> This seems to me to be fairly straight forward, but has anyone carried out
> similar measurements and concur with the approach or are there are there
> traps and pit falls that I need to be aware of. Or is their simply a better
> way?
>
>
> Cheers
>
> --
> Peter Miles VK3YSF
> Melbourne, Australia
>
>
>
>

2083. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 11:04:24 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <OUSfb.8691$La.4503@fed1read02>
Source record: 107101
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vnvffcgsrubqdd@corp.supernews.com...
> There are a lot of factors that can potentially affect measurements. The
> first and most obvious is impedance matching, which has to be done to
> extract the maximum possible power from the antennas (assuming that this
> is what you'll be doing when actually using the antenna) and delivering
> a known amount of power to each. Another is to make sure the feedlines
> aren't radiating or picking up signals, by using proper baluns, which
> you've mentioned. Move the feedlines around and change their lengths,
> making sure the results don't change. If they do, your baluns aren't
> adequate. If you want quantitative measurements, you'll have to
> carefully calibrate your signal strength meter at the power level
> involved. Don't make assumptions about its linearity. Better yet would
> be to carefully match the antennas to 50 ohms, then insert a step
> attenuator in series with the Yagi in the 50 ohm environment and
> increase the attenuation until it reads the same as the dipole. That
> way, the FS meter linearity is immaterial (although the attenuator
> accuracy is important). Then there's the possibility of signals radiated
> off the back of the dipole being reflected from near or distant objects
> which would affect the dipole's measured field strength more than it
> would the Yagi's. The different widths of the forward lobes can also
> cause unequal reflections. Although reflections can affect the forward
> gain up to several dB, their impact on nulls or front/back measurements
> is likely to be greater.
>
> I'd do a couple of things. One is to build an NBS reference Yagi which
> is easy to construct and has a well known and documented gain. It's also
> easy to model. Modern modeling programs do very well with full size
> Yagis. Measure this on your range and verify that the measurements agree
> with its known properties. Another check would be to rotate the dipole
> and see if its pattern is what it should be. And rotate the NBS Yagi and
> verify that its pattern matches modeled results. Only after doing those
> tests would I have reasonable confidence in other measurements made with
> similar types of antennas.
>
> Roy Lewallen, W7EL

I thought that NIST prefers a dipole antenna up to 1 GHz, and then a
waveguide-fed horn beyond that. I would think that a pyramidal horn would be
more predictable that a Yagi, and not unreasonably large, even for 400 MHz.
Plus, the construction is simpler, and the design is more robust over time
(i.e., it's easy to bend a Yagi element slightly, not enough to notice it,
but enough to shift performance).

Ed
WB6WSN

2084. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 11:08:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnvrdj9a7fvf69@corp.supernews.com>
Source record: 107099

The first thing you should consider is why it's important to you to achieve such a good impedance match. I'm all in favor of stimulating intellectual exercises, but that's all it is. It won't help your signal by any measurable amount.

And no, a dipole doesn't have a feedpoint impedance of 70 ohms. In free space, if it's very, very thin, resonant, and perfectly straight, it will have an impedance close to that. But you can't construct one in free space. Over ground, expect anything from about 50 to 100 ohms depending on height and diameter. And that's only at the single frequency at which it's resonant. QSY a few kHz, and there goes all your work down the drain. But have fun. It'll be educational. And if you're like so many others, you'll be *positive* that all the work made your signal get out better. Not because of low SWR though, but because of a phenomenon well known to medicine -- the placebo effect.

Roy Lewallen, W7EL

Tom Sedlack wrote:
> Thanks to all who have responded!
>
> I have ordered the Antenna Manual and will take a peak "to see what they
> know" ;-)
>
> As a vast majority of dipoles have been successfully fed with 50 ohm cable,
> I'm sure I'll do the same thing. I was looking at this more from the
> theoretical side in that it just seems to make sense to try and change the
> impedance. All I read states that the dipole will have a characteristic
> impedance of 70 ohms, the coax will have a characteristic impedance of 50
> ohms. The best possible VSWR is 1.5:1 which equates to about 14 dB return
> loss (this is the unit of measure I am most familiar with). 14 dB is good,
> but in my line of work, I usually see better then 25 dB (VSWR < 1.12:1).
> It's probably overkill on my part but the experimenter in me may give this a
> whirl.
>
> Tom
>
>
>
> "Tarmo Tammaru" <t-tammaru@home.com> wrote in message
> news:1P6dnYeM6IStKeGiXTWJkw@comcast.com...
>
>>Tom,
>>
>>There is a way of doing it, using two matching sections. It is described

>
> in
>
>>either the ARRL Handbook, or Antenna Manual. It takes a length of 50 Ohm
>>coax (NOT 1/4 wave) + a length of 75 Ohm coax (NOT 1/4 wave) to match to
>
> 50
>
>>Ohms. If I run across it, I will post it.
>>
>>Before you do all that, put up the antenna and feed it with 50 Ohm coax.
>>Measure the SWR. Often the dipole impedance is closer to 50 than 75 Ohms,
>>and it is not worth doing anything about it, especially an inverted V.
>>Certainly, don't do anything if your radio has a built in antenna tuner.
>>
>>Tam/WB2TT
>>"Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message
>>news:blhmdv$1bs$1@avnika.corp.mot.com...
>>
>>>I asked this before and was told that for relatively short runs (under
>
> 50
>
>>>ft), using 50 ohm coax to feed dipoles is fine.
>>>
>>>I keep coming back to this in my head because I model a dipole and I get
>
> a
>
>>>VSWR of 1.5 using 50 ohm feed and I get 1:1 if I model with 75 ohm feed.
>>>
>>>My plan for my little antenna farm is to have a run of 50 ohm coax to a
>>>remote antenna switch. Create a few dipoles and feed them with 75 ohm
>>
>>coax.
>>
>>>I saw an equation someplace that, I believe, gave the length of 75 ohm
>>
>>feed
>>
>>>required to transform the impedance to 50 ohms at a given frequency. I
>>
>>would
>>
>>>cut the cable to this length then connect to the 50 ohm antenna switch.
>>>
>>> 246 x Velocity Factor
>>>L = ----------------------------
>>> Freq
>>>

>>>
>>>Does all this make sense? Am I going overboard (a curse of trying to be
>
> a
>
>>>perfectionist)? I don't want to use a tuner because; 1 - I don't own
>
> one
>
>>>and 2 - they waste power (I want to try QRPish operation).
>>>
>>>Also, if the above is correct, would I still need to put a current choke
>>>(coil of coax) or would the "fact" that the feed and dipole are matched,
>>>there wouldn't be RF on the jacket?
>>>
>>>My head is starting to hurt........
>>>
>>>
>>>Tom
>>>
>
>
>
>

2085. Re: Yagi / Beam antenna theory question...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 11:15:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vnvrr352emjq70@corp.supernews.com>
Source record: 107100

The effect of a tree is hard to predict. If it's wet, and if it contacts your antenna at a high impedance point, then the tree will become part of the antenna. It's going to be a pretty lossy conductor, so chances are that it will rob the antenna of some signal by dissipating it. But I can see situations, though unlikely, where it could conceivably improve things.

Few of us can put up the ideal antenna, so they're all compromises of one kind or another. We just do the best we can under the circumstances. You have to weigh the nuisance of center feeding or other modifications against the possible benefits, and make your choices. But if you want to improve your reception, something is going to have to change.

Roy Lewallen, W7EL

Nick C wrote:
> Roy,
>
> Yes, thanks. That confirms most of what I already knew.
>
> About that tree question though... that one threw me. I thought for sure,
> if the tree was wet (which will be about 99% of the time from now on)...
> would 'remove' the energy from any signal hitting the wire..? The reception
> quality with aspect to it's wavelength makes sense, and I understand that.
>
> And yes, I have thought about using a dipole, but you clarified one point --
> that it's not multiband. Although there are a few vendors who sell these
> SWL type antennas. Most are end-fed, but there are a few that are
> center-fed. Center feeding would be a lot harder for me to set up -- a lot
> more coax cable to run to my rig!
>
> PS. My coax is actually pretty horizontal. I have to fling it over some
> other objects, so it actually stays about 90% horizontal. My
> computers/tv/video don't seem to affect it too much with coax. My old set
> up -- with just plain incoming wire... was really bad with QRM -- as
> expected.
>
>
> Thanks
> -Nick
> n7zya

2086. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 11:35:57 UTC
From: ◆K4OKA◆BIG**AL** <◆K◆◆4◆◆O◆◆K◆◆A◆@OICU812.COM>
Message-ID: <vo00gtkju3u242@corp.supernews.com>
Source record: 107102

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031004230120.15865.00000267@mb-m13.aol.com...
> X-Complaints-To: abuse@supernews.com
>
> I recommend everyone flood them with email.
> =-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

YES THAT WOULD BE JUST THE THING TO DO.

THEN MAYBE , JUST MAYBE THE EMAIL ADDRESS vhfradiobuff@aol.com WOULD SHOW UP
ON DOZENS OF SPAM LIST.

SO SWEETHEART GO FOR IT......

2087. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 12:12:00 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <lbydnRT0YJfekh2iU-KYvg@ctc.net>
Source record: 107104

>
> And no, a dipole doesn't have a feedpoint impedance of 70 ohms. In free
> space, if it's very, very thin, resonant, and perfectly straight, it
> will have an impedance close to that. But you can't construct one in
> free space. Over ground, expect anything from about 50 to 100 ohms
> depending on height and diameter. And that's only at the single
> frequency at which it's resonant. QSY a few kHz, and there goes all your

YOu are correct on the impedance of a real dipole. My 80 meter dipole is up about 30 feet on each end but sags to about 20 feet in the middle. It is almost 1:1 at the frequency I cut it for . That makes it closer to 50 ohms than it is to 70 ohms.

2088. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 12:15:10 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20031005081510.28427.00000306@mb-m12.aol.com>
Source record: 107103

Ok, well, blew the test! I got a case of the nerves. I didn't know it well enough. I think that if you really know the code then it can naturally be copied faster than 5wpm. I need to be at the point where I here the transmission and it is the letter.

I'll try again soon. Thanks for all the help.

73
G. Doughty
KI4BBL

2089. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 12:31:06 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <eaUfb.5812$Hd6.4016824@newssvr28.news.prodigy.com>
Source record: 107105

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20031005081510.28427.00000306@mb-m12.aol.com...
> Ok, well, blew the test! I got a case of the nerves. I didn't know it
well
> enough. I think that if you really know the code then it can naturally be
> copied faster than 5wpm. I need to be at the point where I here the
> transmission and it is the letter.
>
> I'll try again soon. Thanks for all the help.
>
>
> 73
> G. Doughty
> KI4BBL

Keep at it and you'll get it. We've all been there. Someday you'll look
back and it will be amazing how slow 5wpm seems.

Dee D. Flint, N8UZE

2090. Re: what is the kind of antenna with this pic, can u point me to site that explain the antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 12:44:46 UTC
From: CyBorg 0091 <non@no.na>
Message-ID: <3f80123e@news.comindico.com.au>
Source record: 107106
Cross-posted to: alt.energy.homepower,alt.energy.renewable,alt.solar.photovoltaic,alt.solar.thermal,aus.computers.linux,aus.electronics,comp.arch.embedded,rec.radio.amateur.antenna

It looks Microwavish.

Look for microwave transmitters or relays or recivers,one or the other.
Looks like something off a relay station if you ask me.

alt.solar.themal....lol

"Mylinux" <myLinux@My.com> wrote in message
news:blp166$2gq12@imsp212.netvigator.com...
> please!
>
> I may be a little cross -posting I need more people to teach me about
> antenna.
>
>
>

2091. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 13:57:01 UTC
From: Pappy127@usa.net
Message-ID: <3F80232D.9542780B@usa.net>
Source record: 107108

John, at your age your should know better, stop acting like some big mouth teenager.

Sit back and enjoy the beauty of the Hickory NC area. I've been there and truly enjoyed my time.

While traveling back and forth on I-77, I had talked to you on 2 meters. I remember the call.

Have a wonderful day. I will talk to you the first weekend in November when I stop at Cornelius NC to visit my daughter. I don't remember the repeater but it's good half way to Columbia SC.

"ï¿½K4OKAï¿½BIG**AL**" wrote:
>
> <Pappy127@usa.net> wrote in message news:3F7ED2B4.2F6256B5@usa.net...
> > That will be the day!!!!!!!!!!!!!!!!!!!!
> >
> > "ï¿½K4OKAï¿½BIG**AL**" wrote:
> > >
> > > OF THIS GROUP.
>
> AND THAT DAY HAS ARRIVED.

2092. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 14:03:41 UTC
From: Pappy127@usa.net
Message-ID: <3F8024BD.B0F69CC6@usa.net>
Source record: 107109

Russ wrote:
>
> On Sat, 4 Oct 2003 17:07:31 -0400, "ï¿½K4OKAï¿½BIG**AL**"
> <ï¿½Kï¿½ï¿½4ï¿½ï¿½Oï¿½ï¿½Kï¿½ï¿½Aï¿½@OICU812.COM> wrote:
>
> >FROM THIS DAY FORWARD YOU WILL NEED TO ASK MY PERMISSION BEFORE POSTING A
> >MESSAGE HERE. THOSE WHO DO NOT COMPLY WILL HAVE TO ANSWER TO ME DIRECTLY. SO
> >BE GOOD LITTLE BOYS AND GIRLS AND SEE BIG AL BEFORE POSTING A MESSAGE. YOU
> >MAY ALL RUN ALONG NOW.
> >
> >
> Ok, dickless, here I am. I'm calling you out. You're just like every
> other loudmouth, jerkoff asshole I've ever met - all mouth, no guts.
> Have fun,
>
> Russ

Russ, you get no awards for kicking an old mans ass. This guy was born in 1923. He's going through that super senior citizen time when they believe they know it all, own it all.

You guys in "4" land should have a "nice" talk with JOHN, face to face.

2093. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 14:06:36 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Zs-dnbyiK-nmuB2iXTWJig@comcast.com>
Source record: 107107
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Mike,

Here is something to watch out for. I tried to measure the pattern for a 432 antenna. I had coax going from the shack to the transmit antenna, and another coax going to the receive antenna. I measured complete garbage for the pattern, until I realized that the receive antenna was picking up a signal any time it was aimed at the transmitter COAX. I fixed the problem by moving the signal source to be collocated with the transmit antenna.

One way to get accurate gain readings is to use the receive S meter and a calibrated attenuator. For instance, if with the reference antenna you need 15db of attenuation to get an S9 reading, and with the target antenna you need 27 db of attenuation to get S9, the gain of the target antenna is 27 - 15 = 12 db. Some S meters are more accurate for low signals; so, you might want to use something like S3 for a reference.

Tam/WB2TT
"Peter" <peterlmiles@hotmail.com> wrote in message
news:3f7f6175$0$6523$afc38c87@news.optusnet.com.au...
> Hi all.
>
> This may seem like a fairly basic question. But here we go!
>
> I want to performance test a 436MHz high gain antenna. My plan is to
> construct a simple dipole with a 1:1 balun for 436MHz as a reference
antenna
> and construct another dipole with a 1:1 balun to receive the test signal,
> measure it with a diode detector and a milli-amp meter (field strength
> meter) at the shack. Do the calculation and have the antenna gain.
> This seems to me to be fairly straight forward, but has anyone carried out
> similar measurements and concur with the approach or are there are there
> traps and pit falls that I need to be aware of. Or is their simply a
better
> way?
>
>
> Cheers
>
> --
> Peter Miles VK3YSF
> Melbourne, Australia
>
>
>

>

2094. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 14:26:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f802c2c_3@corp.newsgroups.com>
Source record: 107110

Roy Lewallen wrote:
> I'm not at all saying your explanation is wrong. I'm just pointing out
> the effect of defining the direction of current. You say that the phase
> of the reflected current changes 180 degrees. Another way to say the
> exactly the same thing is that the current doesn't change phase but
> reverses direction. The phase of the current depends on its direction,
> so is affected by how we define "positive" direction. The phase of
> voltage, on the other hand, isn't.

It might be easier to visualize using E & H fields and the right hand
rule. Point your thumb in the direction of wave travel (North). The orthogonal
index finger (up) represents the E-field and the orthogonal middle finger (East)
represents the H-field. Then turn the thumb in the opposite direction (South)
while keeping the index finger (E-field) pointed in the same direction (up).
The middle finger (H-field) will reverse direction by 180 degrees (West) but the
orthogonal relationships between the direction of travel and the fields are
still identical. Just another way of visualizing what you said above.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2095. Re: Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 14:38:25 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <6aWdnUfty4NosR2iU-KYvA@comcast.com>
Source record: 107111

"Ralph Mowery" <rmowery@ctc.net> wrote in message
news:asacnTDrfc7KH-KiXTWJkA@ctc.net...
> Thanks for the reply. I did get on the internet and found the mk4 book.
It
> seems there is a setting about halfway between the phone and cw segments.
I
> guess the mk3 could be set that way also. I think I am going to try that
in
> about a year when I move and get a tower back up. > 73 de KU4PT

Ralph,
I think I have mine set on the compromise setting. I measured the SWR with
an MFJ269 at the base of the tower. Feedline is about 50 feet of RG8FOAM. I
get

14.07 MHz SWR=1.5
14.175 1.1
14.225 1.2
14.300 1.7
14.350 2.6
Virtually all of my operation is between 14.175 and 14.250.

Tam/WB2TT

2096. Re: element 1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 14:51:25 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <NdWfb.53912$Ms2.40201@fed1read03>
Source record: 107112

Has happened to many of us -- persevere.

Hope you are studying Farnsworth -- characters are sent at 13 wpm and
spacing is 5 wpm.
This tends to have you hear the character and not count dits and dahs.
Did they send Farnsworth on the test you took ??

Successful formula is FOR MANY -- studying EVERY day for 15 to 30 minutes is
successful. Leaving long periods between study sessions is usually
counter-productive. Studying for long periods at a session - frazzles many a
brain.
One long time code instructor advises; "Most people's problems with the code
stem from trying to learn it too fast without sufficient drilling before
they move on to each new letter. The average person needs about 30 hours of
study and practice on the code to hit 5 wpm. Now this is an average. Some
will take longer and some will take less." So a half hour in the morning, a
half hour in the evening and in a month -- you should have it."

Another advises: Whatever method you use, try to *hear* the code directly as
a letter. IOW, don't try to translate the sound into dot-dash and translate
that into A, just hear the dot-dash and think A. Easier said than done, but
when you master it your receiving speed will increase dramatically."

--
73 From the Spurious Noise ';';;';x":.,";"'

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message
news:20031005081510.28427.00000306@mb-m12.aol.com...
> Ok, well, blew the test! I got a case of the nerves. I didn't know it
well
> enough. I think that if you really know the code then it can naturally be
> copied faster than 5wpm. I need to be at the point where I here the
> transmission and it is the letter.
>
> I'll try again soon. Thanks for all the help.
>
>
> 73
> G. Doughty
> KI4BBL

2097. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 15:13:30 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <j1d0ovo8fd29onifubkpmvtotvd8lgppus@4ax.com>
Source record: 107113

On Sun, 05 Oct 2003 10:03:41 -0400, Pappy127@usa.net wrote:

>
>
>Russ wrote:
>>
>> On Sat, 4 Oct 2003 17:07:31 -0400, "ï¿½K4OKAï¿½BIG**AL**"
>> <ï¿½Kï¿½ï¿½4ï¿½ï¿½Oï¿½ï¿½Kï¿½ï¿½Aï¿½@OICU812.COM> wrote:
>>
>> >FROM THIS DAY FORWARD YOU WILL NEED TO ASK MY PERMISSION BEFORE POSTING A
>> >MESSAGE HERE. THOSE WHO DO NOT COMPLY WILL HAVE TO ANSWER TO ME DIRECTLY. SO
>> >BE GOOD LITTLE BOYS AND GIRLS AND SEE BIG AL BEFORE POSTING A MESSAGE. YOU
>> >MAY ALL RUN ALONG NOW.
>> >
>> >
>> Ok, dickless, here I am. I'm calling you out. You're just like every
>> other loudmouth, jerkoff asshole I've ever met - all mouth, no guts.
>> Have fun,
>>
>> Russ
>
>Russ, you get no awards for kicking an old mans ass. This guy was born
>in 1923. He's going through that super senior citizen time when they
>believe they know it all, own it all.
>
>You guys in "4" land should have a "nice" talk with JOHN, face to face.

Oh, I don't want an award for kicking an old man's ass. I'm only
interested in letting whatever it is that some of us aren't prone to
being bullied or suffering fools gladly. If he's that old, I'll let
my Pop do the dirty work. He'll have him standing tall and paying
close attention on the double.

Russ

2098. APE touted as Pope's successor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 15:24:34 UTC
From: "## BIG ## AL ###"
Message-ID: <vo0dtismd4gqe1@corp.supernews.com>
Source record: 107114
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy
Body handling: Inline uuencoded payload not displayed: advertisement.gif

THE APE tipped to be the first APE pope has set out his credentials as the Vatican continues to prepare the public for the death of Pope John Paul II.

Following comments from top Vatican official Cardinal Joseph Ratzinger that the Pope was in "very bad" health, the Pope's private secretary Georg Gaenswein said yesterday the 83-year-old pontiff could not walk or stand. "He is a hero for the faithful," Mr Gaenswein said. "The fact he doesn't give up despite his illness makes him even more credible ... When he is no longer allowed to travel, then dear God will come for him."

Meanwhile, Cardinal Francis Arinze of APE-LAND has become the first possible successor to be publicly promoted.

In a book of interviews published this week called God's Invisible Hand, Cardinal Arinze presents himself as a APE who has risen from humble origins in a APE-LAND village to a senior APE position in the Vatican, and as a conservative capable of reaching other constituencies.

Cardinals do not publicly campaign for advancement, yet an Arinze bandwagon is beginning to roll. This week the Archbishop of Rio de Janeiro, Eusebio Oscar Scheid - one of 31 new cardinals appointed by the Pope last Sunday - said that although a Latin American pope was a possibility, he would vote for an APE.

His views were echoed by Claudio Hummes, the Archbishop of Sao Paulo. Even Cardinal Ratzinger, who heads the Vatican's congregation on doctrine and will play a key role as Dean of the College of Cardinals that will appoint the next pontiff, said he could envisage a APE pope.

Cardinal Arinze, 70, is Africa's only possible APE candidate. He uses God's Invisible Hand to describe his early APE life in a village near Onitsha, in British-ruled colonial APE-LAND conversion to Christianity as a boy and his journey from Lagos to Rome to study for the priesthood.

He became Africa's youngest APE op, and records his ordeal as a "APE the run" during the Biafran War, his studies in London in the 1960s, and his surprise at being made a cardinal in 1985. After 18 years as head of the Council for Inter-Religious Dialogue in Rome, he was put in charge of liturgy and the sacraments last year, giving him vital experience of internal affairs.

He suggests Christianity can learn from other faiths, and calls for greater tolerance and free discussion within the Catholic church.

Speculation about the Pope's successor will increase this month when cardinals from all over the world converge on Rome for a "pre-conclave" marking the Pope's 25th anniversary in office.

[Inline uuencoded payload not displayed: advertisement.gif]

2099. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 16:25:26 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031005122526.13649.00000288@mb-m22.aol.com>
Source record: 107115

>THEN MAYBE , JUST MAYBE THE EMAIL ADDRESS vhfradiobuff@aol.com WOULD SHOW UP
>ON DOZENS OF SPAM LIST.
>
>SO SWEETHEART GO FOR IT......

AOL 9.0 has very nice spam filters. Hardly get any these days. You've already
been reported to your ISP as I hope others have done. Now to add you to my kill
file and all will be right with the world again.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

2100. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 16:53:28 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vo0j56kgug238f@corp.supernews.com>
Source record: 107116

I'd use coax since it's easier to handle but ladder line will have less loss
but you won't be able to detect it. Twist the ladder line about a turn per
foot and any leadin pick up will be cancelled.
regards
hank wd5jfr
"Walter" <junkmail@altonillinois.com> wrote in message
news:70729ae5.0310041542.22d320a8@posting.google.com...
> Ladder Line or Coax For Reception only?
>
>
> I have a 500 foot SkyWire Loop Antenna, about 30 feet off the ground
> and I have it fed with Coax. I will only be using it to receive
> Shortwave broadcasts from 2Mhz to 30Mhz. It will never be used to
> transmit.
>
>
> My questions are :
>
> (1) Will using a Ladder Line instead of Coax improve my reception?
>
> (2) If so, where do I change to coax? Or do I just run the Ladder line
> into the house and straight to the receiver?
>
> (3) What about electrical interference since the ladder line isn't
> shielded?
>
>
> Thanks.

2101. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 17:08:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dlj0ov0asrb9n5jn2oujc8tpub5vmn5l2v@4ax.com>
Source record: 107117

On 4 Oct 2003 16:42:36 -0700, junkmail@altonillinois.com (Walter)
wrote:

>Ladder Line or Coax For Reception only?
>
>
>I have a 500 foot SkyWire Loop Antenna, about 30 feet off the ground
>and I have it fed with Coax. I will only be using it to receive
>Shortwave broadcasts from 2Mhz to 30Mhz. It will never be used to
>transmit.
>
>
>My questions are :
>
>(1) Will using a Ladder Line instead of Coax improve my reception?

Unlikely.

>(2) If so, where do I change to coax? Or do I just run the Ladder line
>into the house and straight to the receiver?

This begs the question, does the receiver demand (match to) ladder
line?

>(3) What about electrical interference since the ladder line isn't
>shielded?

Hi Walter,

The last question raises the issue most closely associated with
positive achievement. Use coax with a 1:1 current BalUn at the
antenna feed point (or use the traditional air wound choke - same
thing but heavier/cheaper) and home noise (from any of many sources)
will be reduced IFF you suffer from this problem in the first place.
A modest home-built tuner will also go further to meeting positive
returns.

73's
Richard Clark, KB7QHC

2102. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 19:39:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo0pamh7eqls2b@corp.supernews.com>
Source record: 107118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Perhaps. If I were going to measure a Yagi against a dipole, I'd first try measuring a Yagi with known gain against a dipole. You might prefer to measure a dipole relative to a dipole. I can't see what you'd learn from it, but each to his own.

Roy Lewallen, W7EL

Ed Price wrote:
>
> I thought that NIST prefers a dipole antenna up to 1 GHz, and then a
> waveguide-fed horn beyond that. I would think that a pyramidal horn would be
> more predictable that a Yagi, and not unreasonably large, even for 400 MHz.
> Plus, the construction is simpler, and the design is more robust over time
> (i.e., it's easy to bend a Yagi element slightly, not enough to notice it,
> but enough to shift performance).
>
> Ed
> WB6WSN
>
>

2103. Trap end caps

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 19:40:39 UTC
From: Scott Livingston <bscout@charter.net>
Message-ID: <vo0snmmnncpde4@corp.supernews.com>
Source record: 106969

It's past time for me to replace the trap end caps on my Cushcraft A3S antenna..The ones that came on the antenna seem awfully thin and flimsy and before ordering replacements from the mfg, I wonder if there is there a better replacement out there? What do you guys use? Thanks in advance.
Scott

2104. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 20:06:46 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <o1s0ov03kl5ba1a4vpoanllqe70k865evs@4ax.com>
Source record: 106970

On Sun, 05 Oct 2003 00:27:28 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>I'm not at all saying your explanation is wrong. I'm just pointing out
>the effect of defining the direction of current. You say that the phase
>of the reflected current changes 180 degrees. Another way to say the
>exactly the same thing is that the current doesn't change phase but
>reverses direction. The phase of the current depends on its direction,
>so is affected by how we define "positive" direction. The phase of
>voltage, on the other hand, isn't.
>
>Consider a short circuit. At that point, Vr = -Vf. That, we know from
>the requirement that the total V, the sum of Vr and Vf, has to be zero.
>But how about the current? The magnitude of the reflected current equals
>the magnitude of the forward current. At the short, the current isn't
>zero -- it's twice If. Assuming that If is always defined as being
>positive toward the load, let's first define the positive direction of
>Ir as also being toward the load. Then the total current at any point is
>If + Ir. At the short, it's If + Ir = 2 * If, which says that Ir = If.
>You can say that the phase of the current hasn't changed as a result of
>the reflection. But if we define the positive direction of Ir as being
>toward the source, then the total current at any point on the line is If
>- Ir. At the short it's If - Ir = 2 * If, so Ir = -If. So the phase of
>Ir is 180 degrees relative to the phase of If. Of course, it's also
>traveling in the opposite direction, by definition. So you have your
>choice. You can say that the reflected current is flowing in the same
>direction as the forward current, and with the same phase. Or you can
>equally correctly say that the current has reversed both direction and
>phase due to the reflection. They're exactly equivalent, both give
>correct mathematical results, and are equally valid.
>
>The same reasoning applied at an open circuit, where the total current
>is zero, shows that when Ir is defined as positive toward the load, the
>total current = If + Ir = 0 means Ir = -If. In other words, the
>reflected current, defined as being in the same direction as the forward
>current, has undergone a 180 degree phase shift. But if Ir is deemed
>positive toward the source, then the total current is If - Ir = 0, so we
>say that the reflected current has undergone a reversal of direction but
>no change in phase.
>
>As long as we always calculate the total current by using Kirchoff's
>principle as If + Ir if Ir is positive toward the load, or If - Ir if
>it's positive toward the source, all results are valid.
>
>Among the consequences of the two possible definitions of positive

>direction for Ir is that the current reflection coefficient Ir/If can be
>either equal to the voltage reflection coefficient, or its negative.
>And, as in earlier postings, one can conclude that Vr/Ir can equal
>either Z0 or -Z0. Both depend on the definition of the positive
>direction of Ir (assuming that If is consistently defined as positive
>toward the load, which is a good assumption).
>
>The need to be careful with the definition, and always making it clear,
>is illustrated by the fact that of the first four fields/transmission
>line texts I pulled off my shelf, two (Holt and Johnson) defined the
>positive direction of If toward the load, and two (Johnk and Kraus)
>toward the source. So you can't make an assumption that the definition
>is even usually one way or the other.

Thanks, Roy, for the lucid explanation. I had not previously thought of the interplay between direction and polarity, as you have so clearly pointed out. I have always considered a minus rho for current when rho is positive for voltage, bu I didn'[t carry the thought through far enough.

Walt, W2DU

>Roy Lewallen, W7EL
>
>Walter Maxwell wrote:
>> On Sat, 04 Oct 2003 18:00:39 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>>
>>
>>>Whenever you're dealing with current, you have to pay attention to the
>>>definition of positive direction. If you define the positive direction
>>>of forward current as being toward the load and of reflected current
>>>toward the source, then Vf is in phase with If and Vr is in phase with
>>>Ir. I suspect that a similar caution needs to be heeded when dealing
>>>with optics.
>>>
>>>Roy Lewallen, W7EL
>>
>>
>> Well, Roy, if what you say above is true then why does the phase of reflected
>> voltage change 180 degrees and reflected current does not change when the
>> forward waves encounter a perfect short-circuit termination?
>>
>> And on the other hand, why does the phase of reflected current change 180
>> degrees and reflected voltage does not change when the forward waves encounter a
>> perfect open-circuit termination?
>>
>> How then can the reflected voltage and current be other than 180 degrees
>> regardless of the load?
>>
>> If what you say is true then my explanation in Reflections concerning the
>> establishment of the standing wave must be all wrong. Is this what you're
>> saying?

>>
>> Walt, W2DU
>>
>>
>>>Cecil Moore wrote:
>>>
>>>>Walter Maxwell wrote:
>>>>
>>>>
>>>>>Sorry, Cecil, the phase between reflected voltage and current is
>>>>>always 180
>>>>>degrees, not zero.
>>>>
>>>>
>>>>Yep, I know better, I just mis-spoke. Did you know that there is no
>>>>such convention for light? It's Kirchhoff's current convention that
>>>>dictates a 180 degree phase between reflected voltage and reflected
>>>>current. EM light doesn't follow Kirchhoff's convention.
>>>>
>>>>For EM light, there is no phase shift in the reflection if the index
>>>>of refraction is higher. If the index of refraction is lower, there
>>>>is a 180 degree phase shift in both E and H fields.
>>
>>

2105. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 20:39:38 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <blpvi5$en98e$1@ID-175933.news.uni-berlin.de>
Source record: 106971
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vnvffcgsrubqdd@corp.supernews.com...
> There are a lot of factors that can potentially affect measurements.
(etc)

Range measurement of absolute antenna patterns and gains at VHF and above is tricky business due to reflections and other factors. For a bit of calibration, the FCC does not require measurement of the absolute gain of _ANY_ television or FM broadcast antenna, whether required by them to be directional, or not.

For broadcast purposes, the gain of an antenna for a given azimuth and elevation is the product of its normalized azimuth, and calculated elevation gains. See the slide presentation at http://rfry.org for more detail.

R. Fry

2106. Re: what is the kind of antenna with this pic, can u point me to si...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 20:44:12 UTC
From: richardharrison@webtv.net
Message-ID: <9161-3F80829C-253@storefull-2317.public.lawson.webtv.net>
Source record: 106973

Mylinux wrote:
"Please."

The antenna pictured is a "grid dish" of the type practical below about 3 GHz. Its advantage is reduced wind loading.

Above about 3 GHz, the spacing between grid elements becomes so small that advantage of the grid over a solid sheet of metal becomes impractical.

Polarization of the reflector is in the direction of the length of its elements. Polarization of the driven antenna element must agree with the reflecting elements in the dish.

The ring-back construction is typical of a company, "Anixter Mark", formerly "Mark Products".

Best regards, Richard Harrison, KB5WZI

2107. Diamond HV7CX

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 20:54:06 UTC
From: aoberhauser@freenet.de
Message-ID: <452e29d9.0310051254.423dd5e4@posting.google.com>
Source record: 106972

Hi out there!
Anyone having experience with this new antenna?
Bought mine with the 14 Mhz. coil.
50/144/430 Mhz. OK out of the box.
40/15/10 mtr. a bit tricky to tune.
Bought mine here in Germnay, no english manual/instructions with it.

Anyone having english instructions that can be emailed?

Vy 73 de Axel DD8GR / LU2HLR
http://www.qsl.net/dd8gr

2108. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 21:24:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0l21ov4p53uiqs11ht17dav6941t7vg2bp@4ax.com>
Source record: 106974

On Sat, 04 Oct 2003 17:31:31 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>everything can be explained by achieving a conjugate match at
>one point on the transmission line when the reactance looking
>in either direction is at a maximum.

Hi Cecil,

I don't know which is funnier: that you have a
one-solution-answers-every-question; or that you have so many of them.

Reach into your bag and present us the conjugate for:
>>source<>50---50 ohm feedline---+---150 ohm feedline---load<>150
or the rather more terse (and simpler - bound to confound):
source=200Ohm(resistive)---50 ohm feedline---load=200Ohm(resistive)

73's
Richard Clark, KB7QHC

2109. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 22:22:18 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <d861ovspi6mneqrf0vi8i26i1ses4kndbo@4ax.com>
Source record: 106975

On Sat, 4 Oct 2003 19:49:19 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>> > SWR meters are designed to operate and provide indications of SWR, Rho,
>> Fwd
>> > Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
>> > transmitter is 50 ohms. It makes the same INCORRECT assumption as a lot
>> of
>> > people do. This should not be surprising because it was people who
>> designed
>> > it.
>> >
>> > So SWR meters nearly always give FALSE indications about what actually
>> > exists.
>> >
>--
>> Reg,
>>
>> BTW, I did force the SWR meter to see a different source impedance. There
>> was no difference in SWR readings for either the 1:1 or 2:1 case.
>>
>--
>
>Tarmo,
>
>And of course, as you and I know, on whatever line there is between the
>meter and transmitter, the swr is neither the indicated 1:1 nor 2:1 because
>the input impedance looking back towards the tranmitter is not the assumed
>50 ohms. Both readings are false, even meaningless. There may in fact be no
>standing waves to measure.
>
>To avoid confusing novices and budding engineers, retarding education,
>rename the meter the TLI (Transmitter Loading Indicator) which is what it
>really is.
>----
>Reg, G4FGQ

Reg, can you furnish a a mathematical expression that includes source resistance
as a required parameter for determining SWR?

Walt, W2DU

2110. Update on antenna situation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 22:50:41 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86n0cf5mf2.fsf@duchess.twilley.org>
Source record: 106976

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Several times in this newsgroup I have mentioned the inadequacies of my location with regard to reception and antennas. I have recently installed a multi-band dipole antenna and it's much better now.

The antenna has two elements for a flat 40m dipole and two elements for an "inverted vee" 20m dipole. I have two additional elements for an "inverted vee" 10m dipole, but those are not yet installed. The antenna rests on four eight-foot "sturdy stakes" from Home Depot, which are strapped with hose clamps to existing iron clothesline poles. The resulting height for the 40m dipole is about thirteen feet but the feedpoint hangs at about nine feet. I plan on using another sturdy stake to lift the feedpoint up to the same height as the rest of the supports.

I got the antenna up at five yesterday afternoon, and my first HF contact was K5TR who was in the California QSO Party. I jumped in, and by the time the contest ended I had 72 QSO's, including Alaska on three different bands, and Germany on 15m.

http://www.twilley.org/~jmt/feedpoint.jpg -- a fuzzy out-of-focus picture of the feedpoint, showing the choke on the feedline as well as the elements of the dipole connected by rope and the little red feedpoint box. Lifting this point another four or five feet in the air will probably make a big difference.

http://www.twilley.org/~jmt/outerstake.jpg -- a sturdy stake under load, bending approximately one foot at the top. This bend should lessen some when the feedpoint is lifted.

Thanks for all the hard work and encouragement.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/gKBFGPFSfAB/ezgRAixtAJ41UUXZGOLnLM5EnvoUuvsPxYmPdgCeKu9K
GW8s+gzEdZWSrNRJf3BM2ko=
=3Bz5
-----END PGP SIGNATURE-----

2111. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 23:34:21 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <YT1gb.38$j%2.52908@news.uswest.net>
Source record: 106977

Walter, you have a 500ft loop?? Wow.. can you provide pictures at some point? I'd love to see this in action. I'm using a 100ft longwire that is end-fed at this point by a matching balun. I use RG8 low-loss coax. I'm tempted to try the more expensive Belden 9913 -- but it's about $100/50ft.

Also, I know that the greater length of antenna will increase gain, but isn't the noise gain almost as much? (i.e. does a greater length of wire ensure greater reception?)

-Nick
n7zya

"Walter" <junkmail@altonillinois.com> wrote in message news:70729ae5.0310041542.22d320a8@posting.google.com...
> Ladder Line or Coax For Reception only?
>
>
> I have a 500 foot SkyWire Loop Antenna, about 30 feet off the ground
> and I have it fed with Coax. I will only be using it to receive
> Shortwave broadcasts from 2Mhz to 30Mhz. It will never be used to
> transmit.
>
>
> My questions are :
>
> (1) Will using a Ladder Line instead of Coax improve my reception?
>
> (2) If so, where do I change to coax? Or do I just run the Ladder line
> into the house and straight to the receiver?
>
> (3) What about electrical interference since the ladder line isn't
> shielded?
>
>
> Thanks.

2112. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-05 23:54:19 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <9xGdnUezgPJtLx2iXTWJlg@ctc.net>
Source record: 106979

> Walter, you have a 500ft loop?? Wow.. can you provide pictures at some
> point? I'd love to see this in action. I'm using a 100ft longwire that
is
> end-fed at this point by a matching balun. I use RG8 low-loss coax. I'm
> tempted to try the more expensive Belden 9913 -- but it's about $100/50ft.
>

For anything below 30 mhz you will see no return for the money by going from
a good grade of rg-8 to the 9913 type. It would be difficult to see much
differance even if the rg-8x is used. Especially at 20 meters and below.
You would be beter off spending the money on a beter antenna than the long
wire.
Or making the antenna higher.

2113. Re: feedline impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 00:06:43 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <jm2gb.41$j%2.54767@news.uswest.net>
Source record: 106978

Mike,

You definitely sound like me about 10 years ago. I started with a RS DX-390 radio and went from there. You didn't mention what kind of Sony portable you had, but the first thing I realized (regardless of antenna) -- was to get a better SW radio. You did say you're on a budget and that makes it frustrating at times. But if you're careful, you can find a good deal on ebay or other sites. I've seen Drake R-8 radios sell for around $250. (They sold for $1200 in late '93.)

As for a 'good' SWL antenna... I picked up two of the RS shortwave antenna kits (@ $10 ea) and bought a Palomar balun with RG-8 coax. I used to have a Drake R-8 but traded it (stupidly) for something else. I've had a Yaesu FRG-100 but now own an Icom R-75.

I can recieve pretty well, but I too am bothered by noise. I believe mine to be more atmospheric rather than homemade QRM. I found that antenna height is pretty important. My 100ft longwire antenna sits anywhere from 20-35ft above ground -- never going below 20ft.

You didn't mention what kind of programs you are listening to? If you're listening to SW broadcasts on AM, then you'll hear much more 'noise' on AM then you would on sideband. If you're trying to listen to military or other HF sideband traffic, then you might be disappointed. I could barely get ham stations on my DX-390! When I received my Drake R-8, I was amazed at how much traffic was out there on HF -- that I couldn't hear before. The quality of radio make a huge difference. ;o)

-Nick
n7zya

"mike" <intotheapex@yahoo.com> wrote in message
news:qjcvmvo8n1vgbn1li5cql2ia0sf1fdle3e@4ax.com...
> Ok, I guess I have a handle on things now.
> I am a newbie SWL still in learning mode.
>
> To properly match the impedance of coax I must use a matching
> transformer (sometimes 'incorrectly' called a longwire balun).
>
> Guess I will have to take a look at the ICE 180, MLB, UMB...etc.
>
> So with the tranformer my PI network tuner should resonate better (?)
>
> I plan to keep using it regardless given its recently added back to
> back voltage limiting diodes between input and ground and a static
> bleed off resistor for DC to ground.

>
> This is what I have going now and it has reduced noise.
>
> I am running a 12 guage wire from the ground banana plug of my antenna
> tuner to a copper wire brade that connects my TV antenna to a ground
> rod. This composes one end of my coax ground to eliminate common mode
> currents.
>
>
> The other end is where the coax meets my 13 meter random wire hung on
> a wooden fence.
>
> Lacking a proper ground rod, I soldered a short length of 12 guage
> wire from the coax sheild to the bottom of a diced up coat hanger (16
> inches in length) and stripped away the 12 guage wire sheild for the
> length of the hanger segment (exposing the copper). This I plunged
> into the resonably moist soil under a lylac tree.
>
> Hodge podge for sure. But I'm on a budget till my new job starts next
> week.
>
> Thanks for all the help,
>
> Mike
>

2114. Re: 70 ohm dipole to 50 ohm feed line question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 00:24:47 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <jD2gb.35464$qj6.1966718@news1.news.adelphia.net>
Source record: 106980

Roy Lewallen wrote:

r
> work down the drain. But have fun. It'll be educational. And if you're
> like so many others, you'll be *positive* that all the work made your
> signal get out better. Not because of low SWR though, but because of a
> phenomenon well known to medicine -- the placebo effect.

Sounds like a good name for an antenna - the Placebo!

- Mike KB3EIA -

2115. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 00:31:30 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <yJ2gb.43$j%2.55516@news.uswest.net>
Source record: 106981

Ralph, that's what I hear from other SWL'ers too. But, there are those that swear by it. So, it'd just be an interesting test... albeit and expensive one... ;o)

"Ralph Mowery" <rmowery@ctc.net> wrote in message news:9xGdnUezgPJtLx2iXTWJlg@ctc.net...
> > Walter, you have a 500ft loop?? Wow.. can you provide pictures at some
> > point? I'd love to see this in action. I'm using a 100ft longwire that
> is
> > end-fed at this point by a matching balun. I use RG8 low-loss coax.
I'm
> > tempted to try the more expensive Belden 9913 -- but it's about
$100/50ft.
> >
>
> For anything below 30 mhz you will see no return for the money by going
from
> a good grade of rg-8 to the 9913 type. It would be difficult to see much
> differance even if the rg-8x is used. Especially at 20 meters and below.
> You would be beter off spending the money on a beter antenna than the long
> wire.
> Or making the antenna higher.
>
>

2116. calculate front/back ratio of Yagi antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 01:54:43 UTC
From: lavida@cygnus.uwa.edu
Message-ID: <blqi10$52v$1@enyo.uwa.edu.au>
Source record: 106983

I was looking at some designs for a 3-element Yagi.
It seemed to me that the ratio of the reflector length to the
director length is approximately the ratio of the highest
frequency to the lowest frequency of the band you wish to
receive. But I gather the front to back ratio is more difficult
to compute. Is there a formula that can tell you what the
FBR is, given the lengths and spacings of the elements?

2117. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 02:10:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo1g98qhnq84a1@corp.supernews.com>
Source record: 106982

Correction:

> On Sun, 05 Oct 2003 00:27:28 -0700, Roy Lewallen <w7el@eznec.com> wrote:
> . . .

> (Last paragraph):

>The need to be careful with the definition, and always making it clear,
>is illustrated by the fact that of the first four fields/transmission
>line texts I pulled off my shelf, two (Holt and Johnson) defined the
>positive direction of If toward the load, and two (Johnk and Kraus)
^^
>toward the source. . .

That should be Ir, not If. I've never seen the positive direction of If
defined as anything other than toward the load.

Roy Lewallen, W7EL

2118. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 02:36:37 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <mRmdnfqCxcb0Sx2iXTWJkQ@ctc.net>
Source record: 106984

> Ralph, that's what I hear from other SWL'ers too. But, there are those
that
> swear by it. So, it'd just be an interesting test... albeit and expensive
> one... ;o)
>

For a cheaper expirment try adding about 30 feet of some rg-8x or even rg-56 or 59 (I know 59 is 70 ohm coax but it does not mater for receiving) . That will be about the same loss as you would gain if you switched out 100 feet of rg-8 to the 9913. See if you can tell any differance.

Not because I wanted to see the differance but because I was replacing some antennas. I replaced about 100 feet of old rg-8 with some new lmr400 and could not tell any differance at 50 mhz. I know there is some but it is light lighting a candle in the sun.. It is there but can not really tell it.

2119. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 02:46:51 UTC
From: Nick C <cnick6@qwest.net>
Message-ID: <ql4gb.96$Hz3.35432@news.uswest.net>
Source record: 106985

Yea, I noticed that RS is promoting RG-6 'F' cable for their SW radios on their web site. I was curious about this, so I check it's loss and it looks on-par with RG-8x and is much more flexible. I might try that if I can find a couple of F-PL259 adapters... it's really cheap coax.

-Nick

"Ralph Mowery" <rmowery@ctc.net> wrote in message news:mRmdnfqCxcb0Sx2iXTWJkQ@ctc.net...
> > Ralph, that's what I hear from other SWL'ers too. But, there are those
> that
> > swear by it. So, it'd just be an interesting test... albeit and
expensive
> > one... ;o)
> >
>
> For a cheaper expirment try adding about 30 feet of some rg-8x or even
rg-56
> or 59 (I know 59 is 70 ohm coax but it does not mater for receiving) .
That
> will be about the same loss as you would gain if you switched out 100 feet
> of rg-8 to the 9913. See if you can tell any differance.
>
> Not because I wanted to see the differance but because I was replacing
some
> antennas. I replaced about 100 feet of old rg-8 with some new lmr400 and
> could not tell any differance at 50 mhz. I know there is some but it is
> light lighting a candle in the sun.. It is there but can not really tell
> it.
>
>

2120. Re: Diamond HV7CX

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 02:56:44 UTC
From: "A.Pismo Clam" <alaininvc@netscape.net>
Message-ID: <3F80D9EC.49AF4F1A@netscape.net>
Source record: 106986

Hi Axel,

If it's the same Diamond that I'm thinking of, you can e-mail them at
the following address for some tech assistance:
customerservice@rfparts.com

This is their website: http://www.rfparts.com/

Hope this helps,

Alain

Axel Oberhauser - DD8GR/LU2HLR wrote:

> Hi out there!
> Anyone having experience with this new antenna?
> Bought mine with the 14 Mhz. coil.
> 50/144/430 Mhz. OK out of the box.
> 40/15/10 mtr. a bit tricky to tune.
> Bought mine here in Germnay, no english manual/instructions with it.
>
> Anyone having english instructions that can be emailed?
>
> Vy 73 de Axel DD8GR / LU2HLR
> http://www.qsl.net/dd8gr

2121. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:14:52 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <M65gb.502827$Oz4.355382@rwcrnsc54>
Source record: 106987

They swear by it because they don't want to admit they blew a wad of cash for nothing. You didn't say how long your coax is but you infered about 50 feet. With that short of a length, no matter what you changed to you would never notice a difference. Look up the numbers. Easy way to test. Take your radio out to the base of the antenna. Run as short a piece of coax as you can to your radio. See if you can tell any difference.

"Nick C" <cnick6@qwest.net> wrote in message
news:yJ2gb.43$j%2.55516@news.uswest.net...
> Ralph, that's what I hear from other SWL'ers too. But, there are those
that
> swear by it. So, it'd just be an interesting test... albeit and expensive
> one... ;o)

2122. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:17:08 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <U85gb.413958$2x.140884@rwcrnsc52.ops.asp.att.net>
Source record: 106988

I've been using RG-6 on receiving antennas for years.

"Nick C" <cnick6@qwest.net> wrote in message
news:qI4gb.96$Hz3.35432@news.uswest.net...
> Yea, I noticed that RS is promoting RG-6 'F' cable for their SW radios on
> their web site. I was curious about this, so I check it's loss and it
looks
> on-par with RG-8x and is much more flexible. I might try that if I can
find
> a couple of F-PL259 adapters... it's really cheap coax.
>
>
> -Nick
>
> "Ralph Mowery" <rmowery@ctc.net> wrote in message
> news:mRmdnfqCxcb0Sx2iXTWJkQ@ctc.net...
> > > Ralph, that's what I hear from other SWL'ers too. But, there are
those
> > that
> > > swear by it. So, it'd just be an interesting test... albeit and
> expensive
> > > one... ;o)
> > >
> >
> > For a cheaper expirment try adding about 30 feet of some rg-8x or even
> rg-56
> > or 59 (I know 59 is 70 ohm coax but it does not mater for receiving) .
> That
> > will be about the same loss as you would gain if you switched out 100
feet
> > of rg-8 to the 9913. See if you can tell any differance.
> >
> > Not because I wanted to see the differance but because I was replacing
> some
> > antennas. I replaced about 100 feet of old rg-8 with some new lmr400
and
> > could not tell any differance at 50 mhz. I know there is some but it is
> > light lighting a candle in the sun.. It is there but can not really
tell
> > it.
> >
> >
>
>

2123. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:19:03 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blqmv7nco1@titan.btinternet.com>
Source record: 106989

> Reg, can you furnish a a mathematical expression that includes source
resistance
> as a required parameter for determining SWR?
>

No Walt. Can you ? Why do you ask ?

Reg.

2124. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:19:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f80e142$1_4@corp.newsgroups.com>
Source record: 106990

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>everything can be explained by achieving a conjugate match at
>>one point on the transmission line when the reactance looking
>>in either direction is at a maximum.
>
> I don't know which is funnier: that you have a
> one-solution-answers-every-question; or that you have so many of them.

It's not my solution, Richard, it's Chipman's solution. "These large
reflection coefficients are an example of the phenomenon of 'resonant
rise of voltage' in series resonant circuits."
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2125. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:40:32 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <qko1ov8uvtr1uhqn4qlu8c3f1kumpmmab2@4ax.com>
Source record: 106991

I made the switch to RG6 a few years ago and am pleased; with the
reducer for RG8x you can go directly to a PL-259 without an adapter.
The loss at HF is negligible, it's less expensive than the RG-8 family
of cables and the receiver doesn't care that it's 75 ohms. If your
existing cable is working it isn't worth the effort to switch -however
in future installations it's an option worth serious consideration.

Howard

On Sun, 5 Oct 2003 19:46:51 -0700, "Nick C" <cnick6@qwest.net> wrote:

>Yea, I noticed that RS is promoting RG-6 'F' cable for their SW radios on
>their web site. I was curious about this, so I check it's loss and it looks
>on-par with RG-8x and is much more flexible. I might try that if I can find
>a couple of F-PL259 adapters... it's really cheap coax.
>
>
>-Nick
>
>"Ralph Mowery" <rmowery@ctc.net> wrote in message
>news:mRmdnfqCxcb0Sx2iXTWJkQ@ctc.net...
>> > Ralph, that's what I hear from other SWL'ers too. But, there are those
>> that
>> > swear by it. So, it'd just be an interesting test... albeit and
>expensive
>> > one... ;o)
>> >
>>
>> For a cheaper expirment try adding about 30 feet of some rg-8x or even
>rg-56
>> or 59 (I know 59 is 70 ohm coax but it does not mater for receiving) .
>That
>> will be about the same loss as you would gain if you switched out 100 feet
>> of rg-8 to the 9913. See if you can tell any differance.
>>
>> Not because I wanted to see the differance but because I was replacing
>some
>> antennas. I replaced about 100 feet of old rg-8 with some new lmr400 and
>> could not tell any differance at 50 mhz. I know there is some but it is
>> light lighting a candle in the sun.. It is there but can not really tell
>> it.
>>
>>
>

2126. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 03:50:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f80e878_4@corp.newsgroups.com>
Source record: 106993

Richard Clark wrote:
> source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)

Are you saying that the SWR will vary up and down the line
when the feedline is lossless? Is the above example in Chipman?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2127. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 04:29:55 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <blqr43$t3$0@208.206.142.103>
Source record: 106994

David wrote:

> On Sat, 4 Oct 2003 17:04:16 -0400, ï¿½K4OKAï¿½BIG**AL** may have said:
>
>><Pappy127@usa.net> wrote in message news:3F7ED2B4.2F6256B5@usa.net...
>>
>>>That will be the day!!!!!!!!!!!!!!!!!!!!!
>>>
>>>"ï¿½K4OKAï¿½BIG**AL**" wrote:
>>>
>>>>OF THIS GROUP.
>>
>>AND THAT DAY HAS ARRIVED.
>>
>
>
>
> _____
> /| /| | | |
> ||__|| | | Please do not |
> / O O__ | feed the |
> / \ | Trolls |
> / \ \|_____|
> / _ \ \ ||
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> * ___ c_c_c_C/ \C_c_c_c_____
>
>
>
>

Leave the clown be. As soon as he realizes he has no ringmaster he'll
lose interest and go away.

2128. Re: what is the kind of antenna with this pic, can u point me to si...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 04:53:42 UTC
From: richardharrison@webtv.net
Message-ID: <9870-3F80F556-110@storefull-2315.public.lawson.webtv.net>
Source record: 106995

Leon wrote:
"I guess that the black cylinder is just a waveguide."

Not exactly. At the frequencies used with grid dishes, the feedline is usually coax. Waveguide would be too big.

The cylinder is a shield which allows a little dipole to illuminate the dish but does not allow direct radiation in the same direction as that reflected from the dish.

The rays reflected from the dish are parallel to each other and perpendicular to the circumference of the dish. Parallel rays reflected by the dish pass through its focal point where the dipole is located.

The transit time within the dish is long near its center and short near its edges. Phase between direct feed radiation and reflected radiation would be a mess were the direct radiation allowed, so the black cylinder is used to clean up the dish pattern.

Best regards, Richard Harrison, KB5WZI

2129. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 05:26:13 UTC
From: richardharrison@webtv.net
Message-ID: <9869-3F80FCF5-269@storefull-2315.public.lawson.webtv.net>
Source record: 106997

Peter, VK3YSF wrote:
"Or is there simply a better way?"

The 0.7 mtr wavelength is an advantage. The separation between antennas only needs to be a few mtrs to be "far field".

The tested antenna can be side by side and tip to tip with a reference antenna, dipole or otherwise, of known gain, and the interaction should be small. The antennas will be in each other`s nulls.

Reception or transmission from the tested and reference antennas may be compared as reciprocity rules.

Of course, the same power or field strength must apply to the tested and reference antennas for validity. Losses in associated systems must be the same for the tested and reference antennas or any differences must be accounted for.

Ther antenna sitings likely won`t correspond to free-space, so a reference of 0 dBd or its equivalent of +2.2 dBi won`t be precise, but the comparison between the "known" reference and tested antenna should be valid if the antennas are operated in similar circumstances.

It isn`t necessary to build a field strength meter if a receiver with a good signal strength indicator is available and a calibrated generator is available. The off the air signal can be replaced with a signal from the generator and its strength can be read from the generator`s attenuator. I`ve done it countless times and it works well.

Best regards, Richard Harrison, KB5WZI

2130. Re: Update on antenna situation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 05:40:37 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86d6da6i0a.fsf@duchess.twilley.org>
Source record: 106996

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Bob" == Bob Miller <bxmiller@texas.netNOSPAM> writes:

[...]

Bob> Nice job -- which department has the "sturdy stakes"?

They were in the gardening department. They're used for tomatoes and
other plants. They are about an inch in diameter and made of green
plastic with an iron core.

Bob> Bob k5qwg

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/gQBZGPFSfAB/ezgRAnxKAKCzWeEmiMDmjV87RhKts4xTP0OmvQCfchMG
gp8IjwEvU1ow2QgzHWbwHd4=
=AIHq
-----END PGP SIGNATURE-----
```

2131. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 06:19:00 UTC
From: junkmail@altonillinois.com
Message-ID: <70729ae5.0310052219.68de0a0@posting.google.com>
Source record: 106998

Hi,

As far as photos go I plan on posting some this next week on the yahoo group for skywires.

http://groups.yahoo.com/group/SkyWires/

I just put the skywire up, and it is definitely a step up from my dipole I just took down.

I'm measuring the difference based on the reception of the International Beacons I can pick up.

http://www.ncdxf.org/beacon/beaconSchedule.html

I can now pick up the one in Russia occasionally , which I could never on my dipole.

The other thing is that I can pick up some of the beacons on the higher frequencies, that I never could before.

As far as RG6, I bought some from Radio shack, trying to save a little money. It was intended for Video use, and not radio, but I figured it was worth a try.

I had to snip off one of the F connectors to solder it to the Skywire. The shielding wasn't copper braid, but an aluminum foil type shielding that was impossible to solder. So I ended up using my old R59. So be careful what you buy.

I'm very happy with the answers to my questions. Please keep them coming.

Thanks.

2132. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 07:08:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3l42ov0k63adq74g8vuufjua7gvuksv212@4ax.com>
Source record: 106999

On Sun, 05 Oct 2003 22:50:17 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)
>
>Are you saying that the SWR will vary up and down the line
>when the feedline is lossless?

Cecil, you can be so thick. Do you inhabit the center of the
universe? We've waded through this long ago.

>Is the above example in Chipman?

No. He does have a snippet of math that will provide the same answer
found for similar (differing only by magnitude of R's) examples by
other authors. These issues are new only to folks here.

Hi Cecil,

It seems that whenever I challenge you to one of your comments such
as:
>>everything can be explained by achieving a conjugate match
you fly from it to prove or question some remote issue.

Instead of going over old material that you abandoned (and will only
abandon again), why not simply offer the group the conjugate of:
>> source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)
which was my query this time (or are you abandoning that too?).

73's
Richard Clark, KB7QHC

2133. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 10:42:34 UTC
From: Steven LeBlanc <oasisin@nbnet.nb.ca>
Message-ID: <lhh2ovk91nt3g5k26sn4f0mmivirm5e7ev@4ax.com>
Source record: 107000

On Sun, 5 Oct 2003 17:11:54 +0000 (UTC), David <david@davidv.net>
wrote:

>On Sat, 4 Oct 2003 17:04:16 -0400, ï¿½K4OKAï¿½BIG**AL** may have said:
>>
>><Pappy127@usa.net> wrote in message news:3F7ED2B4.2F6256B5@usa.net...
>>> That will be the day!!!!!!!!!!!!!!!!!!!!!
>>>
>>> "ï¿½K4OKAï¿½BIG**AL**" wrote:
>>> >
>>> > OF THIS GROUP.
>>
>> AND THAT DAY HAS ARRIVED.
>>
>
>
> _____
> /| /| | | |
> ||__|| | | Please do not |
> / O O__ | feed the |
> / \ | Trolls |
> / \ \|_____|
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>*-- _--\ _ \ | ||
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>* / _ /- | | |
> * ___ c_c_c_C/ \C_c_c_c____________
>
>
>

Nice looking troll monster. I find it the only part of this thread
worth commenting on!

2134. Re: Quarterwave line

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 11:58:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <yf3GIyBIjVg$EACR@ifwtech.co.uk>
Source record: 107001

Tarmo Tammaru wrote:
>Interesting situation. You are short by a couple of inches from what
>one would expect. I wonder if you have to take into account the few
>inches of line inside the meter. Does the manual say anything about
>that?

Recent MFJ manuals recommend using an external coax T-adapter with a 50 ohm load on one arm, and looking for the dip in SWR reading (short-circuited quarter-wave, or open-circuited half-wave). That does not require accounting for any extra length inside the meter, only inside the T-adapter itself.

>You should certainly count the length of any connectors/adapters as
>part of the line length.

Certainly. If you don't like math, then plan to install the resonant line in the same way as you tested it, using a T-adapter.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2135. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 12:08:33 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <bPIMsuDBtVg$EAGr@ifwtech.co.uk>
Source record: 107002

Reg Edwards wrote:
>>
>> Reg, that can't possibly be you. Someone has hijacked your e-mail.
>>
>==========
>
>Ian, it IS me!

Oh yes? Whoever he is, he *would* say that, wouldn't he?

(Catching-up after a hectic long weekend...)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2136. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 12:34:48 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blrnh8$t4c$1@hercules.btinternet.com>
Source record: 107003

> Reg, can you furnish a a mathematical expression that
> includes source resistance as a required parameter for
> determining SWR?
>

No Walt. Can you ? Why do you ask ?

Reg.

2137. Re: BIG**AL** IS NOW IN CHARGE - NEVER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 13:24:19 UTC
From: Mike Luther <mike.luther@ziplog.com>
Message-ID: <vo2r6ccuk999ae@corp.supernews.com>
Source record: 107004

First ASCI-ART message I've snipped in a long time for use in FidoNet!
Thanks!

Dick Carroll wrote:

```
>>
>>
>>
>> _____________________
>> /| /| | | |
>> ||__|| | | Please do not |
>> / O O\__ | feed the |
>> / \ | Trolls |
>> / \ \|_____________________|
>> / _ \ \ ||
>> / |\____\ \ ||
>> / | | | |\____/ ||
>> / \|_|_|/ | _||
>> / / \ |____| ||
>> / | | | --|
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>> * _ | |_|_|_| | \-/
>> *-- _--\ _ \ | ||
>> / _ \\ | / * / \_ /- | | |
>> * ___ c_c_c_C/ \C_c_c_c____________
>>
>>
>>
>>
>
>
> Leave the clown be. As soon as he realizes he has no ringmaster he'll
> lose interest and go away.
>
```

--

--> Sleep well; OS2's still awake! ;)

Mike Luther

2138. Re: what is the kind of antenna with this pic, can u point me to si...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 14:36:40 UTC
From: richardharrison@webtv.net
Message-ID: <8546-3F817DF8-124@storefull-2314.public.lawson.webtv.net>
Source record: 107005

Jack wrote:
"The antenna you are asking for is built of helical antenna and dish."

The illostration on my screen was a dish constructed of parallel bars. The dish will reflect a signal which has an electric field that parallels the bars in the reflector. Cross-polarization of the signals will not work. I`ve seen it tried.

A pickup dipole can be used to explore the field transmitted in the maximum gain direction of a helical antenna. Regardless of the sense of the pickup dipole, horizontal, vertical, or anywhere in-between, throughout 360 degrees rotation, there is no change in amplitude due to dipole polarization.

This characteristic of the helical antenna is called "circular polarization". Off the axis of the helical antenna, signal strength intercepted by a pickup dipole will vary with polarization, and the field is said to be eliptically polarized.

To take full advantage of a helical antenna`s reflected energy requires a solid-sheet reflector, or at least a cross-hatch conducting grid so that more than one polarization of signal will be reflected. See the RSGB "VHF-UHF Manual" for details. In my 3rd edition, this is found on page 7.21.

As the dish il;lustration provided by the given URL has only parallel reflector bars, it is nearly certain that the dish uses a single polarization which agrees with the direction of the bars. The excitation source is likely a dipole.

When a helix is teamed with a dipole, there is a 3 dB loss as compared with a helix to helix or dipole to dipole. So, my bet is on a dipole illuminating the reflector bars which share the same sense in the antenna.

Best regards, Richard Harrison, KB5WZI

2139. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 14:50:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f818329_1@corp.newsgroups.com>
Source record: 107006

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>Are you saying that the SWR will vary up and down the line
>>when the feedline is lossless?
>
> Cecil, you can be so thick. Do you inhabit the center of the
> universe? We've waded through this long ago.

You cloud the issue because you refuse to answer simple
questions. I don't remember what your answer was and I can't
find your previous answer on Google. Is a simple "yes" or "no"
too much to ask?

> Instead of going over old material that you abandoned (and will only
> abandon again), why not simply offer the group the conjugate of:
>
>>>source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)
>
> which was my query this time (or are you abandoning that too?).

If the lossless 50 ohm feedline is a multiple of 1/2WL long, the
system is conjugately matched. Chipman says the extra power term
only exists when the reactance of the feedline is opposite in
sign to the reactance of the load but your load is purely resistive.
So I don't know what you are trying to say. Therefore, I don't know
whether to agree with you or not.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2140. HB9CV antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 14:57:02 UTC
From: nemethf@interticket.hu
Message-ID: <blrvs5$3tm$1@namru.matavnet.hu>
Source record: 107007

I have updated my homepage.
(HB9CV based 5 element antenna installation for 10m and 15m)

Take a look at: http://www.dxantech.com/english/antennainstall-ha7ry.html

best regards
Feri (HA7EA)

2141. HB9CV based antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 14:59:35 UTC
From: nemethf@interticket.hu
Message-ID: <bls00u$3u5$1@namru.matavnet.hu>
Source record: 107008

I have updated my homepage.
(HB9CV based 5 element antenna installation for 10m and 15m)

Take a look at: http://www.dxantech.com/english/antennainstall-ha7ry.html

best regards
Feri (HA7EA)

2142. Re: HB9CV antenna installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 15:00:37 UTC
From: nemethf@interticket.hu
Message-ID: <bls02s$3v5$1@namru.matavnet.hu>
Source record: 107009

sorry, wrong post!

Feri

2143. Re: ATTN::: ALL POSTERS TO THIS GROUP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 15:16:58 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <KHfgb.6453$qK1.5112082@news2.news.adelphia.net>
Source record: 107010

I did as you suggested,

Thanks

Jim

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031004230015.15865.00000266@mb-m13.aol.com...
> >You can have it! When I first joined, it was a pretty good group, a good
> >source of information. But, with assholes like you, and you bud's,
hanging
> >around, it's time to say good. Now AL, just think of the fun you will
have
> >playing with yourself while reading this message. You drove someone off
the
> >group.
> >
> >Jim, KF4TUN
>
> No need to leave the newsgroup. Just add people to your filters and the
> newsgroups are actually fairly civil!
> =-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.522 / Virus Database: 320 - Release Date: 9/29/03

2144. Re: Update on antenna situation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 15:21:00 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <cv13ovcu0o3r5rm57a3vp605kauabu77ac@4ax.com>
Source record: 106992

On Sun, 05 Oct 2003 15:50:41 -0700, Jack Twilley
<jmt+usenet@twilley.org> wrote:

>
>The antenna has two elements for a flat 40m dipole and two elements
>for an "inverted vee" 20m dipole. I have two additional elements for
>an "inverted vee" 10m dipole, but those are not yet installed. The
>antenna rests on four eight-foot "sturdy stakes" from Home Depot,
>which are strapped with hose clamps to existing iron clothesline
>poles. The resulting height for the 40m dipole is about thirteen feet
>but the feedpoint hangs at about nine feet. I plan on using another
>sturdy stake to lift the feedpoint up to the same height as the rest
>of the supports.

Nice job -- which department has the "sturdy stakes"?

Bob
k5qwg

>
>Thanks for all the hard work and encouragement.
>
>Jack.

2145. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 16:04:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8h33ovsrqa98ihqc009aqrtiglih4ubrgs@4ax.com>
Source record: 107011

On Mon, 06 Oct 2003 09:50:17 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>> Instead of going over old material that you abandoned (and will only
>> abandon again), why not simply offer the group the conjugate of:
>>
>>>>source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)
>>
>> which was my query this time (or are you abandoning that too?).
>
>So I don't know what you are trying to say. Therefore, I don't know
>whether to agree with you or not.

Hi Cecil,

You don't have to know as it is not a matter of agreeing, it is a
matter of your statement offering:
>>everything can be explained by achieving a conjugate match
and I see nothing about that in a halfwave line that instead achieves
a Zo match, not a conjugate. A conjugate has very specific properties
and you cannot provide an expression that offers the conjugate for the
situation:
>> source=200 Ohm(resistive)---50 ohm feedline---load=200 Ohm(resistive)
Hence, the generality you impart to Chipman, due to your limitations,
reveals it is neither a generality nor is it necessarily even a
derivation of Chipman. Your two pages of copy are 230-odd pages shy
of understanding.

Let's just juggle the notion of Zo matching out with a slight boundary
change:
>> source=200 Ohm(resistive)---50 ohm feedline---load=600 Ohm(resistive)
What is the expression you offer to support your statement that yields
the conjugate? Barring an answer, it follows your statement that
>>everything can be explained by achieving a conjugate match
is yet another in a long list of absurdities.

Perhaps you should await Chipman's arrival (Waiting for Godot?) before
continuing on. However, given the consequences of that arrival for
others in this group, that could mean total abstinence in discussion
as so many seem to read him in the closet and find themselves locked
in a small, dark room.

73's
Richard Clark, KB7QHC

2146. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 16:40:27 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <vu53ovs8n2i6s5fq0i8ismfv2khfikdd7l@4ax.com>
Source record: 107012

On Sat, 4 Oct 2003 19:49:19 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>> > SWR meters are designed to operate and provide indications of SWR, Rho,
>> Fwd
>> > Power, Refl.Power, on the ASSUMPTION that the internal impedance of the
>> > transmitter is 50 ohms.

>Reg, G4FGQ

Well, Reg, the reason I asked for an expression that includes the source resistance in measuring SWR is that you said above that the internal impedance of the transmitter is ASSUMED to be 50 ohms. This implies that the SWR is dependent on the internal impedance of the source, does it not ?

AsI have understood Richard C., he also asserts that SWR is dependent the internal impedance of the source.

This concept is foreign to me, so if I'm wrong I'd like to have some proof that the source impedance can have any influence on SWR.

Walt

2147. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 17:16:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c073ovgn2kkjrlqsfma92udh4bg2ig4n6v@4ax.com>
Source record: 107013

On Mon, 06 Oct 2003 16:40:27 GMT, Walter Maxwell <w2du@iag.net> wrote:

>
>This concept is foreign to me, so if I'm wrong I'd like to have some proof that
>the source impedance can have any influence on SWR.
>
>Walt

Hi Walt,

I have not seen any correspondence from you. However, as to proof, that has been tendered to you, you simply lack the facilities to test it at this time. That much has already been established and further elaboration is unnecessary. Debate can continue without resolution, a simple hour's work at the bench can put the cap to it.

My data stands un-refuted (barring the usual cackle of nay-saying sneer review), and even more, without test at ANY other bench. I can only conclude that:
1.) My data is bullet-proof;
2.) others lack the ability to perform the task;
3.) 1&2 above, but narcissistic debate is the real focus of critics.

The triumph of the nay-sayers is in my admission that I know that I am in error. They undoubtedly grasp that statement as the chalice of their noble musings leaving them undisturbed to step up to the bench. It also is revealed in their piteous cries of the calamity of Amateur Radio's future that awaits us. This last comes as no surprise to the rising tide in the kulture of institutionalized ignorance where the supreme technical achievement is enacted by pushing a credit card across the display case.

I am bound to be in error through my own admission, but my admission comes with a bounds of accuracy. To others here, my error is absolute and demonstration to attest that is unnecessary. This unsullied nobility is then undercut by the jejune debate they indulge in over issues of a philosophical nature - actually a mystical assignation with metaphysics.

I suppose I frustrate many because I am not afraid to be wrong. The frustration is often railed in terms of my style (their being outgunned on two fronts) and compounded by their inertia for doing simple things well (the loss of yet another, third front). You guys need more threads devoted to the definition of weight so you can devastate the farmer's mud-logic. ;-)

73's
Richard Clark, KB7QHC

2148. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 17:51:09 UTC
From: richardharrison@webtv.net
Message-ID: <26561-3F81AB8D-182@storefull-2313.public.lawson.webtv.net>
Source record: 107015

Walt, W2DU wrote:
"This ratio (reflection coefficient) is determined only by the load and the line, not by the generator.."

Terman is squarely in Walt`s corner. He says on page 87 of his 1955 edition:
"Reflection coefficient = rho = E2 / E1
= (ZL/Zo) -1 / (ZL/Zo) +1.

No Zsource appears in the equation, only ZL and Zo. " Were it not so, Terman would have told you!

There is a nice photo of Walt, W2DU in the April 1973 edition of QST. That`s the edition with (2) Bird wattmeters on the cover. This edition initiated a series of articles on "Reflections" by Walt.

Best regards, Richard Harrison, KB5WZI

2149. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 18:14:15 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <qoGcnfVhu6abLByiXTWJhg@comcast.com>
Source record: 107014
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vnvffcgsrubqdd@corp.supernews.com...
> There are a lot of factors that can potentially ....

Roy,

Does one have to worry about elevation? Generally the gain at 0 degrees elevation is very low. Does this apply when the two antennas are facing each other in plain line of sight? should he raise the transmit antenna to say, 15 degrees above the receiving antennas?

Tam/WB2TT

2150. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 18:38:48 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <f9GdnQ8bgpJaKxyiXTWJlg@comcast.com>
Source record: 107016

"Walter Maxwell" <w2du@iag.net> wrote in message
news:vu53ovs8n2i6s5fq0i8ismfv2khfikdd7l@4ax.com...
>
> This concept is foreign to me, so if I'm wrong I'd like to have some proof
that
> the source impedance can have any influence on SWR.
>
> Walt

Walt,

I don't think the source impedance has any effect on SWR. In fact I have changed the source impedance and saw no change in SWR. But Since tha SWR meter is a really dumb bunny, I wonder of the meter can be mislead by a reactive source impedance that forces the current to be out of phase with the voltage. Perhaps a case where the source and load both are reactive?

Tam/WB2TT

2151. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 18:45:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0md3ov09mrkabo9kmtaj2995kba1snk5jr@4ax.com>
Source record: 107017

On Mon, 6 Oct 2003 12:51:09 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:
>No Zsource appears in the equation, only ZL and Zo. " Were it not so,
>Terman would have told you!

Hi Richard,

Terman offers some expansion on your observation in his first footnote
to "Chapter 4 Transmission Lines"
"This material on transmission lines is a review and summary
of those concepts and relations that are most widely held in
radio work. It presupposes at least a little previous familiarity
with the subject, and therefore should not be regarded as a
self supporting presentation of transmission line theory."

Terman loves me this I know!
For "Electronic and Radio Engineering" tells me so.

:-)

73's
Richard Clark, KB7QHC

2152. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 18:56:15 UTC
From: alertjean_fake_id@rediffmail.com
Message-ID: <abd5b578.0310061056.36668c32@posting.google.com>
Source record: 106919

Thanks for your compliment

Your
friend

2153. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 18:58:30 UTC
From: alertjean_fake_id@rediffmail.com
Message-ID: <abd5b578.0310061058.188f26f@posting.google.com>
Source record: 106920

Lots of Thanks
And I know that your are unlike the GUY below you......
Can you please be more precise about the web resources ?

Jean

2154. 6 Meter Cushcraft ARX-6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:07:29 UTC
From: edflicek@wmconnect.com
Message-ID: <20031006150729.13734.00000002@mb-m29.wmconnect.com>
Source record: 106921

Forsale the above antenna, very good condition, used only 6 months. Asking $36, plus shipping.

Thanks,

Ed, KB0UKG

2155. FS: Cushcraft 4 ele. yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:10:17 UTC
From: edflicek@wmconnect.com
Message-ID: <20031006151017.13734.00000003@mb-m29.wmconnect.com>
Source record: 106922

I am selling the above antenna for $35, plus shipping.

Thanks,

Ed

2156. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:20:08 UTC
From: richardharrison@webtv.net
Message-ID: <11321-3F81C068-363@storefull-2318.public.lawson.webtv.net>
Source record: 106925

Tam, WB2TT wrote:
"--I wonder if the meter can be mislead by a reactive source impedance that forces the current to be out of phase with the voltage."

In the usual h-f transmission line, Zo appears as an Ro. This means that you put volts across it and the resulting current in the line travels according to Ohm`s law controlled by the surge impedance of the line. Ro means the current is in-phase with the volts across the line in both directions of travel. The funny stuff seen on a line with reflections comes from looking at both directions of travel at the same time. That`s not the best way to look at the line and that`s why the Bird wattmeter uses a directional coupler to extract information on the traveling wave in one direction at a time.

Surely maximum power transfer is enabled by a conjugate match. "Dumb bunny " SWR meters may indicate anything.

Terman says on page 76 of his 1955 edition regarding maximum power transfer:
"This is accomplished by making the load the conjugate of its generator impedance as defined by thevenin`s theorem."

It is Walt who is "bullet-proof" on this.

Best regards, Richard Harrison, KB5WZI

2157. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:25:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f81c3b0_5@corp.newsgroups.com>
Source record: 106923

Richard Clark wrote:

>>>everything can be explained by achieving a conjugate match ...
>
> and I see nothing about that in a halfwave line that instead achieves
> a Zo match, not a conjugate. A conjugate has very specific properties
> and you cannot provide an expression that offers the conjugate for the
> situation:

You conveniently trimmed off the rest of my statement. When the line
is lossy, it is possible to achieve a conjugate match at a point but nowhere
else. The requirement of a conjugate match for a lossy line is that the
impedance looking in either direction is the conjugate of the other direction.
That can be achieved at a single point in a lossy system, e.g. at the load.
The rule that if a conjugate match exists at one point, then a conjugate match
exists at all points, is *ONLY* true for lossless systems.

> Let's just juggle the notion of Zo matching out with a slight boundary
> change:
>
>>>source=200 Ohm(resistive)---50 ohm feedline---load=600 Ohm(resistive)
>
> What is the expression you offer to support your statement that yields
> the conjugate? Barring an answer, it follows your statement that
>
>>>everything can be explained by achieving a conjugate match ...

Again, please note that you deliberately snipped the context of that
statement, not a very ethical thing to do.

> is yet another in a long list of absurdities.

Well, since you changed the contextual conditions away from a possible
conjugate match, nothing in the new example cannot be explained by
achieving a conjugate match, since a conjugate match is impossible in
the new example. What do you think changing the context proves? Nothing
that you have said is true at the center of the sun. How's that for a
context change?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2158. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:37:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f81c671_5@corp.newsgroups.com>
Source record: 106924

Richard Clark wrote:
> My data stands un-refuted (barring the usual cackle of nay-saying
> sneer review), and even more, without test at ANY other bench. I can
> only conclude that:
> 1.) My data is bullet-proof;
> 2.) others lack the ability to perform the task;
> 3.) 1&2 above, but narcissistic debate is the real focus of critics.

I offered an experiment that might prove you right, Richard, but so
far you, nor anyone else, has offered any response.

Source---coax---(+j500)---SWR meter---(-j500)---50 ohm load

Seems to me the resonant reactances, in series or parallel, on each side
of the SWR meter, might add an equal magnitude of energy to the forward
energy and reflected energy seen by the SWR meter thus changing the SWR
reading. I suspect the above condition is representative of what you are
seeing in your measurements.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2159. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 19:56:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo3emfqikvh1a0@corp.supernews.com>
Source record: 107018
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The gain at low elevation angles is low only if you're distant from the antenna, and ground reflection is taking place -- EZNEC's far field analysis assumptions don't apply to a typical antenna measurement setup. Low far field gain at low angles is due to interference between the direct radiation and radiation reflected from the ground. This can and does occur when measuring antennas which are relatively close, but not to the extent you see in idealized far field modeling results, where the antennas are effectively an infinite distance apart. I don't have a great deal of real experience in measuring antennas, but believe that the common practice is to try to put the antennas high and relatively close together. It shouldn't be difficult to get a pretty good idea of the amount of signal cancellation you'd get for a given height and spacing, by setting up and solving a pretty simple geometry/trigonometry problem. Or you could model the two antennas over ground at their proposed positions, with a source in the transmitting antenna and a matched load in the receiving antenna, and look at the power delivered to a load as the height and spacing are changed.

Fortunately, dipoles and moderate size Yagis have similar elevation patterns for at least moderate angles relative to straight-on. That means that the percentage of signal directed toward the ground and therefore arriving at the receive antenna as a reflection will be about the same for a reference dipole as for a test Yagi. So whatever attenuation occurs, it should be about the same for the two antennas. This wouldn't hold, though, for a very long Yagi or for high-angle reflections from antennas which are high and close together. It's one of the factors that make really good antenna measurements tricky.

Roy Lewallen, W7EL

Tarmo Tammaru wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vnvffcgsrubqdd@corp.supernews.com...
>
>>There are a lot of factors that can potentially ....
>
>
> Roy,
>
> Does one have to worry about elevation? Generally the gain at 0 degrees
> elevation is very low. Does this apply when the two antennas are facing each
> other in plain line of sight? should he raise the transmit antenna to say,
> 15 degrees above the receiving antennas?
>

> Tam/WB2TT
>
>

2160. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 20:04:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f81ccc3$1_5@corp.newsgroups.com>
Source record: 106927

Richard Harrison wrote:
> In the usual h-f transmission line, Zo appears as an Ro.

RG-174 has about 6dB loss per 100ft on 12m. Its Z0 is equal
to Sqrt[(R+jXL)/(G+jXC)].

Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
say the Z0 of RG-174 is a nominal 50 ohms.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2161. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 20:10:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hni3ovgbq4h89brfefejmjrrsoac02qa84@4ax.com>
Source record: 106926

On Mon, 06 Oct 2003 14:25:33 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>
>>>>everything can be explained by achieving a conjugate match ...
>>
>> and I see nothing about that in a halfwave line that instead achieves
>> a Zo match, not a conjugate. A conjugate has very specific properties
>> and you cannot provide an expression that offers the conjugate for the
>> situation:
>
>You conveniently trimmed off the rest of my statement.

You are welcome.

>> Let's just juggle the notion of Zo matching out with a slight boundary
>> change:
>>
>>>>source=200 Ohm(resistive)---50 ohm feedline---load=600 Ohm(resistive)
>>
>> What is the expression you offer to support your statement that yields
>> the conjugate? Barring an answer, it follows your statement that
>>
>>>>everything can be explained by achieving a conjugate match ...
>>> is yet another in a long list of absurdities.

>Again, please note that you deliberately snipped the context of that
>statement, not a very ethical thing to do.

This time, everyone welcomes it.

>Nothing
>that you have said is true at the center of the sun. How's that for a
>context change?

Hi Cecil,

About average from you except this time you offered no solution for
either context change. As such, it appears your statement
>>>>everything can be explained by achieving a conjugate match ...
has no meaning outside of the center of the sun. I will leave that
you cannot demonstrate your statement anywhere in the known universe.

73's
Richard Clark, KB7QHC

2162. new use for a Direct TV antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 20:12:10 UTC
From: "Henry B." <hbienert@cox.net>
Message-ID: <q0kgb.42264$AH4.27743@lakeread06>
Source record: 106928

Direct TV antenna possible without a subscription to a cable/sat Tv
service-that is to receive as with a regular TV antenna?

--
Hank

2163. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 20:16:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f81cf87$1_5@corp.newsgroups.com>
Source record: 106929

Richard Clark wrote:
> As such, it appears your statement
>
>>>>>everything can be explained by achieving a conjugate match ...
>
> has no meaning outside of the center of the sun.

None of my statements has any meaning outside of the context in which they are offered (which you conventiently attempt to obscure). It appears that you do not want to resolve anything. If so, I hope you won't mind if others resolve your technical problems at the very time that you are 100% resistant to any resolution.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2164. Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 20:46:27 UTC
From: ricksink@mindspring.com
Message-ID: <3f81cfc2.92151328@news.east.earthlink.net>
Source record: 106930

I am currently receiving broadcast HDTV on a Channel Master Model 3020 combo UHF/VHF/FM antenna. I have a rotator and also a mast mounted antenna amplifier. I bring 75 ohm coax down and split the signal several times.

My HD reception is usually good, but occasionally it's hard to aim the antenna and sometimes the signal will drop out. VHF reception is very good and I want to keep that capability.

I'm thinking that to improve my HD (UHF) reception I'd like to install Channel Master's primo UHF antenna, the model 4228, which is a big square "chicken wire" affair. In fact, I just bought this antenna.

My next problem is figuring out how to hook it up and still keep the combo 3020 antenna in service for my VHF and FM stations. I could mount the 4228 on the same mast and use a 300 ohm combiner to bring leads from both antennas together, but will the UHF signals from the 3020 and the 4228 combine properly? Or will I get the possibility of a phase mismatch? To solve this, can I somehow disable or disconnect the UHF portion of the 3020 antenna and then use the 300 ohm combiner with the 4228?

Also, if I mount both these antennas on the same mast, will they somehow interfere with one another? I'm assuming I could separate them by about a foot or so.

Thanks in advance for any insight on this.

Rick Sink

2165. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:01:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mml3ov89s2sba2dprnqifu7flstmdrjv2h@4ax.com>
Source record: 106931

On Mon, 06 Oct 2003 15:16:04 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>None of my statements has any meaning outside of the context in which
>they are offered

Hi Cecil,

Well, as this all thread started from one context:
>>everything can be explained by achieving a conjugate match
being so encompassing as to enlarge beyond your capacity to explain,
we find ourselves with shortfalls of example to any context. Your
response of a Zo match is an embarrassing example of poor application
for conjugation, so it would appear that even your single context is
meaningless.

73's
Richard Clark, KB7QHC

2166. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:10:25 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <2gl3ov0vlo89f2b2qk8jjgjoebfrp9d1f3@4ax.com>
Source record: 106932

On Mon, 6 Oct 2003 14:38:48 -0400, "Tarmo Tammaru" <t-tammaru@home.com> wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:vu53ovs8n2i6s5fq0i8ismfv2khfikdd7l@4ax.com...
>>
>> This concept is foreign to me, so if I'm wrong I'd like to have some proof
>that
>> the source impedance can have any influence on SWR.
>>
>> Walt
>
>Walt,
>
>I don't think the source impedance has any effect on SWR. In fact I have
>changed the source impedance and saw no change in SWR. But Since tha SWR
>meter is a really dumb bunny, I wonder of the meter can be mislead by a
>reactive source impedance that forces the current to be out of phase with
>the voltage. Perhaps a case where the source and load both are reactive?
>
>Tam/WB2TT
>
Tam,

I totally disagree with those who say SWR appearing on a mismatched transmission line is dependent on the source impedance. If I understand Richard C correctly, he claims with 'bullet-poof' certainty that SWR is dependent on the source impedance. And if I understand Reg's earlier statement correctly, he shares Richard's position. I asked Reg for clarification, but he has not yet responded.

Richard C, you suggest we step up to the bench and perform your experiment that will prove you are correct. If you described this experiment to me earlier I invoke my Alzheimer's excuse for not remembering it. So would you please repeat it for my benefit? I'll be back at my Florida lab by Oct 22, and am anxious to perform it.

And Richard H, thanks for the support. More than 50 years of lab and professional work on transmission lines have never shown the source impedance to have any effect on propagation along the line, other than to influence the magnitude of the signal as it enters and propagates along the line.

Walt, W2DU

2167. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:19:13 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <mEednf9Igp_FQRyiXTWJig@crocker.com>
Source record: 106933

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f81ccc3$1_5@corp.newsgroups.com...
> Richard Harrison wrote:
> > In the usual h-f transmission line, Zo appears as an Ro.
>
> RG-174 has about 6dB loss per 100ft on 12m. Its Z0 is equal
> to Sqrt[(R+jXL)/(G+jXC)].
>
> Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
> say the Z0 of RG-174 is a nominal 50 ohms.

of course its not exactly 2500, otherwise there would be no loss. but its close, maybe 2500+j10 or something like that. and even the resistive part may not be exact, the nominal 50 ohms could be 45 to 55 depending on the tolerances of the manufacturer.

2168. Re: new use for a Direct TV antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:21:35 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <lzGdnVUcQ9p7QRyiU-KYgA@crocker.com>
Source record: 106934

"Henry B." <hbienert@cox.net> wrote in message
news:q0kgb.42264$AH4.27743@lakeread06...
> Direct TV antenna possible without a subscription to a cable/sat Tv
> service-that is to receive as with a regular TV antenna?
>
some microwave ops have converted them for use on some of the ham bands up
around 10ghz i think, but other than that there is probably not much else
they are good for.

2169. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:23:16 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <dNOdnaxo5OTWQByiXTWJkQ@crocker.com>
Source record: 106935

"Rick Sink" <ricksink@mindspring.com> wrote in message
news:3f81cfc2.92151328@news.east.earthlink.net...
> I am currently receiving broadcast HDTV on a Channel Master Model 3020
> combo UHF/VHF/FM antenna. I have a rotator and also a mast mounted
> antenna amplifier. I bring 75 ohm coax down and split the signal
> several times.
>
> My HD reception is usually good, but occasionally it's hard to aim the
> antenna and sometimes the signal will drop out. VHF reception is very
> good and I want to keep that capability.
>
> I'm thinking that to improve my HD (UHF) reception I'd like to install
> Channel Master's primo UHF antenna, the model 4228, which is a big
> square "chicken wire" affair. In fact, I just bought this antenna.
>
> My next problem is figuring out how to hook it up and still keep the
> combo 3020 antenna in service for my VHF and FM stations. I could
> mount the 4228 on the same mast and use a 300 ohm combiner to bring
> leads from both antennas together, but will the UHF signals from the
> 3020 and the 4228 combine properly? Or will I get the possibility of a
> phase mismatch? To solve this, can I somehow disable or disconnect the
> UHF portion of the 3020 antenna and then use the 300 ohm combiner with
> the 4228?
>
> Also, if I mount both these antennas on the same mast, will they
> somehow interfere with one another? I'm assuming I could separate them
> by about a foot or so.
>
> Thanks in advance for any insight on this.

you can try, but don't be surprised if it doesn't work as you hope. the
best thing would be to run a new feedline just for the uhf antenna.

2170. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:24:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <42m3ovoa1u8hghqmu6qa8qbi9fsjntjv7r@4ax.com>
Source record: 106936

On Mon, 06 Oct 2003 14:37:18 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>I offered an experiment that might prove you right
>... I suspect the above condition is representative of what you are
>seeing in your measurements.

Hi Cecil,

Your memory of those measurements alternately gains clarity and fades by the passage of each moment. I need no further examples, as flawed or superlative as they may be, to support my thesis that stands by simple resistive loads. Your gilding of the Lily and painting the Rose is performed off the bench as a means to yet again force the world into a speculation that your xeroxed page of Chipman responds to. No further analysis is required, it has been performed and data taken has demonstrated it.

If you choose to put forward a variant employing reactance, you could at least step up to the bench to offer confirmatory or rejecting evidence as I did. This is a simple example of offering a complete analysis to peers for study and review. Some problems defy such completeness, others defy analysis at the bench. This issue that I have presented, and to which you toss in a variant are wholly germane and within the capacity of any Ham to attempt to support or refute through scientific method.

It is equally obvious that such methods and manners are an alien concept competing with sneer review. As such, this disregard constitutes the kulture of institutionalized ignorance that dominates "debate."

Cecil, I seriously doubt your protestations of effusive gushing
>I offered an experiment that might prove you right, Richard
in that of your crafted "might" (which certainly offers no prospect of you actually performing any deed) is weighed with condescension. Such passivity merely conforms to the existing kulture and hardly rises to the effort and reportage I have already offered.

73's
Richard Clark, KB7QHC

2171. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 21:57:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0on3ovc49sitgobsdishff1irgha6of16p@4ax.com>
Source record: 106937

On Mon, 06 Oct 2003 21:10:25 GMT, Walter Maxwell <w2du@iag.net> wrote:
>Richard C, you suggest we step up to the bench and perform your experiment that
>will prove you are correct.

Hi Walt,

This is a misrepresentation of my work. I responded here that the appearance of poor criticism suggests that my work is bulletproof (among a spectrum of equal likelihoods) and my statement is a critique of that shoddy work being offered as rebut to my data.

Further, I make no pretense that such an experiment will prove me correct and I have offered on more than one occasion that someone with care equal to mine could easily find data that refutes mine. I have no illusions to being "correct" and have freely admitted that everything I do contains error. However, I do, by training and experience, exhibit those bounds of accuracy where others simply caterwaul on that they need no lessons in the matter and further would never "change their mind."

Now, if this appears to be backtracking, it is evident only to those who will never attempt anything at the bench and have no capacity to weigh their own sources of error - either of judgement or demonstrable skill.

In conclusion, it is certainly an illusion to imagine that anything is ever concluded. The best I can achieve is a confluence of thought with one or several in educating rather exotic issues that lie outside of the experience of many. There is nothing inherently common about this, and is of interest to only those who aspire to accuracy, a very limited audience.

The larger point that is germane to the whole of the audience is found in the conduct of analysis, its support or its refutation. The scientific community does not brook simple nay-saying and the shotgun approach to cut-and-paste arguments offered as rebuttal. I have described methods and results. My methods can be challenged, my results can be shown irreproducible. I have offered tangible, testable propositions, means, and results to which absolutely nothing of equal merit has been put forward to provide a meaningful assault. It is in that context that the appearance of a bulletproof presentation has been suggested by me. :-)

The irony of my comments lies in the simple observation that this only takes two resistors and a hank of line for one such test. The magnitude of effort, as evidenced by those simple constraints suggests

that my critics are seriously skill impaired to offer honest testing.
I am content to stand above such midgets even if I have to stoop so as
to not make it so overwhelmingly and embarrassingly obvious.

73's
Richard Clark, KB7QHC

2172. Series-Section Xmission Line Impedance Matching

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 22:51:26 UTC
From: jgboyles@aol.com
Message-ID: <20031006185126.18805.00000364@mb-m15.aol.com>
Source record: 106938

Hi,
I would like to cut a 75 ohm coaxial cable to 30 electrical degrees at 7.2 Mhz. for use in a series matching section. The velocity factor of the cable is not known. I have an Antenna Analyzer, and and RFsignal generator + the usual.

The impedance of the coax is stamped on the jacket, any way to determine 30 degrees without guessing at the VF?
73 Gary N4AST

2173. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 23:44:13 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <lsOdnfBUqJGEnx-iXTWJhg@ctc.net>
Source record: 106940

> I made the switch to RG6 a few years ago and am pleased; with the
> reducer for RG8x you can go directly to a PL-259 without an adapter.
> The loss at HF is negligible, it's less expensive than the RG-8 family
> of cables and the receiver doesn't care that it's 75 ohms. If your
> existing cable is working it isn't worth the effort to switch -however
> in future installations it's an option worth serious consideration.
>

The rg-6 is fine. Just be awear that much of it has an aluminum shield and
can not be soldered to . You must make a good mechanical connection.

2174. Re: Series-Section Xmission Line Impedance Matching

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-06 23:54:47 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <H0-dneW3EfNLnR-iU-KYgg@comcast.com>
Source record: 106939

You could use the antenna analyzer to find out what frequency the whole cable is 1/2 wavelength at, measure its length, and then calculate the velocity factor. Personally, I would guess that the factor is no less than 65%, whack off a piece, and take it from there.

Tam/WB2TT
"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20031006185126.18805.00000364@mb-m15.aol.com...
> Hi,
> I would like to cut a 75 ohm coaxial cable to 30 electrical degrees at
7.2
> Mhz. for use in a series matching section. The velocity factor of the
cable is
> not known. I have an Antenna Analyzer, and and RFsignal generator + the
usual.
>
> The impedance of the coax is stamped on the jacket, any way to determine
30
> degrees without guessing at the VF?
> 73 Gary N4AST

2175. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 00:01:28 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <0tKdnWBcHa70nx-iXTWJhQ@comcast.com>
Source record: 106941

Rick,

Assuming your amp is a combined UHF/VHF, you will want to combine the two antennas into the amplifier through a UHF/VHF splitter or combiner. Now, any UHF signal picked up by the VHF antenna will be ignored.

Tam/WB2TT
"Rick Sink" <ricksink@mindspring.com> wrote in message news:3f81cfc2.92151328@news.east.earthlink.net...
> I am currently receiving broadcast HDTV on a Channel Master Model 3020
> combo UHF/VHF/FM antenna. I have a rotator and also a mast mounted
> antenna amplifier. I bring 75 ohm coax down and split the signal
> several times.
>
> My HD reception is usually good, but occasionally it's hard to aim the
> antenna and sometimes the signal will drop out. VHF reception is very
> good and I want to keep that capability.
>
> I'm thinking that to improve my HD (UHF) reception I'd like to install
> Channel Master's primo UHF antenna, the model 4228, which is a big
> square "chicken wire" affair. In fact, I just bought this antenna.
>
> My next problem is figuring out how to hook it up and still keep the
> combo 3020 antenna in service for my VHF and FM stations. I could
> mount the 4228 on the same mast and use a 300 ohm combiner to bring
> leads from both antennas together, but will the UHF signals from the
> 3020 and the 4228 combine properly? Or will I get the possibility of a
> phase mismatch? To solve this, can I somehow disable or disconnect the
> UHF portion of the 3020 antenna and then use the 300 ohm combiner with
> the 4228?
>
> Also, if I mount both these antennas on the same mast, will they
> somehow interfere with one another? I'm assuming I could separate them
> by about a foot or so.
>
> Thanks in advance for any insight on this.
>
> Rick Sink
>
>
>

2176. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 00:06:14 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Cfmdna4JZKIYnh-iXTWJiw@comcast.com>
Source record: 106942
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks

Tam

2177. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 00:52:24 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <nmidne8fueq6kh-iU-KYvg@comcast.com>
Source record: 106943

"Walter Maxwell" <w2du@iag.net> wrote in message
news:2gl3ov0vlo89f2b2qk8jjgjoebfrp9d1f3@4ax.com...
> Tam,
>
> I totally disagree with those who say SWR appearing on a mismatched
transmission
> line is dependent on the source impedance.

Walter, I agree with you. But I am making a distinction between SWR and *measured* SWR. People who think an SWR meter possesses magic properties should look inside one. It takes one instantaneous sample of the NET voltage V, and one instantaneous sample of the NET current I. It displays the vector sum of
K(V + k2I)
and
K(V- k2I)

where K is the sensitivity, and k2 is chosen to make the second equation equal to 0 for a 50 Ohm load. The approximations made in coming up with what is printed on the meter scale assumes that for the forward wave the voltage and current are in phase. I have seen descriptions of how these things work, but no equations to back these up. I suspect one would start with the two equations that I listed, but express I in terms of V and deltaZ, where deltaZ is the deviation from 50 Ohms. K can arbitrarily be 1. I also suspect that Bird, etc don't really want us to know that.

Tam/WB2TT

2178. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 01:29:43 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <blt4u7$8qn$1@titan.btinternet.com>
Source record: 106944

Walt wrote -
> Well, Reg, the reason I asked for an expression that includes the source
> resistance in measuring SWR is that you said above that the internal
impedance
> of the transmitter is ASSUMED to be 50 ohms. This implies that the SWR is
> dependent on the internal impedance of the source, does it not ?
>
==========

Walt, there's just a slight misunderstanding.

It is not I who makes that silly assumption - it is the stupid so-called SWR + |rho| meter!

The meter indication is linearly proportional to |Rho|, from 0-to-1, from zero to full-scale.

In effect, by means of its scale-calibration, it calculates SWR and Refl power from |Rho|.

I understand conversion tables even appear in the handbooks.

The number 50-ohms appears in meter design calculations, and therefore affects the meter indication of |Rho|.

One expression involved is |Rho| = (50-ZL)/(50+ZL) -

The meter therefore ASSUMES the impedance seen looking back towards the transmitter from the meter is exactly 50 ohms.

But, as you well know, in the usual amateur situation, this assumption can be, and often is, is wildly incorrect.

There are only a few remaining old-wives who still think it's true. But the biased arguments still habitually remain.

As I have been saying for years, the solution is to change the name of the undoubtably useful meter to TLI (Transmitter Loading Indicator). Forget about SWR on an imaginary, non-existent transmission line and get into the real world.

Don't shoot the messenger of apple-cart-upsetting news. It's not new to the rigid old-wives Establishment.

Walt, please direct any criticism towards the education-disrupting meter indications.

For design of so-called HF SWR meters download in a few seconds and run immediately program SWRMETER from website below. Copious design notes are

included. I have just re-read them. After 3 years their readability could be improved and updated but I have no intention of doing so.

Walt sez,
> This concept is foreign to me, so if I'm wrong I'd like to have some proof that
> the source impedance can have any influence on SWR.

Walt, you must have been familiar with the incorrect concept for years. As we both know, changing the internal impedance of the transmitter cannot possibly have any effect on SWR on the imaginary transmission line, if there is one between transmitter and the meter. It is the meter itself which gives silly answers because it, and its users, assumes a line of exactly 50-ohms, longer than 1/2-wavelength actually exists. It doesn't!

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

2179. AC978 Tower for Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 02:23:10 UTC
From: Me <j.dauphinais@worldnet.att.net>
Message-ID: <ispgb.171512$3o3.12585839@bgtnsc05-news.ops.worldnet.att.net>
Source record: 106945
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx

I have for sale a steel Tower totaling 25'. This is in 3 sections 1 10'st8 section, 1 5' st8 section and 10' top section. I do NOT have a rotator. $50.00 pickup only from Westford, MA. I am selling this because it is not suitable for my current QTH. 73"s Jeff AA1GR

2180. AC978 TOWER 4-SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 02:50:50 UTC
From: Me <j.dauphinais@worldnet.att.net>
Message-ID: <eSpgb.171541$3o3.12586480@bgtnsc05-news.ops.worldnet.att.net>
Source record: 106946
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.space

I have for sale a steel Tower totaling 25'. This is in 3 sections 1 10'st8 section, 1 5' st8 section and 10' top section. I do NOT have a rotator. $50.00 pickup only from Westford, MA. I am selling this because it is not suitable for my current QTH. 73"s Jeff AA1GR

2181. Re: Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:12:24 UTC
From: David Cook <nospam.davepc4@comcast.net>
Message-ID: <saqgb.512095$cF.183720@rwcrnsc53>
Source record: 106947

I have the exact same configuration that I inherited from a ham who moved into a retirement community. He had used the thing for many years, my guess is he bought it back in the 70's. He had never had any problems with it, running a SB-200 kilowatt linear on it.

I bought the plastics and stainless steel replacment kits from HyGain, completely rebuilt it, and retuned it to the "compromise" frequencies that WB2TT mentioned. I've had it up about a month now and used it from 14.070 PSK up to 14.250 SSB with the amplifier, and with no problems whatsoever. I haven't made a graph of the SWR v.s. frequency, but as I said, I'm running the kilowatt and haven't had any problems in just the month that it's been up. Now that the wet Seattle winter is setting in, I guess we'll see if I have any arcing when it gets damp.

The BN-86 is such a clunky balun anyway, I'm hoping that it will fry so I can replace it with something that looks a little nicer. But for the price (the whole works was free for the price of getting it off his property so he could sell his home), I'm not complaining.

73, Dave, WA0TTN

"Ralph Mowery" <rmowery@ctc.net> wrote in message
news:5vSdnQoUsftEuOKiU-KYuQ@ctc.net...
> I picked up a used Hy-GAin TH3-MK3 and BN-86 balun used at a hamfest today
> with the paper work. It had only been in use a short time and looked new.
> I am a 30 year ham but most of my work has been weak signal on 144 and 432
> mhz. This is my first beam for the DC bands. Most of my vhf/uhf beams are
> broad enough to cover the whole band without a tuner. I noticed the beam
> could be used with a home made coil of coax for a choke or the balun could
> be used. Nothing new sofar. Then the balun says not to use the the balun
> with a tuner because of high voltages causing arcing over. Still nothing
> new. I am planning on running the nominal 100 watt rig and maybe later
> getting an amp that will run about 600 watts out. I plan on mostly phone
> and the upper end of the cw portion of 20 meters for the digital modes. I
> am well awear of all the theory of baluns and chokes but what to people
that
> have used the beam and choke/ balun have to say. Do I use the coax choke,
> use a ferrite current choke or the thing that HY-Gain supplies ? I don't
> really care if the patern is off to one side or some of the more common
> stories about radiating coax.
>
> I can read theory all day but I would like to hear from people that have
> used or seen the beam in use.
>
>

2182. Re: Hy-Gain TH3

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:16:32 UTC
From: David Cook <nospam.davepc4@comcast.net>
Message-ID: <keqgb.420772$2x.143347@rwcrnsc52.ops.asp.att.net>
Source record: 106948

p.s. Here's the unit in all it's glory:
http://www.netdave.com/wa0ttn/images/TowerUp/Tower1.jpg

2183. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:30:06 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <3ub4ovo6bsqlvejipnn5eifjj9q19vsl1q@4ax.com>
Source record: 106949

On Mon, 6 Oct 2003 20:52:24 -0400, "Tarmo Tammaru" <t-tammaru@home.com> wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:2gl3ov0vlo89f2b2qk8jjgjoebfrp9d1f3@4ax.com...
>> Tam,
>>
>> I totally disagree with those who say SWR appearing on a mismatched
>transmission
>> line is dependent on the source impedance.
>
>Walter, I agree with you. But I am making a distinction between SWR and
>*measured* SWR. People who think an SWR meter possesses magic properties
>should look inside one. It takes one instantaneous sample of the NET voltage
>V, and one instantaneous sample of the NET current I. It displays the vector
>sum of
>K(V + k2I)
>and
>K(V- k2I)
>
>where K is the sensitivity, and k2 is chosen to make the second equation
>equal to 0 for a 50 Ohm load. The approximations made in coming up with what
>is printed on the meter scale assumes that for the forward wave the voltage
>and current are in phase. I have seen descriptions of how these things work,
>but no equations to back these up. I suspect one would start with the two
>equations that I listed, but express I in terms of V and deltaZ, where
>deltaZ is the deviation from 50 Ohms. K can arbitrarily be 1. I also suspect
>that Bird, etc don't really want us to know that.
>
>Tam/WB2TT
>
Well, Tam, I agree with you also, but your comments only relate to accuracy, not whether the internal resistance of the source has any influence on the SWR. I'm well acquainted with the various types of swr meters, the Bruene lumped-constant directional coupler, for instance, or for a more professional example, the HP-778D dual directional coupler that I use with an HP-8405A Vector Voltmeter in my own lab.

The value of the source resistance can be any value, and its reflection coefficient rho seen looking into the output can be any value from zero to one. If the value is zero it simply means any reflected power reaching the output is absorbed and if rho = 1all reflected power is re-reflected. With any combination of the above the SWR on a mismatched line is the same. The only effect these parameters have on the line is the magnitude of the signal being propagated. I know this from years of experience, beginning with slotted lines, and from the

engineering literature. For example, Walter C. Johnson on Page 100 spells it out specifically.

What I'd like to see is for those who say SWR is dependent on the source impedance to show how and why this what I call 'misconception' can occur.

Walt, W2DU

2184. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:33:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f823600$1_7@corp.newsgroups.com>
Source record: 106950

Richard Clark wrote:

> On Mon, 06 Oct 2003 15:16:04 -0500, Cecil Moore
> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
>>None of my statements has any meaning outside of the context in which
>>they are offered
>
> Well, as this all thread started from one context:
>
>>>everything can be explained by achieving a conjugate match
>
> being so encompassing as to enlarge beyond your capacity to explain,
> we find ourselves with shortfalls of example to any context.

But that's not what I said, Richard. Everything within the
original context can be explained by achieving a conjugate
match but you deleted the context and therefore misquoted me.

If I say, "It is always daylight at 12 noon." and you quote
me as saying "It is always daylight ", you have turned my true
statement into a false statement which is not an ethical thing
to do.
--
73, Cecil http://www.qsl.net/w5dxp

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2185. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:44:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f823893$1_7@corp.newsgroups.com>
Source record: 106952

David Robbins wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
>>say the Z0 of RG-174 is a nominal 50 ohms.
>
> of course its not exactly 2500, otherwise there would be no loss. but its
> close, maybe 2500+j10 or something like that. and even the resistive part
> may not be exact, the nominal 50 ohms could be 45 to 55 depending on the
> tolerances of the manufacturer.

Comparing the 6dB loss of RG-174 to the 0.14 dB loss for hardline -
is all that extra loss accounted for in the +j10 term?
--
73, Cecil http://www.qsl.net/w5dxp

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2186. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:45:42 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <0uc4ov88r0s9rabtckmca8cig8haujuccs@4ax.com>
Source record: 106951

On Tue, 7 Oct 2003 01:29:43 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@btinternet.com> wrote:

>Walt wrote -
>> Well, Reg, the reason I asked for an expression that includes the source
>> resistance in measuring SWR is that you said above that the internal
>impedance
>> of the transmitter is ASSUMED to be 50 ohms. This implies that the SWR is
>> dependent on the internal impedance of the source, does it not ?
>>
>==========
>
>Walt, there's just a slight misunderstanding.
>
>
>It is not I who makes that silly assumption - it is the stupid so-called
>SWR + |rho| meter!
>
>
>The meter indication is linearly proportional to |Rho|, from 0-to-1, from
>zero to full-scale.
>
>
>In effect, by means of its scale-calibration, it calculates SWR and Refl
>power from |Rho|.
>
>
>I understand conversion tables even appear in the handbooks.
>
>
>The number 50-ohms appears in meter design calculations, and therefore
>affects the meter indication of |Rho|.
>
>
>One expression involved is |Rho| = (50-ZL)/(50+ZL) -
>
>
>The meter therefore ASSUMES the impedance seen looking back towards the
>transmitter from the meter is exactly 50 ohms.
>
>But, as you well know, in the usual amateur situation, this assumption can
>be, and often is, is wildly incorrect.
>
>

>There are only a few remaining old-wives who still think it's true. But the
>biased arguments still habitually remain.
>
>
>As I have been saying for years, the solution is to change the name of the
>undoubtably useful meter to TLI (Transmitter Loading Indicator). Forget
>about SWR on an imaginary, non-existent transmission line and get into the
>real world.
>
>
>Don't shoot the messenger of apple-cart-upsetting news. It's not new to the
>rigid old-wives Establishment.
>
>
>Walt, please direct any criticism towards the education-disrupting meter
>indications.
>
>
>For design of so-called HF SWR meters download in a few seconds and run
>immediately program SWRMETER from website below. Copious design notes are
>included. I have just re-read them. After 3 years their readability could
>be improved and updated but I have no intention of doing so.
>
>---
>Walt sez,
>> This concept is foreign to me, so if I'm wrong I'd like to have some proof
>that
>> the source impedance can have any influence on SWR.
>
>---
>
>Walt, you must have been familiar with the incorrect concept for years. As
>we both know, changing the internal impedance of the transmitter cannot
>possibly have any effect on SWR on the imaginary transmission line, if there
>is one between transmitter and the meter. It is the meter itself which gives
>silly answers because it, and its users, assumes a line of exactly 50-ohms,
>longer than 1/2-wavelength actually exists. It doesn't!
>
>----
>=======================
>Regards from Reg, G4FGQ
>For Free Radio Design Software
>go to http://www.g4fgq.com
>=======================
>
No Reg, I've never been familiar with the incorrect concept. I had never thought
anyone was that uninformed until you and Richard C brought it up here. I was
flabbergasted to think you held that position, so I'm relieved to know that you
aren't among the uninformed. And Richard's last two posts seemed
contradictory--I haven't yet totally understood what his position really is.

I'm sure you're aware that the voltage applied to the meter movement of the SWR meter is actually making the indicator hand respond to the value of rho, but with the scale graduated in units of SWR. To verify this we adjust the forward reading for full scale for the reference reading. We then switch to the reflected reading. Let's say the mismatch is 3:1 for rho = 0.5. If the SWR indicator is accurate a voltmeter will now read 0.5. exactly half scale, where the full-scale reading is 1.0.

Reg, I'm not lecturing you, because I know that you know this--this is my way of telling you that I also know it.

Walt, W2DU

2187. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 03:56:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f823b65$1_7@corp.newsgroups.com>
Source record: 106953

Richard Clark wrote:
> No further analysis is required, it has been performed and data
> taken has demonstrated it.

Nuff said! Guess that settles it - and you don't want or need to
understand the underlying physics. Why do you keep posting?

> If you choose to put forward a variant employing reactance, you could
> at least step up to the bench to offer confirmatory or rejecting
> evidence as I did.

I don't understand how to set up your experiment. Your verbal
description was extremely confusing. How about a decent diagram?
--
73, Cecil http://www.qsl.net/w5dxp

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2188. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 04:30:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ucf4ovk81k85uohag2npp9gek9g1d91sre@4ax.com>
Source record: 106954

On Mon, 06 Oct 2003 22:33:17 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>If I say, "It is always daylight at 12 noon." and you quote
>me as saying "It is always daylight ", you have turned my true
>statement into a false statement which is not an ethical thing
>to do.

Hi Cecil,

I don't know why you bother with discussion of ethics when you cannot respond to the technical enquiry. This is your 12th entry in this side thread that was NOT addressed to you and you have nothing to offer but the squishy touchy problem of your perception of a moral dilemma whose discussion is best left to a democrat running for office.

And this silliness about "true statements" is absurd in its own right and easily an example of a moral rigidity that brooks no contrary evidence. Unlike you, I am fully aware of my errors, their source, and their contribution or benign influence upon other discussion. You have spent to much time in a binary world, a womb that has insulated you from the reality of uneven edges and impure solutions. You are out of your element trying to force fit nature into the only solution you have from a xeroxed page.

73's
Richard Clark, KB7QHC

2189. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 04:51:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dcg4ovcv472abebgokg6h0np89sgqre7p5@4ax.com>
Source record: 106955

On Mon, 06 Oct 2003 22:56:18 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>I don't understand how to set up your experiment. Your verbal
>description was extremely confusing. How about a decent diagram?

Hi Cecil,

Then argue what constitutes a decent diagram? Cecil, you are a
goldbrick. Frankly, I have no interest in explaining it to you. That
is why I offered it only once. All that need be said was said, and I
responded to every technical enquiry you put to me. That you are
confused is your own problem and not my responsibility.

73's
Richard Clark, KB7QHC

2190. Omni homebrew for 23cm? Who helps?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 08:51:15 UTC
From: Michel de Ruiter <pd1aiw@amsat.org>
Message-ID: <3f827e19$0$269$4d4ebb8e@news.nl.uu.net>
Source record: 106956

Dear all,

I am looking for an ATV project for a horizontal omni homebrew antenna for 23cm. Who has any ideas? And helps me with a
schematic?

Reagards,

Michel

2191. Re: Series-Section Xmission Line Impedance Matching

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 09:11:52 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <$jjFH$HYNog$EAQp@ifwtech.co.uk>
Source record: 106958

JGBOYLES wrote:
>Hi,
> I would like to cut a 75 ohm coaxial cable to 30 electrical degrees at 7.2
>Mhz. for use in a series matching section. The velocity factor of the cable is
>not known. I have an Antenna Analyzer, and and RFsignal generator + the usual.
>
> The impedance of the coax is stamped on the jacket, any way to determine 30
>degrees without guessing at the VF?

It's easy to cut a 90deg length, so do that at 21.6MHz.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2192. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 11:04:00 UTC
From: ricksink@mindspring.com
Message-ID: <3f829d04.144697328@news.east.earthlink.net>
Source record: 106957

On Mon, 6 Oct 2003 20:01:28 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Rick,
>
>Assuming your amp is a combined UHF/VHF, you will want to combine the two
>antennas into the amplifier through a UHF/VHF splitter or combiner. Now, any
>UHF signal picked up by the VHF antenna will be ignored.

Huh??? If the amp amplifies both UHF and VHF then why would it ignore
VHF?? Can you explain a bit more?

Thanks,
Rick

>
>Tam/WB2TT
>"Rick Sink" <ricksink@mindspring.com> wrote in message
>news:3f81cfc2.92151328@news.east.earthlink.net...
>> I am currently receiving broadcast HDTV on a Channel Master Model 3020
>> combo UHF/VHF/FM antenna. I have a rotator and also a mast mounted
>> antenna amplifier. I bring 75 ohm coax down and split the signal
>> several times.
>>
>> My HD reception is usually good, but occasionally it's hard to aim the
>> antenna and sometimes the signal will drop out. VHF reception is very
>> good and I want to keep that capability.
>>
>> I'm thinking that to improve my HD (UHF) reception I'd like to install
>> Channel Master's primo UHF antenna, the model 4228, which is a big
>> square "chicken wire" affair. In fact, I just bought this antenna.
>>
>> My next problem is figuring out how to hook it up and still keep the
>> combo 3020 antenna in service for my VHF and FM stations. I could
>> mount the 4228 on the same mast and use a 300 ohm combiner to bring
>> leads from both antennas together, but will the UHF signals from the
>> 3020 and the 4228 combine properly? Or will I get the possibility of a
>> phase mismatch? To solve this, can I somehow disable or disconnect the
>> UHF portion of the 3020 antenna and then use the 300 ohm combiner with
>> the 4228?
>>
>> Also, if I mount both these antennas on the same mast, will they
>> somehow interfere with one another? I'm assuming I could separate them
>> by about a foot or so.
>>

>> Thanks in advance for any insight on this.
>>
>> Rick Sink
>>
>>
>>
>
>

2193. Re: Series-Section Xmission Line Impedance Matching

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 11:25:00 UTC
From: jgboyles@aol.com
Message-ID: <20031007072500.16270.00000424@mb-m19.aol.com>
Source record: 106959

>It's easy to cut a 90deg length, so do that at 21.6MHz.

Now why didn't I think of that! Thanks Ian.
73 Gary N4AST

2194. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 12:59:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82babc$1_6@corp.newsgroups.com>
Source record: 106961

Richard Clark wrote:
> You are
> out of your element trying to force fit nature into the only solution
> you have from a xeroxed page.

Maybe so, but that xeroxed page is what you offered as a reference.
That's why I xeroxed it. Nothing on that page has changed since I
xeroxed it. It still talks about a "resonant rise of voltage" in
series resonant circuits, the most probable cause of a variation in
SWR and the very thing that you refuse to accept or acknowledge.
--
73, Cecil http://www.qsl.net/w5dxp

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2195. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 13:02:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82bb6e$1_6@corp.newsgroups.com>
Source record: 106962

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>I don't understand how to set up your experiment. Your verbal
>>description was extremely confusing. How about a decent diagram?
>
> Then argue what constitutes a decent diagram?

No, you have presented absolutely no diagram at all - just a set
of unintelligible words. You have a web page. Why are you afraid
to publish a schematic?
--
73, Cecil http://www.qsl.net/w5dxp

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2196. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 13:07:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo5b45i88ip309@corp.supernews.com>
Source record: 106960

You've got to be careful with cause and effect. There's not a direct correspondence between loss and characteristic reactance.

A transmission line can be very lossy, yet have a completely real characteristic impedance. Such a line doesn't have any reactance term in its characteristic impedance to "account for" its loss. To learn more about these, look up "distortionless line" in the index of your favorite transmission line text.

The converse, however, isn't true. Any line which has a reactive Z0 does have loss. You can find the equations needed to calculate Z0 and loss coefficient alpha from R, G, L, and C in _Reference Data for Radio Engineers_. Deriving from them an equation directly relating alpha and Z0 should give you something to do for a number of long winter evenings. Maybe even give you a break from thinking about waves of average power bouncing about.

Roy Lewallen, W7EL

Cecil Moore wrote:
> David Robbins wrote:
>
>> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>
>>> Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
>>> say the Z0 of RG-174 is a nominal 50 ohms.
>>
>>
>> of course its not exactly 2500, otherwise there would be no loss. but
>> its
>> close, maybe 2500+j10 or something like that. and even the resistive
>> part
>> may not be exact, the nominal 50 ohms could be 45 to 55 depending on the
>> tolerances of the manufacturer.
>
>
> Comparing the 6dB loss of RG-174 to the 0.14 dB loss for hardline -
> is all that extra loss accounted for in the +j10 term?

2197. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 13:13:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82be16$1_6@corp.newsgroups.com>
Source record: 106963

Roy Lewallen wrote:
> A transmission line can be very lossy, yet have a completely real
> characteristic impedance.

That's what I thought. Is RG-174 one of those transmission lines?

> Maybe even give you a break from thinking about waves of average power
> bouncing about.

At least with average power, one cannot violate the conservation of
energy principle by creating instantaneous energy in a passive load. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2198. Re: Omni homebrew for 23cm? Who helps?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 15:06:16 UTC
From: Key Largo <Bogie@largo.com>
Message-ID: <JDAgb.56613$Ms2.54136@fed1read03>
Source record: 106964

Michel --- some homebrew antenna ideas at URL:

http://ac6v.com/antprojects.htm#GHZ
--
73 From The Old Elmer

"Michel de Ruiter" <pd1aiw@amsat.org> wrote in message
news:3f827e19$0$269$4d4ebb8e@news.nl.uu.net...
> Dear all,
>
> I am looking for an ATV project for a horizontal omni homebrew antenna for
23cm. Who has any ideas? And helps me with a
> schematic?
>
>
>
> Reagards,
>
>
>
> Michel
>
>
>
>

2199. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 15:43:21 UTC
From: w3hy@aol.com
Message-ID: <20031007114321.04926.00000408@mb-m18.aol.com>
Source record: 106965

Cecil wrote:
>Is a simple "yes" or "no"
>too much to ask?

From Richard, yes.

2200. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 15:49:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82e2a2_5@corp.newsgroups.com>
Source record: 106966

Richard Clark wrote:
> If you choose to put forward a variant employing reactance, you could
> at least step up to the bench to offer confirmatory or rejecting
> evidence as I did.

OK, here's an interesting data point. I adjusted my IC-756PRO for 5W
output on 7.2 MHz using the following circuit.

7.2MHz 5W source---(+j442)---(-j442)---50 ohm dummy load

SWR meter at the dummy load read 5W forward with an SWR of 1:1

Then I installed the SWR meter between the coil and the cap. With 5W
supplied by the source, the forward power read 150 watts. Indicated
SWR was 3:1
--
73, Cecil http://www.qsl.net/w5dxp

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2201. Re: Series-Section Xmission Line Impedance Matching

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 17:29:10 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310070929.4671e44f@posting.google.com>
Source record: 106967

I second Tam's advice...good comments as usual.

In addition, realize that the velocity factor (at HF and above) is determined practically entirely by the dielectric used in the line. You can use this fact to at least bracket the reasonable values. If it's solid polyethylene dielectric, the VF will be very near 0.66. If it's solid Teflon, VF will be very near .69. It's usual for foam-polyethylene to give a VF near 0.78, and foam-Teflon closer to 0.82, but since the percentage plastic in the foam affects the VF, it's a bit more variable than with solid dielectric. In addition, if you can measure the capacitance and you are reasonably sure about the impedance of the line, you can use that to get an estimate of the VF. That's because Zo=sqrt(L/C) and Tau=propagation time=sqrt(L*C). Knowing C and Zo, you can find L, and from that you can find Tau, and from that and the length, you can find VF. Assume a tolerance of +/-5% on Zo...it might even be more.

Depending on the test equipment you have available and the trouble you're willing to go to, there are other ways you can nail VF down. It might be worthwhile to do a simple calc to understand how well you need to know the VF, given that you probably don't know the Zo closer than 5%. You may decide it doesn't matter a whole lot as long as you're in the ballpark, or you may decide that you also need to determine the true Zo as well.

Cheers,
Tom

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<H0-dneW3EfNLnR-iU-KYgg@comcast.com>...
> You could use the antenna analyzer to find out what frequency the whole
> cable is 1/2 wavelength at, measure its length, and then calculate the
> velocity factor. Personally, I would guess that the factor is no less than
> 65%, whack off a piece, and take it from there.
>
> Tam/WB2TT
> "JGBOYLES" <jgboyles@aol.com> wrote in message
> news:20031006185126.18805.00000364@mb-m15.aol.com...
> > Hi,
> > I would like to cut a 75 ohm coaxial cable to 30 electrical degrees at
> 7.2
> > Mhz. for use in a series matching section. The velocity factor of the
> cable is
> > not known. I have an Antenna Analyzer, and and RFsignal generator + the
> usual.

> >
> > The impedance of the coax is stamped on the jacket, any way to determine
> 30
> > degrees without guessing at the VF?
> > 73 Gary N4AST

2202. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 17:41:26 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310070941.33f979f2@posting.google.com>
Source record: 106968

alertjean_fake_id@rediffmail.com wrote in message
news:<abd5b578.0310031910.736f0c7c@posting.google.com>...
> When will a wire radiate?
> Can we make an oscillator circuit to radiate by simply connecting its
> output to a long wire ?
> Where can I get suitable study material on net about the topic?

I know it's a little old-fashioned, but I would recommend going to a
library and finding books about this topic. A personal favorite of
mine is Ronold King's "Antennas" chapter in King, Mimno and Wing,
"Transmission Lines, Antennas and Waveguides." Early in that chapter,
he discusses "radiation" from wires...really, what happens in distant
conductors because of something that happened in one conductor.

You may also be able to find good things on the web...try a web search
using words like "antenna" and "radiation".

But above all else, be sure to use your head and really understand
what you read; it can be easy to read more into something than is
really there, and you can be misled by false information if you don't
keep your wits about you.

Cheers,
Tom

2203. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 17:44:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82fd9c$1_7@corp.newsgroups.com>
Source record: 106769

Reg Edwards wrote:
> But where have you hidden this remarkable transmission line which is long
> enough to mug and hoodwink so-called SWR meters?
>
> It does not exist!
>
> Your argument falls flat at the start.

Reg, I asked the question over on sci.phisics.electromag and got
the following answer:

>> So unless almost all the power diverts into an undesireable
>> mode (by a factor of more than a million to one), one foot
>> of (RG-213) cable should see pure TEM at the end.

So according to a pretty smart guy, one foot of RG-213 on each side
of a 50 ohm SWR meter will ensure that the SWR meter is in the 50 ohm
environment for which it was designed. I have three feet of RG-400
on each side of mine.
--
73, Cecil http://www.qsl.net/w5dxp

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2204. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 17:54:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f82ffcc_7@corp.newsgroups.com>
Source record: 106771

Roy Lewallen wrote:

> Cecil Moore wrote:
>
>> Roy Lewallen wrote:
>>> A transmission line can be very lossy, yet have a completely real
>>> characteristic impedance.
>>
>> That's what I thought. Is RG-174 one of those transmission lines?
>
> No. Distortionless lines are specially made, or periodically loaded with
> fixed components to achieve distortionless characteristics.
>
> Incidentally, I recently carefully measured the Z0 of nine pieces of
> RG-58 type cables at 10 MHz. R varied from 48.1 to 57.2 ohms, and X from
> -0.67 to -2.32 ohms.

Assuming 57.2 - j2.32 ohms Z0, our 50 ohm SWR meters may be off
by 15%? Could this be the answer to Richard C's SWR readings?
I suggested that as a possibility early on but he dismissed it.
--
73, Cecil http://www.qsl.net/w5dxp

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2205. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 18:18:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ap06ovk0douhfo4c82eu4p5rqufnmjuhm1@4ax.com>
Source record: 106772

On Tue, 07 Oct 2003 10:49:50 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> If you choose to put forward a variant employing reactance, you could
>> at least step up to the bench to offer confirmatory or rejecting
>> evidence as I did.
>
>OK, here's an interesting data point. I adjusted my IC-756PRO for 5W
>output on 7.2 MHz using the following circuit.
>
>7.2MHz 5W source---(+j442)---(-j442)---50 ohm dummy load
>
>SWR meter at the dummy load read 5W forward with an SWR of 1:1
>
>Then I installed the SWR meter between the coil and the cap. With 5W
>supplied by the source, the forward power read 150 watts. Indicated
>SWR was 3:1

Hi Cecil,

And so?

73's
Richard Clark, KB7QHC

2206. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 18:21:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tu06ov4fu0lmsvvfab6295upmvip65sbtm@4ax.com>
Source record: 106773

On 07 Oct 2003 15:43:21 GMT, w3hy@aol.com (W3HY) wrote:

>Cecil wrote:
>>Is a simple "yes" or "no"
>>too much to ask?
>
>From Richard, yes.
>

Hi Romain,

Nice to see you've been reading enough to have figured out the answer
Cecil couldn't.

73's
Richard Clark, KB7QHC

2207. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 18:52:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo5va994sglv2b@corp.supernews.com>
Source record: 106770

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> A transmission line can be very lossy, yet have a completely real
>> characteristic impedance.
>
>
> That's what I thought. Is RG-174 one of those transmission lines?

No. Distortionless lines are specially made, or periodically loaded with fixed components to achieve distortionless characteristics.

Incidentally, I recently carefully measured the Z0 of nine pieces of RG-58 type cables at 10 MHz. R varied from 48.1 to 57.2 ohms, and X from -0.67 to -2.32 ohms. I made one measurement at 1 MHz, on a cable whose Z0 at 10 MHz was 49.0 - j0.69 at 10 MHz. That cable's Z0 at 1 MHz was 50.7 - j2.05 ohms. I wasn't able to make good measurements below 1 MHz with my setup.

> . . .

Roy Lewallen, W7EL

2208. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 18:54:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f830def_8@corp.newsgroups.com>
Source record: 106776

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>OK, here's an interesting data point. I adjusted my IC-756PRO for 5W
>>output on 7.2 MHz using the following circuit.
>>
>>7.2MHz 5W source---(+j442)---(-j442)---50 ohm dummy load
>>
>>SWR meter at the dummy load read 5W forward with an SWR of 1:1
>>
>>Then I installed the SWR meter between the coil and the cap. With 5W
>>supplied by the source, the forward power read 150 watts. Indicated
>>SWR was 3:1
>
> Hi Cecil, And so?

And so it seems to support your variable SWR observations.
--
73, Cecil http://www.qsl.net/w5dxp

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2209. Seperation question???? thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 18:57:13 UTC
From: kc5cqa@yahoo.com
Message-ID: <4436ovgvmfh97uu0vemsjnv679drkf1v3f@4ax.com>
Source record: 106775

Let me tell you what I have, and then ask my question. Tilt able mast 78ft tall. At present I have located @ 78ft a two meter, 6 element quad, 4ft below that a tv, channel 2 antenna (ten element). Now the question, I have purchased a duel band two meter/440 ground plane. It is about 15ft long/tall, and about 9 or ten 'gain'. I also have a horz 2 meter ground plane(not in the air as of yet). Here is what I would LIKE to do, install the duel band 2/440 at the very top, and below that the two meter horz ground plane and then below that, the channel 2 tv antenna. What I would like to KNOW is,,,,,,,,, what should the ''''spacings' ''' between these antennas????
Since the channel 2 tv antenna is by far the larger than then two meter quad,,,,would its placement be better served in the middle?
My priority is the duel band first, and the horz ground plane and the quad are a 'toss up'.
Is the spacing I am using now between the quad and channel 2 tv antenna correct???.
If you are asking yourself, why does he have a channel 2 tv antenna up that high? I live out in the boonies, and this particular channel has programs that I don't receive on our regular tv antennas. The station is about 60 miles away, I don't want to buy sat or cable.Would appreciate any and all input.
Thanks in advance. cl. 73

2210. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 19:11:46 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <-_WdnULq84OcjR6iXTWJhg@comcast.com>
Source record: 106777

Rick,

Think of the splitter that used to come with TV sets. You had the antenna lead that had both UHF and VHF on it, which got split by the splitter behind the TV set. The VHF signal went to the VHF input on the TV, and the UHF signal went to the UHF input of the TV. You want to do the same thing, but in reverse. On the splitter, connect the UHF port to the UHF antenna, and the VHF port to the VHF antenna. The third port goes to your amp input. The amplifier will have both UHF and VHF signals, but the UHF signal will all have originated in the UHF antenna, and the VHF signal in the VHF antenna. Do NOT use a 2 set coupler instead of the splitter; you will lose 3 to 4 db of signal to noise, regardless of the gain of your amplifier. You can probably buy these things at the Radio Shack.

Tam/WB2TT
"Rick Sink" <ricksink@mindspring.com> wrote in message
news:3f829d04.144697328@news.east.earthlink.net...
> On Mon, 6 Oct 2003 20:01:28 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >Rick,
> >
> >Assuming your amp is a combined UHF/VHF, you will want to combine the two
> >antennas into the amplifier through a UHF/VHF splitter or combiner. Now,
any
> >UHF signal picked up by the VHF antenna will be ignored.
>
> Huh??? If the amp amplifies both UHF and VHF then why would it ignore
> VHF?? Can you explain a bit more?
>
> Thanks,
> Rick
>
> >
> >Tam/WB2TT
> >"Rick Sink" <ricksink@mindspring.com> wrote in message
> >news:3f81cfc2.92151328@news.east.earthlink.net...
> >> I am currently receiving broadcast HDTV on a Channel Master Model 3020
> >> combo UHF/VHF/FM antenna. I have a rotator and also a mast mounted
> >> antenna amplifier. I bring 75 ohm coax down and split the signal
> >> several times.
> >>
> >> My HD reception is usually good, but occasionally it's hard to aim the
> >> antenna and sometimes the signal will drop out. VHF reception is very
> >> good and I want to keep that capability.

> >>
> >> I'm thinking that to improve my HD (UHF) reception I'd like to install
> >> Channel Master's primo UHF antenna, the model 4228, which is a big
> >> square "chicken wire" affair. In fact, I just bought this antenna.
> >>
> >> My next problem is figuring out how to hook it up and still keep the
> >> combo 3020 antenna in service for my VHF and FM stations. I could
> >> mount the 4228 on the same mast and use a 300 ohm combiner to bring
> >> leads from both antennas together, but will the UHF signals from the
> >> 3020 and the 4228 combine properly? Or will I get the possibility of a
> >> phase mismatch? To solve this, can I somehow disable or disconnect the
> >> UHF portion of the 3020 antenna and then use the 300 ohm combiner with
> >> the 4228?
> >>
> >> Also, if I mount both these antennas on the same mast, will they
> >> somehow interfere with one another? I'm assuming I could separate them
> >> by about a foot or so.
> >>
> >> Thanks in advance for any insight on this.
> >>
> >> Rick Sink
> >>
> >>
> >>
> >
> >
>

2211. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 19:23:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <8QCdnU5Y6fc5jx6iU-KYjA@comcast.com>
Source record: 106778

Cecil,

Very interesting. Can you take one more reading. Leave the meter between the coil and cap, and then short out the coil. If shorting out the coil makes any difference, you are seeing the imperfection due to the meter. This is what I was alluding to in my response to Walter.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f82e2a2_5@corp.newsgroups.com...
> Richard Clark wrote:
> > If you choose to put forward a variant employing reactance, you could
> > at least step up to the bench to offer confirmatory or rejecting
> > evidence as I did.
>
> OK, here's an interesting data point. I adjusted my IC-756PRO for 5W
> output on 7.2 MHz using the following circuit.
>
> 7.2MHz 5W source---(+j442)---(-j442)---50 ohm dummy load
>
> SWR meter at the dummy load read 5W forward with an SWR of 1:1
>
> Then I installed the SWR meter between the coil and the cap. With 5W
> supplied by the source, the forward power read 150 watts. Indicated
> SWR was 3:1
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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2212. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 19:25:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f83152a_8@corp.newsgroups.com>
Source record: 106779

Tarmo Tammaru wrote:
> Very interesting. Can you take one more reading. Leave the meter between the
> coil and cap, and then short out the coil. If shorting out the coil makes
> any difference, you are seeing the imperfection due to the meter. This is
> what I was alluding to in my response to Walter.

Shorting out the coil will leave the load at 50-j442 ohms, a very high SWR.
--
73, Cecil http://www.qsl.net/w5dxp

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2213. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 19:52:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo62rlf0ov18a6@corp.supernews.com>
Source record: 106774

There could be quite a number of reasons Richard's readings aren't indicating what he thinks, and this is certainly one of them. Of one thing I'm certain -- the reason is something other than actual SWR being modified by source impedance.

And yes, our SWR meters can easily be that far off when attempting to measure the real SWR on real cables. Good thing it doesn't matter, huh?

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> Assuming 57.2 - j2.32 ohms Z0, our 50 ohm SWR meters may be off
> by 15%? Could this be the answer to Richard C's SWR readings?
> I suggested that as a possibility early on but he dismissed it.

2214. Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 21:16:25 UTC
From: Andy <dx90@blueyonder.co.uk>
Message-ID: <R2Ggb.1$Ek3.0@news-binary.blueyonder.co.uk>
Source record: 106780

Hi all

I know a lot of hams do not like the I-Max 2000 but I have one and need some help with it.
I think I might have a problem with the center section as I can't get any reading from end to end with my
multi meter. Is this normal for the center section or have I got a problem?
The antenna is only a week old and has not been put up yet.

Any help would be greatly appreciated.

Many thanks

Andy

2215. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 21:29:02 UTC
From: David Robbins <k1ttt@arrl.net>
Message-ID: <keWdnVgBM-O6rR6iU-KYuQ@crocker.com>
Source record: 106781

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f823893$1_7@corp.newsgroups.com...
> David Robbins wrote:
>
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
> >>say the Z0 of RG-174 is a nominal 50 ohms.
> >
> > of course its not exactly 2500, otherwise there would be no loss. but
its
> > close, maybe 2500+j10 or something like that. and even the resistive
part
> > may not be exact, the nominal 50 ohms could be 45 to 55 depending on the
> > tolerances of the manufacturer.
>
> Comparing the 6dB loss of RG-174 to the 0.14 dB loss for hardline -
> is all that extra loss accounted for in the +j10 term?

no, its more complicated than that.

the attenuation constant (usually alpha) = Re(gamma) where gamma is
sqrt((R+jwL)(G+jwC)) Zo is sqrt((R+jwL)/(G+jwC)) so there is not a simple
way to relate the characterisitic impedance to loss. for a low loss line
the approximation for alpha is (R/2Zo)+(GZo/2) which can probalby be applied
for most normal cases, but again, you have to get the R and G values of the
line which can not be directly calculated from Zo.

2216. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 23:07:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7ig6ovomug0idnv1dfg4j2tfrh8dd2morv@4ax.com>
Source record: 106782

On Tue, 07 Oct 2003 13:54:34 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>
>> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>>OK, here's an interesting data point. I adjusted my IC-756PRO for 5W
>>>output on 7.2 MHz using the following circuit.
>>>
>>>7.2MHz 5W source---(+j442)---(-j442)---50 ohm dummy load
>>>
>>>SWR meter at the dummy load read 5W forward with an SWR of 1:1
>>>
>>>Then I installed the SWR meter between the coil and the cap. With 5W
>>>supplied by the source, the forward power read 150 watts. Indicated
>>>SWR was 3:1
>>
>> Hi Cecil, And so?
>
>And so it seems to support your variable SWR observations.

Hi Cecil,

With 5W supplied you read 150W forward?

Well that aside, it is not very remarkable to see 1:1 into a dummy
load. It is also not very remarkable to see 3:1 into a complex load.
You do not state you have any transmission line between the two
reactances until you dropped in the SWR meter, that isn't particularly
meaningful either. So, in the end, you demonstrate nothing of my
examples that have always been premised with a transmission line being
integral to the concept.

The short of it: I have always described this as a problem involving
two resistors and a hank of line. The long of it: You have merely
demonstrated your own invention of two conjugated reactances and one
resistor - not the same thing at all, not even conceptually.

Now, if you added a 1foot length between the two reactances, and then
replaced that with a two foot length, and then replaced that with a
three foot length, and then replaced that with a four foot length....
out to at least half a wave of electrical length. And all the while
taking forward and reverse power readings (or SWR, take your choice)
and specified the frequency THEN and ONLY THEN would you be able to
make a first pass comparison.

To take an observation from Metrology: one measurement tells you nothing of any accuracy, two measurements only confuse, three begins to reveal a true measure, more improves matters. Your two readings say nothing to the matter (Mismatch Uncertainty) and actually confirm expectations that lie outside of my examples.

73's
Richard Clark, KB7QHC

2217. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 23:08:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0qh6ov44kd3647i2mk26u9hakr1u6ln3nl@4ax.com>
Source record: 106783

On Tue, 07 Oct 2003 14:25:26 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>Shorting out the coil will leave the load at 50-j442 ohms, a very high SWR.

Hi Cecil,

That's the point....

73's
Richard Clark, KB7QHC

2218. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-07 23:12:41 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <0T6dncVL56ql1B6iXTWJjg@comcast.com>
Source record: 106784

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f83152a_8@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > Very interesting. Can you take one more reading. Leave the meter between
the
> > coil and cap, and then short out the coil. If shorting out the coil
makes
> > any difference, you are seeing the imperfection due to the meter. This
is
> > what I was alluding to in my response to Walter.
>
> Shorting out the coil will leave the load at 50-j442 ohms, a very high
SWR.
> --
> 73, Cecil http://www.qsl.net/w5dxp
Hi Cecil,

I think what you did was to force the current to be in phase with the voltage and fooled the meter into thinking it was all forward power. That is sort of the experiment I was going to do, but you beat me to it. Note that in the case where you moved the meter, you actually changed the load, but you know that.

Tam/WB2TT

2219. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 01:17:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F8365BD.12704D1A@cwis.net>
Source record: 106785

Andy,
I'm afraid you have a problem. The center and top
sections of the antenna are just a single conductor
inside a fibreglass tube, so you should see a short
when measuring resistance from end to end of the
center section (or top section).
'Doc

2220. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 01:24:26 UTC
From: ricksink@mindspring.com
Message-ID: <3f8366a7.196316625@news.east.earthlink.net>
Source record: 106786

>Rick,
>
>Think of the splitter that used to come with TV sets. You had the antenna
>lead that had both UHF and VHF on it, which got split by the splitter behind
>the TV set. The VHF signal went to the VHF input on the TV, and the UHF
>signal went to the UHF input of the TV. You want to do the same thing, but
>in reverse. On the splitter, connect the UHF port to the UHF antenna, and
>the VHF port to the VHF antenna. The third port goes to your amp input. The
>amplifier will have both UHF and VHF signals, but the UHF signal will all
>have originated in the UHF antenna, and the VHF signal in the VHF antenna.
>Do NOT use a 2 set coupler instead of the splitter; you will lose 3 to 4 db
>of signal to noise, regardless of the gain of your amplifier. You can
>probably buy these things at the Radio Shack.
>
>Tam/WB2TT

OK, got it. I did not know that the splitter would automatically strip
any UHF signal off that might be combined on the lead coming from the
VHF/UFH combo antenna.

Thanks!

Rick

2221. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 01:27:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f836a23_3@corp.newsgroups.com>
Source record: 106787

Richard Clark wrote:
> The long of it: You have merely
> demonstrated your own invention of two conjugated reactances and one
> resistor - not the same thing at all, not even conceptually.

But it is what Chipman discusses.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2222. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 01:33:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f836b65_3@corp.newsgroups.com>
Source record: 106788

Tarmo Tammaru wrote:
> I think what you did was to force the current to be in phase with the
> voltage and fooled the meter into thinking it was all forward power. That is
> sort of the experiment I was going to do, but you beat me to it. Note that
> in the case where you moved the meter, you actually changed the load, but
> you know that.

I didn't appreciably change the load on the transmitter. All I did was
change the position of the SWR meter in the serial component chain.
This is essentially what Chipman discusses in his book. Now comes the
big question. Does the same thing happen on a line with reflections
when the impedance looking one direction is 100+j100 ohms and the
impedance looking the other direction is 100-j100 ohms? Is there a
localized energy exchange between that +j100 ohms and that -j100 ohms
that affects the SWR meter?
--
73, Cecil http://www.qsl.net/w5dxp

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2223. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 01:51:56 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F836B46.E2711DDE@gte.net>
Source record: 106789

Andy wrote:

> Hi all
>
> I know a lot of hams do not like the I-Max 2000 but I have one and need some
> help with it.
> I think I might have a problem with the center section as I can't get any
> reading from end to end with my
> multi meter. Is this normal for the center section or have I got a problem?
> The antenna is only a week old and has not been put up yet.
>
> Any help would be greatly appreciated.
>
> Many thanks
>
> Andy

I have read on the 'net that workmanship is notoriously bad in these antennas.

Dale W4OP

2224. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 02:06:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <enr6ov0v3jehce5867vm2g75ntfjfq13vl@4ax.com>
Source record: 106790

On Tue, 07 Oct 2003 20:27:58 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> The long of it: You have merely
>> demonstrated your own invention of two conjugated reactances and one
>> resistor - not the same thing at all, not even conceptually.
>
>But it is what Chipman discusses.

Hi Cecil,

OK, so you are not up to the issues I am discussing. I'm not interested in debating the single page you have xeroxed. You asked for any reference that bore upon the Source Z and I noted it was on the page facing the first page you xeroxed for other discussion. If you find some interest in it, that's fine, but you are operating under a very slim lead of a single citation I offered to answer your question that covers far more territory. Chipman offers many pages of discussion (basically an entire chapter that goes unread by his "disciples" here) describing the action of the Source upon the system's SWR and that one page you inappropriately treasure as an icon is hardly the beginning and certainly not the end.

73's
Richard Clark, KB7QHC

2225. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 02:28:08 UTC
From: Williams <k7hmp@arrl.net>
Message-ID: <3F837638.1C6F1F29@arrl.net>
Source record: 106791

If I'd had a nickel for everything I invented, but never followed up on, I'd be able to afford a new 1S4 for my QRP rig.

Over the years, there have been many variations on this theme and all probably worked about the same. The good folks at EZ-Hang, took the time to package the whole shooting match for those of us who were unable to take the time to chase down the parts. I've had a "commercial" model for a couple years and it works great! I chat with Mr. EZ-Hang from time to time at HamFests, and usually end up getting a couple free weights.

The latest addition is the "ground mounted line feeding gizmo" for pulling the nylon line up with the mono filament line. That is also a handy addition to the kit.

By the way, when the salesman tells you these thing work really, really well from a "projectile" perspective and recommends that you practice a few times in the wide open spaces until you figure out what the "lob" is, take them at their word. Between Whamm-O and Zebco, this is a real lead-slinger and it is nice to know what kind of an arch results from an arm's length pull back. Once you get in the trees, it becomes a little tougher to figure out where that yellow sinker is dropping down. On occasion, I've resorted to tying on a short length of florescent pink (or orange) surveyors tape, just in case.

NOTE: I have no connection with EZ-Hang, Whamm-O, Zebco, whoever makes the sinkers, or the U.S. Patent Office, other than being a "Happy Camper" customer.

73, Dave

Dave Williams - K7HMP/4
Stafford, Virginia

Martin wrote:
>
> "Walter" <junkmail@altonillinois.com> wrote in message
> news:70729ae5.0309092218.2c535362@posting.google.com...
> > Here is an article on how to cheaply and easily run a wire antenna
> > using a slingshot, and a fishing pole.
> >
> > http://groups.yahoo.com/group/SkyWires/message/37
>
> Amazing! Amazing, that is, that there has actually been a recent patent
> issued
> on the slingshot-spinning reel combination: U.S. 6,286,495; filed on

> 8/2/02!
>
> I used this idea as far back as 1966, copied from other hams who used it
> before I did. And in 1990 I built one identical to the one they're selling.
> See the ad for EZ Hang on the www.qrz.com site.
>
> Marty K1FHR

2226. Shakespeare HF/SSB Marine Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 02:47:33 UTC
From: Williams <k7hmp@arrl.net>
Message-ID: <3F837AC5.9D37E9A8@arrl.net>
Source record: 106792

Has anyone experimented with these 2-30 MHz antennas in the ham bands? They are typically rated as 2-30 MHz with a resonant freq around 8 or 10 MHz - Models 390, 393, 5300, 222, 229-F, 5390, 5310R, etc. They are intended to be used with an Antenna Tuner, but I'm wondering if it must be located at (or near) the base of the vertical whip, or if there can be a coax or single wire feeder of some length.

They are not cheap, compared to the typical trap verticals, but thought they might be interesting for an experiment in portable, or emergency type communications.

73, Dave

Dave Williams - K7HMP
Stafford, Virginia

2227. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 03:07:41 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <5qt6ovccee0ttd76i1vuc6tcbl8l0et8iu@4ax.com>
Source record: 106793

On Tue, 07 Oct 2003 22:28:08 -0400, Williams <k7hmp@arrl.net> wrote:

>If I'd had a nickel for everything I invented, but never followed up on,
>I'd be able to afford a new 1S4 for my QRP rig.
>
>Over the years, there have been many variations on this theme and all
>probably worked about the same. The good folks at EZ-Hang, took the
>time to package the whole shooting match for those of us who were unable
>to take the time to chase down the parts. I've had a "commercial" model
>for a couple years and it works great! I chat with Mr. EZ-Hang from
>time to time at HamFests, and usually end up getting a couple free
>weights.
Then there is the shot that puts the sinker/weight/projectile over a
limb and hits the next, leaving the weight caught 40 feet off the
ground.

I did that with a "rope saw" this past week end. Tried everything to
get the weight down. I finally gave up, pulled as much nylon rope as
I could reach and then cut it....Naturally the rope recoiled and the
darn weight dropped about 3 or 4 feet. Later in the day the wind
brought it down.

By then I'd put up a 30 foot extension ladder and crawled up and cut
the limb off. That was 4 days ago and I'm still sore.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2228. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 03:34:04 UTC
From: lavida@cygnus.uwa.edu
Message-ID: <bm00j6sso2@enyo.uwa.edu.au>
Source record: 106794

I think you need a "diplexer" to combine antennae.
This has inputs marked UHF, VHL-LO, VHF-HI or
whatever, and presumably includes some filters to
minimised interference from mixing signals with
different delays.
A plain splitter is broadband, so unless your antennae
are narrowband, you may get ghosts.

2229. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 04:06:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q617ovsknknkvcv9qguh58rejbed9icjiv@4ax.com>
Source record: 106795

On Tue, 07 Oct 2003 12:54:16 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Assuming 57.2 - j2.32 ohms Z0, our 50 ohm SWR meters may be off
>by 15%? Could this be the answer to Richard C's SWR readings?
>I suggested that as a possibility early on but he dismissed it.

Hi Cecil,

This was responded to and answered without equivocation. If that is
dismissal, it is dismissal with a pedigree that far outweighs
speculation offered in its place.

>Date: 2003-08-16 21:43:35 PST
>
>On Sat, 16 Aug 2003 22:10:46 -0500, W5DXP <Cecil.A.Moore@ieee.org>
>wrote:
>
>>Richard Clark wrote:
>>> What does your software report for a software 40 Ohm line feeding a
>>> software 50 Ohm load? That is, when all data points (that is each
>>> increment of 1 foot) exhibits 0 Watts returned for 5W applied?
>>
>>My software takes a list of reflected powers, assumes the forward
>>power is five watts, calculates the 50 ohm SWR for each point, and
>>plots them every 0.03WL on a Smith Chart. It was written to accept
>>your data points. If the reflected power above was always zero watts,
>>all those points would be the same point, i.e. a circle of zero radius
>>at the center of the Smith Chart.
>>
>>Take time to plot those 50 ohm SWR points on a Smith Chart with the
>>0.45 watts reflected point assumed to be the lowest purely resistive
>>point. A picture is worth a thousand words. I have seen that picture
>>before. It was when I designed my SWR meter for a Z0 of 450 ohms and
>>my window-line turned out to have a Z0 of 388 ohms.
>
>Hi Cecil,
>
>Thank you. I see that for the 50 Ohm load that the line exhibits a
>characteristic of 50 Ohms as described by its concentricity about the
>reference.
>
>This confirms the indication of 0W returned for all settings when
>applied to 4 different 50 Ohm loads. One load is calibrated and
>exhibits an S1 of 1.0061 (this is from a set of data points every 5Mhz

>to 1 GHz). The other loads are of equal caliber.
>
>This confirms the vendor MicroCoax specification for UT-141-A:
>50 ï¿½1 Ohm
>OD 0.141 +0.002/-0.001 (0.142 measured)
>ID 0.1175 +/-0.001 (0.1175 measured)
>Conductor OD 0.0359 +0.0010/-0.0004 (0.035 measured)
>Dielectric PTFE
>
>This is no surprise given the cable is premium short run (length, not
>reels) material specified out to 20 GHz (from Boeing's precision
>electronics facilities). I have several hundred feet brand new.
>
>73's
>Richard Clark, KB7QHC

You guys are lazy in the extreme. :-)

73's
Richard Clark, KB7QHC

2230. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 05:16:04 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310072116.411fbc23@posting.google.com>
Source record: 106796

However, if you have coax with good dielectric (polyethylene or
Teflon), at HF and below the loss is strongly dominated by the R term.
You can verify through measurements, if you are careful, that G can
be assumed zero unless you've done something to degrade your line's
dielectric. BUT...it's much easier to measure the line's attenuation
directly than to measure (accurately) the impedance's real and
imaginary parts anyway, so why would one try to do it that way?

Cheers,
Tom

(Example: RG174 at f=30MHz will have a bit more than 3.4dB/100 feet
loss because of R, and probably well under .025dB/100 feet loss
because of G. See Roy's suggested reading for the source of those
numbers.)

"David Robbins" <k1ttt@arrl.net> wrote in message
news:<keWdnVgBM-O6rR6iU-KYuQ@crocker.com>...
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3f823893$1_7@corp.newsgroups.com...
> > David Robbins wrote:
> >
> > > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> > >>Does (R+jXL)/(G+jXC) really equal 2500 for RG-174 on 12m? The specs
> > >>say the Z0 of RG-174 is a nominal 50 ohms.
> > >
> > > of course its not exactly 2500, otherwise there would be no loss. but
> its
> > > close, maybe 2500+j10 or something like that. and even the resistive
> part
> > > may not be exact, the nominal 50 ohms could be 45 to 55 depending on the
> > > tolerances of the manufacturer.
> >
> > Comparing the 6dB loss of RG-174 to the 0.14 dB loss for hardline -
> > is all that extra loss accounted for in the +j10 term?
>
> no, its more complicated than that.
>
> the attenuation constant (usually alpha) = Re(gamma) where gamma is
> sqrt((R+jwL)(G+jwC)) Zo is sqrt((R+jwL)/(G+jwC)) so there is not a simple
> way to relate the characterisitic impedance to loss. for a low loss line
> the approximation for alpha is (R/2Zo)+(GZo/2) which can probalby be applied
> for most normal cases, but again, you have to get the R and G values of the
> line which can not be directly calculated from Zo.

2231. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 11:42:47 UTC
From: Martin <marty123@optonline.net>
Message-ID: <XKSgb.4967$Ri4.1942048@news4.srv.hcvlny.cv.net>
Source record: 106797

One variation I saw was very memorable. One of the fellows brought a
hunting crossbow to field day back in the 60's. The line took off into the
blue yonder over a stand of 70-80 foot trees pulling some 200 yards of line
off the reel. Never found any of the sinkers or lines he lost.

"Williams" <k7hmp@arrl.net> wrote in message
news:3F837638.1C6F1F29@arrl.net...
> If I'd had a nickel for everything I invented, but never followed up on,
> I'd be able to afford a new 1S4 for my QRP rig.
>
> Over the years, there have been many variations on this theme and all
> probably worked about the same. ....>
>
> By the way, when the salesman tells you these thing work really, really
> well from a "projectile" perspective and recommends that you practice a
> few times in the wide open spaces until you figure out what the "lob"
> is, take them at their word. ....>
> 73, Dave
>
> Dave Williams - K7HMP/4
> Stafford, Virginia
>
> Martin wrote:
> >
> > "Walter" <junkmail@altonillinois.com> wrote in message
> > news:70729ae5.0309092218.2c535362@posting.google.com...
> > > Here is an article on how to cheaply and easily run a wire antenna
> > > using a slingshot, and a fishing pole.
> > >
> > > http://groups.yahoo.com/group/SkyWires/message/37
> >
> > Amazing! Amazing, that is, that there has actually been a recent patent
> > issued
> > on the slingshot-spinning reel combination: U.S. 6,286,495; filed on
> > 8/2/02!
> >
> > I used this idea as far back as 1966, copied from other hams who used it
> > before I did. And in 1990 I built one identical to the one they're
selling.
> > See the ad for EZ Hang on the www.qrz.com site.
> >
> > Marty K1FHR

2232. Re: Combining antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 14:05:11 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <FwqdnaCv04U6hBmiU-KYjA@comcast.com>
Source record: 106798

"ms" <lavida@cygnus.uwa.edu> wrote in message
news:bm00j6sso2@enyo.uwa.edu.au...
> I think you need a "diplexer" to combine antennae.
> This has inputs marked UHF, VHL-LO, VHF-HI or
> whatever, and presumably includes some filters to
> minimised interference from mixing signals with
> different delays.
> A plain splitter is broadband, so unless your antennae
> are narrowband, you may get ghosts.

A plain 2 set splitter has 3 - 4 db loss. The diplexer, aka VHF/UHF
combiner/splitter should have less than 1 db loss.

Tam/WB2TT

2233. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 14:15:15 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <esacnWO06NyegRmiU-KYhA@comcast.com>
Source record: 106799

Cecil,

You changed the load the SWR meter saw. In the first instance it was 50 Ohms. Then you changed it to 50 - j442. I think what you want to calculate is the phase of the current flowing through the SWR meter relative to the phase of the voltage. I wonder if anybody on this newsgroup has a contact at Bird who could shed additional light on this.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f836b65_3@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > I think what you did was to force the current to be in phase with the
> > voltage and fooled the meter into thinking it was all forward power. That is
> > sort of the experiment I was going to do, but you beat me to it. Note that
> > in the case where you moved the meter, you actually changed the load, but
> > you know that.
>
> I didn't appreciably change the load on the transmitter. All I did was
> change the position of the SWR meter in the serial component chain.
> This is essentially what Chipman discusses in his book. Now comes the
> big question. Does the same thing happen on a line with reflections
> when the impedance looking one direction is 100+j100 ohms and the
> impedance looking the other direction is 100-j100 ohms? Is there a
> localized energy exchange between that +j100 ohms and that -j100 ohms
> that affects the SWR meter?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2234. antenna seperation???????thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 14:26:10 UTC
From: kc5cqa@yahoo.com
Message-ID: <6e78ovos4qkp6bagf5ghf020jedh2fh834@4ax.com>
Source record: 106800

Let me tell you what I have, and then ask my question. Tilt able mast 78ft tall. At present I have located @ 78ft a two meter, 6 element quad, 4ft below that a tv, channel 2 antenna (ten element). Now the question, I have purchased a duel band two meter/440 ground plane. It is about 15ft long/tall, and about 9 or ten 'gain'. I also have a horz 2 meter ground plane(not in the air as of yet). Here is what I would LIKE to do, install the duel band 2/440 at the very top, and below that the two meter horz ground plane and then below that, the channel 2 tv antenna. What I would like to KNOW is,,,,,,,,, what should the ''''spacings' ''' between these antennas be ????
Since the channel 2 tv antenna is by far the larger than then two meter quad,,,,would its placement be better served in the middle?
My priority is the duel band first, and the horz ground plane and the quad are a 'toss up'.
Is the spacing I am using now between the quad and channel 2 tv antenna correct???.
If you are asking yourself, why does he have a channel 2 tv antenna up that high? I live out in the boonies, and this particular channel has programs that I don't receive on our regular tv antennas. The station is about 60 miles away, I don't want to buy sat or cable.Would appreciate any and all input.
Thanks in advance. cl. 73

2235. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 15:06:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f842a17_7@corp.newsgroups.com>
Source record: 106801

Tarmo Tammaru wrote:
> You changed the load the SWR meter saw.

Exactly! Now the question is: In a conjugately matched system where
100+j100 is seen looking back toward the source and 100-j100 is seen
looking toward the load, have we "changed the load the SWR meter sees"
by installing it at a 100 +/- j100 point?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2236. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 17:46:49 UTC
From: dplatt@radagast.org
Message-ID: <vo8jc9blbmif3@corp.supernews.com>
Source record: 106802

>One variation I saw was very memorable. One of the fellows brought a
>hunting crossbow to field day back in the 60's. The line took off into the
>blue yonder over a stand of 70-80 foot trees pulling some 200 yards of line
>off the reel. Never found any of the sinkers or lines he lost.

Ummm. The fact that the bolt was labeled "SNARK" might have given some
warning of this, I suppose...

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2237. EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 18:22:15 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <rBYgb.40905$5r1.21933@twister.southeast.rr.com>
Source record: 106803

I'm trying to model an antenna that starts with the "vert1.ez" descripton (included with the program)and adds one additional wire that runs parallel to and within 1/4 inch from the original wire but is insulated from it on end 2 and is connected to it on end 1. The added wire is twice as long as the original. I want to model it at the original frequency (7 MHz)and also at one half the original frequency.

The idea is to have a quarter wave 40 meter vertical running parallel with a quarter wave 80 meter vertical. Both are fed from the same source on the ground end. The 80 meter ant. should be a half wave at 40 meters and present a high Z back at the source on 40 meters. The 40 meter ant. should be a one eighth wave at 80 meters and present a capacitive Z back at the source on 80 meters. I'm wondering if such a antenna would be useful on both frequencies. I'm guessing the capacitive reactance of the 40 meter would screw up the swr on the 80 meter.

But the problem is I get an "unknown error" pop up message when I try to run the program. Any help would be appreciated.

Ron W4TQT

2238. NEW: On-line HF Propagation website

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 18:55:55 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f845dba$0$3671$5402220f@news.sunrise.ch>
Source record: 106804

Dear Fellow HAMs,

I would like to invite you to have a look at:
http://salsawaves.com/propagation/

One single page gives you an immediate overview of current shortwave
propagation conditions at your location.

All comments and suggestions for improvement are more than welcome, either
via this way or by using one of the voting buttons provided on the site.

If a reader of this newsgroup would know of any other real-time MUF maps
(e.g. Japan, Australia, Latin-America, etc.)
please let me know. Thank you.

PS: Antenna stuff will come later at this site.

73 and good DX de
Serge ON4BAA / HB9DWU
http://salsawaves.com/propagation/

2239. I'LL BE ON TONITE.....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 20:00:58 UTC
From: BIGBIGAL <BIGBIGAL@BIGBIGAL.BIGBIGAL.COM>
Message-ID: <vo8r7qg34cr7a3@corp.supernews.com>
Source record: 106805

AY YI YI AY YI YI YES ITS THE PORKBUTT SONG.....

2240. Re: EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 20:11:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vo8rs59mrbel63@corp.supernews.com>
Source record: 106806

Please email the description (.EZ) file containing the model to me so I
can take a look at it.

Roy Lewallen, W7EL

Ron wrote:
> I'm trying to model an antenna that starts with the "vert1.ez"
> descripton (included with the program)and adds one additional wire that
> runs parallel to and within 1/4 inch from the original wire but is
> insulated from it on end 2 and is connected to it on end 1. The added
> wire is twice as long as the original. I want to model it at the
> original frequency (7 MHz)and also at one half the original frequency.
>
> The idea is to have a quarter wave 40 meter vertical running parallel
> with a quarter wave 80 meter vertical. Both are fed from the same source
> on the ground end. The 80 meter ant. should be a half wave at 40 meters
> and present a high Z back at the source on 40 meters. The 40 meter ant.
> should be a one eighth wave at 80 meters and present a capacitive Z back
> at the source on 80 meters. I'm wondering if such a antenna would be
> useful on both frequencies. I'm guessing the capacitive reactance of the
> 40 meter would screw up the swr on the 80 meter.
>
> But the problem is I get an "unknown error" pop up message when I try to
> run the program. Any help would be appreciated.
>
> Ron W4TQT
>

2241. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 20:16:28 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310081216.5917f90f@posting.google.com>
Source record: 106807

I guess I'm not surprised by the 150W fwd power reading, but there should be a correspondingly large ref power and a high SWR, if the meter is accurate. Assuming a perfect 50-j442 load and a meter calibrated perfectly to 50 ohms and perfectly accurate, I'd expect to see 102.7W going out and 97.7W coming back. But I also do NOT expect a typical meter to read very accurately at high SWR.

Another thing to remember: the meter will disturb the resonance significantly, when inserted between the cap and coil. The capacitor is only about 50pF, and the meter is likely going to look like more than 5pF at that high impedance point between the inductor and capacitor. It's easy enough to look at in RFSim99, for example. When you move the SWR meter, the load on the transmitter does NOT stay the same! I simulated the meter as 7cm of 50 ohm air-dielectric line, and the return loss seen at the transmitter (at 7.2MHz) went from very high (theoretically infinite) without the line/meter inserted, to only 8.14dB (~2.3:1 SWR) with the line/meter between the coil and cap.

It's important to understand the limitations of your test equipment, and also to realize how that equipment may affect operating conditions of the circuit.

(Tam: my recommendation is to do the test yourself. It will be a lot easier to play with "what-ifs" and to check out things that don't at first make sense if you have direct control of the experiment.)

Cheers,
Tom

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<esacnWO06NyegRmiU-KYhA@comcast.com>...
> Cecil,
>
> You changed the load the SWR meter saw. In the first instance it was 50
> Ohms. Then you changed it to 50 - j442. I think what you want to calculate
> is the phase of the current flowing through the SWR meter relative to the
> phase of the voltage. I wonder if anybody on this newsgroup has a contact at
> Bird who could shed additional light on this.
>
> Tam/WB2TT
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3f836b65_3@corp.newsgroups.com...
> > Tarmo Tammaru wrote:
> > > I think what you did was to force the current to be in phase with the
> > > voltage and fooled the meter into thinking it was all forward power.
> That is

> > > sort of the experiment I was going to do, but you beat me to it. Note
> that
> > > in the case where you moved the meter, you actually changed the load,
> but
> > > you know that.
> >
> > I didn't appreciably change the load on the transmitter. All I did was
> > change the position of the SWR meter in the serial component chain.
> > This is essentially what Chipman discusses in his book. Now comes the
> > big question. Does the same thing happen on a line with reflections
> > when the impedance looking one direction is 100+j100 ohms and the
> > impedance looking the other direction is 100-j100 ohms? Is there a
> > localized energy exchange between that +j100 ohms and that -j100 ohms
> > that affects the SWR meter?
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
> >
> >
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2242. Re: antenna seperation???????thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 20:25:15 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310081225.31dccf84@posting.google.com>
Source record: 106808

I'm not going to try to sort out all the stuff you want to put up in
the air, but will just offer that your Ch.2 yagi may show some
1-1/2-wave resonance for your 2m signals, and because of that, may
change the pattern of your 2m antennas some. Spacing helps, of
course. I'd expect the 2m quad to couple most strongly to the ch.2
antenna. If those two were at 90 degrees difference in heading, it
should minimize the coupling, but you may not need that. You could
try a simulation (like with and without the ch.2 antenna, and varying
the spacing) to find a compromise you can accept.

Cheers,
Tom

kc5cqa@yahoo.com wrote in message news:<6e78ovos4qkp6bagf5ghf020jedh2fh834@4ax.com>...
> Let me tell you what I have, and then ask my question. Tilt able
> mast 78ft tall. At present I have located @ 78ft a two meter, 6
> element quad, 4ft below that a tv, channel 2 antenna (ten element).
> Now the question, I have purchased a duel band two meter/440 ground
> plane. It is about 15ft long/tall, and about 9 or ten 'gain'. I also
> have a horz 2 meter ground plane(not in the air as of yet). Here is
> what I would LIKE to do, install the duel band 2/440 at the very top,
> and below that the two meter horz ground plane and then below that,
> the channel 2 tv antenna. What I would like to KNOW is,,,,,,,,, what
> should the ''''spacings' ''' between these antennas be ????
> Since the channel 2 tv antenna is by far the larger than then two
> meter quad,,,,would its placement be better served in the middle?
> My priority is the duel band first, and the horz ground plane and
> the quad are a 'toss up'.
> Is the spacing I am using now between the quad and channel 2 tv
> antenna correct???.
> If you are asking yourself, why does he have a channel 2 tv antenna
> up that high? I live out in the boonies, and this particular channel
> has programs that I don't receive on our regular tv antennas. The
> station is about 60 miles away, I don't want to buy sat or
> cable.Would appreciate any and all input.
> Thanks in advance. cl. 73

2243. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 23:01:08 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <bm2509$v2j$1@news.oregonstate.edu>
Source record: 106809

Rick Frazier <rick@rickfrazier.com> wrote:
> A radiating wire is essentially an antenna. Typically, in popular use,
> wires or equivalent metallic structures are not automatically considered
> antennas unless they are intended to transmit or receive a specific
> frequency range. This tends to increase confusion for people learning
> about electromagnetic radiation.

I'd also add that I think it's important to point out to people that quasi-static analysis leads you to regular electric and magnetic field coupling (e.g., capacitive couplers and transformers) and that -- at least in my opinion -- such pickup is not to be attributed to an 'antenna.' That is, antennas are intended to transmit or receive far field radiation, even though of course it's not like a wire can differentiate where its signal is going to or coming from.

It's a pet peeve of mine when people talk about noise induced in systems start calling everything in sight an 'antenna' even when there's nothing involved that's a large fraction of the wavelength of the signals in question... technically perhaps they're correct, but it doesn't help much in trying to combat the problem.

---Joel Kolstad

2244. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-08 23:43:31 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <Di1hb.523516$Oz4.381428@rwcrnsc54>
Source record: 106810

"Andy" <dx90@blueyonder.co.uk> wrote in message
news:R2Ggb.1$Ek3.0@news-binary.blueyonder.co.uk...
> Hi all
>
> I know a lot of hams do not like the I-Max 2000 but I have one and need
some
> help with it.
> I think I might have a problem with the center section as I can't get any
> reading from end to end with my
> multi meter. Is this normal for the center section or have I got a
problem?
> The antenna is only a week old and has not been put up yet.
>
> Any help would be greatly appreciated.
>
> Many thanks
>
> Andy

Andy -

Amateur Radio operators tend to judge equipment like "Consumer Reports"
or identifying some automobiles as "lemons"

Does it work? Quality made? Does the product have value? (For what you
paid .. does it work well?)

KG6AOH has already "exposed" the I-MAX 2000 and Antron 99 antennas (see how
they work)

Antron 99
http://www.qsl.net/kg6aoh/a99/

I-MAX 2000
http://www.qsl.net/kg6aoh/imax2000/

73, w9gb

2245. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 00:01:55 UTC
From: k9sqg@aol.com
Message-ID: <20031008200155.19761.00000023@mb-m07.aol.com>
Source record: 106811

Using flourescent Game Tracker line from the sporting goods stores makes sure you can't miss where it is at...

2246. Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 01:23:28 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <5dd9ov8t9o06mjb559cgtrjvjn8k8hjrct@4ax.com>
Source record: 106812

I have a 30 metre length of large diameter coax which I need to
identity to ensure I get the correct connectors.

The cable is about twice as thick as RG213, and has the following
parameters.

Sheath is 22mm OD black PVC. or PE
Inner conductor is a single solid 5 mm dia copper conductor
Outer conductor is bare copper braid.
Dielectric is solid polyethylene

I think this coax is UR 74 or perhaps UR 74M (is there a difference?).

Could someone confirm my identifcation or put me right if I'm in
error.

Thanks

MikeN ZL1BNB

2247. Old QST article needed!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 01:59:08 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <vo9g7mcvuj2657@corp.supernews.com>
Source record: 106813

I'm looking for an article on the Micronaut 20 meter QRP rig that was in QST possibly in 1997. If anyone has it scanned or can point me to a link for it, I'd greatly appreciate it. I'm lookin to build this rig and possibly make up some for some future hams to build as well..

Paul Jordan
kl0an
Anchorage, AK

2248. Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 02:05:35 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310081805.72072701@posting.google.com>
Source record: 106814

In general terms.
Can we say that the variance
of an inductance containing a variometer
is zero to twice the inductance of the rotatable?
The variometer is not talked about much these days
so it is difficult to determine if something
else is at play other than what apears obvious.
I use such a set up in a coupling situation
together with variable physical separation to
prevent kickback and interference from tail
end unused inductance
I am not knoweledgeable enough to understand
all the possible implications so the variometer
seems the best place to start
Regards
Art

2249. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 02:43:38 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bm2i0q$i5g$1@titan.btinternet.com>
Source record: 106815

"MikeN" wrote
> I have a 30 metre length of large diameter coax which I need to
> identity to ensure I get the correct connectors.
>
> The cable is about twice as thick as RG213, and has the following
> parameters.
>
> Sheath is 22mm OD black PVC. or PE
> Inner conductor is a single solid 5 mm dia copper conductor
> Outer conductor is bare copper braid.
> Dielectric is solid polyethylene
>
==========

Download in a few seconds from website below, programs COAXPAIR and COAXRATE
to obtain from dimensions all the performance data you need. The only info
they don't provide is the manufacturer's type number.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

2250. Re: Old QST article needed!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 02:45:05 UTC
From: Rein Wiehler <rw@netscape.net>
Message-ID: <RY3hb.55678$ko%.13554@news04.bloor.is.net.cable.rogers.com>
Source record: 106816

Paul Jordan wrote:
> I'm looking for an article on the Micronaut 20 meter QRP rig that was in QST
> possibly in 1997. If anyone has it scanned or can point me to a link for
> it, I'd greatly appreciate it. I'm lookin to build this rig and possibly
> make up some for some future hams to build as well..
>
>
> Paul Jordan
> kl0an
> Anchorage, AK
>
>

found this using google www.farcircuits.net/receiver2.htm
maybe a more detailed search of this site may help
rw

2251. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 02:50:57 UTC
From: Rein Wiehler <rw@netscape.net>
Message-ID: <l24hb.55734$ko%.41439@news04.bloor.is.net.cable.rogers.com>
Source record: 106817

MikeN wrote:

> I have a 30 metre length of large diameter coax which I need to
> identity to ensure I get the correct connectors.
>
> The cable is about twice as thick as RG213, and has the following
> parameters.
>
> Sheath is 22mm OD black PVC. or PE
> Inner conductor is a single solid 5 mm dia copper conductor
> Outer conductor is bare copper braid.
> Dielectric is solid polyethylene
>
> I think this coax is UR 74 or perhaps UR 74M (is there a difference?).
>
> Could someone confirm my identifcation or put me right if I'm in
> error.
>
> Thanks
>
> MikeN ZL1BNB

is there nothing marked on the outside?

2252. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 03:02:14 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bm2j3m$9eo$1@hercules.btinternet.com>
Source record: 106818

"Art Unwin wrote
> In general terms.
> Can we say that the variance
> of an inductance containing a variometer
> is zero to twice the inductance of the rotatable?
> The variometer is not talked about much these days
> so it is difficult to determine if something
> else is at play other than what apears obvious.
> I use such a set up in a coupling situation
> together with variable physical separation to
> prevent kickback and interference from tail
> end unused inductance
> I am not knoweledgeable enough to understand
> all the possible implications so the variometer
> seems the best place to start.

==========

The inductance of the two identical coils in series is FOUR times the inductance of a single coil provided the coupling coefficient between the two coils approaches unity. It never does.

The main disadvantage of a variometer in a tuned circuit is that as the mutual coupling and resulting inductance is reduced then the amount of wire in use remains constant. So the loss resistance remains relatively constant. And so a VERY low Q occurs at small values of inductance.

No good when used in antenna tuners. Which is great pity. The motion of one coil rotating inside the other is beautiful to see.

Reg, G4FGQ

2253. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 03:13:04 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F84D240.2235BC2@cwis.net>
Source record: 106869

"G.Beat",
You might take a very close look at the quoted articles.
I think you will find that neither antenna is as much of a
'dog' as they are made out to be, and that there are
distinctions
that have very little practical meaning. And no matter who
wrote
the articles, you should be aware of the intended audience...
'Doc

2254. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 03:28:10 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Qy-dndErcppESBmiXTWJhg@comcast.com>
Source record: 106870

Sounds like some stuff I once looked at. That was either RG17 or RG117.
Connectors are going to be very expensive. Unless you can determine that it
is very low loss, and really want it, buying new 9913 or LMR400 + connectors
might be cheaper. Andrew connectors in that size range are about U$ 30 each.

Tam/WB2TT
"MikeN" <mnewman@clear.net.nz> wrote in message
news:5dd9ov8t9o06mjb559cgtrjvjn8k8hjrct@4ax.com...
> I have a 30 metre length of large diameter coax which I need to
> identity to ensure I get the correct connectors.
>
> The cable is about twice as thick as RG213, and has the following
> parameters.
>
> Sheath is 22mm OD black PVC. or PE
> Inner conductor is a single solid 5 mm dia copper conductor
> Outer conductor is bare copper braid.
> Dielectric is solid polyethylene
>
> I think this coax is UR 74 or perhaps UR 74M (is there a difference?).
>
> Could someone confirm my identifcation or put me right if I'm in
> error.
>
> Thanks
>
> MikeN ZL1BNB

2255. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 03:57:40 UTC
From: K6ME <k6me@adelphia.net>
Message-ID: <U05hb.8979$YO5.5206454@news3.news.adelphia.net>
Source record: 106871

Hey Dave,

I have been using a good wrist rocket type slingshot and a closed faced fishing reel taped onto it for
over15 years now. I use 1 or 2 ounce sand sinkers painted yellow and 10 lb yellow monofilament by
Stren for the first shots then pull up nylon twine and if need be real some heavy line.

The home QTH has full sized dipoles for 160, 80 and 30 meters up over 100' on the ends and
a four square for 40 at 90' in the center hanging in the pines using 1/2" nylon rope, 4" pulleys and 30 lb
cement blocks at each end to keep things good and tight in the snow, ice and big winds here.

Yearly at FD I shoot over the tops of several Ponderosa Pines that exceed 120'. No problem
unless it is windy. Those 2 ounce sinkers take that mono up and over really good.

You really need a 1S4?

73: K6ME

2256. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 04:02:56 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <xoidnSS4bLxgQBmiU-KYuA@comcast.com>
Source record: 106872

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0310081216.5917f90f@posting.google.com...
>
> (Tam: my recommendation is to do the test yourself. It will be a lot
> easier to play with "what-ifs" and to check out things that don't at
> first make sense if you have direct control of the experiment.)
>
> Cheers,
> Tom
Tom,

I read you, but first I have to paint the kitchen. I was going to use 50 +/& -j50. I also want to get inside the meter and look at the voltage and current separately. It's a Kenwood, no sealed slugs. Good point about the meter changing the reactance; 160 m might be a good place to do this, or I might use a variable capacitor.

Tam/WB2TT

2257. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 04:53:36 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <kR5hb.435851$2x.151772@rwcrnsc52.ops.asp.att.net>
Source record: 106873

"'Doc" <w5lz@cwis.net> wrote in message news:3F84D240.2235BC2@cwis.net...
>
>
> "G.Beat",
> You might take a very close look at the quoted articles.
> I think you will find that neither antenna is as much of a
> 'dog' as they are made out to be, and that there are
> distinctions
> that have very little practical meaning. And no matter who
> wrote
> the articles, you should be aware of the intended audience...
> 'Doc
>

The purpose of the web site reference is for the reader to
understand how the antennas are constructed.

I have no opinion on either antenna ... your reference
of 'dog' and 'intended audience' is non sequitur

w9gb

non sequitur ['n?n 's?kwit?]
noun
1 a statement having little or no relevance to what preceded it

2 (Logic) a conclusion that does not follow from the premises
Abbrev.: non seq
[ETYMOLOGY: Latin, literally: it does not follow]

2258. Re: high sierra antennas help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 05:01:16 UTC
From: ebrown2841@aol.com
Message-ID: <20031009010116.13958.00000040@mb-m13.aol.com>
Source record: 106874

Last year, I installed an El Dorado here at my house in Largo, Florida when I came down for the winter. It's at 14' and I replaced the 8 somewhat flimsy radials with sixteen of 12 ga. wire. I use a Kenwood TS-50s with fixed outputs of 10, 50 and 100 watts and it seems to work well for the type of antenna that it is, even on the 10 watt setting. When conditions are good, I get a 5/9 almost anywhere in the States with 100 watts. I think that the antenna is a bit expensive but thus far I've been satisfied with its performance.

Emory, KD2DN

2259. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 05:17:39 UTC
From: ebrown2841@aol.com
Message-ID: <20031009011739.13958.00000045@mb-m13.aol.com>
Source record: 106875

The slingshot idea is great but I can't see paying anyone $100 for something that you can put together locally for an awfull lot less. I bought a cheap " wrist rocket " slingshot online along with a Zebco real and sinkers from K-Mart for way under a hundred bucks and it works just fine. No real chasing down anything. I used the money I saved for more radio stuff.

Emory, KD2DN

2260. Re: Antenna Range Testing.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 05:31:03 UTC
From: Peter <peterlmiles@hotmail.com>
Message-ID: <3f84f29d$0$6529$afc38c87@news.optusnet.com.au>
Source record: 106877
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks for all the information it has been of great assistance.

Cheers

Peter

--
Peter Miles VK3YSF
Melbourne, Australia
vk3ysf@optushome.com.au

http://members.optushome.com.au/vk3ysf/main.htm

2261. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 05:34:47 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310082134.690197a6@posting.google.com>
Source record: 106876

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0310072116.411fbc23@posting.google.com>...
...
> (Example: RG174 at f=30MHz will have a bit more than 3.4dB/100 feet
> loss because of R, and probably well under .025dB/100 feet loss
> because of G. See Roy's suggested reading for the source of those
> numbers.)

It's also worth pointing out that if you use the same dielectric material in a line with larger diameter, the R loss -- the loss in the resistance of the wire -- drops, but the G loss stays the same. So for a 1" diameter solid polyethylene dielectric 50 ohm line with smooth copper conductors, at 30MHz the attenuation is about 0.214dB/100ft, and the attenuation due to G is perhaps 1/10th that much. At 3000MHz, the coax probably still propagates pretty well in TEM mode, and the R and G losses will be nearly the same and each about 2dB/100ft.

Because of the higher losses in fiberglass-epoxy PC board material, you can fairly easily end up with stripline which has higher G loss than R loss, when using that board material in the GHz range. (Howard Johnson recently had an article about this topic in, um, EDN or Electronic Design, I can never remember which his column appears in.)

Cheers,
Tom

2262. Re: Old QST article needed!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 12:55:12 UTC
From: Eskay <sieb_kNOS@PAMyahoo.ca>
Message-ID: <dRchb.90178$PD3.4852753@nnrp1.uunet.ca>
Source record: 106878

Paul Jordan wrote:
> I'm looking for an article on the Micronaut 20 meter QRP rig that was in QST
> possibly in 1997. If anyone has it scanned or can point me to a link for
> it, I'd greatly appreciate it. I'm lookin to build this rig and possibly
> make up some for some future hams to build as well..
>
>
> Paul Jordan
> kl0an
> Anchorage, AK
>
>
Are you sure of the name of the rig and the Magazine it was
published in?
I could not find it in the ARRL website index.
Sieb,,VE3JUA

2263. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 13:23:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F856165.660D43AE@cwis.net>
Source record: 106880

"G.Beat",
"Ubi est ignus?"
'Doc

2264. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 13:52:27 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <mY-dnQw4yvi29RiiXTWJhg@comcast.com>
Source record: 106881

It occurs to me I might be able to do a whole lot better than actual measurements. I should be able to simulate a power meter in the SWCadIII Spice simulator, and do a transient analysis. This will let me go from RF to DC out. They also have models for lossless and lossy transmission lines, which should make it possible to see how steady state is reached from turning the source on at T=0.

Tam/WB2TT

2265. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 14:40:31 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f857524_3@news1.prserv.net>
Source record: 106883

Mike:

Identification of the jacket material would help, as there are very few PE jacketed coaxes, especially large sizes like this.

Having said that, the dimensions match, within the accuracy of home measurements, that of RG -218/U, the standardized 50 ohm version of RG-17/U (52 ohms), and nomenclatured in the US as M17/79-RG218 or M17/166-00001. RG-17 has a center conductor closer to 4.78 mm, while the later 50 ohm RG-218 is only slightly smaller than 5 mm (4.95). In any event, you need UG-167A/U or M39012/01-0104 (type N male) connectors.

--
Crazy George
W5VPQ
Remove NO and SPAM from return address
"MikeN" <mnewman@clear.net.nz> wrote in message
news:5dd9ov8t9o06mjb559cgtrjvjn8k8hjrct@4ax.com...
> I have a 30 metre length of large diameter coax which I need to
> identity to ensure I get the correct connectors.
>
> The cable is about twice as thick as RG213, and has the following
> parameters.
>
> Sheath is 22mm OD black PVC. or PE
> Inner conductor is a single solid 5 mm dia copper conductor
> Outer conductor is bare copper braid.
> Dielectric is solid polyethylene
>
> I think this coax is UR 74 or perhaps UR 74M (is there a difference?).
>
> Could someone confirm my identifcation or put me right if I'm in
> error.
>
> Thanks
>
> MikeN ZL1BNB

2266. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 14:43:03 UTC
From: derswede@aol.comspam.com
Message-ID: <20031009104303.09910.00000660@mb-m21.aol.com>
Source record: 106882

>"G.Beat",
> "Ubi est ignus?"
> 'Doc

Tu ubi sub ubi?

A

2267. Re: Solarcon/Latin/Stealth wire-Stainless Steel

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 14:57:15 UTC
From: derswede@aol.comspam.com
Message-ID: <20031009105715.12813.00000001@mb-m10.aol.com>
Source record: 106884

>>"G.Beat",
>> "Ubi est ignus?"
>> 'Doc

In seriousness, think it is, "Ubi ignus est?" unless I've forgotten all my Latin.

Now, who wants to do a Smith Chart in Coptic Egyptian?

Getting back to antennas, has anyone ever used 24 ga. high tensile strength stainless steel wire (think aircraft safety wire) as an antenna? I need a TRUE stealth design, as I've got more XYL restrictions than CC&R restrictions (yea, I know...get a new XYL....but too expensive, and this one is a GREAT cook!). I've got a roll I'm going to try out (nice neighbor with a tall tree 160 ft away) but would like any comments, etc. Max power out will be around 100W or so (Alinco DX70). Tuner will be the EDX-2 Alinco. (thus, piece of cake for tuning....but wondering about general comments on the SS wire) Comments? Modeling the install after the ARRL handbook on end-fed antennas w/counterpoise(s) for autotuner. 80-10M range.

Tnx!
Andrew

A

2268. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 15:04:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f857b16$1_4@corp.newsgroups.com>
Source record: 106885

EBrown2841 wrote:
> I bought a cheap " wrist rocket " slingshot ...

Buy? We used to make them out of old inner tubes and tree limbs
at zero cost.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2269. Re: Solarcon/Latin/Stealth wire-Stainless Steel

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 15:09:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f857c20_4@corp.newsgroups.com>
Source record: 106886

AA wrote:
> I need a TRUE
> stealth design, as I've got more XYL restrictions than CC&R restrictions (yea,
> I know...get a new XYL....but too expensive, and this one is a GREAT cook!).

Ham antennas should be part of any pre-nuptial agreement. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2270. Adding external antenna to clock radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 16:06:31 UTC
From: toddk63@yahoo.com
Message-ID: <6d87a0a0.0310090806.7f94e3f3@posting.google.com>
Source record: 106887

I have a clock radio that gets lousy reception in my office at work. I want to experiment with adding external antennas to it. Maybe a half-wave looped dipole for FM and a small external loop for AM.

My question is how to add the external connection.

The radio has a loopstick ferrite antenna (I presume for only AM) The loopstick has 4 connection points. 2 of them are on the same circuit trace which only goes between these two points and nowhere else (what might this be for?). The other two, one goes to DC ground and the other goes off into the circuitry of the radio. If I solder leads to these four points, is that my external connection for only AM or both AM and FM?

I presume the FM antenna is the power cord because that is commonly done in radios of this type and adjusting the shape of the power cord just right picks up my FM station in question, 88.7 MHz. How can I add an external connection in this case?

TIA,

Todd K.

2271. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 16:41:17 UTC
From: Charles Hampton KA8JVX <hampton@wvnet.edu>
Message-ID: <3F858FAD.65F1@wvnet.edu>
Source record: 106889

Cecil Moore wrote:
>
> EBrown2841 wrote:
> > I bought a cheap " wrist rocket " slingshot ...
>
> Buy? We used to make them out of old inner tubes and tree limbs
> at zero cost.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Cecil,
Did you use the old red rubber tubes? They stretched more than the
modern rubber tubes.

Charles, ka8jvx

2272. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 16:49:11 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310090849.685f9aba@posting.google.com>
Source record: 106888

Hi Tam,

Yes, the lower reactance --> lower Q, and the lower frequency, will
both help keep the disturbance from the meter at a reasonable level.
If you simply re-tune the 50pF cap in Cecil's 7.2MHz 'speriment, you
still end up with about 1.2:1 SWR, because it's effectively a "T"
impedance matching network. But the same line at 1.8MHz with C and L
at 50 ohms reactance, re-tuned to resonance after insertion of the
meter, gives about 50dB return loss, and you'd be lucky to resolve
that with a typical SWR meter. Of course, you're stuck with 1.8nF of
capacitance too.

Let us know how it works out when you have time. I like your idea of
peeking inside the bridge; I had the same thought.

Cheers,
Tom

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<xoidnSS4bLxgQBmiU-KYuA@comcast.com>...
> "Tom Bruhns" <k7itm@aol.com> wrote in message
> news:3200347.0310081216.5917f90f@posting.google.com...
> >
> > (Tam: my recommendation is to do the test yourself. It will be a lot
> > easier to play with "what-ifs" and to check out things that don't at
> > first make sense if you have direct control of the experiment.)
> >
> > Cheers,
> > Tom
> Tom,
>
> I read you, but first I have to paint the kitchen. I was going to use 50
> +/& -j50. I also want to get inside the meter and look at the voltage and
> current separately. It's a Kenwood, no sealed slugs. Good point about the
> meter changing the reactance; 160 m might be a good place to do this, or I
> might use a variable capacitor.
>
>
> Tam/WB2TT

2273. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 17:11:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f859799_2@127.0.0.1>
Source record: 106890

Charles Hampton KA8JVX wrote:
> Did you use the old red rubber tubes? They stretched more than the
> modern rubber tubes.

Yep, that's what I used during WWII and after. When I was a
teenager, I learned about surgical tubing and 3/4" plywood.
I finally sprung for a $2 Whammo sling shot but someone stole it.
--
73, Cecil, W5DXP

2274. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 17:19:30 UTC
From: richardharrison@webtv.net
Message-ID: <26817-3F8598A2-218@storefull-2312.public.lawson.webtv.net>
Source record: 106892

Joel Kolstad wrote:
"It`s a pet peeve of mine when people tak about noise induced in systems start calling everything in sight an "antenna" even when there is nothing involved that is a large fraction of a wavelength of the signal in question."

Someone needs a word for something that radiates or intercepts r-f. No need to distinguish between launchers and receptors. They are all launchers regardless of intentions. Every receiving antenna re-radiates at least 1/2 of everything it receives.

Could call an antenna a radiator but radiator has 8 letters instead of 7. Aerial has only 6 letters.

An antenna does not have to be big. It can be as small as an "elemental doublet".

Terman says about an antenna on page 864 of his 1955 edition:
"This (elemental doublet) consists of a length "delta l" that is short compared with the wavelength "lambda", and which is assumed to have such large capacitance areas associated with each end that the current throughout the doublet everywhere has the same I."

The definition above is for "the simplest wire radiator or antenna ---."

Best regards, Richard Harrison, KB5WZI

2275. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 17:22:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310090922.2b235fce@posting.google.com>
Source record: 106891

"Reg Edwards" <g4fgq.regp@btinternet.com> wrote in message
news:<bm2j3m$9eo$1@hercules.btinternet.com>...
> "Art Unwin wrote
> > In general terms.
> > Can we say that the variance
> > of an inductance containing a variometer
> > is zero to twice the inductance of the rotatable?
> > The variometer is not talked about much these days
> > so it is difficult to determine if something
> > else is at play other than what apears obvious.
> > I use such a set up in a coupling situation
> > together with variable physical separation to
> > prevent kickback and interference from tail
> > end unused inductance
> > I am not knoweledgeable enough to understand
> > all the possible implications so the variometer
> > seems the best place to start.
>
> ==========
>

Reg I was not looking just for an answer but better
understanding.
Your 'four times' comment just adds to my confusion.
Are you suggesting that the variometer can cancel
existing inuctance leaving just capacitance?
I suppose that would be one way to increase the variance
that you refer to..
On the subject of tuners, use of the varometer does not
become a efficiency or resistance problem when used in
antenna construction as the relationship of d.c.resisrance
Regards
Art

Note that my net listing is only updated a couple of times
per day so if there are other responses I have yet to see
them so no offence is intended.
I understand that the slowness in updating of the net does
not occur in some places in the U.S.since many responces
appear in concert with the initial posting!

to radiation resistance comes into play.

> The inductance of the two identical coils in series is FOUR times the
> inductance of a single coil provided the coupling coefficient between the

> two coils approaches unity. It never does.
>
> The main disadvantage of a variometer in a tuned circuit is that as the
> mutual coupling and resulting inductance is reduced then the amount of wire
> in use remains constant. So the loss resistance remains relatively
> constant. And so a VERY low Q occurs at small values of inductance.
>
> No good when used in antenna tuners. Which is great pity. The motion of one
> coil rotating inside the other is beautiful to see.
> ----
> Reg, G4FGQ

2276. Re: Solarcon/Latin/Stealth wire-Stainless Steel

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 18:29:59 UTC
From: derswede@aol.comspam.com
Message-ID: <20031009142959.29144.00000059@mb-m12.aol.com>
Source record: 106893

<< Ham antennas should be part of any pre-nuptial agreement. :-) >>

Yup...but I got my ticket AFTER marriage....c'est la vie.

A

2277. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 18:35:04 UTC
From: richardharrison@webtv.net
Message-ID: <26817-3F85AA58-233@storefull-2312.public.lawson.webtv.net>
Source record: 106896

Art Unwin, KB9MZ wrote:
"Are you suggesting that the variometer---?"

I can`t say what Reg had in mind. What he wrote speaks for itself. The change in mutual inductance between variometer coils causes a change in their total inductance. As the sense of the rotatable coil can be reversed, its inductance can be arranged to aid or oppose the inductance of the fixed coil.

Terman says on page 20 of his 1955 edition:
"when two coils of inductance L1 and L2 , between which a mutual inductance exists, are connected in series, the equivalent inductance of the combination is L1 + L2 plus or minus 2M. The term 2M takes into account the flux linkages in each coil due to the current in the other coil. These mutual linkages may add to or subtract from the self-linkages, depending upon the relative direction in which the current passes through the two coils. Thus , when all linkages are in the same direction, the total inductance of the series combination excedes by 2M the sum of the individual inductances of the two coils."

I think Reg gave a reasonable answer. We may assume coupling (mutual inductance) is high and that the coils are wound for equal inductances.

Now a short-cut. We know that inductance increases with the square of the turns under common conditions. If we double the number of turns by sensing the coils so they aid, we will quadruple the inductance, as Reg said if I recall correctly.

Best regards, Richard Harrison, KB5WZI

2278. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 18:37:44 UTC
From: Reg Edwards <g4fgq.regp@btinternet.com>
Message-ID: <bm49to$k5t$1@hercules.btinternet.com>
Source record: 106894

> > > I am not knoweledgeable enough to understand
> > > all the possible implications

And there it is best to end the matter.

2279. Re: Adding external antenna to clock radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 18:42:01 UTC
From: Pawel Stobinski <sq9nry@wp.pl>
Message-ID: <bm46kd$u7q$1@julia.coi.pw.edu.pl>
Source record: 106895

Todd K. wrote:
> I have a clock radio that gets lousy reception in my office at work.
> I want to experiment with adding external antennas to it. Maybe a
> half-wave looped dipole for FM and a small external loop for AM.
>
> My question is how to add the external connection.
>
> The radio has a loopstick ferrite antenna (I presume for only AM) The
> loopstick has 4 connection points. 2 of them are on the same circuit
> trace which only goes between these two points and nowhere else (what
> might this be for?). The other two, one goes to DC ground and the
> other goes off into the circuitry of the radio. If I solder leads to
> these four points, is that my external connection for only AM or both
> AM and FM?

LW/MW AM bands usually look similar in popular medium-class radios. It's a resonat circuit tuned with a variable capacitor, the inductor is just the ferrite-rod antenna. 4 wires you've found are proably used for 2 bands: LW and SW. Find two of them leading to ground, the left two are these, which are connected to rotors of variable caps. Connect a wire through a 100pF capacitor, that should improve reception a bit. In case you come across troubles with noise level or other distortions, try winding some insulated wire round the ferrite rod and then connect the ends to a loop.
The last thing you could do is to connect a variable capacitor to the loop in parallel, tuning for best reception.

> I presume the FM antenna is the power cord because that is commonly
> done in radios of this type and adjusting the shape of the power cord
> just right picks up my FM station in question, 88.7 MHz. How can I
> add an external connection in this case?

First you've got to do is to isolate an FM aerial signal inlet, somewhere close to the FM tuner circuitry. There might be a series coil for aerial lenghtening and insulating circuit, beware of high voltage on caps from AC decoupling. Once you've got FM tuner input, the only thing is to connect external wire. Besides, having a schematic diagram, there oughtn't to be any problems about it.

--
Pawel Stobinski
Republic of Poland

2280. Re: Adding external antenna to clock radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 18:48:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f85ad77_2@127.0.0.1>
Source record: 106897

Todd K. wrote:
> My question is how to add the external connection.
> The radio has a loopstick ferrite antenna (I presume for only AM) The
> loopstick has 4 connection points.

What has worked for me is to wrap a good number of turns
of #30 insulated wire around the loopstick. Ground one end
and tie the other end to an external jack. Run a long wire
antenna from the jack to wherever works best.
--
73, Cecil, W5DXP

2281. Degen Designs Update

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 19:32:13 UTC
From: G&R <spam@limbo.hell>
Message-ID: <2Jihb.4662$Ys.515449@news20.bellglobal.com>
Source record: 106898

We have updated our antenna pages to reflect our new products.

Hopefully you can pay us a visit and maybe we have something for you at
www.degendesigns.com

Be sure to check out our free ICOM software in our downloads page.

The updates continue.

73
Guenther VE3CVS
info@degendesigns.com

2282. Re: Adding external antenna to clock radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 20:34:59 UTC
From: Vi&#65533;arr <Vitharr@nospam.net>
Message-ID: <TDjhb.7915$Eo2.2333@newsread2.news.atl.earthlink.net>
Source record: 106899

One way to add an external FM antenna is to create a folded dipole out of some twinlead. Use another length of twinlead for the feedline. "Terminate" the other end of the feedline by connecting the two conductors with a 330 Ohm resistor, leaving one of the leads long. Use that lead to attach the antenna to either the whip antenna that comes with the radio, or the connector on the back. (This worked well enough in my college dorm room 'way back when.)

What W5DXP said for the AM problem. Wrapping some wire around the radio itself (assuming a plastic case) sometimes works too, but not quite as well.

Nï¿½KF

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f85ad77_2@127.0.0.1...
> Todd K. wrote:
> > My question is how to add the external connection.
> > The radio has a loopstick ferrite antenna (I presume for only AM) The
> > loopstick has 4 connection points.
>
> What has worked for me is to wrap a good number of turns
> of #30 insulated wire around the loopstick. Ground one end
> and tie the other end to an external jack. Run a long wire
> antenna from the jack to wherever works best.
> --
> 73, Cecil, W5DXP
>

2283. Re: Cushcraft 4 ele. yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 20:46:43 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <TOjhb.174534$3o3.12886372@bgtnsc05-news.ops.worldnet.att.net>
Source record: 106900

ok, what band is it for????

thnx

2284. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 22:22:08 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310091422.1d5bf343@posting.google.com>
Source record: 106901

Thanks Richard
Your explanation does make sense in that I was looking at
it as several inductors but forgetting the interaction
via coupling.
May I lean on you for further help and education ?
The variometer that I have is a commercial one
and marked 3600-5000 Kc, what ever that means
and the outer windings consist of ten turns on either side
of center.
To make the inductance larger i replicated the original
outer turns so that there is now thirty turns either side
of center.(I added twenty homebrew turns either side to
the original commercial version)
Could you share with me a method of approximating the total
inductance together with its variance values?
Any help would be appreciated.
Regards
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<26817-3F85AA58-233@storefull-2312.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "Are you suggesting that the variometer---?"
>
> I can`t say what Reg had in mind. What he wrote speaks for itself. The
> change in mutual inductance between variometer coils causes a change in
> their total inductance. As the sense of the rotatable coil can be
> reversed, its inductance can be arranged to aid or oppose the inductance
> of the fixed coil.
>
> Terman says on page 20 of his 1955 edition:
> "when two coils of inductance L1 and L2 , between which a mutual
> inductance exists, are connected in series, the equivalent inductance of
> the combination is L1 + L2 plus or minus 2M. The term 2M takes into
> account the flux linkages in each coil due to the current in the other
> coil. These mutual linkages may add to or subtract from the
> self-linkages, depending upon the relative direction in which the
> current passes through the two coils. Thus , when all linkages are in
> the same direction, the total inductance of the series combination
> excedes by 2M the sum of the individual inductances of the two coils."
>
> I think Reg gave a reasonable answer. We may assume coupling (mutual
> inductance) is high and that the coils are wound for equal inductances.
>

> Now a short-cut. We know that inductance increases with the square of
> the turns under common conditions. If we double the number of turns by
> sensing the coils so they aid, we will quadruple the inductance, as Reg
> said if I recall correctly.
>
> Best regards, Richard Harrison, KB5WZI

2285. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 22:40:08 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F85E3C8.7FB51667@uci.edu>
Source record: 106902

Build the little circuit shown at:

http://www.discovercircuits.com/PDF-FILES/parallelosc.PDF

If you measure the frequency range over which the circuit oscillates,
you can calculate the inductance range of your variometer.

73 Jim AC6XG

Art Unwin KB9MZ wrote:
>
> Thanks Richard
> Your explanation does make sense in that I was looking at
> it as several inductors but forgetting the interaction
> via coupling.
> May I lean on you for further help and education ?
> The variometer that I have is a commercial one
> and marked 3600-5000 Kc, what ever that means
> and the outer windings consist of ten turns on either side
> of center.
> To make the inductance larger i replicated the original
> outer turns so that there is now thirty turns either side
> of center.(I added twenty homebrew turns either side to
> the original commercial version)
> Could you share with me a method of approximating the total
> inductance together with its variance values?
> Any help would be appreciated.
> Regards
> Art
>
> richardharrison@webtv.net (Richard Harrison) wrote in message
news:<26817-3F85AA58-233@storefull-2312.public.lawson.webtv.net>...
> > Art Unwin, KB9MZ wrote:
> > "Are you suggesting that the variometer---?"
> >
> > I can`t say what Reg had in mind. What he wrote speaks for itself. The
> > change in mutual inductance between variometer coils causes a change in
> > their total inductance. As the sense of the rotatable coil can be
> > reversed, its inductance can be arranged to aid or oppose the inductance
> > of the fixed coil.
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> > Terman says on page 20 of his 1955 edition:
> > "when two coils of inductance L1 and L2 , between which a mutual
> > inductance exists, are connected in series, the equivalent inductance of
> > the combination is L1 + L2 plus or minus 2M. The term 2M takes into

> > account the flux linkages in each coil due to the current in the other
> > coil. These mutual linkages may add to or subtract from the
> > self-linkages, depending upon the relative direction in which the
> > current passes through the two coils. Thus , when all linkages are in
> > the same direction, the total inductance of the series combination
> > excedes by 2M the sum of the individual inductances of the two coils."
> >
> > I think Reg gave a reasonable answer. We may assume coupling (mutual
> > inductance) is high and that the coils are wound for equal inductances.
> >
> > Now a short-cut. We know that inductance increases with the square of
> > the turns under common conditions. If we double the number of turns by
> > sensing the coils so they aid, we will quadruple the inductance, as Reg
> > said if I recall correctly.
> >
> > Best regards, Richard Harrison, KB5WZI

2286. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 23:02:30 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <cupbovgeom66e2k59gc7nu5322h1rsj0f2@4ax.com>
Source record: 106903

Thanks for the responses I received.

This coax was sourced from the UK, that's why I suspect it's UR 74.
There are no visible markings (its's not new). One UK cable supplier
is advertising connectors at a very fair price.

I want to use this for feeding a local 70cm repeater, without
incurring too much cost.

MikeN ZL1BNB

On Thu, 09 Oct 2003 14:23:28 +1300, MikeN <mnewman@clear.net.nz>
wrote:

>I have a 30 metre length of large diameter coax which I need to
>identity to ensure I get the correct connectors.
>
>The cable is about twice as thick as RG213, and has the following
>parameters.
>
> Sheath is 22mm OD black PVC. or PE
> Inner conductor is a single solid 5 mm dia copper conductor
> Outer conductor is bare copper braid.
> Dielectric is solid polyethylene
>
>I think this coax is UR 74 or perhaps UR 74M (is there a difference?).
>
>Could someone confirm my identifcation or put me right if I'm in
>error.
>
>Thanks
>
>MikeN ZL1BNB

2287. Re: Please identify this Coax.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 23:14:43 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <u9qbov4565p4b9j1h8knfivc9dpnuolrnd@4ax.com>
Source record: 106904

Thanks for the info.

How does one distinguish between PE and PVC in a cable outer?

I measured the dimensions with a metric vernier caliper, so the
dimensions I gave should be sufficiently precise for identification.

It seem's that RG218 is equivalent to UR 74, so the connectors you
quote should fit either. N type connectors for UR 74 are offered for
around ï¿½4 by a UK supplier

Thanks

MikeN ZL1BNB

On Thu, 9 Oct 2003 09:40:31 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Mike:
>
>Identification of the jacket material would help, as there are very few PE
>jacketed coaxes, especially large sizes like this.
>
>Having said that, the dimensions match, within the accuracy of home
>measurements, that of RG -218/U, the standardized 50 ohm version of RG-17/U
>(52 ohms), and nomenclatured in the US as M17/79-RG218 or M17/166-00001.
>RG-17 has a center conductor closer to 4.78 mm, while the later 50 ohm
>RG-218 is only slightly smaller than 5 mm (4.95). In any event, you need
>UG-167A/U or M39012/01-0104 (type N male) connectors.

2288. Re: Determining antenna resonance with a grid dip meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 23:49:44 UTC
From: R P Haviland <bobh@iag.net>
Message-ID: <sumhb.10410$mQ2.1142@newsread1.news.atl.earthlink.net>
Source record: 106905

Of course, the two basic methods of coupling a grid dipper to an antenna are capacative and inductive. For capacative, couple one side of the dipper coil to the end of the antenna by 2 to 5 pf. You may be changing the resonant frequency by stray coupling.
For inductive, make a coil shaped like a wire coathanger, size or more than one turn to get to the right frequency. couple the long side of this "coil" to the center of the element.
bob w4mb

2289. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-09 23:54:22 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310091554.30b1799b@posting.google.com>
Source record: 106906

Richard,
On reflection I now see that how a variometer is
connected up can make a big difference.
In my particular case all coils are connected in
series such that the current is constant thru out.
An alternative way of connecting a variometer I suppose
is to supply a different current or placing the revolvable
inductance as part of another separate circuit whereas the
COUPLING action alone will provide the variances you speak of.
As for adding inductances in series, as stated in my earlier
reply, is a lot different such that I now believe my
original analysis is correct.(In other words I have just
increased the number of turns by sliding the inductances
together to make one inductor leaving the third inductor
which is revolveable seen as an inductance with reversable
turns or flux pattern.)
As you probably can now see I am totally confused,
especially since this arrangement is then coupled
to another separate circuit which is where I suspect the
+ or - 'M' variation comes into play comes into play.
Regards
Art
Regards
Art

norichardharrison@webtv.net (Richard Harrison) wrote in message
news:<26817-3F85AA58-233@storefull-2312.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "Are you suggesting that the variometer---?"
>
> I can`t say what Reg had in mind. What he wrote speaks for itself. The
> change in mutual inductance between variometer coils causes a change in
> their total inductance. As the sense of the rotatable coil can be
> reversed, its inductance can be arranged to aid or oppose the inductance
> of the fixed coil.
>
> Terman says on page 20 of his 1955 edition:
> "when two coils of inductance L1 and L2 , between which a mutual
> inductance exists, are connected in series, the equivalent inductance of
> the combination is L1 + L2 plus or minus 2M. The term 2M takes into
> account the flux linkages in each coil due to the current in the other
> coil. These mutual linkages may add to or subtract from the
> self-linkages, depending upon the relative direction in which the
> current passes through the two coils. Thus , when all linkages are in

> the same direction, the total inductance of the series combination
> excedes by 2M the sum of the individual inductances of the two coils."
>
> I think Reg gave a reasonable answer. We may assume coupling (mutual
> inductance) is high and that the coils are wound for equal inductances.
>
> Now a short-cut. We know that inductance increases with the square of
> the turns under common conditions. If we double the number of turns by
> sensing the coils so they aid, we will quadruple the inductance, as Reg
> said if I recall correctly.
>
> Best regards, Richard Harrison, KB5WZI

2290. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 00:22:07 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310091622.51ae154@posting.google.com>
Source record: 106907

alertjean_fake_id@rediffmail.com wrote in message
news:<abd5b578.0310031910.736f0c7c@posting.google.com>...
> When will a wire radiate?
> Can we make an oscillator circuit to radiate by
simply connecting its > output to a long wire ?

Yes, you certainly can.
If you place a loop circuit that is resonant in an area where it can absorb energy it will then oscillate and thus will radiate. If you place same circuit close to a normal dipole the circuit will take some of the energy from the dipole via coupling such that the circuit will oscillate and radiate at its resonant frequency or at a frequency determined by the particular coefficient of coupling.
Please note that I am an amateur and suggest you obtain coroberation from one of the many experts at hand.
Regards
Art

> Where can I get suitable study material on net about the topic?

2291. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 00:45:34 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F86012E.A53295F6@cwis.net>
Source record: 106908

AA,
Simper ubi sub ubi! And after 30 some years I'm lucky
to get any of it right much less in the right order.
Stainless steel is supposed to be 'not the greatest'
conductor for antennas, but, as long as you already have
it, why not? If you have to go buy a spool of it, you might
try some 18ga. 'CopperWeld'. Probably cheaper...
'Doc

2292. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 00:52:11 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <8d0covc7g6332vmjti7l3e8du1i7idrlrr@4ax.com>
Source record: 106879

On Thu, 09 Oct 2003 04:53:36 GMT, "G.Beat"
<now9spamgb@spam.comcast.net> wrote:

>"'Doc" <w5lz@cwis.net> wrote in message news:3F84D240.2235BC2@cwis.net...
>>
>>
>> "G.Beat",
>> You might take a very close look at the quoted articles.
>> I think you will find that neither antenna is as much of a
>> 'dog' as they are made out to be, and that there are
>> distinctions
>> that have very little practical meaning. And no matter who
>> wrote
>> the articles, you should be aware of the intended audience...
>> 'Doc
>>
>
>The purpose of the web site reference is for the reader to
>understand how the antennas are constructed.
>
>I have no opinion on either antenna ... your reference
>of 'dog' and 'intended audience' is non sequitur
>
>w9gb

I think you got your own non sequiters in there. To use your own
words:

"Does it work? Quality made? Does the product have value? (For what
you
paid .. does it work well?)"

If the antenna does work, if it has value (for what you paid...does it
work well) -- and if it does, then the article has little value other
that to look at "quality construction" issues that may or may not be
relevant.

Bob
k5qwg

>
>non sequitur ['n?n 's?kwit?]
>noun
> 1 a statement having little or no relevance to what preceded it
>
> 2 (Logic) a conclusion that does not follow from the premises

> Abbrev.: non seq
>[ETYMOLOGY: Latin, literally: it does not follow]
>

2293. REQ: Antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 00:58:56 UTC
From: Foopy <foopy@nospamhome.net>
Message-ID: <lu0covk0s28lb7dve7krjjo5pka34i932a@4ax.com>
Source record: 106909

What is the best HF vertical antenna out there?

Suggestions appreciated.

Foopy

2294. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 01:13:39 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <7Jnhb.724569$uu5.120853@sccrnsc04>
Source record: 106911

I'll go against your home made slingshot with my wrist rocket any time.

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f857b16$1_4@corp.newsgroups.com...
> EBrown2841 wrote:
> > I bought a cheap " wrist rocket " slingshot ...
>
> Buy? We used to make them out of old inner tubes and tree limbs
> at zero cost.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2295. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 01:17:19 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <zMnhb.724591$uu5.121160@sccrnsc04>
Source record: 106912

I don't know what they used in the US but when I was a kid in Ethiopia, the red rubber tubes were the prefered ones. Pirrelli, as I remember.

"Charles Hampton KA8JVX" <hampton@wvnet.edu> wrote in message news:3F858FAD.65F1@wvnet.edu...
>
> Cecil,
> Did you use the old red rubber tubes? They stretched more than the
> modern rubber tubes.
>
> Charles, ka8jvx

2296. Re: Slingshot method for hanging a wire antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 01:19:04 UTC
From: Williams <k7hmp@arrl.net>
Message-ID: <3F860908.919EE715@arrl.net>
Source record: 106910

Appreciate the info and the query re the 1S4. I'm OK on the tubes. I pick up a couple from time to time at local ham fests to use in my QRP rigs that I've built over the years.

73, Dave

K6ME wrote:
>
> Hey Dave,
>
> >< snipped ><
>
> You really need a 1S4?
>
> 73: K6ME

2297. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 01:34:24 UTC
From: richardharrison@webtv.net
Message-ID: <26817-3F860CA0-311@storefull-2312.public.lawson.webtv.net>
Source record: 106913

Art Unwin, KB9MZ wrote:
"Could you share with me a method of approximating the total inductance together with its variance values?"

The design of shortwave coils is a complicated process. Skin effect causes most loss, and single-strand wire wound as a single-layer coil is usually best. According to Terman, the highest Q is usually, for a given sized coil, gotten by a winding length somewhat less than the diameter of the coil. Terman refers to an article in "Wireless Eng.", vol. 26, page 179, June 1949 by G.W.O. Howe.

My big help with coils comes from the ARRL "L/C/F Calcululator", a specialized slide-rule. My "Model A" has a price of $2.00 printed on it.

Tom Bruhns has done a lot of work with coils and knows much more about them than I do. Maybe he will offer some help.

Reg has studied the pertinent factors and used them for some of his marvelous programs, so he can be a big help.

Sorry I am not qualified to be much help. My method has been "cut and try".

I was reading an excellent article from a 1920 QST as reprinted in January 1966, by E.H. Armstrong about his Signal Corps research in WW-1. He noted that his IF transformers benefitted from many turns of fine wire which reduced capacitance and added enough resistance to dampen oscillation tendencies. Armstrong was using "Type 5" triodes in his IF amplifier of 100 KHz. I am sorry that I am so out of date.

Best regards, Richard Harrison, KB5WZI

2298. Re: REQ: Antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 02:10:24 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <085cov4gupn89fuoqritosno054asp82pr@4ax.com>
Source record: 106916

On Thu, 09 Oct 2003 20:58:56 -0400, Foopy <foopy@nospamhome.net>
wrote:

>What is the best HF vertical antenna out there?
>
>Suggestions appreciated.
>
>Foopy

Those with the best ground systems.

Danny

2299. Re: Solarcon I-Max 2000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 02:13:07 UTC
From: derswede@aol.comspam.com
Message-ID: <20031009221307.04963.00000443@mb-m18.aol.com>
Source record: 106914

> Simper ubi sub ubi!
Still laughing....what was the old line, "if you ever get in a traffic accident...."

>, but, as long as you already have
>it, why not?

Yup....this stuff is very high tensile strength SS and is approx. 24 gauge. I'm going to try it, just wondered if there were any caveats before doing so. The ARRL handbook of course recommends copper, but the SS wire is just about invisible against the sky. Keeps me out of the dog house (and one of these days I'm gonna wire that sucker and put in air/heat ala the infamous Baker Doghouse...at least I can have my radios while therein!!)

Many thanks for the comments (always have to get my daily dose of rec.radio.amateur.antennas!)

Andrew

2300. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 02:14:08 UTC
From: richardharrison@webtv.net
Message-ID: <1261-3F8615F0-314@storefull-2315.public.lawson.webtv.net>
Source record: 106915

Art Unwin, KB9MZ wrote:
"If you place some circuit close to a normal dipole the circuit will take some of the energy from the dipole via coupling such that the circuit will oscillate and reradiate at its resonant frequency or at a frequency determined by its particular coefficient of coupling."

Not exactly.. To obtain continuous oscillation requires a gain equal to loss in a circuit and introduction from the output to the input of the circuit a sufficient fraction in the proper phase to reinforce signals in the circuit.

An oscillator is likely to have its frequency affected by any external coupling. That`s a reason to shield an oscillator and to provide a buffer between its output and external circuitry.

A characteristic of a radio wave is its amplitude and frequency lock to the generator which produces it. Subsequent mistreatment of the wave by its environment is usually incapable of altering its alternations.

Best regards, Richard Harrison, KB5WZI

2301. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 02:38:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cp6covgf1gs6rttaquhr2arsro574rft8k@4ax.com>
Source record: 106917

On Thu, 9 Oct 2003 21:14:08 -0500 (CDT), richardharrison@webtv.net
(Richard Harrison) wrote:

>Art Unwin, KB9MZ wrote:
>"If you place some circuit close to a normal dipole the circuit will
>take some of the energy from the dipole via coupling such that the
>circuit will oscillate and reradiate at its resonant frequency or at a
>frequency determined by its particular coefficient of coupling."
>

Hi Richard,

Obviously a case of not being able to distinguish between the usage of
oscillation and resonation.

73's
Richard Clark, KB7QHC

2302. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 03:34:54 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <cvKcne2-O49wtRuiXTWJjg@comcast.com>
Source record: 106918

Tom,

I am making progress with the SWCad model of the power meter. The current to voltage converter is working, which should be the hardest part. What I like about doing it this way is that all components have 0 tolerance, and there is nothing in the circuit that I don't put on the schematic. Unfortunately, I won't be able to do anything the next couple of days.

Tam/WB2TT

2303. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 06:39:07 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0310092239.5779d5bb@posting.google.com>
Source record: 106819

Hi Art,
the connection "all in series" is the proper one, not "particular".
Usually there are four parts of winding: one half of fixed coil, two halves of moving coil and another half of fixed coil. Let's mark the fixed coil inductance L1 and the moving coil L2. The construction is made so that L1=L2 and magnetic coupling is as tight as possible. The mutual inductance when both coils have the same axis is therefore approximately M=L1=L2.
If the moving coil is turned so that the magnetic fields add, the total inductance is (nearly) L = L1+L2+2M = 4*L1.
If the moving coil is turned so it is perpendicular to the fixed one and the magnetic fields do not influence the other coil, the mutual inductance is zero and the total inductance is L = L1+L2 = 2*L1.
If the moving coil is turned so that the magnetic fields subtract, the total inductance is (nearly) L = L1+L2-2M = 0.
When you added some turns, you destroyed the construction symmetry. Measuring the total inductance at various coil positions within 0..180 deg and at the working frequecy is the best you can do.

Variometers are often used for tuning antennas at 136 kHz. See
http://www.sweb.cz/ok1fig/Small_vario.jpg ,
http://www.sweb.cz/ok1fig/Big_vario_02.jpg ,
http://www.sweb.cz/ok1fig/Big_vario_03.jpg or
http://www.g0mrf.freeserve.co.uk/variometer.htm .

BR from Ivan

aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310091554.30b1799b@posting.google.com>...
> Richard,
> On reflection I now see that how a variometer is
> connected up can make a big difference.
> In my particular case all coils are connected in
> series such that the current is constant thru out.
> An alternative way of connecting a variometer I suppose
> is to supply a different current or placing the revolvable
> inductance as part of another separate circuit whereas the
> COUPLING action alone will provide the variances you speak of.
> As for adding inductances in series, as stated in my earlier
> reply, is a lot different such that I now believe my
> original analysis is correct.(In other words I have just
> increased the number of turns by sliding the inductances
> together to make one inductor leaving the third inductor
> which is revolveable seen as an inductance with reversable
> turns or flux pattern.)

> As you probably can now see I am totally confused,
> especially since this arrangement is then coupled
> to another separate circuit which is where I suspect the
> + or - 'M' variation comes into play comes into play.
> Regards
> Art

2304. Re: REQ: Antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 07:23:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F865E6A.58750F89@cwis.net>
Source record: 106820

In most cases, it was the one you had before the one
you have now. Maybe if you defined 'best' your question
might be easier to answer.
'Doc

2305. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 07:36:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k9ocovkj06j146mvpk3gfvo8nkg4vqafvj@4ax.com>
Source record: 106821

On 9 Oct 2003 23:39:07 -0700, remove_ok1sip@atlas.cz (OK1SIP) wrote:
>Variometers are often used for tuning antennas at 136 kHz. See
>http://www.sweb.cz/ok1fig/Small_vario.jpg ,
>http://www.sweb.cz/ok1fig/Big_vario_02.jpg ,
>http://www.sweb.cz/ok1fig/Big_vario_03.jpg or
>http://www.g0mrf.freeserve.co.uk/variometer.htm .
>
>BR from Ivan

Hi Ivan,

Those are some great variometers.

73's
Richard Clark, KB7QHC

2306. Hexbeam vs. Cushcraft MA5B

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 14:31:24 UTC
From: rcuffee@hotmail.com
Message-ID: <df27559b.0310100631.6af6ea23@posting.google.com>
Source record: 106822

I am thinking about installing a small beam. I have narrowed it down to the 5 band Hexbeam and the MA5B. I have read the reveiws on eHam on both of these antennas, and both appear to be excellent antenna based on the size. Since the Hexbeam cost 2.5 times the cost of the MA5B, do you think it is worth the additional expense? Will the Heambeam significantly outperform the MA5B?

Thanks,

RC

2307. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 14:32:12 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310100632.175279de@posting.google.com>
Source record: 106823

Richard.
You have no need to be sorry!
\You are trying to help me and
I appreciate that.
My problem started when I moved
away from a homebrew coil on a circuit
which was coupled to a rod (distributed inductance)
The coupled rod when moved allowed for
an ideal matching setup
as it could be made into a perfect match
for top band use.(the rod was the driven element)
When I substituted a variometer for fine
tuning everything went to pot!
(That is why they call mesh circuits 'complex')
Thus the questions regarding variometers
and the markings. With the new band in
the U.K. being used I suspect we are going
to hear a lot more about this instrument
and I can then reintroduce it on my antenna
Best regards
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<26817-3F860CA0-311@storefull-2312.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "Could you share with me a method of approximating the total inductance
> together with its variance values?"
>
> The design of shortwave coils is a complicated process. Skin effect
> causes most loss, and single-strand wire wound as a single-layer coil is
> usually best. According to Terman, the highest Q is usually, for a given
> sized coil, gotten by a winding length somewhat less than the diameter
> of the coil. Terman refers to an article in "Wireless Eng.", vol. 26,
> page 179, June 1949 by G.W.O. Howe.
>
> My big help with coils comes from the ARRL "L/C/F Calcululator", a
> specialized slide-rule. My "Model A" has a price of $2.00 printed on it.
>
> Tom Bruhns has done a lot of work with coils and knows much more about
> them than I do. Maybe he will offer some help.
>
> Reg has studied the pertinent factors and used them for some of his
> marvelous programs, so he can be a big help.
>

> Sorry I am not qualified to be much help. My method has been "cut and
> try".
>
> I was reading an excellent article from a 1920 QST as reprinted in
> January 1966, by E.H. Armstrong about his Signal Corps research in WW-1.
> He noted that his IF transformers benefitted from many turns of fine
> wire which reduced capacitance and added enough resistance to dampen
> oscillation tendencies. Armstrong was using "Type 5" triodes in his IF
> amplifier of 100 KHz. I am sorry that I am so out of date.
>
> Best regards, Richard Harrison, KB5WZI

2308. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 14:48:17 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310100648.764bc073@posting.google.com>
Source record: 106824

What a great posting!
The input and work has not gone unnoticed
and I am sure that all on the net appreciate
your presence. I need time to digest it as I
am now in a state of confusion regarding the subject
and its applicability to my particular project.
Many, many thanks for your effort
Art

remove_ok1sip@atlas.cz (OK1SIP) wrote in message
news:<5f5159fa.0310092239.5779d5bb@posting.google.com>...
> Hi Art,
> the connection "all in series" is the proper one, not "particular".
> Usually there are four parts of winding: one half of fixed coil, two
> halves of moving coil and another half of fixed coil. Let's mark the
> fixed coil inductance L1 and the moving coil L2. The construction is
> made so that L1=L2 and magnetic coupling is as tight as possible. The
> mutual inductance when both coils have the same axis is therefore
> approximately M=L1=L2.
> If the moving coil is turned so that the magnetic fields add, the
> total inductance is (nearly) L = L1+L2+2M = 4*L1.
> If the moving coil is turned so it is perpendicular to the fixed one
> and the magnetic fields do not influence the other coil, the mutual
> inductance is zero and the total inductance is L = L1+L2 = 2*L1.
> If the moving coil is turned so that the magnetic fields subtract, the
> total inductance is (nearly) L = L1+L2-2M = 0.
> When you added some turns, you destroyed the construction symmetry.
> Measuring the total inductance at various coil positions within 0..180
> deg and at the working frequecy is the best you can do.
>
> Variometers are often used for tuning antennas at 136 kHz. See
> http://www.sweb.cz/ok1fig/Small_vario.jpg ,
> http://www.sweb.cz/ok1fig/Big_vario_02.jpg ,
> http://www.sweb.cz/ok1fig/Big_vario_03.jpg or
> http://www.g0mrf.freeserve.co.uk/variometer.htm .
>
> BR from Ivan
>
>
> aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310091554.30b1799b@posting.google.com>...
> > Richard,
> > On reflection I now see that how a variometer is
> > connected up can make a big difference.

> > In my particular case all coils are connected in
> > series such that the current is constant thru out.
> > An alternative way of connecting a variometer I suppose
> > is to supply a different current or placing the revolvable
> > inductance as part of another separate circuit whereas the
> > COUPLING action alone will provide the variances you speak of.
> > As for adding inductances in series, as stated in my earlier
> > reply, is a lot different such that I now believe my
> > original analysis is correct.(In other words I have just
> > increased the number of turns by sliding the inductances
> > together to make one inductor leaving the third inductor
> > which is revolveable seen as an inductance with reversable
> > turns or flux pattern.)
> > As you probably can now see I am totally confused,
> > especially since this arrangement is then coupled
> > to another separate circuit which is where I suspect the
> > + or - 'M' variation comes into play comes into play.
> > Regards
> > Art

2309. Re: Antenna suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 14:54:26 UTC
From: El Martillo <Noise@noise.com>
Message-ID: <5Lzhb.67188$Ms2.40378@fed1read03>
Source record: 106825

Assuming you are asking about a multiband vertical
read what vertical owners think at URL:
http://www.eham.net/reviews/products/13

My experience -- single band, full 1/4 wave, homebrew verticals with a good
ground system -- beat all the multibanders.

73 From El Martillo

"Foopy" <foopy@nospamhome.net> wrote in message
news:lu0covk0s28lb7dve7krjjo5pka34i932a@4ax.com...
> What is the best HF vertical antenna out there?
>
> Suggestions appreciated.
>
> Foopy
>

2310. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 15:06:45 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310100706.7f81f5e1@posting.google.com>
Source record: 106826

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<1261-3F8615F0-314@storefull-2315.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "If you place some circuit close to a normal dipole the circuit will
> take some of the energy from the dipole via coupling such that the
> circuit will oscillate and reradiate at its resonant frequency or at a
> frequency determined by its particular coefficient of coupling."
>
> Not exactly.. To obtain continuous oscillation requires a gain equal to
> loss in a circuit and introduction from the output to the input of the
> circuit a sufficient fraction in the proper phase to reinforce signals
> in the circuit.
>
> An oscillator is likely to have its frequency affected by any external
> coupling. That`s a reason to shield an oscillator and to provide a
> buffer between its output and external circuitry.
>
> A characteristic of a radio wave is its amplitude and frequency lock to
> the generator which produces it. Subsequent mistreatment of the wave by
> its environment is usually incapable of altering its alternations.
>
> Best regards, Richard Harrison, KB5WZI

Richard,
If I have a loop circuit unconnected to a transmitter
could it not oscillate under ideal conditions?
If it can then would it not radiate at the frequency
that it is resonant at as well as reradiate at the
frequency of the energy input
Regards
Art

2311. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 15:56:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f86d77e_2@127.0.0.1>
Source record: 106827

Art Unwin KB9MZ wrote:
> If I have a loop circuit unconnected to a transmitter
> could it not oscillate under ideal conditions?

Art, what is the power source?
--
73, Cecil, W5DXP

2312. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 16:36:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b7ndovkd5ige0hsjntfko51a0u8i18elmo@4ax.com>
Source record: 106828

On 10 Oct 2003 08:06:45 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Richard,
>If I have a loop circuit unconnected to a transmitter
> could it not oscillate under ideal conditions?
>If it can then would it not radiate at the frequency
>that it is resonant at as well as reradiate at the
>frequency of the energy input
>Regards
>Art

Hi Art,

Distinguish between what resonates and what oscillates. Passive circuits do not oscillate even though they support the flow of alternating current. The ideal conditions for oscillation is the presence of a power source, gain, and feedback. If any of the three is missing, then there is no oscillation. The ideal conditions for resonance is an external source of alternating current coupled to a system that is harmonically related. If that system has no harmonic relation, then there is no oscillation or resonation.

ALL systems that support the flow of alternating current radiate. How well this is performed is called efficiency.

You cannot change a frequency without a nonlinear interface (like a diode) or without the original excitation source containing spurs (illegal at the antenna).

73's
Richard Clark, KB7QHC

2313. What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:07:53 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86n0c90xvq.fsf@duchess.twilley.org>
Source record: 106829

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

I recently sat down and calibrated my antenna, going through the bands
and recording the antenna tuner settings required to reach 1:1 on all
the bands my rig can run.

I'm thinking about another calibration I'd like to perform with the
tuner bypassed, trying to determine where on the bands I can use the
antenna without a tuner and still be within a reasonable SWR range.

I am hoping to preserve the lifetime of my tubes and maximize the
power available to me.

My question is: what is an acceptable SWR range? I know that 1:1 is a
desirable SWR, but when does SWR become undesirable to the point that
it shortens the lives of my tubes?

I am using a Kenwood TS-520 and an MFJ Versa Tuner II.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/hvV9GPFSfAB/ezgRAl5qAKChOQSqLiCctZuNg67p+74QGmhRMACfdGU4
7nYIyaJIotUYfs/pPsI4340=
=4Uqc
-----END PGP SIGNATURE-----
```

2314. Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:30:03 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <LUChb.616$_i.49017@nnrp1.ptd.net>
Source record: 106830
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hello all,

I am fortunate enough to have just acquired a new 2003 Ford Explorer (4x4, 4-door model) and wanted to solicit input from other owners of this vehicle as to their experiences with VHF/UHF and HF rig and antenna installation and wiring issues.

I thought I might benefit from the experience of others in locating the wiring channels, good paths through the firewall to the battery, and perhaps experience in locating "remote head" radios in the forward of the two rear under-deck storage areas (or other locations).

I plan to install a 2m/70cm transceiver and an HF plus (at least) 6m multiband rig in the vehicle. (probably both Yaesu).

Additionally, any "gotchas" on mounting remote heads on the center console, etc. would be appreciated. (don't want to drill into something behind a pannel, but don't want to have to tear the whole vehicle apart to see what's behind, either, if it can be helped)

73 and thanks in advance for any insights that owners of this vehicle may provide,

Carl - wk3c

2315. TSB3305?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:34:02 UTC
From: Al Cristaldi <megaman@cybernet1.com>
Message-ID: <bm6u2i01e4c@enews4.newsguy.com>
Source record: 106833

Seeking information on above listed antenna model. Appears to be an exact copy (weight, dimensions, etc.) of a Diamond X-510MA. Attempting to get the name of the manufacturer ... any help would be appreciated, thanks.

73 DE AL KK7GV

2316. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:43:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vodvf1gca5p75d@corp.supernews.com>
Source record: 106831

Locate a tuning fork. Mount it any way you please. Then check it from time to time to see if it spontaneously begins a sustained ringing.

As a mechanical engineer, you're well acquainted with the differential equations that describe the motion of a physical object that's been struck, for example a tuning fork. And you'll recall that the form of the solution is a decaying sinusoid. An antenna or other resonant circuit obeys the same equations and behaves the same way. In electrical parlance, this response to excitation is called "ringing", after the obvious physical equivalent. While a tuning fork or an antenna will ring if excited, an antenna won't spontaneously ring, or produce a sustained oscillation without an external source of power -- for exactly the same reasons a tuning fork won't.

Roy Lewallen, W7EL

Art Unwin KB9MZ wrote:
>
> Richard,
> If I have a loop circuit unconnected to a transmitter
> could it not oscillate under ideal conditions?
> If it can then would it not radiate at the frequency
> that it is resonant at as well as reradiate at the
> frequency of the energy input
> Regards
> Art

2317. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:44:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f86fede_2@127.0.0.1>
Source record: 106832

Jack Twilley wrote:
> My question is: what is an acceptable SWR range?
> I am using a Kenwood TS-520 and an MFJ Versa Tuner II.

Your transceiver manual should specify a maximum SWR.
For my IC-706, it is 3:1. I consider anything below
2:1 to be perfectly safe. That's about 11% reflected
power. Most modern transceivers are equipped with
foldback circuitry to protect the finals.
--
73, Cecil, W5DXP

2318. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 18:57:56 UTC
From: El Martillo <Noise@noise.com>
Message-ID: <UiDhb.67228$Ms2.27006@fed1read03>
Source record: 106834

A TS-520 has vacuum tube output stages --
Vacuum tubes are very forgiving of SWR --- unlike solid states rigs.

I operated a TS-830S (tube outputs) with swr's well over 3:1 for years (no tuner) and never had to change the finals.

Not desireable but in my case had no choice as I didn't have a tuner and the SWR was high on one end of the band for my junior beam.

Caveat -- your tube life may vary !!!!!

--
73 From
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f86fede_2@127.0.0.1...
> Jack Twilley wrote:
> > My question is: what is an acceptable SWR range?
> > I am using a Kenwood TS-520 and an MFJ Versa Tuner II.
>
> Your transceiver manual should specify a maximum SWR.
> For my IC-706, it is 3:1. I consider anything below
> 2:1 to be perfectly safe. That's about 11% reflected
> power. Most modern transceivers are equipped with
> foldback circuitry to protect the finals.
> --
> 73, Cecil, W5DXP
>

2319. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 19:12:35 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <KwDhb.20$ko1.210@news.ntplx.net>
Source record: 106835

"Jack Twilley" <jmt+usenet@twilley.org> wrote in message
news:86n0c90xvq.fsf@duchess.twilley.org...

>I am hoping to preserve the lifetime of my tubes and maximize the
>power available to me.

>My question is: what is an acceptable SWR range? I know that 1:1 is a
>desirable SWR, but when does SWR become undesirable to the point that
>it shortens the lives of my tubes?

Impedances of 25ohms, 50+j39ohms, and 100 ohms all represent loads that
could present a 2:1 SWR to the transmitter. Which is worse depends on
how the matching and filtering networks reflect the load back to the
transistor.
With a networks that look like a half wavelength of transmission line, the
25ohm
load would cause more transistor stress than the 100 ohm load. Adding
another
quarter wavelength of transmission line wouldn't change the SWR, but would
make
the 100ohm load more of a problem than the 25ohm load.

>I am using a Kenwood TS-520 and an MFJ Versa Tuner II.

You may be in luck. You can calculate the plate power (plate current*plate
voltage).
Subtract the power output and you have a very good idea on how much the tube
is
stressed. You can then measure the SWR and see if how much of a correlation
there
is between SWR and tube stress. Another useful measurement may be to
measure
the temperature of the tube with one of those non-contact IR thermometers.

73--Zack Lau W1VT

2320. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 19:25:08 UTC
From: richardharrison@webtv.net
Message-ID: <3362-3F870794-47@storefull-2318.public.lawson.webtv.net>
Source record: 106836

Art Unwin, KB9MZ wrote:
"If I have a loop circuit unconnected to a transmitter could it not oscillate under ideal conditions?"

Ideal conditions would require a source of energy to replenish losses in the loop circuit. The source has to be the same frequency as that consumed in operation of the loop.

A loop like any conductor or circuit has a self-resonant frequency. At resonance, the conductor`s inductive and capacitive reactances cancel. This zero reactance leaves only resistance to limit current in the conductor. Some of the total resistance may be a coupled load, and some will be radiation resistance, which is the conductor`s loss of r-f energy to radiation. Some energy will be lost in conversion to heat at the surface of the conductor and perhaps other locations.

At frequencies not too far from resonance, reactance of the wire rises so high that little current flows and the wire has little effect on anything.

Broadcasters are faced with structures which arise near their antenna arrays. At times these are resonant at the broadcast frequency and if so they absorb and re-radiate energy distorting the station`s radiation pattern. The solution is usually simply applying something to the new structure to detune it from resonance at the broadcast frequency. If not very near resonance, the structure won`t pickup enough energy to cause trouble. Too much reactance to allow current flow.

The hard fact that a structure must be near resonance to admit significant energy makes broadbanding an antenna by an appurtenance tuned to some frequency other than the fundamental frequency of the antenna challenging. One method that works is a combination of antennas resonant for all the desired frequencies.

There are other methods to get a wire to accept current over a wide frequency range. Wave antennas are an example. But, standing wave antennas are the most common and these need resonance or thereabouts.

Best regards, Richard Harrison, KB5WZI

2321. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 19:53:31 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <mh3eovkar4l64qo24grrsepcsc70cjvj2r@4ax.com>
Source record: 106837

On Fri, 10 Oct 2003 11:07:53 -0700, Jack Twilley
<jmt+usenet@twilley.org> wrote:

>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>I recently sat down and calibrated my antenna, going through the bands
>and recording the antenna tuner settings required to reach 1:1 on all
>the bands my rig can run.
>
>I'm thinking about another calibration I'd like to perform with the
>tuner bypassed, trying to determine where on the bands I can use the
>antenna without a tuner and still be within a reasonable SWR range.
>
>I am hoping to preserve the lifetime of my tubes and maximize the
>power available to me.
>
>My question is: what is an acceptable SWR range? I know that 1:1 is a
>desirable SWR, but when does SWR become undesirable to the point that
>it shortens the lives of my tubes?
>
>I am using a Kenwood TS-520 and an MFJ Versa Tuner II.
>
>Jack.

Jack,

The 520 has a pi-network output. When properly adjusted, the pin-net
work will match the finals to the load. So if you are able to adjust
your plate and loading controls to the recommended grid and plate
current values everything will be just fine reguardless of the SWR.
Now if your SWR is so high as the 520 will not load properly then you
should think of bringing the tuner on line. Otherwise just leave it in
the by-pass position. Nothing is gained using the tuner if it isn't
needed.

73
Danny, K6MHE

2322. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 20:31:58 UTC
From: El Martillo <Noise@noise.com>
Message-ID: <2HEhb.67233$Ms2.52191@fed1read03>
Source record: 106838

```
Also the tank circuit in vacuum tube finals will allow loading into a
mismatch -- just watch that the
plate and grid current values are in limits.

--
73 From El Martillo
------------------
"El Martillo" <Noise@noise.com> wrote in message
news:UiDhb.67228$Ms2.27006@fed1read03...
> A TS-520 has vacuum tube output stages --
> Vacuum tubes are very forgiving of SWR --- unlike solid states rigs.
>
> I operated a TS-830S (tube outputs) with swr's well over 3:1 for years (no
> tuner) and never had to change the finals.
>
> Not desireable but in my case had no choice as I didn't have a tuner and
the
> SWR was high on one end of the band for my junior beam.
>
> Caveat -- your tube life may vary !!!!!
>
> --
> 73 From
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3f86fede_2@127.0.0.1...
> > Jack Twilley wrote:
> > > My question is: what is an acceptable SWR range?
> > > I am using a Kenwood TS-520 and an MFJ Versa Tuner II.
> >
> > Your transceiver manual should specify a maximum SWR.
> > For my IC-706, it is 3:1. I consider anything below
> > 2:1 to be perfectly safe. That's about 11% reflected
> > power. Most modern transceivers are equipped with
> > foldback circuitry to protect the finals.
> > --
> > 73, Cecil, W5DXP
> >
>
>
```

2323. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 20:41:20 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86d6d425cf.fsf@duchess.twilley.org>
Source record: 106839

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Cecil" == Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> writes:

Jack> My question is: what is an acceptable SWR range? I am using a
Jack> Kenwood TS-520 and an MFJ Versa Tuner II.

Cecil> Your transceiver manual should specify a maximum SWR. For my
Cecil> IC-706, it is 3:1. I consider anything below 2:1 to be
Cecil> perfectly safe. That's about 11% reflected power. Most modern
Cecil> transceivers are equipped with foldback circuitry to protect
Cecil> the finals.

I don't have my manual at work, but the following URL

http://www.qsl.net/sm7vhs/radio/kenwood/ts520/specs.htm

doesn't show any kind of maximum SWR.

This transceiver isn't "modern" by any stretch of the imagination -- I
wouldn't be surprised to learn that the radio is older than I am.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/hxl0GPFSfAB/ezgRAlOTAJ9OQOu7SXJ8VEb5KI4eDu93Zx/bvQCffXXJ
bXWjwVcJGafB5XnME3ubjfw=
=gGDS
-----END PGP SIGNATURE-----
```

2324. Aktivantenne ADDX-AT2

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 20:53:45 UTC
From: Chello Newsgroup <yogi97@gmx.at>
Message-ID: <t%Ehb.37960$KP4.438385@news.chello.at>
Source record: 106840

Hallo!

Aktivantenne ADDX-AT2 (Frequenzbereich 3-30 MHz), mit Teleskopantenne und magnetischer Loop-Antenne (Frequenzbereich 3 - 28 MHz, 35 cm Durchmesser, 2-dimensional drehbar), f�r den Kurzwellenempfang. Zur Verwendung mit einem Kurzwellenrado wie z. B. Sangean ATS909 oder �hnliche geeignet. Betrieben mit einer 9V-Blockbatterie (nicht enthalten). Verschiedene Empfangsbereiche vorw�hlbar. Regelbare Antennenverst�rkung und Feinabstimmung.Die maximale Verst�rkung liegt bei 25 dB, bei sehr g�nstigem Rauschverhalten. Anschl�sse R�ckseite: 50-Ohm-Anschlu� in PL-259-Ausf�hrung zum Anschlu� anderer Antennen, Chinch-Kupplung (Verbindung zum Empf�nger), Batterieanschluss. Oberseite: Anschluss f�r Teleskopantenne und magnetischer Loop-Antenne (ebenfalls eine Chinch-Kupplung). Durch die vielen Anschl�sse ist die AT2 eine vielseitig verwendbare Aktivantenne oder Antennetuner. Ger�t wenig gebraucht, Optisch und technisch einwandfreier Zustand. F�r weitere Infos oder Bilder bitte Mail an mich. Neupreis betr�gt Euro 140,-, Verkaufspreis Euro 85,-

Gru�, Hans-Peter

yogi97@gmx.at

2325. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 22:17:14 UTC
From: Irv Finkleman <finkirv@NOSPAMshaw.ca>
Message-ID: <3F872F0C.6C2D2E6D@NOSPAMshaw.ca>
Source record: 106841

Jack Twilley wrote:
>
etc. etc.

I run a TS-520S and do a lot of antenna experimentation. I have never really concerned myself with SWR as tube rigs are very forgiving. In the military we always considered 1.5:1 or better as 'mil spec'. I never worry about 3:1 or less, and wouldn't even care about greater SWR's as long as the finals are properly tuned and within current specs.

I think that a very high SWR might cause problems with the tuner well before it would do anything to the rig.

Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2326. Re: Old QST article needed!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-10 22:34:56 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bm7coo$5qa$1@reader2.nmix.net>
Source record: 106842

According to my quick-and-dirty web research, the original Micronaut transmitter was described in K4TWJ's "World of Ideas" column in the April and May 1996 issues of CQ magazine. Not QST.

According to an endnote in a September 1997 QST article on the MRX-40 Mini Receiver, Micronaut transmitter kits can be obtained from Dave Ingram, K4TWJ, 4941 Scenic View Dr, Birmingham, AL 35210. They are $15 (without crystal), plus $2 shipping and handling. That address is still good according to QRZ.com, though the price might have gone up. :-)

Bill / W5WVO

Paul Jordan wrote:
> I'm looking for an article on the Micronaut 20 meter QRP rig that was
> in QST possibly in 1997. If anyone has it scanned or can point me to
> a link for it, I'd greatly appreciate it. I'm lookin to build this
> rig and possibly make up some for some future hams to build as well..
>
>
> Paul Jordan
> kl0an
> Anchorage, AK

2327. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 00:55:22 UTC
From: El Martillo <Noise@noise.com>
Message-ID: <_xIhb.67262$Ms2.52452@fed1read03>
Source record: 106843

Yep you are correct.

--
73 From
"W7TI" <noway@nohow.com> wrote in message
news:gi9eovog8o3h2qhggighjhv5kjnqnmjs37@4ax.com...
> On Fri, 10 Oct 2003 11:57:56 -0700, "El Martillo" <Noise@noise.com>
> wrote:
>
> >Vacuum tubes are very forgiving of SWR --- unlike solid states rigs.
>
> ____
>
> I think you mean "vacuum tube rigs", not "vacuum tubes". The tubes
> themselves don't care what the SWR is, assuming the tank circuit is
> properly tuned.
>
> --
> Bill, W7TI
>

2328. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 01:47:36 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <b4oeov4edhd26m8i0f4aiee6m46biavqq8@4ax.com>
Source record: 106844

On Fri, 10 Oct 2003 11:07:53 -0700, Jack Twilley
<jmt+usenet@twilley.org> wrote:

>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
<snip>

>My question is: what is an acceptable SWR range? I know that 1:1 is a
>desirable SWR, but when does SWR become undesirable to the point that
>it shortens the lives of my tubes?
>
>I am using a Kenwood TS-520 and an MFJ Versa Tuner II.

The 520 uses tubes for finals and a Pi Network for matching. As long
as the network tunes and loads without exceeding the tube ratings it
should run just fine.

All that the tuner does is extend the matching range, so it matters
little whether the external tuner, or the built in Pi network does the
matching. (as long as it does match)

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>Jack.

2329. Re: Ladder Line or Coax For Reception only?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 02:16:07 UTC
From: mike <intotheapex@yahoo.com>
Message-ID: <9ooeov88i5oe02qu1sekle820jgm0n7jj0@4ax.com>
Source record: 106845

On 4 Oct 2003 16:42:36 -0700, junkmail@altonillinois.com (Walter)
wrote:

>(1) Will using a Ladder Line instead of Coax improve my reception?

For really long runs maybe. The biggest advantage for ladder line is
its low loss. But with 500 feet of longwire, you have plenty of signal
which would easily overcome any appreciable loss.

I researched this myself recently. Some say it wouldnt hold up to
rough weather such as snow and ice. Coax is pretty rugged comparably.

The key to using coax effectively is ensuring you're matching the coax
to the antenna. Given the longwire might be 450 ohms or better a 4-1
or higher balun (actually called a long wire matching transformer) is
imperative.

If your improperly matched, 75 ohm coax is better than 50 ohm as it
would reduce the mismatch slightly.

To ensure the coax actually helps block noise as it feeds the signal
in, be certain to ground the sheild at both the antenna and near the
receiver. If you dont do this, currents flow in the shield.

While coax is marginally lossy, improperly matched coax is really
lossy. When the antenna and coax are matched you get max signal "flow"
to your receiver.

>(2) If so, where do I change to coax? Or do I just run the Ladder line
>into the house and straight to the receiver?

I think you would need a balanced/unbalanced (balun) to do this.
Ladder line is balanced, coax is not.

>(3) What about electrical interference since the ladder line isn't
>shielded?

Ladder line cancels noise like twisted pair does. Each wire cancels
the noise picked up by the other.

Lastly, consider an antenna tuner if you dont already have one, this
will further help in matching as impedances change with frequency.

mike

2330. BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 02:20:31 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bm9o10$kemhq$1@ID-189073.news.uni-berlin.de>
Source record: 106859
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Just found out today listening to a local, reputable radio station that Bay, Saginaw and Midland Counties in Michigan are going to be "test sites" for BPL, at least for Michigan. I don't know when it will be an actual reality, as opposed to being in the planning stages, but will keep current with their project!

Ryan KC8PMX
Midland, Michigan

2331. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 02:49:15 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <4cKhb.1057$BI4.726@bignews6.bellsouth.net>
Source record: 106846
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:LUChb.616$_i.49017@nnrp1.ptd.net...
> Hello all,
>
> I am fortunate enough to have just acquired a new 2003 Ford Explorer
> (4x4, 4-door model) and wanted to solicit input from other owners of
> this vehicle as to their experiences with VHF/UHF and HF rig and
> antenna installation and wiring issues.
>
> I thought I might benefit from the experience of others in locating the
> wiring channels, good paths through the firewall to the battery, and
> perhaps experience in locating "remote head" radios in the forward
> of the two rear under-deck storage areas (or other locations).
>
> I plan to install a 2m/70cm transceiver and an HF plus (at least)
> 6m multiband rig in the vehicle. (probably both Yaesu).
>
> Additionally, any "gotchas" on mounting remote heads on the center
> console, etc. would be appreciated. (don't want to drill into something
> behind a pannel, but don't want to have to tear the whole vehicle apart
> to see what's behind, either, if it can be helped)
>
> 73 and thanks in advance for any insights that owners of this vehicle
> may provide,
>
> Carl - wk3c

I don't own a Ford Exploder (WHOOPS! Just kiddin'),
I mean EXPLORER, but my Chevy S-10 shouldn't be all
that different. Most of the wiring can be chased down down thru the engine
compartment and into the driver area via the door drip rails/strips. After
checking under there for any wiring harnesses, a hole can be drilled thru
and wires should be able to get in under the dash from there. Make sure that
the wires don't get where the wheels can rub against them when they are
turned hard to one side. I use grommets in these holes (Radio Shack has
them) to prevent wires from being chafed due to unseen burrs. It should be
an easy run from there under the carpet to the radio or control head. If the
radio is remoted, the control cable can be routed the same way, routing
same from the radio/head under the drip rail/channel to the correct
location. Same thing with the antenna coax. If the HF antenna is at the
rear, one can come from under the bumper along the frame and use wire ties
to prevent chafing. Keep your wiring harnesses away from existing wiring
lest you find yourself with some other issues (ignition noise, whines, *

funny* occurrances like wipers coming on, engine stalling, etc.). One advantage of running cables this way is, when the drip channel molding is replaced, one can't tell there was ever any wires under there. Oh, BTW, Where the wires enter the vehicle, be sure to leave a little drip loop in the cable to keep water from wicking its way inside and ruining the carpet. Of course, the alternate method would be to find a plug in the firewall where wires can come in under the carpet.

One thing I always do is to take a little time to survey the proposed installation and see how best to do the job. A bit of forethought can save a botched installation. This is where one looks carefully at surfaces for possible hidden wires. *IF* there is a lip or an angled surface next an accessory, such as the radio/tape player, you can often tell if you might hurt anything. If the dash has a "lip" or a channel where it is too narrow for any harnesses to fit inside, usually it is *safe* to attach small screws. If one is not comfortable with that, then he may want to remove the console. Look for cup holders, panels, ash trays, etc.
that might be removed with a simple lift of a screwdriver so that the console may not have to be removed in toto. My shift console was quickly removed with the 4 screws/bolts existing.

Your VHF/UHF antenna can be attached to the luggage rack and the coax chased down between the doors and inside that way--being careful that the doors don't pinch the feedline or rub it in two.

Being a builder and an avid HF user, I would recommend the Carolina Cyclone (my own brand) screwdriver. The screwdriver concept is about the best, most versatile way to go HF AND 6 Meters. With the exception of 160 Meters, getting 80 thru 70 CM is quite easy. And it makes the spouse happier not having to have a multitude of antennas flopping around the car (two antennas--an HF antenna, and a dual band VHF/70 cm).

In a nutshell, each installation is different and requires a bit of that pre-install survey and some imagination. I think you will do fine! And, of course, if you need a great HF antenna, just let me know! LOL!

73

Jerry
K4KWH

(www.qsl.net)

2332. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 02:55:02 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310101855.4d50faa6@posting.google.com>
Source record: 106847

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f86d77e_2@127.0.0.1>...
> Art Unwin KB9MZ wrote:
> > If I have a loop circuit unconnected to a transmitter
> > could it not oscillate under ideal conditions?
>
> Art, what is the power source?

Wow, this brought forth a lot of comments to contemplate.

Regarding your question. I was thinking of energy radiated
by a nearby source such as another radiator with very loose
coupling from which it gets energy, and current flows in the loop,
I then reason that with energy being applied to the loop it will also
create oscillation PLUS a emf feedback to the initiating energy
scource
which then also reacts giving a 'pulse' to continue oscillation as
well as energy for radiation. I see the loop not only reradiating the
initial frequency impinged upon it by the outside source but also a
radiation at the frequency of oscillation somewhat similar to that
seen in a receiver where the object is to bring the two frequencies
together. Now I am not electrically based and I am also guilty of
using wrong terms in my description but I am using the hobby
to experiment and learn. Now I did play with such a set up and was
able to see two frequencies on the 141T, Whether I interpreted
correctly what I saw is another matter. Fortunately I am not teaching
the subject or trying to make a living from it nor do I have a resume
to protect which gives me the opportunity to speculate, play around
with the hobby without the danger of being beheaded.
That is what is great about this hobby, it accepts all, the curious
and the appliance operators all of which are not frightened by showing
their ignorance of the subject but trying just the same. If I thought
I knew a bit about conjugate matches I would have participated in the
other postings but that was really beyond my ken and interest so you
lucked out there.
Cheers
Art

2333. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 03:01:49 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310101901.18e4baa1@posting.google.com>
Source record: 106848

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<b7ndovkd5ige0hsjntfko51a0u8i18elmo@4ax.com>...
> On 10 Oct 2003 08:06:45 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
> >Richard,
> >If I have a loop circuit unconnected to a transmitter
> > could it not oscillate under ideal conditions?
> >If it can then would it not radiate at the frequency
> >that it is resonant at as well as reradiate at the
> >frequency of the energy input
> >Regards
> >Art
>
>
> Hi Art,
>
> Distinguish between what resonates and what oscillates. Passive
> circuits do not oscillate even though they support the flow of
> alternating current.

If what you state above is correct then I am wrong since basically
what I am descibing is a passive feedback circuitu

Art

The ideal conditions for oscillation is the
> presence of a power source, gain, and feedback. If any of the three
> is missing, then there is no oscillation. The ideal conditions for
> resonance is an external source of alternating current coupled to a
> system that is harmonically related. If that system has no harmonic
> relation, then there is no oscillation or resonation.
>
> ALL systems that support the flow of alternating current radiate. How
> well this is performed is called efficiency.
>
> You cannot change a frequency without a nonlinear interface (like a
> diode) or without the original excitation source containing spurs
> (illegal at the antenna).
>
> 73's
> Richard Clark, KB7QHC

2334. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 03:34:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u4ueovc4s32vcog03esoedr5hsbe5fl4ke@4ax.com>
Source record: 106849

On 10 Oct 2003 20:01:49 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>> Hi Art,
>>
>> Distinguish between what resonates and what oscillates. Passive
>> circuits do not oscillate even though they support the flow of
>> alternating current.
>
>If what you state above is correct then I am wrong since basically
>what I am descibing is a passive feedback circuitu
>
>Art

Hi Art,

There is no such thing as "passive feedback." Feedback is a property
of active circuit design to serve the purpose of tailoring input and
output characteristics.

You simply have to accept the conventional terms instead of making
your own up. What you describe, and has been pointed out to you by
others here recently is simple "coupling." This is not to say
coupling is simple - well, it is, but in the classic sense of being
fundamental. Coupling can be used to affect input and output
characteristics, as you inappropriately label as "passive feedback,"
but you really need to get a grounding in the fundamentals of this
action. This, of course, leads to the study of fields, and as you may
well appreciate that this is no simple course of study either.

73's
Richard Clark, KB7QHC

2335. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 03:36:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sjueovov7j3quomsfpiv9sasffa194ljj5@4ax.com>
Source record: 106850

On 10 Oct 2003 19:55:02 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>I then reason that with energy being applied to the loop it will also
>create oscillation

Hi Art,

The term is resonation, not oscillation.

73's
Richard Clark, KB7QHC

2336. Re: What SWR range is acceptable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 07:15:44 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310102315.64e6c74e@posting.google.com>
Source record: 106851

Dan Richardson <ChangeThisToCallSign@mendolink.com> wrote in message
news:<mh3eovkar4l64qo24grrsepcsc70cjvj2r@4ax.com>...
> On Fri, 10 Oct 2003 11:07:53 -0700, Jack Twilley
> <jmt+usenet@twilley.org> wrote:
>
> >-----BEGIN PGP SIGNED MESSAGE-----
> >Hash: SHA1
> >
> >I recently sat down and calibrated my antenna, going through the bands
> >and recording the antenna tuner settings required to reach 1:1 on all
> >the bands my rig can run.
> >
> >I'm thinking about another calibration I'd like to perform with the
> >tuner bypassed, trying to determine where on the bands I can use the
> >antenna without a tuner and still be within a reasonable SWR range.
> >
> >I am hoping to preserve the lifetime of my tubes and maximize the
> >power available to me.
> >
> >My question is: what is an acceptable SWR range? I know that 1:1 is a
> >desirable SWR, but when does SWR become undesirable to the point that
> >it shortens the lives of my tubes?
> >
> >I am using a Kenwood TS-520 and an MFJ Versa Tuner II.
> >
> >Jack.
>
> Jack,
>
> The 520 has a pi-network output. When properly adjusted, the pin-net
> work will match the finals to the load. So if you are able to adjust
> your plate and loading controls to the recommended grid and plate
> current values everything will be just fine reguardless of the SWR.
> Now if your SWR is so high as the 520 will not load properly then you
> should think of bringing the tuner on line. Otherwise just leave it in
> the by-pass position. Nothing is gained using the tuner if it isn't
> needed.

Yep, if the rig will tune up with the loading control within it's
range, there is no need for a tuner. The 520 has it's own limited
range tuner built in.:)
If the load is 50 ohms, "IE dummy load, or 1.1 SWR antenna. the
loading control should be about 1/3 range. If the load Z is lower, the
load control will end up on the lower end. If the load Z is higher

than 50 ohms, the load control will end up at a higher setting. No matter, as long as it's within it's range when you achieve a full power tune. As far as the tuner, I would be more concerned with using the absolute minimum inductance to get a usable match, than I would be to get a perfect 1 to 1 match. This would give you the least tuner losses. Also, the 520 has a "tune" mode setting. Good for initial ALC and drive peaking , etc. But he should always do the final tuneup in CW mode. Otherwise, he will end up underloaded if he tunes using the "tune" mode only. This could cause splatter on fone. The 520 is a very good older rig. The original 520 came out in the early to mid 70's. I've had an orignal 520, and also a 520s. The 520 I had was a basket case I bought for $100 about 4-5?? years ago. I overhauled it, and it was a real nice rig. Very smooth audio. I had the 520s in the late 70's when it was still fairly new. I sold the 520 I rebuilt for $225 to a friend who was getting back into radio after 20 years off. He's since sold it, and who knows where it is now. I still have a TS-830s and VFO-230. Probably the best radio I have as far as pure performance.
It's hard to kill an old hybrid kenwood rig. Anyway, the answer to his main question is any match that lets the rig tune up within it's loading range is good enough. If not, switch the tuner inline. BTW, it's hard to kill a 6146 unless you really abuse it. I rarely have toasted a 6146. But I used to go through drake's 6JB6's once every year or two when I ran drakes all day long and retuned about 8-10 times a day switching bands. :/
The plate dissipation of the 6146A is 25 watts. A 6146B, 35 watts. The 6JB6 sweep tube a puny 17.5 watts. The original 520 came with "A's". MK

2337. R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 10:46:48 UTC
From: "Dave Glow, AA1VX" <dglow@glowtrain.com>
Message-ID: <scRhb.211$mS3.131804@monger.newsread.com>
Source record: 106852

Hello...

I'm new to this newsgroup, so forgive me if this subject has been beaten to death in the past.

I'm in need of a replacement CT-3 20/30m trap for my Cushcraft R7000 vertical as a result of a burn-out. Cushcraft says they can't help me because my version is 1996.

Any ideas or suggestions?

Thanks & 73,

Dave AA1VX

2338. Re: R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 15:25:49 UTC
From: "Z.Z." <nobody@nowhere.com>
Message-ID: <Xns941155C1F43Fnobodynowhere@68.6.19.6>
Source record: 106853

Dave Glow, AA1VX wrote:
>
> I'm in need of a replacement CT-3 20/30m trap for my Cushcraft R7000
> vertical as a result of a burn-out. Cushcraft says they can't help me
> because my version is 1996.
>
> Any ideas or suggestions?
>

Even if they still sold it they'd charge more than the antenna is worth.

Take the trap apart and see how bad it is. You may be able to rewind it. Or it could be just the connections...the rivets seem to work loose after a while, at least they did on mine. I replaced the rivets with screws that can be re-tightened as required. You'll have to drill the dimples that hold the trap together but then they should slide apart pretty easily. Make sure you label the top & bottom coils so you can put them together correctly...:-). If the coil form is melted you may be SOL but I'd give it a look.

Or, find a used or junked one...

I also use some of that anti-oxidation paste made for aluminum house wiring on all the aluminum-to-aluminum joints and it seems to help. Get a tube of it at Home Depot or Lowe's or equivalent.

The R7000 is not designed all that well, IMO. I have to fiddle with mine a couple times/year. When it works, it works fairly well but sure can be a PITA to keep running.

73...

2339. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 15:55:23 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310110755.3848b297@posting.google.com>
Source record: 106854

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<sjueovov7j3quomsfpiv9sasffa194ljj5@4ax.com>...
> On 10 Oct 2003 19:55:02 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >I then reason that with energy being applied to the loop it will also
> >create oscillation
>
> Hi Art,
>
> The term is resonation, not oscillation.
>
> 73's
> Richard Clark, KB7QHC

Richard, At my stage of life where death would beat a formal education
one must resort to individual thinking,after all the exclamation of
Eureka came from a man in a bath and not from a studying classroom tho
the latter is a more consistant way to succecces. There in my case is
it not unexpected that
reasoning and thus nomenclature would be different from the regimented
norm.
You may remember that I once referred to radio waves as pulses
(it generated mirth) because I saw the current curve as starting from
zero and ending at zero where the regimented term that the current
goes THRU zero and thus is a wave. I submit that both are correct.
In a similar way an electrical engineer may well look at a leaking tap
as a continuoes leak while another may see the results as a series
of pulses as shown by the continous sccesion of pulses.
Roy used a mechanical action to bolster his case against mine
while J.H.Morecraft uses similar analogy to to bolster his
case *
If one does not strive to understand INTENT then learning and
understanding is thrown away in favour of debate.
A similar aproach was taken when I tried to describe my antenna
which is nothing more than a T section plus tuner but engineered
backward
to form a number of complex circuits where lumped circuits
can be divided up into lumped and distributed components
and thus negate the need for a serparate tuner while attaining high
radiation efficiency, this again is an example of individual thinking
and
manipulating the known via unconventional thinking which was thrown
out by those educated under the normal format.

and different nomenclature which thru out understandings and evolved
into debate. So yes, my terms may be different but thinking and
understanding
should not be thrown out because of lack of conformity.
So I must ask you to give some leeway to me and strive to
understand intent
Regards
Art

*
Principles of Radio Communication
Second Edition
With special reference to The laws of oscillating circuits/
currents in coupled circuits,chapter 111

2340. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 17:15:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9gcgov44qa93sre754pjtvaiue2c2r9vt3@4ax.com>
Source record: 106855

On 11 Oct 2003 08:55:23 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard Clark <kb7qhc@comcast.net> wrote in message
news:<sjueovov7j3quomsfpiv9sasffa194ljj5@4ax.com>...
>> On 10 Oct 2003 19:55:02 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
>> wrote:
>>
>> >I then reason that with energy being applied to the loop it will also
>> >create oscillation
>>
>> Hi Art,
>>
>> The term is resonation, not oscillation.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Richard, At my stage of life where death would beat a formal education

Art, your correspondence here in this group has eclipsed the time
necessary for the term of study for a B.S.E.E. Using the crutch of
death to escape learning for such a length of time becomes wearing.

>one must resort to individual thinking,after all the exclamation of
>Eureka came from a man in a bath and not from a studying classroom tho
>the latter is a more consistant way to succecces.

Strange you should offer a quote from one of history's greatest
educators to propound turning from studying in a classroom (which was
at that time quite rare, but education proceeded nonetheless).

>There in my case is
>it not unexpected that
>reasoning and thus nomenclature would be different from the regimented
>norm.

You are not alone in that respect. Many correspondents learn the
significance of their errors here daily.

>You may remember that I once referred to radio waves as pulses
>(it generated mirth) because I saw the current curve as starting from
>zero and ending at zero where the regimented term that the current
>goes THRU zero and thus is a wave. I submit that both are correct.

This is simply your insistence on maintaining a vulgar usage in the
face of appropriate usage. To that, the willful refusal to employ

accepted terms is more the quality of a rebellious teenager than a new Edison.

>If one does not strive to understand INTENT then learning and
>understanding is thrown away in favour of debate.

Art, you shrink from the word debate due to your own insecurity, not from its inherent evil that spoils learning. Certainly there are many here that gust on in narcissistic arguments but that hardly qualifies as debate and rather debases its goal. Call those pundits' activities "discussions" instead as they rise neither to scholarly work nor technical activity. You at least know which end of the soldering iron to pick up; they often couldn't recognize which side of their credit card displays their signature.

>A similar aproach was taken when I tried to describe my antenna
>which is nothing more than a T section plus tuner but engineered
>backward
>to form a number of complex circuits where lumped circuits
> can be divided up into lumped and distributed components
>and thus negate the need for a serparate tuner while attaining high
>radiation efficiency, this again is an example of individual thinking
>and
>manipulating the known via unconventional thinking which was thrown
>out by those educated under the normal format.

What you describe above was commonplace a century ago when it was novel. You have been offered any number of writers from that day and age in an aid to further your understanding of the fundamentals of their working relationships and the terms commonly employed to describe them.

Here's an example from the 1907 "Standard Handbook for Electrical Engineers":
Sec 21, Radiotelegraphy, part 279, Method of Exciting the Antenna"
"The antenna is usually excited by a closed circuit composed of inductance and capacity to which it is coupled either inductively or directly (fig. 75 and 76)"
at this point I should relate to all that these figures display EXACTLY what you have described.

>and different nomenclature which thru out understandings and evolved
>into debate. So yes, my terms may be different but thinking and
>understanding
>should not be thrown out because of lack of conformity.
>So I must ask you to give some leeway to me and strive to
>understand intent
>Regards
>Art

Hi Art,

What you describe as "understanding intent" is not at issue here because few mistake what you describe. It is quite commonplace where the only unique contribution is in your corruption of terms. Absolutely every posting in response to you has been to respond to this poor usage you embrace as invention. To summon up an analogy, calling a dripping faucet the source of wave emanations does not reduce the water bill, nor offer the prospects of the world rushing to the inventor-of-the-age's door to obtain license agreements.

With all this aside, what you describe is not oscillation. Further, if we simply abandoned that discussion, what you describe is hardly novel. Discarding that, what you describe is not particularly more effective nor more efficient compared to simpler constructions. Ignoring that, no one here is rejecting your message because it goes counter to convention - it in fact supports long standing convention, however you appear to be the last to be aware of that.

73's
Richard Clark, KB7QHC

2341. Re: R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 17:44:35 UTC
From: "Dave Glow, AA1VX" <dglow@glowtrain.com>
Message-ID: <7kXhb.4$jg7.313@newshog.newsread.com>
Source record: 106856

OK, good suggestion...I'll take a look at it.

Thanks.

Dave AA1VX

2342. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 17:53:00 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310110953.794bfbe5@posting.google.com>
Source record: 106857

Richard
I broke my post down to a single questio
and for the life of me I cannot deduce
your position.
The question:
.....could it not oscillate
under ideal conditions ?
Yes or no.
If 'NO' is it based on the terminology of
'oscillation'
I am basing my thoughts on the law of reprocity
i.e.energy can be changed but not destroyed.
Best regardsand nothing personal intended
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<3362-3F870794-47@storefull-2318.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "If I have a loop circuit unconnected to a transmitter could it not
> oscillate under ideal conditions?"
>
> Ideal conditions would require a source of energy to replenish losses in
> the loop circuit. The source has to be the same frequency as that
> consumed in operation of the loop.
>
> A loop like any conductor or circuit has a self-resonant frequency. At
> resonance, the conductor`s inductive and capacitive reactances cancel.
> This zero reactance leaves only resistance to limit current in the
> conductor. Some of the total resistance may be a coupled load, and some
> will be radiation resistance, which is the conductor`s loss of r-f
> energy to radiation. Some energy will be lost in conversion to heat at
> the surface of the conductor and perhaps other locations.
>
> At frequencies not too far from resonance, reactance of the wire rises
> so high that little current flows and the wire has little effect on
> anything.
>
> Broadcasters are faced with structures which arise near their antenna
> arrays. At times these are resonant at the broadcast frequency and if so
> they absorb and re-radiate energy distorting the station`s radiation
> pattern. The solution is usually simply applying something to the new
> structure to detune it from resonance at the broadcast frequency. If not
> very near resonance, the structure won`t pickup enough energy to cause
> trouble. Too much reactance to allow current flow.

>
> The hard fact that a structure must be near resonance to admit
> significant energy makes broadbanding an antenna by an appurtenance
> tuned to some frequency other than the fundamental frequency of the
> antenna challenging. One method that works is a combination of antennas
> resonant for all the desired frequencies.
>
> There are other methods to get a wire to accept current over a wide
> frequency range. Wave antennas are an example. But, standing wave
> antennas are the most common and these need resonance or thereabouts.
>
> Best regards, Richard Harrison, KB5WZI

2343. QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 18:03:33 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8845f9$0$3670$5402220f@news.sunrise.ch>
Source record: 106858

Dear OMs,

Via this newsgroup I learned that last September the following article appeared in QST:

p.28: An Easy to Build, Dual-Band Collinear Antenna by Dan Friedrichs, K0IPG

I am particularly interested in this article, because at this very moment I am designing myself a 70cm colinear.
Unfortunately, I do not have access here to this article.

Before I contact the ARRL's reprint service, I was wondering if somebody of this newsgroup who has read this article,
could brievely describe the basis principle of this antenna (coils?, phased line?, electrical length?).

Many thanks!

73 de Serge ON4BAA / HB9DWU
http://salsawaves.com/propagation/

2344. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 20:30:07 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <jLZhb.573$P%1.510470@newssvr28.news.prodigy.com>
Source record: 106860
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> Just found out today listening to a local, reputable radio station that
Bay,
> Saginaw and Midland Counties in Michigan are going to be "test sites" for
> BPL, at least for Michigan. I don't know when it will be an actual
reality,
> as opposed to being in the planning stages, but will keep current with
their
> project!
>
>
> Ryan KC8PMX
> Midland, Michigan
>
>

Go to the sites. Check out the interference. If it's as bad as they say, write the local commercial radio stations to say they are being interfered with, write your congressman, and write the FCC.

Dee D. Flint, N8UZE

2345. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 22:03:08 UTC
From: richardharrison@webtv.net
Message-ID: <9989-3F887E1C-74@storefull-2312.public.lawson.webtv.net>
Source record: 106861

Art Unwin, KB9MZ wrote:
"The question ....Could it oscillate under ideal conditions? Yes or no."

A tuned loop can not "oscillate", that is, to continue repeating a cycle of motions with strict periodicity, if it does not have a continuing supply of the resonant frequency.

Analogies pose problems, but a resonant device responds to a particular frequency and ignores others. A resonant-reed low-frequency indicator is a vivid analogy of a collection of tuned circuits. Only the resonant reed responds to excitation which is applied to all of the reeds. Likewise, a resonant loop must be excited at its resonant frequency to accept and re-radiate energy. A collection of dipoles and loops may be exposed to r-f. If one of the collection is resonant, it accepts energy and re-radiates.

A common inference from the word oscillation is production of continuous waves. The device making the oscillation is called an oscillator. I`ve seen loops and I`ve seen oscillators, and a loop without an active circuit is no oscillator.

Best regards, Richard Harrison, KB5WZI

2346. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-11 23:12:10 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <e70ib.18049$Eo2.17320@newsread2.news.atl.earthlink.net>
Source record: 106862
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dee D. Flint" <deehays@qix.net> wrote in message
news:jLZhb.573$P%1.510470@newssvr28.news.prodigy.com...
>
> "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> > Just found out today listening to a local, reputable radio station that
> Bay,
> > Saginaw and Midland Counties in Michigan are going to be "test sites"
for
> > BPL, at least for Michigan. I don't know when it will be an actual
> reality,
> > as opposed to being in the planning stages, but will keep current with
> their
> > project!
> >
> >
> > Ryan KC8PMX
> > Midland, Michigan
> >
> >
>
> Go to the sites. Check out the interference. If it's as bad as they say,
> write the local commercial radio stations to say they are being interfered
> with, write your congressman, and write the FCC.
>
> Dee D. Flint, N8UZE
>

Exactly, must sent in complaints. Or the 'utilities' will say...."we got
very few complaints"

Dan/W4NTI

2347. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 00:10:20 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310111610.5d9b2a2d@posting.google.com>
Source record: 106863

Before this thread bites the dust
Can anyone point out the meanings of the markings
on my commercial variometer?
The markings are

3600-5000KC

Thanks in advance
Art

aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310100648.764bc073@posting.google.com>...
> What a great posting!
> The input and work has not gone unnoticed
> and I am sure that all on the net appreciate
> your presence. I need time to digest it as I
> am now in a state of confusion regarding the subject
> and its applicability to my particular project.
> Many, many thanks for your effort
> Art
>
>
>
>
>
> remove_ok1sip@atlas.cz (OK1SIP) wrote in message
news:<5f5159fa.0310092239.5779d5bb@posting.google.com>...
> > Hi Art,
> > the connection "all in series" is the proper one, not "particular".
> > Usually there are four parts of winding: one half of fixed coil, two
> > halves of moving coil and another half of fixed coil. Let's mark the
> > fixed coil inductance L1 and the moving coil L2. The construction is
> > made so that L1=L2 and magnetic coupling is as tight as possible. The
> > mutual inductance when both coils have the same axis is therefore
> > approximately M=L1=L2.
> > If the moving coil is turned so that the magnetic fields add, the
> > total inductance is (nearly) L = L1+L2+2M = 4*L1.
> > If the moving coil is turned so it is perpendicular to the fixed one
> > and the magnetic fields do not influence the other coil, the mutual
> > inductance is zero and the total inductance is L = L1+L2 = 2*L1.
> > If the moving coil is turned so that the magnetic fields subtract, the
> > total inductance is (nearly) L = L1+L2-2M = 0.
> > When you added some turns, you destroyed the construction symmetry.
> > Measuring the total inductance at various coil positions within 0..180
> > deg and at the working frequecy is the best you can do.

> >
> > Variometers are often used for tuning antennas at 136 kHz. See
> > http://www.sweb.cz/ok1fig/Small_vario.jpg ,
> > http://www.sweb.cz/ok1fig/Big_vario_02.jpg ,
> > http://www.sweb.cz/ok1fig/Big_vario_03.jpg or
> > http://www.g0mrf.freeserve.co.uk/variometer.htm .
> >
> > BR from Ivan
> >
> >
> > aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310091554.30b1799b@posting.google.com>...
> > > Richard,
> > > On reflection I now see that how a variometer is
> > > connected up can make a big difference.
> > > In my particular case all coils are connected in
> > > series such that the current is constant thru out.
> > > An alternative way of connecting a variometer I suppose
> > > is to supply a different current or placing the revolvable
> > > inductance as part of another separate circuit whereas the
> > > COUPLING action alone will provide the variances you speak of.
> > > As for adding inductances in series, as stated in my earlier
> > > reply, is a lot different such that I now believe my
> > > original analysis is correct.(In other words I have just
> > > increased the number of turns by sliding the inductances
> > > together to make one inductor leaving the third inductor
> > > which is revolveable seen as an inductance with reversable
> > > turns or flux pattern.)
> > > As you probably can now see I am totally confused,
> > > especially since this arrangement is then coupled
> > > to another separate circuit which is where I suspect the
> > > + or - 'M' variation comes into play comes into play.
> > > Regards
> > > Art

2348. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 00:32:05 UTC
From: Jim Hampton <aa2qa@frontiernet.net>
Message-ID: <9i1ib.2314$_%6.1676@news01.roc.ny>
Source record: 106864
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Exactly. Also, don't just complain to the utilities as they will still deny
getting complaints. I wonder if they are hiring any of the lawyers from the
tobacco companies LOL

73 from Rochester, NY
Jim AA2QA

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:e70ib.18049$Eo2.17320@newsread2.news.atl.earthlink.net...
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:jLZhb.573$P%1.510470@newssvr28.news.prodigy.com...
> >
> > "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> > news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> > > Just found out today listening to a local, reputable radio station
that
> > Bay,
> > > Saginaw and Midland Counties in Michigan are going to be "test sites"
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> > > BPL, at least for Michigan. I don't know when it will be an actual
> > reality,
> > > as opposed to being in the planning stages, but will keep current with
> > their
> > > project!
> > >
> > >
> > > Ryan KC8PMX
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> > >
> > >
> >
> > Go to the sites. Check out the interference. If it's as bad as they
say,
> > write the local commercial radio stations to say they are being
interfered
> > with, write your congressman, and write the FCC.
> >
> > Dee D. Flint, N8UZE
> >
>
> Exactly, must sent in complaints. Or the 'utilities' will say...."we got
> very few complaints"
>

> Dan/W4NTI
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.525 / Virus Database: 322 - Release Date: 10/9/03

2349. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 01:34:02 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3F88AF87.9060008@ix.netcom.com>
Source record: 106865
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Jim Hampton wrote:

>Exactly. Also, don't just complain to the utilities as they will still deny
>getting complaints. I wonder if they are hiring any of the lawyers from the
>tobacco companies LOL
>
>
>
>
A CC list for complaints:

*Utility company
*FCC (radio, telecom, and cable depts)
*ARRL
*your congresscritter
*your senator
*your state's PUC (public utilitues commission)
*The senators or congressmen who fund the FCC
*Various broadcasters, particularly those on TV
channels 2, 3, 4 (as these are below 80MHz, the
high end of BPL). Also any shortwave broadcasters
in the USA except VOA (they are not allowed to care
about reception inside the USA).
*NTIA (who we share the 5MHz band with).

2350. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 01:38:38 UTC
From: spam@spam.com
Message-ID: <3f88b058.6889375@news.east.cox.net>
Source record: 106866

I would assume it means that the tuning range was 3.6 MHz to 5.0 MHz
(3600 kHz or kc to 5000 kHz)

Mark

--
On 11 Oct 2003 17:10:20 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Before this thread bites the dust
>Can anyone point out the meanings of the markings
>on my commercial variometer?
>The markings are
>
> 3600-5000KC
>
>Thanks in advance
>Art
>
>
>
>
>
>aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310100648.764bc073@posting.google.com>...
>> What a great posting!
>> The input and work has not gone unnoticed
>> and I am sure that all on the net appreciate
>> your presence. I need time to digest it as I
>> am now in a state of confusion regarding the subject
>> and its applicability to my particular project.
>> Many, many thanks for your effort
>> Art
>>
>>
>>
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>> remove_ok1sip@atlas.cz (OK1SIP) wrote in message
news:<5f5159fa.0310092239.5779d5bb@posting.google.com>...
>> > Hi Art,
>> > the connection "all in series" is the proper one, not "particular".
>> > Usually there are four parts of winding: one half of fixed coil, two
>> > halves of moving coil and another half of fixed coil. Let's mark the
>> > fixed coil inductance L1 and the moving coil L2. The construction is

>> > made so that L1=L2 and magnetic coupling is as tight as possible. The
>> > mutual inductance when both coils have the same axis is therefore
>> > approximately M=L1=L2.
>> > If the moving coil is turned so that the magnetic fields add, the
>> > total inductance is (nearly) L = L1+L2+2M = 4*L1.
>> > If the moving coil is turned so it is perpendicular to the fixed one
>> > and the magnetic fields do not influence the other coil, the mutual
>> > inductance is zero and the total inductance is L = L1+L2 = 2*L1.
>> > If the moving coil is turned so that the magnetic fields subtract, the
>> > total inductance is (nearly) L = L1+L2-2M = 0.
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>> > Measuring the total inductance at various coil positions within 0..180
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>> > Variometers are often used for tuning antennas at 136 kHz. See
>> > http://www.sweb.cz/ok1fig/Small_vario.jpg ,
>> > http://www.sweb.cz/ok1fig/Big_vario_02.jpg ,
>> > http://www.sweb.cz/ok1fig/Big_vario_03.jpg or
>> > http://www.g0mrf.freeserve.co.uk/variometer.htm .
>> >
>> > BR from Ivan
>> >
>> >
>> > aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0310091554.30b1799b@posting.google.com>...
>> > > Richard,
>> > > On reflection I now see that how a variometer is
>> > > connected up can make a big difference.
>> > > In my particular case all coils are connected in
>> > > series such that the current is constant thru out.
>> > > An alternative way of connecting a variometer I suppose
>> > > is to supply a different current or placing the revolvable
>> > > inductance as part of another separate circuit whereas the
>> > > COUPLING action alone will provide the variances you speak of.
>> > > As for adding inductances in series, as stated in my earlier
>> > > reply, is a lot different such that I now believe my
>> > > original analysis is correct.(In other words I have just
>> > > increased the number of turns by sliding the inductances
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>> > > which is revolveable seen as an inductance with reversable
>> > > turns or flux pattern.)
>> > > As you probably can now see I am totally confused,
>> > > especially since this arrangement is then coupled
>> > > to another separate circuit which is where I suspect the
>> > > + or - 'M' variation comes into play comes into play.
>> > > Regards
>> > > Art

2351. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 01:55:13 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <5w2ib.452437$2x.166730@rwcrnsc52.ops.asp.att.net>
Source record: 106867
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Robert Casey" <wa2ise@ix.netcom.com> wrote in message
news:3F88AF87.9060008@ix.netcom.com...
> *your state's PUC (public utilitues commission)

It's PUD around here.

> Also any shortwave broadcasters
> in the USA except VOA (they are not allowed to care
> about reception inside the USA).

Neither are any of them.

2352. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 02:33:10 UTC
From: richardharrison@webtv.net
Message-ID: <16964-3F88BD66-127@storefull-2317.public.lawson.webtv.net>
Source record: 106868

Art Unwin, KB9MZ wrote:
"The markings are 3600 - 5000 KC."

"KC" may date the variometer back several decades or more.

Inductance has units of flux linkages per amp.

A single-layer solenoid has an inductance in microhenries of:
L = (n squared) (d) (form factor)
n = number of turns
d = diameter of the coil
form factor = complicated constant that depends on the length to diameter ratio

See Terman`s 1955 edition, page 11 for the inductance story.

Inductance does not have a frequency term in its formula, but inductive reactance is proportional to frrequency.

I guess that the variometer`s frequency markings are related to Q. Resistance rises as the sq rt of frequency due to skin effect. Q will be inversely proportional to r-f resistance in a coil.

As Reg Edwards has already said, a variometer`s Q is likely very poor when set for low inductance. Q is XL/R.

Changing the variometer`s inductance setting has almost no effect on its resistance. Its Q will be low enough at maximum inductance setting on a shortwave variometer. Lower XL and don`t change the R. The effect on Q is obvious.

I suspect the variometer was optimized for Q in the 3600 - 5000 MHz range.

Best regards, Richard Harrison, KB5WZI

2353. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 03:20:19 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f88ca9b_4@news1.prserv.net>
Source record: 106720

Well, Serge,

It consists of 5 major parts. A piece of 300 ohm twinlead, a coil, some wire, a copper disk plus a length of PVC pipe and cap on top. The twinlead matches 50 ohm input to the radiator, which consists of two half waves on 2M separated by a phasing coil. On 70 CM, the radiator will be two full wavelength radiators in phase.

Matching section:
Start with a piece of 300 ohm twinlead about 50 cm long. Strip and short one end. 3.8 cm from the short, remove a few mm of insulation from both conductors, and connect a 50 ohm coax to it, center conductor to one side (call it A) and shield to the other side. Now, trim the twinlead to exactly 42.4 CM long, leaving this end open. Remove 1.3 cm of insulation from the conductor on the A side. This is where the radiator will attach.

Phasing coil:
Dry wood dowel (or Plexiglas or polystyrene, but not PVC) 1.3 cm diameter (actually 1/2") and 3.8 cm (1.5") long. Drill a 2.5 or 3 mm hole through each end to hold the ends of a coil. You need about 55 cm of solid 20 gage (0.889 mm dia.) insulated wire. Wind 13 equally spaced turns of this 20 gage wire on the dowel and pass the ends through the holes. Cut the ends leaving a couple of cm on each end. Strip a cm of insulation off each end. These dimensions are likely to be fairly critical.

Radiator:
Made from straight pieces of 12 gage (2.053 mm) insulated solid wire. (Typical house wiring material in the US.) Cut one piece 97.8 cm long, strip a few mm of insulation from each end, and connect (solder) from A of the twin lead to one end of the coil. Cut a second piece the same (97.8 cm) length, and solder to the other end of the coil. The wire diameter is not critical, but the lengths are.

Pipe and top disk:
The author used a 10 foot (3.1 M) piece of 3/4" (nominal OD ~ 27 cm) PVC pipe to support this assembly. He cut a piece of copper clad material just larger than the ID of the pipe, drilled a hole in the center and passed the end of the second piece of 12 gage wire through it and soldered it. Then he dropped the antenna in the pipe, and put a PVC pipe cap over the end.

The author recommends adjusting the lengths of the twin lead and the radiator wires to achieve best SWR.
--
Crazy George
Remove NO and SPAM from return address
"Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com> wrote in message

news:3f8845f9$0$3670$5402220f@news.sunrise.ch...
> Dear OMs,
>
> Via this newsgroup I learned that last September the following article
> appeared in QST:
>
> p.28: An Easy to Build, Dual-Band Collinear Antenna by Dan Friedrichs,
> K0IPG
>
> I am particularly interested in this article, because at this very moment
I
> am designing myself a 70cm colinear.
> Unfortunately, I do not have access here to this article.
>
> Before I contact the ARRL's reprint service, I was wondering if somebody
of
> this newsgroup who has read this article,
> could brievely describe the basis principle of this antenna (coils?,
phased
> line?, electrical length?).
>
> Many thanks!
>
> 73 de Serge ON4BAA / HB9DWU
> http://salsawaves.com/propagation/
>
>

2354. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 03:24:10 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031011232410.12917.00000141@mb-m10.aol.com>
Source record: 106719

>Art Unwin, KB9MZ wrote:
>"The markings are 3600 - 5000 KC."
>
>

It was used in a radio or transmitter operating in that range. (German WW II SK10?)

Yuri

2355. J-Pole Problem: Great at Low Pwr, No-Go at High Pwr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 04:02:45 UTC
From: Scott Drumm <denagoth@midsouth.rr.com>
Message-ID: <Fn4ib.5572$oC5.4790@clmboh1-nws5.columbus.rr.com>
Source record: 106721

I have a rather odd problem with a J-Pole "copper cactus" antenna that I just installed this evening. I can transmit and hit local repeaters w/o any problems w/ an HT on LOW power (< 1.5W) but can't bring up even the closest repeater on HIGH power (4.5W).

The SWR for the antenna is 1.1:1 to 1.3:1 across the entire 2m band (direct antenna reading - not w/ the transmitter in the loop) and I've got a 5-coil balun right at the feedpoint to trap any return RF.

Any suggestions? It wasn't my intention to build a QRP rig.... ;)

Perplexedly,
Scott Drumm
N3XFD
denagoth@midsouth.rr.com

2356. 2m vertical dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 04:17:59 UTC
From: Fart Blossom <denney@meckcom.net>
Message-ID: <XB4ib.969$j6.396@news.randori.com>
Source record: 106722

Does anyone have a plan that I can build without a gamma match. Just something that is a straight forward dipole. Thanks all.

2357. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 05:19:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m0phov4fis5eqbdtou40fjhct35pr2fus3@4ax.com>
Source record: 106723

On 12 Oct 2003 03:24:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>>Art Unwin, KB9MZ wrote:
>>"The markings are 3600 - 5000 KC."
>It was used in a radio or transmitter operating in that range. (German WW II
>SK10?)
>
>Yuri

Hi Yuri,

More probable is Marine DF.

73's
Richard Clark, KB7QHC

2358. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 05:24:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i8phov823pc9lq37csi8itdjigiboj6npj@4ax.com>
Source record: 106724

On Sat, 11 Oct 2003 22:20:19 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>On 70 CM, the radiator will be two full
>wavelength radiators in phase.

Hi George,

Hardly sounds very useful except for working satellites or
mountain-top repeaters if you live in a valley.

73's
Richard Clark, KB7QHC

2359. Re: Old QST article needed!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 05:38:10 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <vohq6d7god5j09@corp.supernews.com>
Source record: 106725

Thanks for that update Bill. I contacted Dave and he's not shipping right now, told me to call back in a few months.. I was hoping i could find the article and put the kit together myself.

Thanks again to you and the other helpful respondents..

Paul Jordan
kl0an
Anchorage, AK
"Bill VanAlstyne" <w5wvo@cybermesa.net> wrote in message
news:bm7coo$5qa$1@reader2.nmix.net...
> According to my quick-and-dirty web research, the original Micronaut
> transmitter was described in K4TWJ's "World of Ideas" column in the April
> and May 1996 issues of CQ magazine. Not QST.
>
> According to an endnote in a September 1997 QST article on the MRX-40 Mini
> Receiver, Micronaut transmitter kits can be obtained from Dave Ingram,
> K4TWJ, 4941 Scenic View Dr, Birmingham, AL 35210. They are $15 (without
> crystal), plus $2 shipping and handling. That address is still good
> according to QRZ.com, though the price might have gone up. :-)
>
> Bill / W5WVO
>
>
> Paul Jordan wrote:
> > I'm looking for an article on the Micronaut 20 meter QRP rig that was
> > in QST possibly in 1997. If anyone has it scanned or can point me to
> > a link for it, I'd greatly appreciate it. I'm lookin to build this
> > rig and possibly make up some for some future hams to build as well..
> >
> >
> > Paul Jordan
> > kl0an
> > Anchorage, AK
>
>

2360. Re: 2m vertical dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 05:39:11 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <2uphov4hovb5tjkj15gnjg1a3oomhlcbm8@4ax.com>
Source record: 106726

On Sun, 12 Oct 2003 04:17:59 GMT, "Fart Blossom" <denney@meckcom.net>
wrote:

>Does anyone have a plan that I can build without a gamma match. Just
>something that is a straight forward dipole. Thanks all.
>

Use your imagination.
I used two pieces of 1/2 inch copper pipe, a plastic "T" and a 3'
length of thin wall conduit.

To be neat you can put pipe caps over the ends of the 1/2 inch pipe.

Cut them to length, pull the coax through the thin wall, out through
the "T" with the braid to one side and the center conductor to the
other (solder each and keep the leads as short as possible.. Use hose
clamps, tape, tywraps, or what ever to fasten the thin wall to a
support. Make sure the copper pipes are in the vertical plane.

You can also build 4 folded dipoles, out of copper pipe and fittings.
Feed it with a 90 ohm coax cable harness, get some gain and that
antenna is rugged.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2361. Re: 2m vertical dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 08:52:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310120052.46e28aa2@posting.google.com>
Source record: 106728

"Fart Blossom" <denney@meckcom.net> wrote in message
news:<XB4ib.969$j6.396@news.randori.com>...
> Does anyone have a plan that I can build without a gamma match. Just
> something that is a straight forward dipole. Thanks all.

Shouldn't need one if center fed. But you will need matching for any
base fed 1/2 wave. I usually use the "gamma loop" setup. Same as most
of the cushcraft verticals. Myself, for a simple 2m antenna, I prefer
a simple 1/4 wave ground plane with sloping radials. No matching
needed, and a fairly good pattern on the horizon. Just as good as a
1/2 wave usually. In theory, there is only about .3 db difference
between the two. In actual practice on VHF, many times the ground
planes work better due to better decoupling of the feedline compared
to a 1/2 wave with no extra decoupling. MK

2362. Re: R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 08:57:17 UTC
From: Dennis <dedey1@bigpond.net.au>
Message-ID: <NH8ib.147459$bo1.65707@news-server.bigpond.net.au>
Source record: 106729

A fair bit of the trouble with the traps from cushcraft is the termination
of the end of the coil/trap ally wire i have seen 4 different model trap
that were not secured in the termination and then started arching and
barking.
rgds
vk4sx
"Dave Glow, AA1VX" <dglow@glowtrain.com> wrote in message
news:scRhb.211$mS3.131804@monger.newsread.com...
> Hello...
>
> I'm new to this newsgroup, so forgive me if this subject has been beaten
to
> death in the past.
>
> I'm in need of a replacement CT-3 20/30m trap for my Cushcraft R7000
> vertical as a result of a burn-out. Cushcraft says they can't help me
> because my version is 1996.
>
> Any ideas or suggestions?
>
> Thanks & 73,
>
> Dave AA1VX
>
>

2363. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 08:58:42 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8917cc$0$3662$5402220f@news.sunrise.ch>
Source record: 106730

Dear George,

Thank you for having taken the time to answer me in such detail.
This is very kind of you.

73 de Serge ON4BAA / HB9DWU
http://salsawaves.com/propagation/

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:3f88ca9b_4@news1.prserv.net...
> Well, Serge,
>
> It consists of 5 major parts. A piece of 300 ohm twinlead, a coil, some
> wire, a copper disk plus a length of PVC pipe and cap on top. The
twinlead
> matches 50 ohm input to the radiator, which consists of two half waves on
2M
> separated by a phasing coil. On 70 CM, the radiator will be two full
> wavelength radiators in phase.
>
> Matching section:
> Start with a piece of 300 ohm twinlead about 50 cm long. Strip and short
> one end. 3.8 cm from the short, remove a few mm of insulation from both
> conductors, and connect a 50 ohm coax to it, center conductor to one side
> (call it A) and shield to the other side. Now, trim the twinlead to
exactly
> 42.4 CM long, leaving this end open. Remove 1.3 cm of insulation from the
> conductor on the A side. This is where the radiator will attach.
>
> Phasing coil:
> Dry wood dowel (or Plexiglas or polystyrene, but not PVC) 1.3 cm diameter
> (actually 1/2") and 3.8 cm (1.5") long. Drill a 2.5 or 3 mm hole through
> each end to hold the ends of a coil. You need about 55 cm of solid 20
gage
> (0.889 mm dia.) insulated wire. Wind 13 equally spaced turns of this 20
> gage wire on the dowel and pass the ends through the holes. Cut the ends
> leaving a couple of cm on each end. Strip a cm of insulation off each
end.
> These dimensions are likely to be fairly critical.
>
> Radiator:
> Made from straight pieces of 12 gage (2.053 mm) insulated solid wire.
> (Typical house wiring material in the US.) Cut one piece 97.8 cm long,
> strip a few mm of insulation from each end, and connect (solder) from A of
> the twin lead to one end of the coil. Cut a second piece the same (97.8

cm)
> length, and solder to the other end of the coil. The wire diameter is not
> critical, but the lengths are.
>
> Pipe and top disk:
> The author used a 10 foot (3.1 M) piece of 3/4" (nominal OD ~ 27 cm) PVC
> pipe to support this assembly. He cut a piece of copper clad material
just
> larger than the ID of the pipe, drilled a hole in the center and passed
the
> end of the second piece of 12 gage wire through it and soldered it. Then
he
> dropped the antenna in the pipe, and put a PVC pipe cap over the end.
>
> The author recommends adjusting the lengths of the twin lead and the
> radiator wires to achieve best SWR.
> --
> Crazy George
> Remove NO and SPAM from return address
> "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com> wrote in
message
> news:3f8845f9$0$3670$5402220f@news.sunrise.ch...
> > Dear OMs,
> >
> > Via this newsgroup I learned that last September the following article
> > appeared in QST:
> >
> > p.28: An Easy to Build, Dual-Band Collinear Antenna by Dan Friedrichs,
> > K0IPG
> >
> > I am particularly interested in this article, because at this very
moment
> I
> > am designing myself a 70cm colinear.
> > Unfortunately, I do not have access here to this article.
> >
> > Before I contact the ARRL's reprint service, I was wondering if somebody
> of
> > this newsgroup who has read this article,
> > could brievely describe the basis principle of this antenna (coils?,
> phased
> > line?, electrical length?).
> >
> > Many thanks!
> >
> > 73 de Serge ON4BAA / HB9DWU
> > http://salsawaves.com/propagation/
> >
> >
>

>

2364. Re: J-Pole Problem: Great at Low Pwr, No-Go at High Pwr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 09:49:41 UTC
From: Michael <mixstatdonotspam@bigpond.net.au>
Message-ID: <Vs9ib.147537$bo1.142544@news-server.bigpond.net.au>
Source record: 106731

I recently had a problem with my HF antenna on one band that I fixed today. It would shut down the powersupply (trip the earth leakage protection) when the power out of the TX went over about 70W on 40 metres (not the other bands). The antenna was a 40m/20m parallel dipole.

It ended up that the antenna was shorting to ground at that power from the high voltage parts (end of the 40m dipole). I cleared it and it now works.

A similar situation may be happening with you. The antenna may be shorting out at higher powers. Check the materials you used and the spacngs at the high voltage sections of the antenna. Check the SWR at both the low power setting and at the high power setting. Also actually check the transmitter output power at both those settings. If the SWR goes high or the TX power out goes low when the high power is selected this would indicate a short of some kind at those setings.

"Scott Drumm" <denagoth@midsouth.rr.com> wrote in message
news:Fn4ib.5572$oC5.4790@clmboh1-nws5.columbus.rr.com...
> I have a rather odd problem with a J-Pole "copper cactus" antenna that I
> just installed this evening. I can transmit and hit local repeaters w/o
> any problems w/ an HT on LOW power (< 1.5W) but can't bring up even the
> closest repeater on HIGH power (4.5W).
>
> The SWR for the antenna is 1.1:1 to 1.3:1 across the entire 2m band
> (direct antenna reading - not w/ the transmitter in the loop) and I've
> got a 5-coil balun right at the feedpoint to trap any return RF.
>
> Any suggestions? It wasn't my intention to build a QRP rig.... ;)
>
> Perplexedly,
> Scott Drumm
> N3XFD
> denagoth@midsouth.rr.com
>

2365. need help-info on grounded antenna-Marconi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 10:36:13 UTC
From: "Phil Sisson, Litchfield Aerobatic Club" <sisson@consolidated.net>
Message-ID: <3F892E9D.3825A92B@consolidated.net>
Source record: 106727

I need some help as I am not real kean on antenna's.
If I were going on two meters, I would go buy a little vertical or something, but this is not the case.

Hypothetical example.

Suppose a metal pipe was stuck up in the air 50 feet. We want to operate on two meters. We measure from the top downward for 1/4 wave length and calculate and decided on this for a proper length.

Can this 1/4 w.l. point downward from the top then be used as a terminal point for coax shield while tapping upward to the 52 ohm point for matching?

Can the rest of the pipe or metal support running downward be ignored as for length, or must it be a given length? This is the part of the answer I am interested in.

Can a MFJ-259B help with this? Does this instrument have a long learning curve?

Thanks for any help on this.

Phil..... K9DNH (havent been on air for a long time)

2366. Re: need help-info on grounded antenna-Marconi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 11:29:10 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <Dp-dnWyg1bORphSiXTWJkw@crocker.com>
Source record: 106732

"Phil Sisson, Litchfield Aerobatic Club" <sisson@consolidated.net> wrote in
message news:3F892E9D.3825A92B@consolidated.net...
> I need some help as I am not real kean on antenna's.
> If I were going on two meters, I would go buy a little vertical or
> something, but this is not the case.
>
> Hypothetical example.
>
> Suppose a metal pipe was stuck up in the air 50 feet. We want to operate
> on two meters. We measure from the top downward for 1/4 wave length and
> calculate and decided on this for a proper length.
>
> Can this 1/4 w.l. point downward from the top then be used as a terminal
> point for coax shield while tapping upward to the 52 ohm point for
> matching?

if there is an insulator there to separate the top 18" from the rest of it
you could feed the top part by attaching the center of the coax there and
the shield to the rest of the pipe.the impedance wouldn't be that close to
52 ohms though, to bring the impedance down some you could add some radials
sticking out attached to the bottom section.

another option is to add a gamma match to feed the top section, or turn it
into what is called a J-Pole, that kind of looks like a gamma match but
doesn't need a capacitor.

>
>
> Can the rest of the pipe or metal support running downward be ignored as
> for length, or must it be a given length? This is the part of the answer
> I am interested in.

yes, if you have a proper feed mechanism for the top the length of the rest
would be irrelevant.

>
> Can a MFJ-259B help with this? Does this instrument have a long learning
> curve?

maybe, i don't know the frequency range of that off hand.

>
> Thanks for any help on this.
>
> Phil.............. K9DNH (havent been on air for a long time)
>

2367. Re: R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 11:40:43 UTC
From: "Dave Glow, AA1VX" <dglow@glowtrain.com>
Message-ID: <%4bib.74$jg7.38392@newshog.newsread.com>
Source record: 106733

Thanks for the reply.

This one certainly did some arcing....all burnt around the bottom of the trap. I opened the trap as Z.Z. suggested. The wiring was intact, and the nylon core had some melting around it, but I didn't see any damage to the inner aluminum tube. I cleaned out the burnt stuff and cleaned up things. Maybe I'll try it out again after I move and can reassemble the antenna.

I would feel much better if I could get a replacement trap, however.

Thanks again, all.

Dave AA1VX

2368. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 16:55:23 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <%Hfib.693$P%1.707465@newssvr28.news.prodigy.com>
Source record: 106736
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"James Wilson" <Someone@Microsoft.Com> wrote in message
news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified? Is it worse that the Pennsylvania QSO party?
>

The ARRL website has a recording. It would make things like the PA QSO
party (and other communications) nearly impossible.

Dee D. Flint, N8UZE

2369. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 16:56:50 UTC
From: James Wilson <Someone@Microsoft.Com>
Message-ID: <mJfib.121280$xx4.20524963@twister.neo.rr.com>
Source record: 106735
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

What does BPL sound like? Can someone post a wav file somewhere so it can be identified? Is it worse that the Pennsylvania QSO party?

> BPL, at least for Michigan. I don't know when it will be an actual reality,
> as opposed to being in the planning stages, but will keep current with their
> project!
>
>

2370. IMPORTANT POINTS FOR ALL - Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 17:36:53 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <Vigib.780$_i.73365@nnrp1.ptd.net>
Source record: 106737
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dee D. Flint" <deehays@qix.net> wrote in message
news:jLZhb.573$P%1.510470@newssvr28.news.prodigy.com...
>
> "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> > Just found out today listening to a local, reputable radio station that
> Bay,
> > Saginaw and Midland Counties in Michigan are going to be "test sites"
for
> > BPL, at least for Michigan. I don't know when it will be an actual
> reality,
> > as opposed to being in the planning stages, but will keep current with
> their
> > project!
> >
> >
> > Ryan KC8PMX
> > Midland, Michigan
> >
> >
>
> Go to the sites. Check out the interference. If it's as bad as they say,
> write the local commercial radio stations to say they are being interfered
> with, write your congressman, and write the FCC.
>
> Dee D. Flint, N8UZE
>

Ryan, et al, PLEASE coordinate with Ed Hare, w1rfi@arrl.org ... and don't
"write/contact your local commercial radio stations" UNLESS they ACTUALLY
ARE being interfered with AND you are ABSOLUTELY SURE it's BPL.

It is EXTREMELY IMPORTANT that any reports/complaints of "BPL interference"
are REALLY BPL ... the amateur community is being accused by BPL proponents
of "exaggerating the problem (so the ARRL can raise money ... which is
absurd ...
if there weren't a threat they wouldn't HAVE to raise money to defend
against it ...).

We CANNOT AFFORD to miss-identify other sources of interference as "BPL"
or we just lend credence to the BPL folks' claim that we're "crying wolf."

I cannot overemphasize the importance of these points.

73,
Carl - wk3c

2371. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 17:38:09 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <5kgib.781$_i.73372@nnrp1.ptd.net>
Source record: 106738
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Please see my previous message about the necessity of making SURE
that any complaints of "BPL interference" REALLY ARE BPL.

73,
Carl - wk3c

"Robert Casey" <wa2ise@ix.netcom.com> wrote in message
news:3F88AF87.9060008@ix.netcom.com...
> Jim Hampton wrote:
>
> >Exactly. Also, don't just complain to the utilities as they will still
deny
> >getting complaints. I wonder if they are hiring any of the lawyers from
the
> >tobacco companies LOL
> >
> >
> >
> >
> A CC list for complaints:
>
> *Utility company
> *FCC (radio, telecom, and cable depts)
> *ARRL
> *your congresscritter
> *your senator
> *your state's PUC (public utilitues commission)
> *The senators or congressmen who fund the FCC
> *Various broadcasters, particularly those on TV
> channels 2, 3, 4 (as these are below 80MHz, the
> high end of BPL). Also any shortwave broadcasters
> in the USA except VOA (they are not allowed to care
> about reception inside the USA).
> *NTIA (who we share the 5MHz band with).
>

2372. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 17:40:44 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <wmgib.783$_i.73435@nnrp1.ptd.net>
Source record: 106739
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"James Wilson" <Someone@Microsoft.Com> wrote in message
news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified? Is it worse that the Pennsylvania QSO party?

The video on the ARRL website shows a couple of BPL variants ...
one that uses SS and another (test area 4) that uses OFDM.
They sound different.

Again, I cannot over-emphasize the importance of making SURE
that complaints of "BPL interference" are REALLY from BPL and
not some other source.

The LAST thing we need now is a bunch of people "crying wolf."
(Real complaints are one thing, crying wolf will only HURT us.)

73,
Carl - wk3c

2373. Re: Hexbeam vs. Cushcraft MA5B

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 19:06:05 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3F89A64D.859E36DB@bellatlantic.net>
Source record: 106740

RC wrote:
>
> I am thinking about installing a small beam. I have narrowed it down
> to the 5 band Hexbeam and the MA5B. I have read the reveiws on eHam on
> both of these antennas, and both appear to be excellent antenna based
> on the size. Since the Hexbeam cost 2.5 times the cost of the MA5B, do
> you think it is worth the additional expense? Will the Heambeam
> significantly outperform the MA5B?
>
> Thanks,
>
> RC

Throw another antenna into the mix before you decide:
http://www3.sympatico.ca/tgmc/

Look at either the MQ-1 for 4 band operation, or the MQ-26
for 6 band operation. I use the 6 band model and am 100%
satisfied.

2374. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 19:36:22 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <W2iib.47717$xB4.18926@twister.southeast.rr.com>
Source record: 106741
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi Carl,

I'm using double faced tape to hold the mount for the head of an Icom 706 in place on the console of a Jeep. Should work also in an Explorer. This allows you to remove the head and pt it out of site when the car is parked.

I'm using a license plate mount for Hamstick antennas in the mobile.

Good luck.

Bill, W4WNT
"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message news:LUChb.616$_i.49017@nnrp1.ptd.net...
> Hello all,
>
> I am fortunate enough to have just acquired a new 2003 Ford Explorer
> (4x4, 4-door model) and wanted to solicit input from other owners of
> this vehicle as to their experiences with VHF/UHF and HF rig and
> antenna installation and wiring issues.
>
> I thought I might benefit from the experience of others in locating the
> wiring channels, good paths through the firewall to the battery, and
> perhaps experience in locating "remote head" radios in the forward
> of the two rear under-deck storage areas (or other locations).
>
> I plan to install a 2m/70cm transceiver and an HF plus (at least)
> 6m multiband rig in the vehicle. (probably both Yaesu).
>
> Additionally, any "gotchas" on mounting remote heads on the center
> console, etc. would be appreciated. (don't want to drill into something
> behind a pannel, but don't want to have to tear the whole vehicle apart
> to see what's behind, either, if it can be helped)
>
> 73 and thanks in advance for any insights that owners of this vehicle
> may provide,
>
> Carl - wk3c
>

2375. HFpack Events Pacificon 18 Oct (Shootout, Forum) California

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 19:42:15 UTC
From: expeditionradio@aol.com
Message-ID: <20031012154215.19698.00000189@mb-m07.aol.com>
Source record: 106742

HFPACK EVENTS AT PACIFICON HAM CONVENTION
SATURDAY 18 OCTOBER 2003 IN CALIFORNIA

The HFpack Events at Pacificon are open to everyone.
Join the fun, bring your HF backpack too!

11:30AM~2:30PM HFPACK SHOOTOUT 2003
Measuring dB level of backpack setups on 5 and 18 MHz.
Location: Central Park, San Ramon, California.
At the intersection of Camino Ramon and Bishop Drive,
in a field, a few blocks away from the convention.
Pack a lunch. Bring your Pedestrian Mobile pack.

3:45PM HFPACK PORTABLE HF FORUM
Powerpoint presentation by Bonnie KQ6XA
Live demos by HFpackers with state-of-the-art
portable systems.
Location: San Ramon Marriott, Forum Room F and G.

5:30PM HFPACK SNACK'N'DRINK
Relax with fellow HFpackers around the patio tables.
Location: Pasta Pomodoro restaurant, 146 Sunset Drive,
next to the Marriott Hotel.

8:45PM and 11:00PM HFPACK ZOMBIE WALK'N'TALK
(0345UTC and 0600UTC 19OCT2003UTC)
A casual evening with friends using pedestrian /portable
gear outside in the beautiful California environment.
Location: San Ramon Marriott hotel front lawn.
Primary: 5371.5kHz USB
Alternates: 3996.0kHz USB, 7242.5kHz LSB

INTERCOM: 144.320MHz(PL 100)Simp FM and 18157.5kHz USB

MAP OF EVENTS:
http://www.qsl.net/hfpack/hfpack_shootout_map2.jpg

==========
HFpack Shootout 2003 Information
==========

The HFpack Shootout 2003 is sponsored by
HFpack and open to all amateur radio operators.
HFpack is dedicated to furthering the state of the art
for HF Portable.
http://www.hfpack.com

On Saturday 18 October 2003, HFpack will hold the
3rd annual HFpack Shootout at USA's west coast ham
convention "Pacificon" in San Ramon, California.
The purpose of the shootout is to measure signal
strength of pedestrian and human mobile HF systems
on 18MHz and 5MHz in a controlled manner and report
the results as a service to radio operators around the
world. Participation and entry in the shootout is open
and free to all radio amateurs.

==========
New Type of Shootout for 2003: Complete Systems
==========

Unlike previous years where only the antennas were
tested, the HFpack Shootout 2003 tests complete
backpack and human mobile systems on
18MHz and 5MHz in several power and type categories.

==========
Entrant Information Required:
==========

1) Entrant Operator Name and Callsign
2) Entrant Team Name
3) Category(s) and Band(s) of Entry
4) Description of transmitter
5) Description of antenna system
6) Description of power source
7) Description of other equipment used
8) Polarization (Horizontal or Vertical)
9) Measured power output of transmitter
10) Measured height of antenna system
11) Measured diameter of antenna system

==========
Basic Shootout Description
==========

1) A circle 10 meters (33ft) in diameter in an open area
shall be clearly marked. The entrant operator, antenna
system and equipment shall be within this circle during
the RF measurement.

2) The entrant operator's voice transmission shall be
measured in decibels of peak RF signal strength by a
nearby test receiver, connected to a vertical and a
horizontal antenna. The operator shall make a brief
transmission for the Shootout test receiver engineer
to verify best polarization.

3) The entrant operator shall make three voice USB
transmissions and the Shootout test receiver engineer
shall make 3 corresponding RF signal strength

measurements. The maximum and minimum
measurements shall not be used. The medium (median)
measurement shall be recorded as the final
measurement of the entrant.

4) The RF measurements shall be made on amateur
USB frequencies designated by the Shootout engineer
within the 18MHz and the 5MHz bands.

5) An entrant may separately enter any or all
categories and frequency bands.

==========
Entrant Requirements and Guidelines
==========

1) The entrant operator shall check in, weigh in the
equipment, and demonstrate the ability to move about
freely while carrying all equipment and antenna system.
The entrant's transmitter output power into a 50ohm
dummy load shall be measured by the Shootout
engineer.

2) The entrant operator shall carry and support the full
weight of all equipment and antenna system during the
RF measurements; however, a single wire or cable
dragging counterpoise attached to the radio equipment
with a maximum total length of 10 meters in a single
direction and a maximum cross section of 1 centimeter
may be touching, dragging, or laying on the surface
upon which the operator is walking or standing.
This counterpoise wire shall not be attached to a
ground rod or imbedded in the ground, or in any way
elevated above the surface of the earth by fixed objects
on the ground.

3) The entrant's antenna system shall not exceed a
total height of 10 meters above the surface level upon
which the operator is walking or standing, and the
entire weight of the antenna shall be carried by the
operator during the RF measurements.

==========
Category 1 = Pedestrian 100W Class
==========

1) The output power of the Category 1 entrant
operator's transmitter shall not exceed 100 Watts PEP.

2) The total weight of the Category 1 entrant operator's
transmitting equipment shall not exceed 20 kilograms
(44 pounds), inclusive of transmitter, antenna system,
all wires, cables, backpack/cases, microphone, and

power supply.

3) Only the entrant operator's body may be used to
support the equipment; no monopod, tripod, wheeled
support, or other support device shall be used to hold
up the equipment or the antenna system.

==========
Category 2 = Pedestrian 10W Class
==========

1) The output power of the Category 2 entrant
operator's transmitter shall not exceed 10 Watts PEP.

2) The weight of the Category 2 entrant's equipment
is not limited.

3) Only the entrant operator's body may be used to
support the equipment; no monopod, tripod, wheeled
support, or other support device shall be used to hold
up the equipment or the antenna system.

==========
Category 3 = Human Mobile 100W Class
==========

1) A Human Mobile is considered to be any wheeled
vehicle, craft, device, cart, skates, wagon, bicycle,
tricycle, quadracycle, scooter, or carrier which is
powered for movement solely by human energy.

2) The output power of the Category 3 entrant
operator's transmitter shall not exceed 100 Watts PEP.

3) The weight of the Category 3 entrant's equipment
is not limited.

==========
Differently-Abled Notes
==========

1) Differently-abled operators may enter any category
of their choice, exempt from requirements of support
of equipment, and may utilize any type of body support
assistance including but not limited to: walkers, canes,
crutches, motorized wheelchair, other assisted devices,
or the assistance of another person for carrying
equipment.

==========
Shootout Notes
==========

1) The general public, amateur radio operators,
volunteer witnesses, and others may be present to view
the Shootout. All entrants should conduct themselves
in the spirit of friendly cooperation.

2) Other guidelines may be posted or verbally
announced or personally advised at the Shootout by
the organizers to comply with local laws and regulations.

3) In the unlikely event of confusion or dispute, a panel
of three HFpack members chosen by the HFpack
members present at the shootout will attempt to resolve
the issue in an amicable manner.

4) The results of the HFpack Shootout 2003 will be
announced on the HFpack website and a report will
be issued documenting the entrant systems.

==========
End of message
HFpack
http://www.hfpack.com

2376. Taking apart Hustler mobile mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 19:52:49 UTC
From: Martin <marty123@optonline.net>
Message-ID: <liiib.109121$Ri4.33496386@news4.srv.hcvlny.cv.net>
Source record: 106743
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

While I'm waiting hopefully for some help from New-Tronics, I thought I would
ask here if anyone would know how to take apart a Hustler mobile mast
without wrecking it?

The joint where the mast folds has two screws which I can remove, but the
fit between the sections seems impossible to budge.

Anyone have any actual experience with this?

Marty K1FHR

2377. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 22:46:49 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <tRkib.41103$mQ2.23551@newsread1.news.atl.earthlink.net>
Source record: 106744
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

www.arrl.org follow the links.

And yes its much worse than a contest. You wont even hear the contesters.

Dan/W4NTI

"James Wilson" <Someone@Microsoft.Com> wrote in message
news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified? Is it worse that the Pennsylvania QSO party?
>
> > BPL, at least for Michigan. I don't know when it will be an actual
> reality,
> > as opposed to being in the planning stages, but will keep current with
> their
> > project!
> >
> >
>
>

2378. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 23:02:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f89dfaf$1_6@corp.newsgroups.com>
Source record: 106745
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

W4WNT wrote:
> I'm using double faced tape to hold the mount for the head of an Icom 706 in
> place on the console of a Jeep. Should work also in an Explorer. This
> allows you to remove the head and pt it out of site when the car is parked.

Are you sure that's not velcro?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2379. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 23:11:23 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmcn2r$4n0$1@208.207.71.176>
Source record: 106746
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Carl R. Stevenson wrote:

> "James Wilson" <Someone@Microsoft.Com> wrote in message
> news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
>
>>What does BPL sound like? Can someone post a wav file somewhere so it can
>>be identified? Is it worse that the Pennsylvania QSO party?
>
>
> The video on the ARRL website shows a couple of BPL variants ...
> one that uses SS and another (test area 4) that uses OFDM.
> They sound different.
>
> Again, I cannot over-emphasize the importance of making SURE
> that complaints of "BPL interference" are REALLY from BPL and
> not some other source.
>
> The LAST thing we need now is a bunch of people "crying wolf."
> (Real complaints are one thing, crying wolf will only HURT us.)
>
> 73,
> Carl - wk3c
>

You raise an interesting question, Carl. How exactly should the
average ham go about proving that the RFI is indeed BPL, when the BPL
people say
"That's not us!'??

2380. Re: J-Pole Problem: Great at Low Pwr, No-Go at High Pwr

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-12 23:25:10 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5kojov8fvbi735j1nehv1madk984bngtta@4ax.com>
Source record: 106734

On Sun, 12 Oct 2003 04:02:45 GMT, Scott Drumm
<denagoth@midsouth.rr.com> wrote:

>I have a rather odd problem with a J-Pole "copper cactus" antenna that I
>just installed this evening. I can transmit and hit local repeaters w/o
>any problems w/ an HT on LOW power (< 1.5W) but can't bring up even the
>closest repeater on HIGH power (4.5W).
>
>The SWR for the antenna is 1.1:1 to 1.3:1 across the entire 2m band
>(direct antenna reading - not w/ the transmitter in the loop) and I've
>got a 5-coil balun right at the feedpoint to trap any return RF.

With the transmitter in the loop, try measuring forward and reverse
power at both power levels, low and high.

Bob
k5qwg

>
>Any suggestions? It wasn't my intention to build a QRP rig.... ;)
>
>Perplexedly,
>Scott Drumm
>N3XFD
>denagoth@midsouth.rr.com

2381. Re: R7000 replacement trap

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:12:04 UTC
From: Dennis <dedey1@bigpond.net.au>
Message-ID: <o5mib.148096$bo1.13310@news-server.bigpond.net.au>
Source record: 106747

Good Dave you may be lucky, doesn't take much of a Carbon track for RF to seekout,

Rgds

"Dave Glow, AA1VX" <dglow@glowtrain.com> wrote in message news:%4bib.74$jg7.38392@newshog.newsread.com...
> Thanks for the reply.
>
> This one certainly did some arcing....all burnt around the bottom of the
> trap. I opened the trap as Z.Z. suggested. The wiring was intact, and the
> nylon core had some melting around it, but I didn't see any damage to the
> inner aluminum tube. I cleaned out the burnt stuff and cleaned up things.
> Maybe I'll try it out again after I move and can reassemble the antenna.
>
> I would feel much better if I could get a replacement trap, however.
>
> Thanks again, all.
>
> Dave AA1VX
>
>

2382. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:18:29 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <derjovgmspnimkfeolgv8rero563g1qkvu@4ax.com>
Source record: 106749

On Fri, 10 Oct 2003 22:20:31 -0400, "Ryan, KC8PMX"
<REMOVETHISkc8pmx@diamondcs.net> wrote:

>Just found out today listening to a local, reputable radio station that Bay,
>Saginaw and Midland Counties in Michigan are going to be "test sites" for
>BPL, at least for Michigan. I don't know when it will be an actual reality,
>as opposed to being in the planning stages, but will keep current with their
>project!
>
>
>Ryan KC8PMX
>Midland, Michigan
>
What the "ham density" like in the Tri-Cities these days? Moved away
27 years ago (Bay City/Essexville) and not having been a ham then I
was out of touch with such things. I do know that it wasn't too high
a population density overall - perhaps they are targeting low ham
population areas in the testing so they can show a low interference
complaint volume?

I think Carl's on track in his post; the more credible the reports of
interference the more likely they will be taken seriously.

Howard

2383. Re: Taking apart Hustler mobile mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:24:29 UTC
From: James Wilson <Someone@Microsoft.Com>
Message-ID: <1hmib.121458$xx4.20792594@twister.neo.rr.com>
Source record: 106748
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Adjust and apply a crescent wrench to fit the shaft above the sleeve. Tap downward with wrench lightly with hammer. Protect bottom threads from damage..

> ask here if anyone would know how to take apart a Hustler mobile mast
> without wrecking it?
>
> The joint where the mast folds has two screws which I can remove, but the
> fit between the sections seems impossible to budge.
>
> Anyone have any actual experience with this?
>
> Marty K1FHR
>
>
>
>
>
>
>
>

2384. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:31:42 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310121631.4189662c@posting.google.com>
Source record: 106750

Thanks for the posting Richard

I concede.....

I had thought that the 'too and fro' of the 'coupling'
would have continued after energy was turned off,
like an ever changing EMF until final decrement.
If this were true then I am sure an expert
would have piped up. Since they didn't think the
same way the energy decay (Current flow) must have been
'instantaneous'
As I am not going to try for a ELECTRICAL degree
as suggested (O.K. I am a wimp)I am resigned to
falling down a few times if I wish to move forward.
At my age I don't get to move that fast anyway
Best Regards
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<9989-3F887E1C-74@storefull-2312.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "The question ....Could it oscillate under ideal conditions? Yes or no."
>
> A tuned loop can not "oscillate", that is, to continue repeating a cycle
> of motions with strict periodicity, if it does not have a continuing
> supply of the resonant frequency.
>
> Analogies pose problems, but a resonant device responds to a particular
> frequency and ignores others. A resonant-reed low-frequency indicator is
> a vivid analogy of a collection of tuned circuits. Only the resonant
> reed responds to excitation which is applied to all of the reeds.
> Likewise, a resonant loop must be excited at its resonant frequency to
> accept and re-radiate energy. A collection of dipoles and loops may be
> exposed to r-f. If one of the collection is resonant, it accepts energy
> and re-radiates.
>
> A common inference from the word oscillation is production of continuous
> waves. The device making the oscillation is called an oscillator. I`ve
> seen loops and I`ve seen oscillators, and a loop without an active
> circuit is no oscillator.
>
> Best regards, Richard Harrison, KB5WZI

2385. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:32:42 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310121632.ed307c7@posting.google.com>
Source record: 106751

Thanks for the posting Richard

I concede.....

I had thought that the 'too and fro' of the 'coupling'
would have continued after energy was turned off,
like an ever changing EMF until final decrement.
If this were true then I am sure an expert
would have piped up. Since they didn't think the
same way the energy decay (Current flow) must have been
'instantaneous'
As I am not going to try for a ELECTRICAL degree
as suggested (O.K. I am a wimp)I am resigned to
falling down a few times if I wish to move forward.
At my age I don't get to move that fast anyway
Best Regards
Art

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>
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> of motions with strict periodicity, if it does not have a continuing
> supply of the resonant frequency.
>
> Analogies pose problems, but a resonant device responds to a particular
> frequency and ignores others. A resonant-reed low-frequency indicator is
> a vivid analogy of a collection of tuned circuits. Only the resonant
> reed responds to excitation which is applied to all of the reeds.
> Likewise, a resonant loop must be excited at its resonant frequency to
> accept and re-radiate energy. A collection of dipoles and loops may be
> exposed to r-f. If one of the collection is resonant, it accepts energy
> and re-radiates.
>
> A common inference from the word oscillation is production of continuous
> waves. The device making the oscillation is called an oscillator. I`ve
> seen loops and I`ve seen oscillators, and a loop without an active
> circuit is no oscillator.
>
> Best regards, Richard Harrison, KB5WZI

2386. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:39:06 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310121639.2ee068c7@posting.google.com>
Source record: 106752

Thanks for the posting Richard

I concede.....

I had thought that the 'too and fro' of the 'coupling'
would have continued after energy was turned off,
like an ever changing EMF until final decrement.
If this were true then I am sure an expert
would have piped up. Since they didn't think the
same way the energy decay (Current flow) must have been
'instantaneous'
As I am not going to try for a ELECTRICAL degree
as suggested (O.K. I am a wimp)I am resigned to
falling down a few times if I wish to move forward.
At my age I don't get to move that fast anyway
Best Regards
Art

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>
> Analogies pose problems, but a resonant device responds to a particular
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> a vivid analogy of a collection of tuned circuits. Only the resonant
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> waves. The device making the oscillation is called an oscillator. I`ve
> seen loops and I`ve seen oscillators, and a loop without an active
> circuit is no oscillator.
>
> Best regards, Richard Harrison, KB5WZI

2387. Re: Radiation from wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:44:45 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310121644.12660ca7@posting.google.com>
Source record: 106753

Thanks for the posting Richard

I concede.....

I had thought that the 'too and fro' of the 'coupling'
would have continued after energy was turned off,
like an ever changing EMF until final decrement.
If this were true then I am sure an expert
would have piped up. Since they didn't think the
same way the energy decay (Current flow) must have been
'instantaneous'
As I am not going to try for a ELECTRICAL degree
as suggested (O.K. I am a wimp)I am resigned to
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At my age I don't get to move that fast anyway
Best Regards
Art

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> A tuned loop can not "oscillate", that is, to continue repeating a cycle
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> and re-radiates.
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> waves. The device making the oscillation is called an oscillator. I`ve
> seen loops and I`ve seen oscillators, and a loop without an active
> circuit is no oscillator.
>
> Best regards, Richard Harrison, KB5WZI

2388. Re: Taking apart Hustler mobile mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 00:51:40 UTC
From: Dave Bushong <dbushong@adelphia.net>
Message-ID: <wGmib.107772$qj6.4067085@news1.news.adelphia.net>
Source record: 106754
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Never use a crescent wrench as anything other than a wrench (unless it belongs to someone else). Find an open-end wrench and tap that with a hammer instead.

"Ham" doesn't need to mean "Hack".

All the best,
KZ1O

James Wilson wrote:
> Adjust and apply a crescent wrench to fit the shaft above the sleeve. Tap
> downward with wrench lightly with hammer. Protect bottom threads from
> damage..
>
>
>>ask here if anyone would know how to take apart a Hustler mobile mast
>>without wrecking it?
>>
>>The joint where the mast folds has two screws which I can remove, but the
>>fit between the sections seems impossible to budge.
>>
>>Anyone have any actual experience with this?
>>
>>Marty K1FHR
>>
>>
>>
>>

2389. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 01:05:23 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmctojpbu0@208.206.142.109>
Source record: 106755
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Cecil Moore wrote:

> W4WNT wrote:
>
>> I'm using double faced tape to hold the mount for the head of an Icom
>> 706 in
>> place on the console of a Jeep. Should work also in an Explorer. This
>> allows you to remove the head and pt it out of site when the car is
>> parked.
>
>
> Are you sure that's not velcro?

Would be if it was mine! <g>

2390. Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 02:04:10 UTC
From: skaatz1@yahoo.com
Message-ID: <276c71c6.0310121804.19a85641@posting.google.com>
Source record: 106756

I have a span of approx 32 ft. to use for a horizontal dipole. It will be about 40 ft high.

I want to use 2 parallel wires to cover 40M, 20M, and 15M. Ladder line is not feasible here, so I need to tune the antenna for min SWR to minimize coax feedline losses.

I would use 1 of the wires for 20M as a 1/2 wave dipole; and use the other for 40/15.

The 40/15 will have off center loading coils at approx 11' on each side (so it will be a 1/2 wave dipole for 15M), followed by more wire to use the span. The coils would be designed to tune the whole span for 40M, using either the Hamcalc program or one of the G4FGQ programs.

Is the combined 40/15 element a reasonable idea? Or should I use seperate wires for 40 & 15M?

I expect the interaction with the 20M wire will require several pruning iterations.

Thanks in advance for any helpful comments.

73
Steve
K8SDK

2391. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 02:14:28 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <8Unib.831$_i.78693@nnrp1.ptd.net>
Source record: 106757
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmcn2r$4n0$1@208.207.71.176...
> Carl R. Stevenson wrote:
>
> > "James Wilson" <Someone@Microsoft.Com> wrote in message
> > news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
> >
> >>What does BPL sound like? Can someone post a wav file somewhere so it
can
> >>be identified? Is it worse that the Pennsylvania QSO party?
> >
> >
> > The video on the ARRL website shows a couple of BPL variants ...
> > one that uses SS and another (test area 4) that uses OFDM.
> > They sound different.
> >
> > Again, I cannot over-emphasize the importance of making SURE
> > that complaints of "BPL interference" are REALLY from BPL and
> > not some other source.
> >
> > The LAST thing we need now is a bunch of people "crying wolf."
> > (Real complaints are one thing, crying wolf will only HURT us.)
> >
> > 73,
> > Carl - wk3c
> >
>
>
> You raise an interesting question, Carl. How exactly should the
> average ham go about proving that the RFI is indeed BPL, when the BPL
> people say
> "That's not us!'??
>

BPL has a unique "signature" (in the spectral/time domains) that can be
used to ID it.

Since there are different systems (SS from main.net and OFDM from Amperion,
for example) they have different signatures, which are distinct from other
sources
of interference and more traditional power line noise (of course the
utilities are
responsible for fixing the latter, too ... though their record is poor).

Carl - wk3c

2392. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 02:28:09 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vok3bj7so5th6b@corp.supernews.com>
Source record: 106758
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

I submit that what is needed is detailed information.
Who is doing the testing? I think that only Consumers Energy
distributes electric power in that area - they would be the people to
ask.
Is more than one system being tested?
When will the tests take place?
From where to where is the test link?

With details one can plan for before and after testing. Who can
sniff out the details?
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

2393. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 02:42:23 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <124kovo42h1tllre16iik10aor7pn1seu9@4ax.com>
Source record: 106759

On Sun, 12 Oct 2003 17:38:09 GMT, "Carl R. Stevenson"
<wk3cqth@wk3c.com> wrote:

>Please see my previous message about the necessity of making SURE
>that any complaints of "BPL interference" REALLY ARE BPL.

Unless I know it's BPL, it's just going to get reported as "noise".

Another way to look at it though ... If it doesn't sound like a normal
power line, it's gonna be BPL as there shouldn't be anything else on
there.

My understand is that this is only going to be in the Midland, Bay
City, and Saginaw areas with the possibility of Flint.

I still haven't seen anything specific as to locations and time
tables.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>73,
>Carl - wk3c
>
>"Robert Casey" <wa2ise@ix.netcom.com> wrote in message
>news:3F88AF87.9060008@ix.netcom.com...
>> Jim Hampton wrote:
>>
>> >Exactly. Also, don't just complain to the utilities as they will still
>deny
>> >getting complaints. I wonder if they are hiring any of the lawyers from
>the
>> >tobacco companies LOL
>> >
>> >
>> >
>> >
>> A CC list for complaints:
>>
>> *Utility company
>> *FCC (radio, telecom, and cable depts)
>> *ARRL
>> *your congresscritter
>> *your senator

>> *your state's PUC (public utilitues commission)
>> *The senators or congressmen who fund the FCC
>> *Various broadcasters, particularly those on TV
>> channels 2, 3, 4 (as these are below 80MHz, the
>> high end of BPL). Also any shortwave broadcasters
>> in the USA except VOA (they are not allowed to care
>> about reception inside the USA).
>> *NTIA (who we share the 5MHz band with).
>>

2394. DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 02:49:35 UTC
From: Pierre <pierred1@sympatico.ca>
Message-ID: <644kov8n0opr94o7egfak2ppno1v1kh34u@4ax.com>
Source record: 106760

Hi to all.

I choose to install a DK3 screwdriver on a second floor balcony. No good grounding is possible fo the base of the antenna. So I decided to use the MFJ-931 artificial ground as a substitute. My question is this.. Would it be equivalent to a RF ground to connect the MFJ right at the ground post of the transceiver (Icom 706) and to disconnect the coax shield from the base of the antenna?

Or, more generally, what is the best way to use an artificial ground with an antenna like that one, when a proper metallic ground is not available?

Thanks de Pierre

2395. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:04:27 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmd4nr$b4s$0@208.206.142.109>
Source record: 106761
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Carl R. Stevenson wrote:

> "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> news:bmcn2r$4n0$1@208.207.71.176...
>
>>Carl R. Stevenson wrote:
>>
>>
>>>"James Wilson" <Someone@Microsoft.Com> wrote in message
>>>news:mJfib.121280$xx4.20524963@twister.neo.rr.com...
>>>
>>>
>>>>What does BPL sound like? Can someone post a wav file somewhere so it
>
> can
>
>>>>be identified? Is it worse that the Pennsylvania QSO party?
>>>
>>>
>>>The video on the ARRL website shows a couple of BPL variants ...
>>>one that uses SS and another (test area 4) that uses OFDM.
>>>They sound different.
>>>
>>>Again, I cannot over-emphasize the importance of making SURE
>>>that complaints of "BPL interference" are REALLY from BPL and
>>>not some other source.
>>>
>>>The LAST thing we need now is a bunch of people "crying wolf."
>>>(Real complaints are one thing, crying wolf will only HURT us.)
>>>
>>>73,
>>>Carl - wk3c
>>>
>>
>>
>> You raise an interesting question, Carl. How exactly should the
>>average ham go about proving that the RFI is indeed BPL, when the BPL
>>people say
>>"That's not us!'??
>>
>
>
> BPL has a unique "signature" (in the spectral/time domains) that can be

> used to ID it.
>
> Since there are different systems (SS from main.net and OFDM from Amperion,
> for example) they have different signatures, which are distinct from other
> sources
> of interference and more traditional power line noise (of course the
> utilities are
> responsible for fixing the latter, too ... though their record is poor).

So to repeat, how does the average ham, whom you have exhorted to
"make sure it's BPL that you're complaining about", go about detecting
and sorting which is what, given that spectral analysis gear, and the
training to use it if it was available, is virtually nonexistnt in the
average hamshack? Is there a aural signature or more than one for the
different BPL modes? Is the Emmaus test site video/audio clip
reresentative enough to make the call, or is something more needed?
I expect that if it was indeed BPL RFI it would follow the power grid
pretty closely with signal strength highest when close, and tapering off
with distance away from the lines. But from the one report posted here
of a ham who said he heard it from a distance of 60 miles, seems like
propagation will play into the picture-to be expected at HF as all
experienced HF ham operators know. Or maybe *he* mis-identified it!

So who do hams call for assistance, the ARRL? I haven't seen anything
from them suggesting that.

I seriously doubt the economics of BPL will ever bring it where I
live, even if it is approved, but others need to know.

2396. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:14:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8a1abb$1_7@corp.newsgroups.com>
Source record: 106763

Steve wrote:
> Is the combined 40/15 element a reasonable idea? Or should I use
> seperate wires for 40 & 15M?

66 ft dipoles work on 15m because they are 3/2WL long. Not just any
40m dipole with loading coils will work on 15m. Better use a separate
wire for 15m or turn the loading coil into an LC trap.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2397. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:16:45 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f8a1af3_1@news1.prserv.net>
Source record: 106762

I agree. Which is why I mentioned it. You should discuss it with the
author of the article. I was just trying to do a favor for someone "over
there".

--
Crazy George
Remove NO and SPAM from return address
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:i8phov823pc9lq37csi8itdjigiboj6npj@4ax.com...
> On Sat, 11 Oct 2003 22:20:19 -0500, "Crazy George"
> <muNnscOh@attSglPobaAl.nMet> wrote:
>
> >On 70 CM, the radiator will be two full
> >wavelength radiators in phase.
>
> Hi George,
>
> Hardly sounds very useful except for working satellites or
> mountain-top repeaters if you live in a valley.
>
> 73's
> Richard Clark, KB7QHC

2398. Re: DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:24:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8a1d05$1_7@corp.newsgroups.com>
Source record: 106764

Pierre wrote:
> Or, more generally, what is the best way to use an artificial ground
> with an antenna like that one, when a proper metallic ground is not
> available?

An artificial ground tunes the ground wire such that it appears as a very
low impedance point at the rig. That ground wire should be tied to the rig
chassis. Another way to solve the problem is to put resonant radials on the
base of the vertical. In fact, your DK3 configuration will be a dog
without radials.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2399. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:41:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8a20ec_7@corp.newsgroups.com>
Source record: 106765

Crazy George wrote:
> I agree. Which is why I mentioned it. You should discuss it with the
> author of the article. I was just trying to do a favor for someone "over
> there".

EZNEC sez that two vertical dipoles stacked end to end have a gain of
about 3dBi with their sources in phase at their centers. I'm sure you
have seen the UHF folded dipole vertical stacked arrays.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2400. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 03:51:08 UTC
From: AK <ak-in-nc@mchsi.com>
Message-ID: <Mipib.755033$uu5.131325@sccrnsc04>
Source record: 106766

"Steve" <skaatz1@yahoo.com> wrote in message
news:276c71c6.0310121804.19a85641@posting.google.com...
> I have a span of approx 32 ft. to use for a horizontal dipole. It will
> be about 40 ft high.
>
> I want to use 2 parallel wires to cover 40M, 20M, and 15M. Ladder line
> is not feasible here, so I need to tune the antenna for min SWR to
> minimize coax feedline losses.

I have had good results with one 40 meter dipole (a little coil loading to shorten it shouldn't hurt), a 20 meter dipole suspended (by nylon string) below it (about 3 ft below the 40m wire at the 20m wire ends) and a 15 meter dipole suspended below the 20 meter dipole. All three dipoles were connected in parallel at the center, and fed by 75-ohm (RG-59 or cable coax). Never found a satisfactory length that would work well on 40 and 15 using one wire, so the extra 15m dipole solved the problem. Did not find much, if any detuning caused by the extra dipoles, although the antenna starts to look like a spider's web.

I also found no need for a balun when my coax came straight down to ground level and then was run into the basement. The way to test to see if a balun is needed is to check the resonant points on the three bands without a balun, then put a balun in and retest. If the resonant points don't noticeably increase in frequency when you insert the balun, then the balun isn't needed. (i.e. the coax isn't radiating as if it's part of the antenna) Fifty ohm coax (RG 58) will work also, but the SWR at resonance will be somewhat higher - especially on 15m and 20m because of the height above the ground. (75 ohm coax matches best when the dipole is higher than a half wavelength over the ground.)

Good luck & 73, Andy K4YKZ

2401. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 04:15:53 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <3F8A26F9.7020804@optonline.net>
Source record: 106677

IIRC, the old 750ft-high TV transmitting tower at Sutton Coldfield in
the British Midlands rested on a 2"-dia. steel ball. I've an idea that
that was to allow a certain amount of "give" without the thing snapping off.

-=-
Alan

On 10/13/03 08:06 am Jerry Asher put fingers to keyboard and launched
the following message into cyberspace:

<snip>

> Instead of resting on four (or three) legs though, they rest on a
> single point, making the whole tower sort of a very elongated diamond
> shape.
>
> The whole tower is kept from tipping over through the use of guy
> wires.
>
> Why build an unstable tower? What are the advantages of this design?

2402. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 04:51:09 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <rnbkov4nnhdqrv4nm26v33f16j4li0mqak@4ax.com>
Source record: 106669
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Sun, 12 Oct 2003 23:27:27 -0400, a 32 bit process
<replytogroup@hotmail.com> wrote:

>On Sun, 12 Oct 2003 16:56:50 GMT, "James Wilson"
><Someone@Microsoft.Com> wrote:
>
>>What does BPL sound like? Can someone post a wav file somewhere so it can
>>be identified? Is it worse that the Pennsylvania QSO party?
>
>It almost sounds like a geiger counter, but a lot louder and the
>clicking is quicker in pace.

That is a really good description of precipitation/snow static, but
the speed *usually* varies.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2403. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:02:20 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <3rbkovg3ra856br5s8koc3ak9vuakg7q30@4ax.com>
Source record: 106767

On Mon, 13 Oct 2003 00:18:29 GMT, Howard <mensch90249@yahoo.com>
wrote:

>On Fri, 10 Oct 2003 22:20:31 -0400, "Ryan, KC8PMX"
><REMOVETHISkc8pmx@diamondcs.net> wrote:
>
>>Just found out today listening to a local, reputable radio station that Bay,
>>Saginaw and Midland Counties in Michigan are going to be "test sites" for
>>BPL, at least for Michigan. I don't know when it will be an actual reality,
>>as opposed to being in the planning stages, but will keep current with their
>>project!
>>
>>
>>Ryan KC8PMX
>>Midland, Michigan
>>
>What the "ham density" like in the Tri-Cities these days? Moved away
>27 years ago (Bay City/Essexville) and not having been a ham then I
>was out of touch with such things. I do know that it wasn't too high
>a population density overall - perhaps they are targeting low ham
>population areas in the testing so they can show a low interference
>complaint volume?
>
>I think Carl's on track in his post; the more credible the reports of
>interference the more likely they will be taken seriously.
>
If you count everyone it's probably well over several hundred in the
tri-county area.. I'd guess for active hams on HF and low VHF it's
well over 100. It's probably more than that as "I recall" Midland
club meetings run 30 to 40 although Ryan has a better memory than I
and besides...he goes to the meetings. I hit about two a year. As I
recall, Saginaw has a larger ham population. Bay City? They have an
active group, but I have no idea as to numbers.

There are a number of High power DXers and county hunters and some
relatively elaborate antenna systems.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>Howard

2404. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:11:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vokd0ma9j3oda7@corp.supernews.com>
Source record: 106768

If you add a little series inductance at the feedpoint of the 40 meter dipole, it'll load fine as a 3/2 wave on 15 meters. You can convert the cloverleaf pattern on 15 to a bidirectional pattern with some gain, without much effect on 40, by moving the wires together horizontally, each by 30 degrees, for a 120 degree included angle -- if you have room, and if you'll settle for essentially two-direction operation on 15.

But whether you use that scheme or not, a combined 40/15 meter dipole and separate dipole for 20 should work well. I wouldn't put them in parallel, but would hang the 20 meter antenna under the 40/15 as an inverted vee, or separate them horizontally. That will make the arrangement less critical to tune, and improve the bandwidth of at least the 20 meter antenna.

Roy Lewallen, W7EL

Steve wrote:
> I have a span of approx 32 ft. to use for a horizontal dipole. It will
> be about 40 ft high.
>
> I want to use 2 parallel wires to cover 40M, 20M, and 15M. Ladder line
> is not feasible here, so I need to tune the antenna for min SWR to
> minimize coax feedline losses.
>
> I would use 1 of the wires for 20M as a 1/2 wave dipole; and use the
> other for 40/15.
>
> The 40/15 will have off center loading coils at approx 11' on each
> side (so it will be a 1/2 wave dipole for 15M), followed by more wire
> to use the span. The coils would be designed to tune the whole span
> for 40M, using either the Hamcalc program or one of the G4FGQ
> programs.
>
> Is the combined 40/15 element a reasonable idea? Or should I use
> seperate wires for 40 & 15M?
>
> I expect the interaction with the 20M wire will require several
> pruning iterations.
>
> Thanks in advance for any helpful comments.
>
> 73
> Steve
> K8SDK

2405. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:15:40 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bme4oa$lic55$3@ID-189073.news.uni-berlin.de>
Source record: 106675
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dee D. Flint" <deehays@qix.net> wrote in message
news:jLZhb.573$P%1.510470@newssvr28.news.prodigy.com...
>
> "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> > Just found out today listening to a local, reputable radio station that
> Bay,
> > Saginaw and Midland Counties in Michigan are going to be "test sites"
for
> > BPL, at least for Michigan. I don't know when it will be an actual
> reality,
> > as opposed to being in the planning stages, but will keep current with
> their
> > project!
> >
> >
> > Ryan KC8PMX
> > Midland, Michigan
> >
> >
>
> Go to the sites. Check out the interference. If it's as bad as they say,
> write the local commercial radio stations to say they are being interfered
> with, write your congressman, and write the FCC.
>
> Dee D. Flint, N8UZE
>

The Bay, Saginaw and Midland clubs are going to work together on that......
Strength in numbers, at least locally.

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...

2406. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:17:10 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <h3dkov0d2v7hp9r3nh1kqetucr0e8t6f1u@4ax.com>
Source record: 106670
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

On Sun, 12 Oct 2003 23:27:27 -0400, a 32 bit process
<replytogroup@hotmail.com> wrote:

>On Sun, 12 Oct 2003 16:56:50 GMT, "James Wilson"
><Someone@Microsoft.Com> wrote:
>
>>What does BPL sound like? Can someone post a wav file somewhere so it can
>>be identified? Is it worse that the Pennsylvania QSO party?
>
>It almost sounds like a geiger counter, but a lot louder and the
>clicking is quicker in pace.

After having gone to the ARRL site and listened to the examples, all I
can say is it sounds just like precipitation static and/or loose
connections. No way would I be able to identify one from the other.
I'm just going to have to complain every time I hear noise and make
recordings. If it's noisy enough to be a problem it should be fixed.

BTW, most of the links failed and instead I ended up hijacked to QSL
dot net. (they call it redirecting, but if I didn't select to go
there, I don't want to go there...I'll settle for the 404 screen
instead of giving some one advertizing points.)

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2407. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:23:48 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310122123.11caecf1@posting.google.com>
Source record: 106671
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"James Wilson" <Someone@Microsoft.Com> wrote in message
news:<mJfib.121280$xx4.20524963@twister.neo.rr.com>...
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified?

The ARRL website is loaded with video and/or audio files which will
clearly demonstrate what the various forms of BPL signals sound like
and the havoc they generate throughout the HF spectrum.

http://www.arrl.org/tis/info/HTML/plc/#Video

> Is it worse that the Pennsylvania QSO party?

If BBL is broadly implemented you won't have to worry about the PAQP.
There won't be a PAQP.

> > BPL, at least for Michigan. I don't know when it will be an actual
> reality,
> > as opposed to being in the planning stages, but will keep current with
> their
> > project!

w3rv

2408. Re: IMPORTANT POINTS FOR ALL - Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 05:38:20 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bme4od$lic55$6@ID-189073.news.uni-berlin.de>
Source record: 106676
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:Vigib.780$_i.73365@nnrp1.ptd.net...
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:jLZhb.573$P%1.510470@newssvr28.news.prodigy.com...
> >
> > "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> > news:bm9o10$kemhq$1@ID-189073.news.uni-berlin.de...
> > > Just found out today listening to a local, reputable radio station
that
> > Bay,
> > > Saginaw and Midland Counties in Michigan are going to be "test sites"
> for
> > > BPL, at least for Michigan. I don't know when it will be an actual
> > reality,
> > > as opposed to being in the planning stages, but will keep current with
> > their
> > > project!
> > >
> > >
> > > Ryan KC8PMX
> > > Midland, Michigan
> > >
> > >
> >
> > Go to the sites. Check out the interference. If it's as bad as they
say,
> > write the local commercial radio stations to say they are being
interfered
> > with, write your congressman, and write the FCC.
> >
> > Dee D. Flint, N8UZE
> >
>
> Ryan, et al, PLEASE coordinate with Ed Hare, w1rfi@arrl.org ... and don't
> "write/contact your local commercial radio stations" UNLESS they ACTUALLY
> ARE being interfered with AND you are ABSOLUTELY SURE it's BPL.

Yes and no Carl.... if it makes it impossible to RECIEVE our local broadcast
stations, I would think that the local broadcasters would be VERY interested
to know that nobody is getting thier signal, except cable subscribers.

--
Ryan, KC8PMX

FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...

2409. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 06:55:17 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.19f38c12fed47fca98969c@news-60.giganews.com>
Source record: 106672
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

In article <mJfib.121280$xx4.20524963@twister.neo.rr.com>,
Someone@Microsoft.Com says...
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified? Is it worse that the Pennsylvania QSO party?

The ARRL web site (www.arrl.org) has a video that can be downloaded that shows how severe this interference can be. They took a vehicle equipped with HF equipment and drove around areas where BPL is in use as a test program. The noise levels are horrendous.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

2410. Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 08:06:59 UTC
From: jerry-google-groups@bogosimeter.com
Message-ID: <8a9fd42a.0310130006.211dbb00@posting.google.com>
Source record: 106673

Driving down I-5 between SF and LA, I've seen many radio towers that rest on a single point.

I don't know what they are transmitting.

I do know that they look like regular towers from about ten feet up. From ten feet and higher, they have a diminishing square cross section. (May be triangular.)

Instead of resting on four (or three) legs though, they rest on a single point, making the whole tower sort of a very elongated diamond shape.

The whole tower is kept from tipping over through the use of guy wires.

Why build an unstable tower? What are the advantages of this design?

Thanks,

Jerry

2411. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 10:20:16 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <jeOdnSrVc5Dl4ReiXTWJig@crocker.com>
Source record: 106674

"Steve" <skaatz1@yahoo.com> wrote in message
news:276c71c6.0310121804.19a85641@posting.google.com...
> I have a span of approx 32 ft. to use for a horizontal dipole. It will
> be about 40 ft high.
>
> I want to use 2 parallel wires to cover 40M, 20M, and 15M. Ladder line
> is not feasible here, so I need to tune the antenna for min SWR to
> minimize coax feedline losses.

remember, "too low an swr can kill you!". unless you are going hundreds of
feet and using rg-58 for coax the losses on hf are small.

2412. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 12:36:05 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <im6lov0r41s2u2lv73egtmes3278le6dfv@4ax.com>
Source record: 106683

They are resting on a single insulator. This is a very common practice
with BC monopoles.

They are not unstable. They are just not self-supporting.

Danny, K6MHE

On 13 Oct 2003 01:06:59 -0700, jerry-google-groups@bogosimeter.com
(Jerry Asher) wrote:

>Driving down I-5 between SF and LA, I've seen many radio towers that
>rest on a single point.
>
>I don't know what they are transmitting.
>
>I do know that they look like regular towers from about ten feet up.
>From ten feet and higher, they have a diminishing square cross
>section. (May be triangular.)
>
>Instead of resting on four (or three) legs though, they rest on a
>single point, making the whole tower sort of a very elongated diamond
>shape.
>
>The whole tower is kept from tipping over through the use of guy
>wires.
>
>Why build an unstable tower? What are the advantages of this design?
>
>Thanks,
>
>
>Jerry

2413. Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 14:07:10 UTC
From: Tom Sedlack <cts050@nospamhere.email.mot.com>
Message-ID: <bmeb1u$8np$1@avnika.corp.mot.com>
Source record: 106678

What kind of voltages and currents are present at the ends of dipoles assuming 100W of RF and the antenna being close to resonant?

Just wondering,

Tom

2414. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 14:54:30 UTC
From: Bruce Raymond <raymondb@dma.org>
Message-ID: <G0zib.803$P%1.902845@newssvr28.news.prodigy.com>
Source record: 106679

I suppose the real answer is "I don't know", but I never let
that get in the way ... ;-)

If the tower gets narrow at its base then it will transmit relatively
little moment to the base. This means that the wind (and
earthquake) loads will be picked up by the guy wires. The
lower sections of the tower and the base can be smaller as a result.

Bruce Raymond/ND8I

"Jerry Asher" <jerry-google-groups@bogosimeter.com> wrote in message
news:8a9fd42a.0310130006.211dbb00@posting.google.com...
> Driving down I-5 between SF and LA, I've seen many radio towers that
> rest on a single point.
>
> I don't know what they are transmitting.
>
> I do know that they look like regular towers from about ten feet up.
> From ten feet and higher, they have a diminishing square cross
> section. (May be triangular.)
>
> Instead of resting on four (or three) legs though, they rest on a
> single point, making the whole tower sort of a very elongated diamond
> shape.
>
> The whole tower is kept from tipping over through the use of guy
> wires.
>
> Why build an unstable tower? What are the advantages of this design?
>
> Thanks,
>
>
> Jerry

2415. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:00:46 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <_OWdnVQbpuG5UReiU-KYuA@comcast.com>
Source record: 106680
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

> After having gone to the ARRL site and listened to the examples, all I
> can say is it sounds just like precipitation static and/or loose
> connections. No way would I be able to identify one from the other.
> I'm just going to have to complain every time I hear noise and make
> recordings. If it's noisy enough to be a problem it should be fixed.

Any hope of us non-arrl members getting something to listen to?

2416. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:05:33 UTC
From: Pawe&#65533; Stobi&#65533;ski <sq9nry@wp.pl>
Message-ID: <bmeeru$72n$1@julia.coi.pw.edu.pl>
Source record: 106681

Tom Sedlack wrote:
> What kind of voltages and currents are present at the ends of dipoles
> assuming 100W of RF and the antenna being close to resonant?
>
> Just wondering,

Maximum current is in the feeding point, thus minimum at the ends - that's pretty logical, as the current must flow between something of different potentials. In case of voltage, zero in the middle of antenna, and consequently max. at both ends. So, avoid touching the radiator at the ends ;-)

--
Pawe&#65533; Stobi&#65533;ski
Republic of Poland

2417. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:07:11 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <EsqdnU5hovE5UBeiU-KYjQ@comcast.com>
Source record: 106682
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Brian Kelly" <kelly@dvol.com> wrote in message
news:d22b54c3.0310122123.11caecf1@posting.google.com...
> "James Wilson" <Someone@Microsoft.Com> wrote in message
news:<mJfib.121280$xx4.20524963@twister.neo.rr.com>...
> > What does BPL sound like? Can someone post a wav file somewhere so it
can
> > be identified?
>
>
> The ARRL website is loaded with video and/or audio files which will
> clearly demonstrate what the various forms of BPL signals sound like
> and the havoc they generate throughout the HF spectrum.
>
> http://www.arrl.org/tis/info/HTML/plc/#Video

That helps a lot. I see what was meant by "geiger counter" sound now, as
well as the other sort of noise.

I do have a spectrum analyzer here, so that will help, when the day comes.
At the moment, the only broadband available here is DSL or cable modem,
which have been well-behaved neighbors. I'm using a cable modem now, and I
don't notice anything from it, even when I tune into the bands that it uses.
We have regular overflights scanning for leakage, so it appears that Comcast
is making the effort.

2418. BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:14:29 UTC
From: private <private@private.com>
Message-ID: <3F8ACF65.BFA8CE2D@private.com>
Source record: 106685

Is BPL still only in a testing phase yet to be approved by
the FCC for a full scale build?

It would be nice if there was a website set up clearly explaining
what BPL is, how to detect it, where it is and will be deployed,
information and .pdf forms to fill out and mail in to complain
to the right people in the right areas of the country.

If I wasn't so lazy and more computer literate I'd do it myself.
Sounds like its something the ARRL should be more active in
doing.

2419. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:26:10 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <K_qcnfBErYaKTxeiU-KYjg@comcast.com>
Source record: 106684
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

> Any hope of us non-arrl members getting something to listen to?

Nevermind, a later post answered this.

2420. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:44:43 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <%DAib.46545$mQ2.16258@newsread1.news.atl.earthlink.net>
Source record: 106686
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmd4nr$b4s$0@208.206.142.109...

> I seriously doubt the economics of BPL will ever bring it where I
> live, even if it is approved, but others need to know.
>

That may indeed be true. However it will certainly make it tougher for you
to communicate with someone in an area that is trashed by BPL.

Dan/W4NTI

2421. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:47:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <CGAib.46576$mQ2.33645@newsread1.news.atl.earthlink.net>
Source record: 106687
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:_OWdnVQbpuG5UReiU-KYuA@comcast.com...
>
> > After having gone to the ARRL site and listened to the examples, all I
> > can say is it sounds just like precipitation static and/or loose
> > connections. No way would I be able to identify one from the other.
> > I'm just going to have to complain every time I hear noise and make
> > recordings. If it's noisy enough to be a problem it should be fixed.
>
> Any hope of us non-arrl members getting something to listen to?
>
>

I wasn't aware you had to be a member to go klik on the link to the BPL
file. Go check and see.

Dan/W4NTI

2422. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 16:57:39 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310130857.1124da08@posting.google.com>
Source record: 106688

"Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message
news:<bmeb1u$8np$1@avnika.corp.mot.com>...
> What kind of voltages and currents are present at the ends of dipoles
> assuming 100W of RF and the antenna being close to resonant?
>
> Just wondering,
>
> Tom

The current should be fairly low at the ends. The current max is at
the feedpoint. Just guessing on the voltage, probably about 700 volts
potential at the ends or so...x10 for a KW...Any kind of decent end
insulator should be ok for 100w. Same for a KW too, but you want to
stay away from green tree branches etc, if you run high power. I've
toasted some of those when the branches touched the ends of the
dipole. MK

2423. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 17:33:56 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmenm4$8qu$0@208.207.71.142>
Source record: 106689
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dave VanHorn wrote:
>>After having gone to the ARRL site and listened to the examples, all I
>>can say is it sounds just like precipitation static and/or loose
>>connections. No way would I be able to identify one from the other.
>>I'm just going to have to complain every time I hear noise and make
>>recordings. If it's noisy enough to be a problem it should be fixed.
>
>
> Any hope of us non-arrl members getting something to listen to?
>
>

Surely that file isn't on the members-only side of the site, is it?

Certainly it shouldn't be, and if so I intend to protest.

2424. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 17:38:17 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmenu9$8qu$1@208.207.71.142>
Source record: 106690
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dan/W4NTI wrote:

> "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> news:bmd4nr$b4s$0@208.206.142.109...
>
>
>
>> I seriously doubt the economics of BPL will ever bring it where I
>>live, even if it is approved, but others need to know.
>>
>
>
> That may indeed be true. However it will certainly make it tougher for you
> to communicate with someone in an area that is trashed by BPL.
>

Indeed! And don't forget the skip issue-if it works for QRP hams it'll
work for BPL, too.

2425. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 18:48:36 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ScGcnXAV_5IKbheiU-KYiA@comcast.com>
Source record: 106691

Tom, Cecil, etc

Well, I got the SwCAD model of the SWR/power meter operating. Very interesting. Learned a lot that I would never have thought of by just contemplating.

Here is the circuit:

A) An opamp with a gain bandwidth of 10000 MHz that senses the current in the line. The current to voltage gain conversion constant is 50 I.

B) Another opamp that does the RF sum of K(V + 50 I). I am calling this output VF.

C) A third opamp that does the RF subtraction of K(V - 50 I). Gee, lets call this VR.

D) It can be shown that SWR=(VF + VR) / (VF - VR). I love statements like this, but it is easy enough to prove. Let I=V/RL, and plug the first two equations into the third.

I did a calibration run at 5W with the source set to 15.811V, ZS=0. With my K, I get VF=3.13, VR=0, PF=5W

Now for Cecil 1. ZL = 50 - j400. VF=1.62, VR=1.56, SWR=53, PF=1.33W, PR=1.24W.

Now for Cecil 2. ZL=50-j400, BUT ZS= 0 + J400. VF=11.2, VR=10.9, SWR=73.7, PF=64W, PR=60.6W. I am at such a high impedance here, that I suspect the 10K sampling resistors are loading down the circuit somewhat. (I might try 100K instead).

Note that there is absolutely nothing explicit in the circuit that has anything to do with transmission lines. All components are perfect; there are no stray inductances or stray capacitors.

Tam/WB2TT

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0310090849.685f9aba@posting.google.com...
> Hi Tam,
>
> Yes, the lower reactance --> lower Q, and the lower frequency, will
> both help keep the disturbance from the meter at a reasonable level.
> If you simply re-tune the 50pF cap in Cecil's 7.2MHz 'speriment, you
> still end up with about 1.2:1 SWR, because it's effectively a "T"
> impedance matching network. But the same line at 1.8MHz with C and L
> at 50 ohms reactance, re-tuned to resonance after insertion of the

> meter, gives about 50dB return loss, and you'd be lucky to resolve
> that with a typical SWR meter. Of course, you're stuck with 1.8nF of
> capacitance too.
>
> Let us know how it works out when you have time. I like your idea of
> peeking inside the bridge; I had the same thought.
>
> Cheers,
> Tom
>
> "Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<xoidnSS4bLxgQBmiU-KYuA@comcast.com>...
> > "Tom Bruhns" <k7itm@aol.com> wrote in message
> > news:3200347.0310081216.5917f90f@posting.google.com...
> > >
> > > (Tam: my recommendation is to do the test yourself. It will be a lot
> > > easier to play with "what-ifs" and to check out things that don't at
> > > first make sense if you have direct control of the experiment.)
> > >
> > > Cheers,
> > > Tom
> > Tom,
> >
> > I read you, but first I have to paint the kitchen. I was going to use 50
> > +/& -j50. I also want to get inside the meter and look at the voltage
and
> > current separately. It's a Kenwood, no sealed slugs. Good point about
the
> > meter changing the reactance; 160 m might be a good place to do this, or
I
> > might use a variable capacitor.
> >
> >
> > Tam/WB2TT

2426. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 18:52:30 UTC
From: Alexander Schewelew <dl1pbd@gmx.net>
Message-ID: <bmesfo$m1s7v$1@ID-34767.news.uni-berlin.de>
Source record: 106692

Hi!
> Maximum current is in the feeding point,
Not always.

Alexander

2427. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 19:01:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310131101.494593aa@posting.google.com>
Source record: 106693

jerry-google-groups@bogosimeter.com (Jerry Asher) wrote in message
>
> The whole tower is kept from tipping over through the use of guy
> wires.
>
> Why build an unstable tower? What are the advantages of this design?

It's not unstable with the guy wires. That design is usually used when the tower is insulated from ground with a big insulator I think. It's probably a 1/4 wave AM-BC antenna . MK

2428. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 19:17:10 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ENecnY_dI8XVZxeiXTWJhQ@comcast.com>
Source record: 106694

Steve,

I had a situation something like that. Wanted 40, 17 and 12 meters, but the trees were too close for 40. I supported the whole thing from the 17m dipole, hung the 12 underneath it (ends were separated by about 5 feet), and strung a full length 40m inverted V from the same feedpoint, but about 30 degrees out of plane with fairly low end supports.

In tuning up, go from the lowest to the highest frequency, or it might not converge.

A 40m inverted V makes a lousy 15m antenna. I would use a separate dipole for 15. Run EZNEC first to get in the ballpark.

Tam/WB2TT
"Steve" <skaatz1@yahoo.com> wrote in message
news:276c71c6.0310121804.19a85641@posting.google.com...
> I have a span of approx 32 ft. to use for a horizontal dipole. It will
> be about 40 ft high.
>
> I want to use 2 parallel wires to cover 40M, 20M, and 15M. Ladder line
> is not feasible here, so I need to tune the antenna for min SWR to
> minimize coax feedline losses.
>
> I would use 1 of the wires for 20M as a 1/2 wave dipole; and use the
> other for 40/15.
>
> The 40/15 will have off center loading coils at approx 11' on each
> side (so it will be a 1/2 wave dipole for 15M), followed by more wire
> to use the span. The coils would be designed to tune the whole span
> for 40M, using either the Hamcalc program or one of the G4FGQ
> programs.
>
> Is the combined 40/15 element a reasonable idea? Or should I use
> seperate wires for 40 & 15M?
>
> I expect the interaction with the 20M wire will require several
> pruning iterations.
>
> Thanks in advance for any helpful comments.
>
> 73
> Steve
> K8SDK

2429. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 20:17:13 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <dLDib.941$_i.88127@nnrp1.ptd.net>
Source record: 106695
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmd4nr$b4s$0@208.206.142.109...
> Carl R. Stevenson wrote:
>
> > "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> > news:bmcn2r$4n0$1@208.207.71.176...
> >
[snip]

> >> You raise an interesting question, Carl. How exactly should the
> >>average ham go about proving that the RFI is indeed BPL, when the BPL
> >>people say
> >>"That's not us!'??
> >>
> >
> >
> > BPL has a unique "signature" (in the spectral/time domains) that can be
> > used to ID it.
> >
> > Since there are different systems (SS from main.net and OFDM from
Amperion,
> > for example) they have different signatures, which are distinct from
other
> > sources
> > of interference and more traditional power line noise (of course the
> > utilities are
> > responsible for fixing the latter, too ... though their record is poor).
>
>
> So to repeat, how does the average ham, whom you have exhorted to
> "make sure it's BPL that you're complaining about", go about detecting
> and sorting which is what, given that spectral analysis gear, and the
> training to use it if it was available, is virtually nonexistnt in the
> average hamshack? Is there a aural signature or more than one for the
> different BPL modes? Is the Emmaus test site video/audio clip
> reresentative enough to make the call, or is something more needed?

The Emmaus test site video (test area #3) should be pretty representative
of the "main.net" system ... test area #4 is the Amperion OFDM system.
There could be others that might have different "signatures" ...

> I expect that if it was indeed BPL RFI it would follow the power grid
> pretty closely with signal strength highest when close, and tapering off
> with distance away from the lines. But from the one report posted here

> of a ham who said he heard it from a distance of 60 miles, seems like
> propagation will play into the picture-to be expected at HF as all
> experienced HF ham operators know. Or maybe *he* mis-identified it!

I suspect that may be the case ... though it's not impossible that under ideal conditions of terrain, propagation, with good antenna, etc. that it *might* be detectable at some distance ... whether current levels of deployment would cause truly "harmful interference" at such a distance requires further study.

> So who do hams call for assistance, the ARRL? I haven't seen anything
> from them suggesting that.

My recommendation would be to e-mail a .wav file or other common audio file format to Ed Hare, w1rfi@arrl.org, and give him the particulars of time, location, if you *know* that your utility is doing a BPL trial, etc.
(I'd appreciate a cc: of the audio file and particulars to my main e-mail address wk3c@wk3c.com as well, just for my own information and analysis.)

The MAIN thing is to NOT have a bunch of false "BPL interference complaints."
The BPL industry is trying to paint the ARS as "exaggerating the potential for
interference" and doing a lot of hand-waving ... inaccurate claims of "BPL interference" at this point will do more harm than good.

Carl -wk3c

2430. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 20:19:12 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <4NDib.942$_i.88243@nnrp1.ptd.net>
Source record: 106696
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:_OWdnVQbpuG5UReiU-KYuA@comcast.com...
>
> > After having gone to the ARRL site and listened to the examples, all I
> > can say is it sounds just like precipitation static and/or loose
> > connections. No way would I be able to identify one from the other.
> > I'm just going to have to complain every time I hear noise and make
> > recordings. If it's noisy enough to be a problem it should be fixed.
>
> Any hope of us non-arrl members getting something to listen to?

Dave,

The ARRL video is not in the "members only" part of the site ...
it's easy to find from the articles on BPL in the public area.

Carl - wk3c

2431. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 20:19:50 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <GNDib.943$_i.87822@nnrp1.ptd.net>
Source record: 106697
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmenm4$8qu$0@208.207.71.142...
> Dave VanHorn wrote:
> >>After having gone to the ARRL site and listened to the examples, all I
> >>can say is it sounds just like precipitation static and/or loose
> >>connections. No way would I be able to identify one from the other.
> >>I'm just going to have to complain every time I hear noise and make
> >>recordings. If it's noisy enough to be a problem it should be fixed.
> >
> >
> > Any hope of us non-arrl members getting something to listen to?
> >
> >
>
>
> Surely that file isn't on the members-only side of the site, is it?
>
> Certainly it shouldn't be, and if so I intend to protest.
>

It isn't Dick ... it's open to the world.

Carl - wk3c

2432. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 20:31:07 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <WfGdnYmbXtMflhaiU-KYiA@comcast.com>
Source record: 106698
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

> > Surely that file isn't on the members-only side of the site, is it?
> >
> > Certainly it shouldn't be, and if so I intend to protest.
> >
>
> It isn't Dick ... it's open to the world.
>
> Carl - wk3c

Apparently my "nevermind" is taking a while to propagate :)

2433. Re: BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 20:33:18 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <HhSdnfXOBZKYkRaiXTWJkQ@comcast.com>
Source record: 106699

"private" <private@private.com> wrote in message
news:3F8ACF65.BFA8CE2D@private.com...
> Is BPL still only in a testing phase yet to be approved by
> the FCC for a full scale build?

Testing only at this point, but quite a few mega$ have been sunk into it
now.

> It would be nice if there was a website set up clearly explaining
> what BPL is, how to detect it, where it is and will be deployed,
> information and .pdf forms to fill out and mail in to complain
> to the right people in the right areas of the country.

It dosen't sound like it's going to be hard to find.
Those Wavs and movies on the ARRL site show it about as suttle as a train
horn in a hearing aid shop.

2434. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-13 22:23:58 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8b25fd$0$3654$5402220f@news.sunrise.ch>
Source record: 106700

That is absolutely correct, Cecil.

I am currently designing a 70cm colinear with two 5/8 elements, fed in the middle over a stub with balun
and made entirely out of standard (in Europe) 12mm diameter copper tubing.

AO (Antenna Optimizer) predicts a gain of 3.3dBi in free space.
Due to the stub the pattern is not entirely uniform and therefore in one direction I would have a bit more gain upto 5dBi according to AO.

In the coming weeks (sorry, but I have a demanding job and a HF antenna project that takes presidence) I will model the antenna also in EZNEC to double-check its matching to 50ohm and than build it.

Of course I will share the results and final measure in this newsgroup.

I had asked for the QST design in this group, simply to see if I could improve on my design but it does not seem so.

Thanks guys for your help and Cecil, intersting stuff on your website!

73 de Serge ON4BAA / HB9DWU
http://salsawaves.com/propagation/

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f8a20ec_7@corp.newsgroups.com...
> Crazy George wrote:
> > I agree. Which is why I mentioned it. You should discuss it with the
> > author of the article. I was just trying to do a favor for someone
"over
> > there".
>
> EZNEC sez that two vertical dipoles stacked end to end have a gain of
> about 3dBi with their sources in phase at their centers. I'm sure you
> have seen the UHF folded dipole vertical stacked arrays.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2435. Re: DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 00:03:50 UTC
From: jgboyles@aol.com
Message-ID: <20031013200350.15806.00000745@mb-m13.aol.com>
Source record: 106701

> No good grounding is possible fo the base of the antenna. So I decided to
>use the MFJ-931 artificial ground as a substitute.
The artificial ground is designed to tune a 1/4 wave counterpoise to present a low impedance rf ground to the chassis of the rig. This is usually done by cutting the 1/4 wave ground wire to something less than 1/4 wave length. Then the artificial ground (series resonant circuit) is tuned so it looks like a 1/4 wave radial, or counterpoise. The tuning is done by looking for maximun current in the counterpoise.
If you are only interested in a single band, just attach a single wire radial 1/4 wave long and forget about the artificial ground. If you want maximum performance from a screwdriver or any type of vertical, a good ground system is necessary, but you already knew that.

73 Gary N4AST

2436. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 00:23:52 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310131623.387a22e4@posting.google.com>
Source record: 106702

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f8a20ec_7@corp.newsgroups.com>...
> Crazy George wrote:
> > I agree. Which is why I mentioned it. You should discuss it with the
> > author of the article. I was just trying to do a favor for someone "over
> > there".
>
> EZNEC sez that two vertical dipoles stacked end to end have a gain of
> about 3dBi with their sources in phase at their centers. I'm sure you
> have seen the UHF folded dipole vertical stacked arrays.

Cecil
I used stacked vert dipoles and 12 watts for two meters
when my son was in hospital a 100 miles away and we used
a repeater nearby so he could use a H.T. I don.t remember
seeing a MOUNTAIN here in Central Illinois and other
antennas couldn't reach it

I do like the dipole overlay on the vertical pattern on your
page.Actualy I enjoyed the whole page
Makes you wonder why all people don't use horizontal
polarisation to get away from ground losses.
The pattern looks just like the one I generated for a dipole
over a beverage for the top band using AO Pro and just goes
to show that max radiation at a high angle in not always bad.
(That comment will attract a few people to your page!)
Regards
Art
Regards
Art

2437. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 00:51:29 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310131651.581854f6@posting.google.com>
Source record: 106703
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick Carroll <dixie@NOSPAM.townsqr.com> wrote in message
news:<bmd4nr$b4s$0@208.206.142.109>...

> >> You raise an interesting question, Carl. How exactly should the
> >>average ham go about proving that the RFI is indeed BPL, when the BPL
> >>people say
> >>"That's not us!''??
> >>
> > >
> > >
> > > BPL has a unique "signature" (in the spectral/time domains) that can be
> > > used to ID it.
> > >
> > > Since there are different systems (SS from main.net and OFDM from Amperion,
> > > for example) they have different signatures, which are distinct from other
> > > sources
> > > of interference and more traditional power line noise (of course the
> > > utilities are
> > > responsible for fixing the latter, too ... though their record is poor).
> >
> >
> So to repeat, how does the average ham, whom you have exhorted to
> "make sure it's BPL that you're complaining about", go about detecting
> and sorting which is what, given that spectral analysis gear, and the
> training to use it if it was available, is virtually nonexistnt in the
> average hamshack? Is there a aural signature or more than one for the
> different BPL modes? Is the Emmaus test site video/audio clip
> reresentative enough to make the call, or is something more needed?

There's no mistaking the BPL signals in the Emmaus test area which are
SS although there's some discussion on that point. I didn't know what
to look for on my first pass through Emmaus and found all sorts of
crud particularly in the extensive commercial area. But I found a very
odd-sounding strong clicking noise in the area around the Emmaus High
School and reported it to Carl and Ed Hare who then told me the stuff
sounds like geiger-counter clicks. So I'd nailed it out of the chute
with just my little TS-50 HF mobile xcvr and a 2M magmaount whip. I've
probably heard every form of QRN/QRM out there by now and there is
no mistaking the BPL in use in Emmaus. The stuff grabs yer AGC and
it's all over.

The ARRL audio tracks and files don't do it justice, the spikes it
kicks out are too sharp and short to be captured properly with the
consumer-level digital recording/playback equipment used to generate

the recordings. OFDM is another form of the beast which I haven't
personally tuned on-site yet but the ARRL recordings ought to give you
the drift.

> I expect that if it was indeed BPL RFI it would follow the power grid
> pretty closely with signal strength highest when close, and tapering off
> with distance away from the lines. But from the one report posted here
> of a ham who said he heard it from a distance of 60 miles, seems like
> propagation will play into the picture-to be expected at HF as all
> experienced HF ham operators know. Or maybe *he* mis-identified it!
>
> So who do hams call for assistance, the ARRL? I haven't seen anything
> from them suggesting that.

Unfortunately the only help available is via the FCC and the ARRL is
beating the FCC into the ground over this one.

> I seriously doubt the economics of BPL will ever bring it where I
> live, even if it is approved, but others need to know.

w3rv

2438. fm.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 01:37:42 UTC
From: luis <cristianalpfm@cox.net>
Message-ID: <snlib.68177$AH4.7909@lakeread06>
Source record: 106704

sabe alguien como puedo instalar 2 dipolos con gamma ,50 ohms e incrementar en dos sectores el lobulo? no quiero direccional.Como puedo calcular el adaptador con pocos elementos de prueba?

2439. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 01:44:18 UTC
From: jerry-google-groups@bogosimeter.com
Message-ID: <8a9fd42a.0310131744.156081f9@posting.google.com>
Source record: 106705

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0310131101.494593aa@posting.google.com>...
> jerry-google-groups@bogosimeter.com (Jerry Asher) wrote in message
> >
> > The whole tower is kept from tipping over through the use of guy
> > wires.
> >
> > Why build an unstable tower? What are the advantages of this design?
>
> It's not unstable with the guy wires. That design is usually used when
> the tower is insulated from ground with a big insulator I think. It's
> probably a 1/4 wave AM-BC antenna . MK

Thanks to all that replied. I've been puzzled by this for about nine
months of such trips now, and finally remembered to post.

Jerry

2440. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 01:55:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8B579A.709238D6@uci.edu>
Source record: 106707
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Carl R. Stevenson" wrote:
>
> "Dave VanHorn" <dvanhorn@cedar.net> wrote in message
> news:_OWdnVQbpuG5UReiU-KYuA@comcast.com...
> >
> > > After having gone to the ARRL site and listened to the examples, all I
> > > can say is it sounds just like precipitation static and/or loose
> > > connections. No way would I be able to identify one from the other.
> > > I'm just going to have to complain every time I hear noise and make
> > > recordings. If it's noisy enough to be a problem it should be fixed.
> >
> > Any hope of us non-arrl members getting something to listen to?
>
> Dave,
>
> The ARRL video is not in the "members only" part of the site ...
> it's easy to find from the articles on BPL in the public area.
>
> Carl - wk3c

http://216.167.96.120/BPL_Trial-web.mpg
http://216.167.96.120/BPL_Trial-small.mpg

2441. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 01:56:27 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8b57cb$0$3660$5402220f@news.sunrise.ch>
Source record: 106706

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0310131623.387a22e4@posting.google.com...
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f8a20ec_7@corp.newsgroups.com>...

> Cecil

> I do like the dipole overlay on the vertical pattern on your
> page.Actualy I enjoyed the whole page
> Makes you wonder why all people don't use horizontal
> polarisation to get away from ground losses.

This conversation is starting to get interesting :-)

INVERTED GROUNDPLANES:
What about using an inverted 1/4wave groundplane in order to avoid ground
losses?
Then you have the high impedance point of the antenna close to the lossy
(low impedance) earth.
Due to the severe mismatch less power will couple into the earth.

The low impedance point (feed point) of the antenna is safely high up in the
(high impedance) air then.

--

73 de Serge ON4BAA - HB9DWU
http://salsawaves.com/propagation/

2442. Re: DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 02:06:47 UTC
From: k9sqg@aol.com
Message-ID: <20031013220647.09528.00000137@mb-m27.aol.com>
Source record: 106708

A more common use of an artificial ground is to "tune" a dc ground lead so that it is also at RF ground. This helps to keep the solid state rigs contented but in no way has an effect on radiation properties of the antenna in most cases.

2443. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 02:13:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vommtp653g0q51@corp.supernews.com>
Source record: 106709

That question has been answered several times in this newsgroup. For one of the most recent answers, go to groups.google.com and find my posting on July 21, 2003 in the thread "Re: efficiency of horizontal vs vertical antennas".

Roy Lewallen, W7EL

Serge Stroobandt, ON4BAA wrote:
>
> This conversation is starting to get interesting :-)
>
> INVERTED GROUNDPLANES:
> What about using an inverted 1/4wave groundplane in order to avoid ground
> losses?
> Then you have the high impedance point of the antenna close to the lossy
> (low impedance) earth.
> Due to the severe mismatch less power will couple into the earth.
>
> The low impedance point (feed point) of the antenna is safely high up in the
> (high impedance) air then.
>
>

2444. Re: DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 02:18:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vomn7ccjsjpddb@corp.supernews.com>
Source record: 106710

Unfortunately, the "artificial ground" is just as much an antenna as the "antenna" is. And it's usually in a lousy place for an antenna -- often, low and parallel to the ground. If it is, the radiation from the "artificial ground" (representing a sizeable fraction of the RF power your rig is producing) will be largely absorbed by the ground. If it's in a more favorable spot, its radiation will end up modifying your overall radiated pattern.

Just because we connect one wire to one terminal of our rig's output and call it an "antenna" and connect the other to the other terminal and call it "ground" doesn't impart any magical properties to them. They behave just the same.

Roy Lewallen, W7EL

K9SQG wrote:
> A more common use of an artificial ground is to "tune" a dc ground lead so that
> it is also at RF ground. This helps to keep the solid state rigs contented but
> in no way has an effect on radiation properties of the antenna in most cases.

2445. off-center dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 02:42:37 UTC
From: pdrunen@aol.com
Message-ID: <20031013224237.07995.00000238@mb-m16.aol.com>
Source record: 106711

Hi Group,

In the process of fab'ing a off-center dipole. The short end is 40 feet and the long end is 80 feet. At the feed point I have a 4:1 balun. The balun I purchased new, I believe it has w2un on the side of it. I don't have it here at the computer.

The question is what side of the 4:1 should I feed the long end, or does it matter?

Paul
KJ4UO

2446. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 02:44:49 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f8b64c6_1@news1.prserv.net>
Source record: 106712

Jerry:

I just read that the WLW tower has been marked as a historical landmark. It is one of the few remaining originals of that design, and has considerable story coverage on the 'net. Do a Google search for WLW, and enjoy.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Jerry Asher" <jerry-google-groups@bogosimeter.com> wrote in message news:8a9fd42a.0310130006.211dbb00@posting.google.com...
> Driving down I-5 between SF and LA, I've seen many radio towers that
> rest on a single point.
>
> I don't know what they are transmitting.
>
> I do know that they look like regular towers from about ten feet up.
> From ten feet and higher, they have a diminishing square cross
> section. (May be triangular.)
>
> Instead of resting on four (or three) legs though, they rest on a
> single point, making the whole tower sort of a very elongated diamond
> shape.
>
> The whole tower is kept from tipping over through the use of guy
> wires.
>
> Why build an unstable tower? What are the advantages of this design?
>
> Thanks,
>
>
> Jerry

2447. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 04:08:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8b78dd_4@corp.newsgroups.com>
Source record: 106714

Tom Sedlack wrote:
> What kind of voltages and currents are present at the ends of dipoles
> assuming 100W of RF and the antenna being close to resonant?

Zero current. A voltage estimate would be V^2/600=100w, or V=245V RMS.
The net RMS voltage would be double that value so peak voltage might
be around 700 volts.
--
73, Cecil http://www.qsl.net/w5dxp

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2448. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 04:17:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8b7afc_4@corp.newsgroups.com>
Source record: 106715

Tarmo Tammaru wrote:
> Now for Cecil 1. ZL = 50 - j400. VF=1.62, VR=1.56, SWR=53, PF=1.33W,
> PR=1.24W.
>
> Now for Cecil 2. ZL=50-j400, BUT ZS= 0 + J400. VF=11.2, VR=10.9, SWR=73.7,
> PF=64W, PR=60.6W. I am at such a high impedance here, that I suspect the 10K
> sampling resistors are loading down the circuit somewhat. (I might try 100K
> instead).
>
> Note that there is absolutely nothing explicit in the circuit that has
> anything to do with transmission lines. All components are perfect; there
> are no stray inductances or stray capacitors.

Chipman alludes to such a "phenomenon of resonance" in Chapter 10,
"Resonant Transmission Line Circuits". For instance, at a conjugate match
point where 100+j100 is seen looking in one direction and 100-j100 is
seen looking in the opposite direction, there seems to be a *localized*
exchange of extra energy between +j100 and -j100 that can adversely affect
the value indicated by an SWR meter placed between those two values.
--
73, Cecil http://www.qsl.net/w5dxp

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2449. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 04:19:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8b7b59$1_4@corp.newsgroups.com>
Source record: 106716

Alexander Schewelew wrote:

>>Maximum current is in the feeding point,
>
> Not always.

Always for a center-fed 1/2WL dipole.
--
73, Cecil http://www.qsl.net/w5dxp

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2450. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 04:28:46 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bmgqer$m4r49$4@ID-189073.news.uni-berlin.de>
Source record: 106634

Saw Roger K8RI's post as well, but will try to answer as well.

Bay County has around 300 hams listed, Saginaw has almost 500 listed, and Midland has about 230-250 listed as hams living in those areas. The Midland Amateur Radio Club has about 80 members with about 20-30 actually active. The Bay Area Amateur Radio Club has about 35-50 club members and has about 20 or so that are active and the Saginaw Valley Amateur Radio Association has about 30 members with somewhere between 15-20 members active.

It's kinda funny though, with almost a thousand hams between 3 counties, I sure as hell do not hear much on the ham bands, both HF and VHF/UHF. One would think that they would hear a ton of radio usage but thats not the case.... I would say that maybe 10-20% of the total population around here is actually active on a regular basis. (that's probably true about alot of things though... :)

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...

"Howard" <mensch90249@yahoo.com> wrote in message
news:derjovgmspnimkfeolgv8rero563g1qkvu@4ax.com...
> On Fri, 10 Oct 2003 22:20:31 -0400, "Ryan, KC8PMX"
> <REMOVETHISkc8pmx@diamondcs.net> wrote:
>
> >Just found out today listening to a local, reputable radio station that
Bay,
> >Saginaw and Midland Counties in Michigan are going to be "test sites" for
> >BPL, at least for Michigan. I don't know when it will be an actual
reality,
> >as opposed to being in the planning stages, but will keep current with
their
> >project!
> >
> >
> >Ryan KC8PMX
> >Midland, Michigan
> >
> What the "ham density" like in the Tri-Cities these days? Moved away
> 27 years ago (Bay City/Essexville) and not having been a ham then I
> was out of touch with such things. I do know that it wasn't too high
> a population density overall - perhaps they are targeting low ham
> population areas in the testing so they can show a low interference

> complaint volume?
>
> I think Carl's on track in his post; the more credible the reports of
> interference the more likely they will be taken seriously.
>
> Howard

2451. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 06:22:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <von5hn85ndadd3@corp.supernews.com>
Source record: 106717

Goodness, are we talking about energy moving back and forth on a cycle-to-cycle basis? Instantaneous power? Are you saying boar hog tits do have a use after all -- in Texas, anyway?

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> Chipman alludes to such a "phenomenon of resonance" in Chapter 10,
> "Resonant Transmission Line Circuits". For instance, at a conjugate match
> point where 100+j100 is seen looking in one direction and 100-j100 is
> seen looking in the opposite direction, there seems to be a *localized*
> exchange of extra energy between +j100 and -j100 that can adversely affect
> the value indicated by an SWR meter placed between those two values.

2452. 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 07:06:48 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <cgNib.757812$YN5.731961@sccrnsc01>
Source record: 106718

Any suggestions?

Thanks,

Eric

2453. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 08:49:11 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <bMOib.758913$YN5.732692@sccrnsc01>
Source record: 106569

Yes, they exist. How's that?

"Eric" <nobody@nowhere.org> wrote in message
news:cgNib.757812$YN5.731961@sccrnsc01...
> Any suggestions?
>
> Thanks,
>
> Eric
>
>
>

2454. Re: BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:13:01 UTC
From: Bill <brianspam86@iquest.net>
Message-ID: <1TQib.2032$kx.1881@newsread2.news.atl.earthlink.net>
Source record: 106570

Take your lazy ass to the arrl website and look for yourself. ARRL has been doing a LOT of legwork on BPL.

or not.

"private" <private@private.com> wrote in message news:3F8ACF65.BFA8CE2D@private.com...
> Is BPL still only in a testing phase yet to be approved by
> the FCC for a full scale build?
>
> It would be nice if there was a website set up clearly explaining
> what BPL is, how to detect it, where it is and will be deployed,
> information and .pdf forms to fill out and mail in to complain
> to the right people in the right areas of the country.
>
> If I wasn't so lazy and more computer literate I'd do it myself.
> Sounds like its something the ARRL should be more active in
> doing.
>

2455. RIG FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:20:55 UTC
From: n2ion@aol.com
Message-ID: <20031014072055.15709.00000647@mb-m13.aol.com>
Source record: 106571

FOR SALE-ICOM IC-735
The Icom IC-735 covers all amateur frequencies from 1.8MHZ to 30MHz including 10MHZ,18MHZ,24MHZ +general coverage. It offers not only SSB but also CW,AM,and FM operating modes. All circuits in the IC-735 including the driver and final power stages are completely solid state and the transceiver provides full power output. Included is a hand mic, mounting bracket, & original box.
$325.00 firm, shipped in the continental U.S.A.

2456. Re: off-center dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:49:58 UTC
From: "Thomas C. Sefranek" <WA1RHP@ARRL.net>
Message-ID: <GpRib.2047$kx.1448@newsread2.news.atl.earthlink.net>
Source record: 106572

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20031013224237.07995.00000238@mb-m16.aol.com...
> Hi Group,
>
> In the process of fab'ing a off-center dipole. The short end is 40 feet
and
> the long end is 80 feet. At the feed point I have a 4:1 balun. The balun
I
> purchased new, I believe it has w2un on the side of it. I don't have it
here
> at the computer.
>
> The question is what side of the 4:1 should I feed the long end, or does
it
> matter?

Why do you believe you need a 4:1 balun?
(The fritzel Off-center feed dipole uses a 6:1)
Have you measured the feedpoint?
(It's so much better to work with facts rather than myth.)

As to your "side" question, what "side" does any transformer use?
>
> Paul
> KJ4UO

--
*
| __O Thomas C. Sefranek WA1RHP@ARRL.net
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

2457. Re: BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:53:26 UTC
From: w1rfi@aol.com
Message-ID: <20031014075326.09700.00000220@mb-m24.aol.com>
Source record: 106573

> It would be nice if there was a website set up clearly explaining
> what BPL is, how to detect it, where it is and will be deployed,
> information and .pdf forms to fill out and mail in to complain
> to the right people in the right areas of the country.

http://www.arrl.org/bpl

The only thing missing are the 'complaint forms.' It is possible to misidentify non-BPL signals as BPL, so ARRL wants to take a close look at each report, analyzing the signal in the frequency and time domain, for example, before reporting it as BPL. I have seen a number of misidentified signals, either conventional power line noises or other. One ham reported that he was hearing BPL signals 60 miles away, an impossbility at the power levels used and the size of the trial areas. (The largest of the trial areas is about 300 homes; most are less than 100 and some are as few as 10.)

If one is in the right area, it isn't hard to find, at least for the BPL systems that are radiating at the FCC "legal limit." The limit of 30 uV/m at 30 meters translates to S9+ signals several MHz wide.

I drove to Whitehall, PA, one of the trial areas using the Amperion BPL system. It took me a few hours of driving around, but I found the two 1/2-mile stretches of overhead power lines in the trial area that has extremely strong interference.

There are trials or early deployment in the following cities:
* indicates that ARRL has identified the streets/neighborhood involved).
** indicates that ARRL has visited the trial area
*** indicates that other hams have visited the trial area and submitted reports of interference to their mobile stations
**** indicates a report of interference to a home amateur station

Birmingham, AL
Atlanta, GA
Honolulu, HI*
Boise, ID*
Potomac, MD*, **,***,****
Cape Girardeau, MO*,***
Raleigh, NC*
Briarcliff Manor/Ossining, NY*,**,***
Bethlehem/Hanover, PA*,**,****
Emmaus, PA*,**,***
Whitehall, PA*,**
Manassas, VA*,**,***

It is reported that PG&E may be doing a small trial "in the bay area." A local Michigan radio station just ran a piece that the service should soon be available in parts of Michigan. Rumors about possible deployment in Florida have been bantered about.

If any hams live near the trial areas and can take an HF mobile station into the area, or suspect they may have BPL interference at home, contact me at w1rfi@arrl.org. I can provide more information and a map of the areas involved.

73,
Ed Hare, W1RFI
ARRL Lab

2458. Re: off-center dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:54:37 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <1uRib.770804$uu5.134211@sccrnsc04>
Source record: 106574

DOESN'T MATTER

PDRUNEN wrote:

> Hi Group,
>
> In the process of fab'ing a off-center dipole. The short end is 40 feet and
> the long end is 80 feet. At the feed point I have a 4:1 balun. The balun I
> purchased new, I believe it has w2un on the side of it. I don't have it here
> at the computer.
>
> The question is what side of the 4:1 should I feed the long end, or does it
> matter?
>
> Paul
> KJ4UO

2459. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:54:54 UTC
From: w1rfi@aol.com
Message-ID: <20031014075454.09700.00000221@mb-m24.aol.com>
Source record: 106576

>Exactly, must sent in complaints. Or the 'utilities' will say...."we got
>very few complaints"

Some of the trial areas have about 10 homes in them. The industry still says, with a straight face, we had no reports of interference, so this "proves" we won't interfere.

73,
Ed Hare, W1RFI

2460. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:55:24 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <MuRib.770815$uu5.132891@sccrnsc04>
Source record: 106575

About what??

Eric wrote:

> Any suggestions?
>
> Thanks,
>
> Eric
>
>
>

2461. Re: IMPORTANT POINTS FOR ALL - Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 11:58:42 UTC
From: w1rfi@aol.com
Message-ID: <20031014075842.09700.00000222@mb-m24.aol.com>
Source record: 106577

>Yes and no Carl.... if it makes it impossible to RECIEVE our local broadcast
>stations, I would think that the local broadcasters would be VERY interested
>to know that nobody is getting thier signal, except cable subscribers.

A number of hams have reported to the FCC that there was interference to the AM BC band in Emmaus, PA. In my last visit there, I tuned the AM band while parked in the trial area and heard no BPL interference whatsoever. From the looks of the comments, someone posted a "template" and urged hams to file it.

The BPL problem appears to be primarily one of HF and low VHF. There may be some harmonics into the TV channels, but those harmonics will be a LOT weaker than ours are, so we need to be careful of what we wish for.

73,
Ed Hare, W1RFI

2462. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:04:36 UTC
From: w1rfi@aol.com
Message-ID: <20031014080436.09700.00000223@mb-m24.aol.com>
Source record: 106578

>You raise an interesting question, Carl. How exactly should the
>average ham go about proving that the RFI is indeed BPL, when the BPL
>people say
>"That's not us!'??

In the case in Emmaus, the PPL rep told a reporter that Carl had misidentified a "neon sign" (in a residential neighborhood) as BPL. First, Carl is professionally adept with spread spectrum, so he knows what an SS signal sounds like. The signal was heard only in the trial area and when I was in Emmaus, I worked with a local in the trial area who downloaded files for me. When the download started, the noise started; when it stopped, the noise stopped.

What really proves it to be not a neon sign, however, is that the time-domain (oscilloscope) signature of the received signal does not have a pronounced 120-Hz signature. Had the PPL representative actually looked at the signal, he would have known that his "explanation" was pretty transparent.

I have extended by email a very cordial inviation for the PPL folks to attend a local club talk I gave; they did not respond. I then emailed a cordial invitation to work with them on interference issues; they did not respond. This boggles the mind, because if I were about to invest millions of dollars of my company's money and a national organization came to me and told me that there was a serious problem with the technology, and offered to drive over 200 miles just to show it to me, I think I would spend the hour or two and take a look.

73,
Ed Hare, W1RFI

2463. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:08:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmgovt$o8b$1@hercules.btinternet.com>
Source record: 106579

"Tom Sedlack" wrote > What kind of voltages and currents are present at the ends of dipoles
> assuming 100W of RF and the antenna being close to resonant?

A half-wave dipole is a resonant L & C tuned circuit.

Its lumped equivalent is a series L and C circuit across the feedpoint.

It has a Q value like any other resonant circuit.

As is usual, Q = Inductive reactance of wire divided by resistance.

In the case of a dipole the resistance is the radiation resistance at its centre, typically around 70 ohms.

Inductance gets smaller as wire diameter increases. So a 2-meter dipole with 1" diameter tubes has a lower Q (about 4) than a 160-meter dipole made with 18 gauge wire. (about 12). Q controls bandwidth.

A 40 meter dipole may have a Q around 9. If it is fed at its centre with 100 watts then the feeding voltage is 84 volts.

So the voltage difference between the ends of the dipole is Q times 84 = 756 volts.

Relative to ground, the voltage at one end of the dipole is half of this, equal to 378 volts.

This would burn a nice little hole at the tip of your right forefinger if you touched it. Electrical burns take a long time to heal because the surrounding flesh is electrocuted. Do not confuse this with 'skin effect'.

Reg, G4FGQ

2464. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:09:03 UTC
From: w1rfi@aol.com
Message-ID: <20031014080903.09700.00000224@mb-m24.aol.com>
Source record: 106630

> So to repeat, how does the average ham, whom you have exhorted to
>"make sure it's BPL that you're complaining about", go about detecting
>and sorting which is what, given that spectral analysis gear, and the
>training to use it if it was available, is virtually nonexistnt in the
>average hamshack? Is there a aural signature or more than one for the
>different BPL modes? Is the Emmaus test site video/audio clip
>reresentative enough to make the call, or is something more needed?

Carl had suggested that those that suspect they have BPL interference contact me. ARRL can help ask the right questions and analyze the pattern. Many hams do have the abiltity to use an oscilloscope and may be able to do some time-domain analysis themselves.

< I expect that if it was indeed BPL RFI it would follow the power grid
>pretty closely with signal strength highest when close, and tapering off
>with distance away from the lines. But from the one report posted here
>of a ham who said he heard it from a distance of 60 miles, seems like
>propagation will play into the picture-to be expected at HF as all
>experienced HF ham operators know. Or maybe *he* mis-identified it!

That is almost certain. At a few hundred homes and BPL power levels, it is not possible for a small number of signals to propagate by skywave at a level strong enough to be heard. When there are tens of thousands of simultaneous signals, that may be *just* possible, but not at all certain.

> So who do hams call for assistance, the ARRL? I haven't seen anything
>from them suggesting that.

I have just completed the draft of the letter that ARRL will send to hams in the trial cities, asking for reports and offering to help vet them before they are sent. It should go out this week.

73,
Ed Hare, W1RFI
ARRL Lab

2465. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:10:53 UTC
From: w1rfi@aol.com
Message-ID: <20031014081053.09700.00000225@mb-m24.aol.com>
Source record: 106631

>The Emmaus test site video (test area #3) should be pretty representative
>of the "main.net" system ... test area #4 is the Amperion OFDM system.
>There could be others that might have different "signatures" ...

Just as a mnor correction, test area #4, in Briarcliff Manor, NY, is an Ambient system. The Amperion system is also OFDM and has a very similar sound. I found it easily in Whitehall, PA, once I drove into the test area.

73,
Ed Hare, W1RFI

2466. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:15:29 UTC
From: w1rfi@aol.com
Message-ID: <20031014081529.09700.00000226@mb-m24.aol.com>
Source record: 106632

>> It isn't Dick ... it's open to the world.

>Apparently my "nevermind" is taking a while to propagate :)

They always do.

The ARRL is doing some pretty important work on this one. What would the League have to do to get you as a member?

73,
Ed Hare, W1RFI

2467. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:25:42 UTC
From: Rich <rk911@ANTISPAM.yahoo.com>
Message-ID: <dpqnovsem24hl46ua69h5afp8bi90k5ph9@4ax.com>
Source record: 106633

On Tue, 14 Oct 2003 07:06:48 GMT, "Eric" <nobody@nowhere.org> wrote:

>Any suggestions?
>
>Thanks,
>
>Eric
>
>
a more complete, well thought out question would be my suggestion.

rich

2468. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 12:45:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmgr4g$2fl$1@titan.btinternet.com>
Source record: 106635

Cec, I'm not altogether happy about the current coming to a sudden stop at the ends of a dipole.

What's that stuff which clearly flows between the plates of a wide-spaced capacitor?

2469. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 13:00:30 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmgs1essn4@208.206.142.105>
Source record: 106636
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Roger Halstead wrote:
> On Sun, 12 Oct 2003 23:27:27 -0400, a 32 bit process
> <replytogroup@hotmail.com> wrote:
>
>
>>On Sun, 12 Oct 2003 16:56:50 GMT, "James Wilson"
>><Someone@Microsoft.Com> wrote:
>>
>>
>>>What does BPL sound like? Can someone post a wav file somewhere so it can
>>>be identified? Is it worse that the Pennsylvania QSO party?
>>
>>It almost sounds like a geiger counter, but a lot louder and the
>>clicking is quicker in pace.
>
>
> After having gone to the ARRL site and listened to the examples, all I
> can say is it sounds just like precipitation static and/or loose
> connections. No way would I be able to identify one from the other.
> I'm just going to have to complain every time I hear noise and make
> recordings. If it's noisy enough to be a problem it should be fixed.
>

Proximity to the power grid would be the main clincher, IMO, but what
about skywave propagation? That stuff could go around the world at QRP
evels!

> BTW, most of the links failed and instead I ended up hijacked to QSL
> dot net. (they call it redirecting, but if I didn't select to go
> there, I don't want to go there...I'll settle for the 404 screen
> instead of giving some one advertizing points.)
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
>

2470. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 13:21:53 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmgt9h$2su$0@208.206.142.105>
Source record: 106637

W1RFI wrote:.
>
> I have just completed the draft of the letter that ARRL will send to hams in
> the trial cities, asking for reports and offering to help vet them before they
> are sent. It should go out this week.
>
>

Ed, is there a URL where we can view the location of all the test sites
now in use? How about future planned test sites?

Dick

2471. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 13:24:17 UTC
From: richardharrison@webtv.net
Message-ID: <9989-3F8BF901-582@storefull-2312.public.lawson.webtv.net>
Source record: 106638

Cecil, W5DXP wrote:
"For instance, at a conjugate match point where 100+j100 is seen looking in one direction and 100-j100 is seen looking in the opposite direction, there seems to be a "localized" exchange between +j100 and -j100 that can adversely affect the value indicated by an SWR meter placed between these values."

If we have a resonant LC circuit, there is only resistance to limit current. If the resonant circuit is a series combination, we can place a certain voltage of the resonant frequency across the series combination. Voltage across either L or C can be much larger than the applied voltage as the reactive Z`s are equal and opposite. This leaves the applied voltage equal to (I)(R).

Some day I hope to see Chipman`s analysis. Transmission lines have distributed inductance and capacitance. A "conjugate match point" seems an oxymoron to me. A conjugately matched circuit demonstrates this condition no matter where it is sliced to look in both directions.

A resonant length of transmission line with reflections will have more loss than a similar matched line simply because the msatched line has no opportunity to lose some of the reflected energy.

Seems to me, we correct power factor at a load to eliminate reactive current in the power line. We are resonating the load and eliminating a reflection from the load.

If loss from reflected power is trivial, we don`t need to worry with matching at the load and can match at the sending end of the line to get the power we need.

Best regards, Richard Harrison, KB5WZI

2472. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 13:42:41 UTC
From: KeyBoard In The Wilderness <Keyboard73@zilcha.com>
Message-ID: <l3Tib.63647$vj2.52984@fed1read06>
Source record: 106639

Guess you are looking for a 102" CB whip antenna
Radio Shack used to carry the stainless steel ones

AND here is a fiberglass one by Shakespeare for $9.00
http://www.valcoelectronics.com/cbantenna/whips.htm
Scroll to bottom of page

--
73 From TKBITW

"Eric" <nobody@nowhere.org> wrote in message
news:cgNib.757812$YN5.731961@sccrnsc01...
> Any suggestions?
>
> Thanks,
>
> Eric
>
>
>

2473. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 13:52:32 UTC
From: fractenna@aol.com
Message-ID: <20031014095232.12553.00000144@mb-m23.aol.com>
Source record: 106640

>> So who do hams call for assistance, the ARRL? I haven't seen anything
>>from them suggesting that.
>
>I have just completed the draft of the letter that ARRL will send to hams in
>the trial cities, asking for reports and offering to help vet them before
>they
>are sent. It should go out this week.
>
>73,
>Ed Hare, W1RFI
>ARRL Lab
>
>

If there are RFI complaints, kindly correct me if I am wrong, but I seem to recall that the FCC has the purview on such matters, not a non-profit organization.

Ed, is there some reason why radio amateurs cannot document their complaints, if they exist, to the FCC directly? Why is it preferable to go through a non profit organization? Is there some additional technical capacity which the radio amateur requires in order to make an RFI complaint? If so, could you kindly let us know what that is and how it is accessed?

Many thanks.

73,
Chip N1IR

2474. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:03:08 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmgvms$9uo$0@208.206.142.105>
Source record: 106641

W1RFI wrote:

>>You raise an interesting question, Carl. How exactly should the
>>average ham go about proving that the RFI is indeed BPL, when the BPL
>>people say
>>"That's not us!'??
>
>
> In the case in Emmaus, the PPL rep told a reporter that Carl had misidentified
> a "neon sign" (in a residential neighborhood) as BPL. First, Carl is
> professionally adept with spread spectrum, so he knows what an SS signal sounds
> like. The signal was heard only in the trial area and when I was in Emmaus, I
> worked with a local in the trial area who downloaded files for me. When the
> download started, the noise started; when it stopped, the noise stopped.
>
> What really proves it to be not a neon sign, however, is that the time-domain
> (oscilloscope) signature of the received signal does not have a pronounced
> 120-Hz signature. Had the PPL representative actually looked at the signal, he
> would have known that his "explanation" was pretty transparent.
>
> I have extended by email a very cordial inviation for the PPL folks to attend a
> local club talk I gave; they did not respond. I then emailed a cordial
> invitation to work with them on interference issues; they did not respond. This
> boggles the mind, because if I were about to invest millions of dollars of my
> company's money and a national organization came to me and told me that there
> was a serious problem with the technology, and offered to drive over 200 miles
> just to show it to me, I think I would spend the hour or two and take a look.
>

It's beyond obvious that the BPL people are adamantly intent on
stonewealling and bypassing ham radio and anything else that tries to
get in the way.
They're aware that many of the impacted spectrum users are so widely
scattered that much of the interference caused by BPL even when it
becomes widely implemented they won't be noticed due to their limited
exposure caused by lack of adequately close proximity.

Hams, which *are* pretty well scattered throughout the population,
should be ignored and their complaints deflected by such incorrect
assertions as the above "neon sign" explanation. Make it so that there
is so much question as to hams' competance to make such a call they can
be portrayed to be wrong, whatever the facts. It's obvious obfuscation
and an end-run around us, and whatever other protesters weigh in that
can be similarily deflected. They hope that the "serious" users of that
part of the spectrum will prove to be so few and widely scattered that

their protests will be few and managable.

And once BPL installations are widespread, they know it would demand a clearly demonstrated, very serious interference problem to csuse its abandonment, and they don't think that will happen. They maybe right. If so many users sign on that the sheer numbers of BPL users overwhelm all the protests of spectrum pollution and damage to communications sheer numbers and politics will prevail in their favor, they believe. All they really need to do is get it approved and "out there" in large amounts in most populated areas, then the situation will take care of itself, they think.

If allowed to proceed, BPL will forever change usability of the HF and Low VHF part of the spectrum.

2475. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:09:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8c05ae_7@corp.newsgroups.com>
Source record: 106642

Roy Lewallen wrote:
> Goodness, are we talking about energy moving back and forth on a
> cycle-to-cycle basis?

We are talking about a localized energy exchange between an
inductive reactance and a capacitive reactance during a cycle -
that third term in your energy equation - and the possible effects
on an averaging RMS wattmeter.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2476. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:22:39 UTC
From: richardharrison@webtv.net
Message-ID: <15995-3F8C06AF-541@storefull-2318.public.lawson.webtv.net>
Source record: 106645

Reg, G4FGQ wrote:
"What`s that stuff which clearly flows between the plates of a wide-spaced capacitor?"

It is displacement current as Reg and Cecil know very well. J.C. Maxewell speculated long ago that displacement current is surrounded by magnetic flux, same as conducting current is. That was the key to electromagnetic radiation which explains how the radiated fields replenish each other where there is no matter.

As there is displacement current between the tips of a horizontal dipole and the earth, and the voltage vector is vertical in this voltage stress, radiation from this source is vertically polarized. The main (high intensity) radiation from a horizontal dipole is horizontally polarized, especially so when the dipole is far from earth.

Best regards, Richard Harrison, KB5WZI

2477. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:24:57 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8c0957_7@corp.newsgroups.com>
Source record: 106644

Reg Edwards wrote:
> Cec, I'm not altogether happy about the current coming to a sudden stop at
> the ends of a dipole.

It doesn't come to a sudden stop, Reg. It is reflected out of phase such that the forward current vectorially added to the reflected current equals zero, i.e. the net current is zero at the ends of the antenna. If appreciable current flowed through the air, it would first have to ionize the air causing an arc.

The reflected current from the ends of the dipole is what gives that standing-wave dipole its low feedpoint impedance. If it weren't for the reflected current from the ends of the dipole, the feedpoint impedance would be in the hundreds of ohms and it would be a traveling-wave antenna.

> What's that stuff which clearly flows between the plates of a wide-spaced
> capacitor?

If current is clearly flowing between the plates, it is called an arc. Appreciable current doesn't usually flow across the air gap between the plates. Current flows in the rest of the circuit while charges are stored on the capacitor plates. Current flowing directly between the plates means that the air has been ionized and the cap is breaking down. I have one of those in the horizontal drive section of my TV.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2478. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:29:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8c0a53_7@corp.newsgroups.com>
Source record: 106646

Richard Harrison wrote:
> Some day I hope to see Chipman`s analysis.

I just bought the book on half.com.

> Transmission lines have
> distributed inductance and capacitance. A "conjugate match point" seems
> an oxymoron to me. A conjugately matched circuit demonstrates this
> condition no matter where it is sliced to look in both directions.

Nope, it doesn't, Richard. A flat system is conjugately matched, i.e.
you see 50 + j0 in one direction and 50 - j0 in the other direction.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2479. FS: Hard to find Bristol Wrench sets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:30:43 UTC
From: jonweiner@aol.com
Message-ID: <20031014103043.19515.00000251@mb-m07.aol.com>
Source record: 106643

COMPLETE 10 PIECE SET OF RARE AND HARD TO FIND BRISTOL SPLINE WRENCHES - PERFECT FOR THOSE HARD TO REMOVE COLLINS AND HALLICRAFTERS KNOBS - COMPLETE WITH VINYL CARRYING POUCH

Kit contains 6 flute wrenches in major inch diameters .060, .072, .096, .111, .133, .145, .168, & .183, and 4 flute wrenches in .069, & .076. Includes all sizes necessary for radio repair, including the special size used on the Collins 4:1 vernier knobs. Don't risk those valuable knobs, use the correct tool for knob removal. Price is $18. per set. Buyer to add $2. shipping (USA), $3. foreign.

2480. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 14:36:27 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310140636.7dbcfb1c@posting.google.com>
Source record: 106647

Serge
It is nice to read what other people have to say but it
should never overide your own inclinations to the point
that you stop experimenting
Patterns are very informative but ground losses and efficiency
are just as important factors, as Cecil's page shows with
his overlapping patterns of a dipole over a vertical.
Using the program that you have (AO) you can verify these
things for yourself.
I use the same program and it allowed me to create a rotatable
dipole for the top band so that I was not encombered by ground
losses. True the low dipoles tend to bea cloud warmer, but
because of its higher efficiency it can equal the best of
verticals as Cecil's page shows. After all we are only
interested in a very small portion of the energy that we
radiate and that is the portion used for communication, if the rest
that is not used is used for cloud warming then so be it
You have the best program around, go with your instincts
with respect to ground losses but be sure that you have
enough pulses available for acceptable confirmation.
Enjoy the experimenting
Regards
Art

Roy Lewallen <w7el@eznec.com> wrote in message news:<vommtp653g0q51@corp.supernews.com>...
> That question has been answered several times in this newsgroup. For one
> of the most recent answers, go to groups.google.com and find my posting
> on July 21, 2003 in the thread "Re: efficiency of horizontal vs vertical
> antennas".
>
> Roy Lewallen, W7EL
>
> Serge Stroobandt, ON4BAA wrote:
> >
> > This conversation is starting to get interesting :-)
> >
> > INVERTED GROUNDPLANES:
> > What about using an inverted 1/4wave groundplane in order to avoid ground
> > losses?
> > Then you have the high impedance point of the antenna close to the lossy
> > (low impedance) earth.
> > Due to the severe mismatch less power will couple into the earth.
> >
> > The low impedance point (feed point) of the antenna is safely high up in the

> > (high impedance) air then.
> >
> >

2481. Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:04:41 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <ln3oovsg7hnpilh0gvhq27l48o4ct4jom1@4ax.com>
Source record: 106648

Hams are not the only users of the affected spectrum. They may be the most vocal, but perhaps the easiest to discredit or deflect.

What about the other users of the HF-thru-VHF spectrum? Police, Fire, EMS, Federal Government, Business, Utilities (the power companies themselves), Military, Aviation, etc., etc.?

Do they not have consultants who are in touch with industry affairs?

Does APCO (and other industry communications associations) not have knowledge about BPL and a position on it?

What is the ARRL doing to join forces with other affected spectrum users, perhaps forming a task force to promote common interests? Lobbying senators and congressmen, the Commission, NTIA, etc.?

If the utilities' strategy is to divide and conquer, it appears they are being very effective.

73
Dan (K0DAN)

On 14 Oct 2003 14:03:08 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com> wrote:

>W1RFI wrote:
>
>>>You raise an interesting question, Carl. How exactly should the
>>>average ham go about proving that the RFI is indeed BPL, when the BPL
>>>people say
>>>"That's not us!'??
>>
>>
>> In the case in Emmaus, the PPL rep told a reporter that Carl had misidentified
>> a "neon sign" (in a residential neighborhood) as BPL. First, Carl is
>> professionally adept with spread spectrum, so he knows what an SS signal sounds
>> like. The signal was heard only in the trial area and when I was in Emmaus, I
>> worked with a local in the trial area who downloaded files for me. When the
>> download started, the noise started; when it stopped, the noise stopped.
>>
>> What really proves it to be not a neon sign, however, is that the time-domain
>> (oscilloscope) signature of the received signal does not have a pronounced
>> 120-Hz signature. Had the PPL representative actually looked at the signal, he
>> would have known that his "explanation" was pretty transparent.
>>
>> I have extended by email a very cordial inviation for the PPL folks to attend a
>> local club talk I gave; they did not respond. I then emailed a cordial

>> invitation to work with them on interference issues; they did not respond. This
>> boggles the mind, because if I were about to invest millions of dollars of my
>> company's money and a national organization came to me and told me that there
>> was a serious problem with the technology, and offered to drive over 200 miles
>> just to show it to me, I think I would spend the hour or two and take a look.
>>
>
>
> It's beyond obvious that the BPL people are adamantly intent on
>stonewealling and bypassing ham radio and anything else that tries to
>get in the way.
> They're aware that many of the impacted spectrum users are so widely
>scattered that much of the interference caused by BPL even when it
>becomes widely implemented they won't be noticed due to their limited
>exposure caused by lack of adequately close proximity.
>
> Hams, which *are* pretty well scattered throughout the population,
>should be ignored and their complaints deflected by such incorrect
>assertions as the above "neon sign" explanation. Make it so that there
>is so much question as to hams' competance to make such a call they can
>be portrayed to be wrong, whatever the facts. It's obvious obfuscation
>and an end-run around us, and whatever other protesters weigh in that
>can be similarily deflected. They hope that the "serious" users of that
>part of the spectrum will prove to be so few and widely scattered that
>their protests will be few and managable.
>
> And once BPL installations are widespread, they know it would demand
>a clearly demonstrated, very serious interference problem to csuse its
>abandonment, and they don't think that will happen. They maybe right.
>If so many users sign on that the sheer numbers of BPL users overwhelm
>all the protests of spectrum pollution and damage to communications
>sheer numbers and politics will prevail in their favor, they believe.
>All they really need to do is get it approved and "out there" in large
>amounts in most populated areas, then the situation will take care of
>itself, they think.
>
> If allowed to proceed, BPL will forever change usability of the HF and
>Low VHF part of the spectrum.

2482. Re: DK3 screwdriver antenna and artificial ground

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:05:23 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <vq3oov0eiahjs986lpk2jj74n6smornh0u@4ax.com>
Source record: 106713

On Sun, 12 Oct 2003 22:49:35 -0400, Pierre <pierred1@sympatico.ca>
wrote:

>Hi to all.
>
>I choose to install a DK3 screwdriver on a second floor balcony. No
>good grounding is possible fo the base of the antenna. So I decided to
>use the MFJ-931 artificial ground as a substitute. My question is
>this.. Would it be equivalent to a RF ground to connect the MFJ right
>at the ground post of the transceiver (Icom 706) and to disconnect the
>coax shield from the base of the antenna?
>
>Or, more generally, what is the best way to use an artificial ground
>with an antenna like that one, when a proper metallic ground is not
>available?
>
>Thanks de Pierre

I used to run a similar set-up from a 3rd floor apartment. Just attach
a 1/4 wave radial (for each band) to the ground side of your antenna.
Run the radial(s) out, across your floor. Or hang them from your
balcony.

Forget the artificial ground. You don't really need it.

You'll have a considerable amount of RF indoors, but that's about what
you get with this kind of set-up.

Bob
k5qwg

2483. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:13:43 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <snUib.10717$lk1.3792@bignews3.bellsouth.net>
Source record: 106649

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bmgovt$o8b$1@hercules.btinternet.com...
> "Tom Sedlack" wrote > What kind of voltages and currents are present at
the
> ends of dipoles
> > assuming 100W of RF and the antenna being close to resonant?
>
> ---
>
> A half-wave dipole is a resonant L & C tuned circuit.
>
> Its lumped equivalent is a series L and C circuit across the feedpoint.
>
> It has a Q value like any other resonant circuit.
>
> As is usual, Q = Inductive reactance of wire divided by resistance.
>
> In the case of a dipole the resistance is the radiation resistance at its
> centre, typically around 70 ohms.
>
> Inductance gets smaller as wire diameter increases. So a 2-meter dipole
> with 1" diameter tubes has a lower Q (about 4) than a 160-meter dipole
made
> with 18 gauge wire. (about 12). Q controls bandwidth.
>
> A 40 meter dipole may have a Q around 9. If it is fed at its centre with
> 100 watts then the feeding voltage is 84 volts.
>
> So the voltage difference between the ends of the dipole is Q times 84 =
756
> volts.
>
> Relative to ground, the voltage at one end of the dipole is half of this,
> equal to 378 volts.
>
> This would burn a nice little hole at the tip of your right forefinger if
> you touched it. Electrical burns take a long time to heal because the
> surrounding flesh is electrocuted. Do not confuse this with 'skin
effect'.
> ----
> Reg, G4FGQ

.....and besides, it SMARTS!!!!!!!!!

Jwerry
K4KWH
>
>
>
>
>
>
>
>
>
>
>
>

2484. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:15:58 UTC
From: fantbb@yahoo.com
Message-ID: <c2a65514.0310140715.501d1112@posting.google.com>
Source record: 106650

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f8b78dd_4@corp.newsgroups.com>...

> Zero current. A voltage estimate would be V^2/600=100w, or V=245V RMS.
> The net RMS voltage would be double that value so peak voltage might
> be around 700 volts.

> V^2/600=100w

Where did the value of V and 600 come from in this formula?

I'd like to be able to calculate the voltages also for let's say my 5 watt QRP rig.

73!

Jeff

2485. Plans for B&W BWD-65 & BWD-90 Folded Dipole Balun & Terminating Resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:19:59 UTC
From: Dave <Dave@coldborst.org>
Message-ID: <qj4oovk36fgkg0desoe35iahtetpha889o@4ax.com>
Source record: 106651

I'd like to build a replica of the B&W 65 or 90 folded dipole antenna.

I know that there are a lot of arguments against this type of antenna
but for the convienience, I would like to have one anyway.

$220 - $250 seems a bit steep to buy one.

I have read L.B. Cebik's article on Terminated Wideband Dipoles,
http://www.cebik.com/wbfd.html but have been unable to find a source
for the 800-900 ohm resistor or plans for a suitable 16:1 balun.

The only resistors of that value and wattage I have found are
wirewounds which I assume are not suitable because they are inductive.

For an antenna to handle legal limit 1500 watts is it necessary for
the terminating resistor to be 1500 watts? It seems to me that you
would hope that the majority of the power would be dissappated by the
wire and not the resistor.

Does anyone know where I can find a plan for the balun (or a resonably
priced commercially made one)? How about the resistor?

Thanks,

Dave

2486. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:29:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rb5oov4jhc4m5maai6g1c73uubd7t0qgkp@4ax.com>
Source record: 106652

On Tue, 14 Oct 2003 09:09:20 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>on an averaging RMS wattmeter.

Hi Cecil,

An average, by definition, cannot resolve a difference. Pointing out such disconnects comes of your trying to force fit all problems to the answer found on one xeroxed page.

This, also and again, shows to go you that introducing new variables into an old issue you cannot resolve in the first place does little for the new or the old.

73's
Richard Clark, KB7QHC

2487. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 15:31:55 UTC
From: Mike Luther <mike.luther@ziplog.com>
Message-ID: <voo5lcd7edum5f@corp.supernews.com>
Source record: 106653
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Precisely ..

Dick Carroll wrote:

>
>
> Proximity to the power grid would be the main clincher, IMO, but what
> about skywave propagation? That stuff could go around the world at QRP
> evels!
>
And it will. You can even work VK6 from W5 on 40CW with one watt. If
it radiates, it also radiates skywave. Which mnakes this issue one for
WARC as well, bigtime.

--

--> Sleep well; OS2's still awake! ;)

Mike Luther

2488. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 16:06:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0g6oovsg71fc67j96c6n9c172mgcal74j7@4ax.com>
Source record: 106654

On 14 Oct 2003 08:15:58 -0700, fantbb@yahoo.com (Jeffdeham) wrote:

>Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f8b78dd_4@corp.newsgroups.com>...
>
>> Zero current. A voltage estimate would be V^2/600=100w, or V=245V RMS.
>> The net RMS voltage would be double that value so peak voltage might
>> be around 700 volts.
>
>> V^2/600=100w
>
>Where did the value of V and 600 come from in this formula?
>
>I'd like to be able to calculate the voltages also for let's say my 5 watt QRP rig.
>
>73!
>
>Jeff

Hi Jeff,

Reg already explained it. You know the applied voltage to a tuned circuit whose (presumed for this discussion) opposite leads are at the far end. You know the characteristic Z and the radiative loss R. You can guesstimate the Q of this circuit as the multiplier. If you reach out and touch that element's end (or bring it suitably close to a conductor or other lossy element) you would necessarily depress that same Q - by being the load. -Zap!- as the comix used to say. So for your 5W you can expect that as your hand approaches the tip (how'd you get up there anyway?) both your body and the proximity of everything around you (like a ladder, or simply the ground you stand on) has done far more to depress that same calculated Q to diminish the multiplying effect, but not without some prospect of surprise. Many shock injuries come from that alone (falling off the ladder is what kills you, not the 50V 5mA buzz that rattled your nerves).

When I was in the Navy, we had all sorts of exposed radiators around the ship. Common lore (certainly untested by me) was that if you found yourself holding one when transmission was begun, to not let go because you would draw an arc where formerly the voltage was depressed by your contact. Now, as to how you could distinguish when the QSO started or ended to time your unfortunate hand-hold was never offered; and so I was loath to test this lore. Further, no one asked about why you would stand there holding it while simmering. I generally carried an NE-2 neon bulb with me when I went aloft so that I had at least

some method to detect hot surfaces (and scramble back down to find out what jerk had thrown a tagged breaker).

73's
Richard Clark, KB7QHC

2489. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 16:11:44 UTC
From: jder8745@aol.com
Message-ID: <20031014121144.16270.00000807@mb-m19.aol.com>
Source record: 106655

That's why you gotta have a GOOD insulator at the end of a wire antenna.

K9CUN

2490. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 16:15:15 UTC
From: jder8745@aol.com
Message-ID: <20031014121515.16270.00000808@mb-m19.aol.com>
Source record: 106656

Whoa! There's gotta be some resistance in there somewhere!

73 de Jack, K9CUN

2491. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 16:37:14 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <_CVib.2878$kx.2822@newsread2.news.atl.earthlink.net>
Source record: 106657
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmgs1essn4@208.206.142.105...
> Roger Halstead wrote:
> > On Sun, 12 Oct 2003 23:27:27 -0400, a 32 bit process
> > <replytogroup@hotmail.com> wrote:
> >
> >
> > >On Sun, 12 Oct 2003 16:56:50 GMT, "James Wilson"
> > ><Someone@Microsoft.Com> wrote:
> > >>
> > >>
> > >>>What does BPL sound like? Can someone post a wav file somewhere so it
can
> > >>>be identified? Is it worse that the Pennsylvania QSO party?
> > >>
> > >>It almost sounds like a geiger counter, but a lot louder and the
> > >>clicking is quicker in pace.
> > >
> > >
> > > After having gone to the ARRL site and listened to the examples, all I
> > > can say is it sounds just like precipitation static and/or loose
> > > connections. No way would I be able to identify one from the other.
> > > I'm just going to have to complain every time I hear noise and make
> > > recordings. If it's noisy enough to be a problem it should be fixed.
> > >
> >
> >
> > Proximity to the power grid would be the main clincher, IMO, but what
> > about skywave propagation? That stuff could go around the world at QRP
> > evels!
> >
> >
> >
> >
> >
> > > BTW, most of the links failed and instead I ended up hijacked to QSL
> > > dot net. (they call it redirecting, but if I didn't select to go
> > > there, I don't want to go there...I'll settle for the 404 screen
> > > instead of giving some one advertizing points.)
> > >
> > > Roger Halstead (K8RI EN73 & ARRL Life Member)
> > > www.rogerhalstead.com
> > > N833R World's oldest Debonair? (S# CD-2)

> >
>
>

Yep.....I've worked QRPp stations using miliwatts of output.

Can you imagine this garbage being generated and then propagated worldwide.
My Gawd !!!!

Dan/W4NTI

2492. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 17:41:08 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <HB6dnc63XeO5qBGiU-KYvw@comcast.com>
Source record: 106658

> Some of the trial areas have about 10 homes in them. The industry still
says,
> with a straight face, we had no reports of interference, so this "proves"
we
> won't interfere.
>
> 73,
> Ed Hare, W1RFI

If I was a suspicious fellow, I might thing they were putting callbook data through it's paces, and selecting areas based on low ham count.

2493. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 17:55:21 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <k1idnfFsKLzkpRGiU-KYhQ@comcast.com>
Source record: 106660

"W1RFI" <w1rfi@aol.com> wrote in message
news:20031014081529.09700.00000226@mb-m24.aol.com...
> >> It isn't Dick ... it's open to the world.
>
> >Apparently my "nevermind" is taking a while to propagate :)
>
> They always do.
>
> The ARRL is doing some pretty important work on this one. What would the
League
> have to do to get you as a member?

Well.. I've been rather turned off by the "luddite"s in my local area.
Until recently, our league section person was the head of the VEC group
locally, an she refused to allow farnsworth testing for CW. There was no
web presence, no response to emails. You'd have to be there.. The general
thread was "if you're not an HF contester or rag chewer, hang up now". We
have a new section person, but it dosen't seem anything's changing.

The ARRL bandplan for 902, is pretty much unusable, since the vast majority
of commercial gear that can be used in this band, won't work with the 12 MHz
split.

I do see that the ARRL is going to be very important on this issue, and I'm
available to make observations within any reasonable driving distance of my
QTH. (Muncie Indiana)

Wether I'm a member or not shouldn't affect the validity of my data.

I've got an FT-847 that I can take mobile, and also Tek 7L12 spectrum
analyzer for direct measurements. This is an older swept analog, rather
than a new DSP analyzer. The DSP based systems are not so good at finding
pulsed noise. Sometime I'll relate the story of how an IC-R8500
dramatically out performed the latest and greatest HP EMI analysis suite in
finding an EMI problem.

I am interested to know how you're calibrating your mobile to get uV/Meter
measurements.

2494. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 17:56:19 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <n_2dnZMKyZ0ppRGiU-KYvA@comcast.com>
Source record: 106661

"Eric" <nobody@nowhere.org> wrote in message
news:cgNib.757812$YN5.731961@sccrnsc01...
> Any suggestions?

Don't drive under short overhangs.

2495. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:10:59 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net>
Source record: 106662

The message is titled 102" mobile antenna. It should ring a bell about being a MOBILE. That should ring another bell that makes you think it's for a vehicle.
Suggestions were expected from people who have had experience with these, or can say something about these type of antenna.

Is it that hard to understand?

But ok, I'll explain a little further.
I'm installing a cb radio in my jeep, and I will be in very remote areas, therefore I considered the full quarter length whip.

Any suggestions on what antenna to get?

Thank you,

Eric

"CW" <clinton.magers@comcast.net> wrote in message
news:bMOib.758913$YN5.732692@sccrnsc01...
> Yes, they exist. How's that?
>
>
> "Eric" <nobody@nowhere.org> wrote in message
> news:cgNib.757812$YN5.731961@sccrnsc01...
> > Any suggestions?
> >
> > Thanks,
> >
> > Eric
> >
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2496. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:11:28 UTC
From: richardharrison@webtv.net
Message-ID: <25243-3F8C3C50-526@storefull-2311.public.lawson.webtv.net>
Source record: 106666

Cecil, W5DXP wrote:
"A flat system is conjugately matched, i.e. you see 50+j0 in one direction and 50-j0 in the other direction."

Let`s simplify Cecil`s example. 50+j0 and 50-j0 can both be expressed as 50 ohms resistive. In other words they are the same.

A matched 50-ohm transmission line under maximum power transfer conditions also has a 50-ohm source.

Conjugate matching is equivalent to maximum power transfer.

I agree with Cecil that: "A flat system is conjugately matched, i.e. you see 50+j0 in one direction and 50-j0 in the other direction."

No matter where you slice the transmission line you see 50 ohms resistive (volts and amps are in-phase) looking in either direction. Nothing amiss except the word "conjugate" is superfluous in the special case where the system is free from reactance.

Best regards, Richard Harrison, KB5WZI

2497. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:12:18 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <60Xib.281975$mp.220104@rwcrnsc51.ops.asp.att.net>
Source record: 106663

Is a fiber glass one better or worse than a stainless steel one?

Thanks

Eric

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:l3Tib.63647$vj2.52984@fed1read06...
> Guess you are looking for a 102" CB whip antenna
> Radio Shack used to carry the stainless steel ones
>
> AND here is a fiberglass one by Shakespeare for $9.00
> http://www.valcoelectronics.com/cbantenna/whips.htm
> Scroll to bottom of page
>
> --
> 73 From TKBITW
> ------------------------------
> "Eric" <nobody@nowhere.org> wrote in message
> news:cgNib.757812$YN5.731961@sccrnsc01...
> > Any suggestions?
> >
> > Thanks,
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> > Eric
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2498. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:13:39 UTC
From: KeyBoard In The Wilderness <Keyboard73@zilcha.com>
Message-ID: <n1Xib.64251$vj2.39772@fed1read06>
Source record: 106664

I thought that was what you were after and sent this reply

Guess you are looking for a 102" CB whip antenna
Radio Shack used to carry the stainless steel ones

AND here is a fiberglass one by Shakespeare for $9.00
http://www.valcoelectronics.com/cbantenna/whips.htm
Scroll to bottom of page

--
73 From Keyboard
"Eric" <nobody@nowhere.org> wrote in message
news:T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net...
> The message is titled 102" mobile antenna. It should ring a bell about
being
> a MOBILE. That should ring another bell that makes you think it's for a
> vehicle.
> Suggestions were expected from people who have had experience with these,
or
> can say something about these type of antenna.
>
> Is it that hard to understand?
>
> But ok, I'll explain a little further.
> I'm installing a cb radio in my jeep, and I will be in very remote areas,
> therefore I considered the full quarter length whip.
>
> Any suggestions on what antenna to get?
>
> Thank you,
>
> Eric
>
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>
> "CW" <clinton.magers@comcast.net> wrote in message
> news:bMOib.758913$YN5.732692@sccrnsc01...
> > Yes, they exist. How's that?
> >
> >
> > "Eric" <nobody@nowhere.org> wrote in message
> > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > Any suggestions?
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> > > Thanks,
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> > > Eric
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2499. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:19:57 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <c7Xib.558611$Oz4.511329@rwcrnsc54>
Source record: 106665

I'll probably go for the steel one. I'm trying to decide if a telescopic one
is a good idea or not.

Thanks

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:n1Xib.64251$vj2.39772@fed1read06...
> I thought that was what you were after and sent this reply
>
> Guess you are looking for a 102" CB whip antenna
> Radio Shack used to carry the stainless steel ones
>
> AND here is a fiberglass one by Shakespeare for $9.00
> http://www.valcoelectronics.com/cbantenna/whips.htm
> Scroll to bottom of page
>
>
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> --
> 73 From Keyboard
> "Eric" <nobody@nowhere.org> wrote in message
> news:T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net...
> > The message is titled 102" mobile antenna. It should ring a bell about
> being
> > a MOBILE. That should ring another bell that makes you think it's for a
> > vehicle.
> > Suggestions were expected from people who have had experience with
these,
> or
> > can say something about these type of antenna.
> >
> > Is it that hard to understand?
> >
> > But ok, I'll explain a little further.
> > I'm installing a cb radio in my jeep, and I will be in very remote
areas,
> > therefore I considered the full quarter length whip.
> >
> > Any suggestions on what antenna to get?
> >
> > Thank you,
> >
> > Eric
> >
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> >
> > "CW" <clinton.magers@comcast.net> wrote in message
> > news:bMOib.758913$YN5.732692@sccrnsc01...
> > > Yes, they exist. How's that?
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> > >
> > > "Eric" <nobody@nowhere.org> wrote in message
> > > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > > Any suggestions?
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> > > > Thanks,
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> > > > Eric
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2500. Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:23:28 UTC
From: b_t_s@hotmail.com
Message-ID: <c73c4162.0310141023.41010e82@posting.google.com>
Source record: 106667

I'm considering making a G5RV like antenna and tuning it by changing the length of twinlead by scraping off some of the insulation at various locations and attaching it to the radio with alligator clips. I'm wondering if the excess twinlead hanging off the connection point would be a problem?

Brock

2501. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:24:15 UTC
From: KeyBoard In The Wilderness <Keyboard73@zilcha.com>
Message-ID: <jbXib.64293$vj2.32919@fed1read06>
Source record: 106668

Sorry never owned either so can't say which is better -- maybe some one else
can help.

Two considerations though -- radiation efficiency and mechanical integrity.
I suspect the radiation efficiency is about the same between the two.

Some offroad vehicle owners might comment on the mechanical integrity as far
as banging into tree branches etc.
102" whips are usually spring mounted so have a certain amount of give to
them.

Maybe a post at rec.radio.cb will find more responses from actual
users.

Also a CB shop will probably have words of wisdom.
--
73 From The KeyBoard

"Eric" <nobody@nowhere.org> wrote in message
news:60Xib.281975$mp.220104@rwcrnsc51.ops.asp.att.net...
> Is a fiber glass one better or worse than a stainless steel one?
>
> Thanks
>
> Eric
>
>
>
> "KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
> news:l3Tib.63647$vj2.52984@fed1read06...
> > Guess you are looking for a 102" CB whip antenna
> > Radio Shack used to carry the stainless steel ones
> >
> > AND here is a fiberglass one by Shakespeare for $9.00
> > http://www.valcoelectronics.com/cbantenna/whips.htm
> > Scroll to bottom of page
> >
> > --
> > 73 From TKBITW
> > ---
> > "Eric" <nobody@nowhere.org> wrote in message
> > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > Any suggestions?
> > >
> > > Thanks,

> > >
> > > Eric
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2502. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:25:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <voofsumaq74o66@corp.supernews.com>
Source record: 106580

In the eyes of the BPL, there's no problem with the technology that needs to be addressed. It will make barrels of money for them. So what's the problem?

I've learned that when the actions of a person or company don't make sense, it's simply because I've misunderstood their motives or situation. Their response is perfectly logical if you begin with the premise that the necessary money has been spent on the right politicians and political campaigns to assure approval regardless of the actions of irritating gnats like hams and the ARRL. If that's the case, then it's simply a waste of time and money for them to pay any attention to the likes of the ARRL.

I'll bet you'll find that their other actions are consistent with this model. I suspect that the ARRL's effort would better be spent locating and trying to persuade the purchased politicians that their political futures might be affected by approval, rather than trying to convince the BPL that there's something wrong with their attempt to make lots of money.

Roy Lewallen, W7EL

W1RFI wrote:
> . . .
> I have extended by email a very cordial inviation for the PPL folks to attend a
> local club talk I gave; they did not respond. I then emailed a cordial
> invitation to work with them on interference issues; they did not respond. This
> boggles the mind, because if I were about to invest millions of dollars of my
> company's money and a national organization came to me and told me that there
> was a serious problem with the technology, and offered to drive over 200 miles
> just to show it to me, I think I would spend the hour or two and take a look.

2503. Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:27:50 UTC
From: Will Reeve <will@reeve.org.uk>
Message-ID: <bmhf75fac1@sparta.btinternet.com>
Source record: 106581
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi,

I have an interesting project! I am using a RF receiver device which has a 50 Ohm RF input. I want to use a PCB printed antenna on FR4 board, not unusual you say. but I need to pot the whole PCB in resin to make it waterproof. The receiver only needs to work when floating on water! Has anyone any experience in PCB antenna who would be so kind to comment on the effects, and possible actions to counter any effects, of the potting. The resin is much like araldite.

Any thoughts much appreciated.

Will

2504. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:30:59 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <DhXib.470609$2x.188956@rwcrnsc52.ops.asp.att.net>
Source record: 106582

Couldn't find a shop in Utah.

Thanks for the help though,

Eric

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:jbXib.64293$vj2.32919@fed1read06...
> Sorry never owned either so can't say which is better -- maybe some one
else
> can help.
>
> Two considerations though -- radiation efficiency and mechanical
integrity.
> I suspect the radiation efficiency is about the same between the two.
>
> Some offroad vehicle owners might comment on the mechanical integrity as
far
> as banging into tree branches etc.
> 102" whips are usually spring mounted so have a certain amount of give to
> them.
>
> Maybe a post at rec.radio.cb will find more responses from
actual
> users.
>
> Also a CB shop will probably have words of wisdom.
> --
> 73 From The KeyBoard
> ----------------------------
> "Eric" <nobody@nowhere.org> wrote in message
> news:60Xib.281975$mp.220104@rwcrnsc51.ops.asp.att.net...
> > Is a fiber glass one better or worse than a stainless steel one?
> >
> > Thanks
> >
> > Eric
> >
> >
> >
> > "KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
> > news:l3Tib.63647$vj2.52984@fed1read06...
> > > Guess you are looking for a 102" CB whip antenna
> > > Radio Shack used to carry the stainless steel ones
> > >

> > > AND here is a fiberglass one by Shakespeare for $9.00
> > > http://www.valcoelectronics.com/cbantenna/whips.htm
> > > Scroll to bottom of page
> > >
> > > --
> > > 73 From TKBITW
> > > ------------------------------
> > > "Eric" <nobody@nowhere.org> wrote in message
> > > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > > Any suggestions?
> > > >
> > > > Thanks,
> > > >
> > > > Eric
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2505. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:33:19 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <PjXib.558622$Oz4.511925@rwcrnsc54>
Source record: 106583

What is very clear is that you would fill a hole in my kill file. Bye.

"Eric" <nobody@nowhere.org> wrote in message
news:T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net...
> The message is titled 102" mobile antenna. It should ring a bell about
being
> a MOBILE. That should ring another bell that makes you think it's for a
> vehicle.
> Suggestions were expected from people who have had experience with these,
or
> can say something about these type of antenna.
>
> Is it that hard to understand?
>
> But ok, I'll explain a little further.
> I'm installing a cb radio in my jeep, and I will be in very remote areas,
> therefore I considered the full quarter length whip.
>
> Any suggestions on what antenna to get?
>
> >
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2506. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:51:38 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <kv-dnTnaxeFR2BGiU-KYuA@comcast.com>
Source record: 106584

I cleaned up the circuit somewhat. The current sense resistor is now 0.1 Ohm, and the signal is sampled through voltage follower opamps. So, there is no shunt loading of any kind. I also increased the sampling rate.

For the example where the load is 50 - j400, and source is 0, I now get an SWR of 66.3. Adding a source impedance of +j400 gives an SWR of 69.1. Since I am doing a transient analysis, and reading amplitudes off the waveform, this is about as close as I can get to having the two SWR readings be the same. PF for the second case is now 86.25W and PR is 81.02, which gives a net power close to the desired 5.0. The absolute numbers are clearly meaningless; only their difference has any meaning.

I also tried a less extreme termination, 50 - j100. This gave an SWR of 5.7. Conjugate matching at the source gave me 5.8. I think it is safe to say that source impedance does not affect SWR.

I am going to try some other stuff, The simulator is perfectly happy if , for instance, I drive both sides of the meter with a 1KW signal. Either at the same, or two different frequencies.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f8b7afc_4@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > Now for Cecil 1. ZL = 50 - j400. VF=1.62, VR=1.56, SWR=53, PF=1.33W,
> > PR=1.24W.
> >
> > Now for Cecil 2. ZL=50-j400, BUT ZS= 0 + J400. VF=11.2, VR=10.9,
SWR=73.7,
> > PF=64W, PR=60.6W. I am at such a high impedance here, that I suspect the
10K
> > sampling resistors are loading down the circuit somewhat. (I might try
100K
> > instead).
> >
> > Note that there is absolutely nothing explicit in the circuit that has
> > anything to do with transmission lines. All components are perfect;
there
> > are no stray inductances or stray capacitors.
>
> Chipman alludes to such a "phenomenon of resonance" in Chapter 10,
> "Resonant Transmission Line Circuits". For instance, at a conjugate match
> point where 100+j100 is seen looking in one direction and 100-j100 is
> seen looking in the opposite direction, there seems to be a *localized*
> exchange of extra energy between +j100 and -j100 that can adversely affect

> the value indicated by an SWR meter placed between those two values.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2507. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 18:52:25 UTC
From: KeyBoard In The Wilderness <Keyboard73@zilcha.com>
Message-ID: <JBXib.64497$vj2.12836@fed1read06>
Source record: 106585

Words of possible wisdom at URL:
http://www.olypen.com/craigh/antennab.htm

Discusses merits of SS vs Fiberglass flexing and also which is the better
radiator.

Can't vouch for it --- but seems well thought out.

Good Luck

--
73 From Keyboard

"Eric" <nobody@nowhere.org> wrote in message
news:DhXib.470609$2x.188956@rwcrnsc52.ops.asp.att.net...
> Couldn't find a shop in Utah.
>
> Thanks for the help though,
>
> Eric
>
>
> "KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
> news:jbXib.64293$vj2.32919@fed1read06...
> > Sorry never owned either so can't say which is better -- maybe some one
> else
> > can help.
> >
> > Two considerations though -- radiation efficiency and mechanical
> integrity.
> > I suspect the radiation efficiency is about the same between the two.
> >
> > Some offroad vehicle owners might comment on the mechanical integrity as
> far
> > as banging into tree branches etc.
> > 102" whips are usually spring mounted so have a certain amount of give
to
> > them.
> >
> > Maybe a post at rec.radio.cb will find more responses from
> actual
> > users.
> >
> > Also a CB shop will probably have words of wisdom.
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> > 73 From The KeyBoard
> > ----------------------------
> > "Eric" <nobody@nowhere.org> wrote in message
> > news:60Xib.281975$mp.220104@rwcrnsc51.ops.asp.att.net...
> > > Is a fiber glass one better or worse than a stainless steel one?
> > >
> > > Thanks
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> > > Eric
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> > > "KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
> > > news:l3Tib.63647$vj2.52984@fed1read06...
> > > > Guess you are looking for a 102" CB whip antenna
> > > > Radio Shack used to carry the stainless steel ones
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> > > > AND here is a fiberglass one by Shakespeare for $9.00
> > > > http://www.valcoelectronics.com/cbantenna/whips.htm
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> > > > "Eric" <nobody@nowhere.org> wrote in message
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2508. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 19:12:36 UTC
From: richardharrison@webtv.net
Message-ID: <13987-3F8C4AA4-586@storefull-2315.public.lawson.webtv.net>
Source record: 106586

Serge, ON4BAA wrote:
"What about using an inverted 1/4wave groundplane in order to avoid ground losses?"

How high above the earth can the inverted ground plane be placed?

Brown, of the famous RCA trio of Brown, Lewis. and Epstein, invented the groundplane antenna. B,L,& E did most of the work on broadcast ground systems when broadcasting was new. Brown described the purpose of elevated radials as capture of the antenna current which otherwise might include the earth which could impose exorbitant loss.

The energy fed to a groundplane produces capacitive (displacement) current between the vertical radiator and its return paths, be they radials, other antenna element(s), or the earth.

If you place the groundplane upside down, you lose the screen between the radiator and the earth, which it hides from the radiator. If the groundplane is very high, capacitance between the radiator and the earth will be very small. Likewise, current between the radiator and the earth will be very small. So, the question of how high can the groundplane antenna be elevated is not entirely facetious.

Loss is likely lower in the rightside up groundplane

Best regards, Richard Harrison, KB5WZI

2509. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 19:31:03 UTC
From: K7JEB <k7jeb@qsl.remove.net>
Message-ID: <9hYib.26262$Rd4.24491@fed1read07>
Source record: 106587

> Eric wrote:
> I'll probably go for the steel one. I'm trying
> to decide if a telescopic one is a good idea or not.

Telescopic is a very, very bad choice for anything
that bangs into tree branches or is exposed to
moisture, particularly salt water.

I had bad luck with fiberglass whips. The wire inside
was either too small for amateur-level (100W) transmitters
or had a splice or kink in it. I burned the wire in two
inside the fiberglass - black spot on the outside shell
and very intermittent operation.

I have had good luck with the garden-variety, stainless-
steel whips available from CB shops. If they get dinged-
up or bent, it's just a matter of a little pressure with
both hands and a knee to straighten them out. Besides,
the funkier they look, the more off-road you look. And
they can take kilowatts of power.

If you can't find stainless-steel whips locally, order
several (they're cheap here in Phoenix, about $18 each)
and have them UPS'ed over. That way you'll have spares.

Jim, K7JEB

2510. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 19:53:40 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <b4Xib.561834$cF.238441@rwcrnsc53>
Source record: 106588

I'll probably go for the steel one. I'm trying to decide if a telescopic one
is a good idea or not.

Thanks

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:n1Xib.64251$vj2.39772@fed1read06...
> I thought that was what you were after and sent this reply
>
> Guess you are looking for a 102" CB whip antenna
> Radio Shack used to carry the stainless steel ones
>
> AND here is a fiberglass one by Shakespeare for $9.00
> http://www.valcoelectronics.com/cbantenna/whips.htm
> Scroll to bottom of page
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>
>
> --
> 73 From Keyboard
> "Eric" <nobody@nowhere.org> wrote in message
> news:T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net...
> > The message is titled 102" mobile antenna. It should ring a bell about
> being
> > a MOBILE. That should ring another bell that makes you think it's for a
> > vehicle.
> > Suggestions were expected from people who have had experience with
these,
> or
> > can say something about these type of antenna.
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> > Is it that hard to understand?
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> > therefore I considered the full quarter length whip.
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> > Any suggestions on what antenna to get?
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> > "CW" <clinton.magers@comcast.net> wrote in message
> > news:bMOib.758913$YN5.732692@sccrnsc01...
> > > Yes, they exist. How's that?
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> > > "Eric" <nobody@nowhere.org> wrote in message
> > > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > > Any suggestions?
> > > >
> > > > Thanks,
> > > >
> > > > Eric
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> > > >
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2511. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 19:53:41 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <Z5Xib.561836$cF.238289@rwcrnsc53>
Source record: 106589

I'll probably go for the steel one. I'm trying to decide if a telescopic one
is a good idea or not.

Thanks

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:n1Xib.64251$vj2.39772@fed1read06...
> I thought that was what you were after and sent this reply
>
> Guess you are looking for a 102" CB whip antenna
> Radio Shack used to carry the stainless steel ones
>
> AND here is a fiberglass one by Shakespeare for $9.00
> http://www.valcoelectronics.com/cbantenna/whips.htm
> Scroll to bottom of page
>
>
>
> --
> 73 From Keyboard
> "Eric" <nobody@nowhere.org> wrote in message
> news:T_Wib.281972$mp.220143@rwcrnsc51.ops.asp.att.net...
> > The message is titled 102" mobile antenna. It should ring a bell about
> being
> > a MOBILE. That should ring another bell that makes you think it's for a
> > vehicle.
> > Suggestions were expected from people who have had experience with
these,
> or
> > can say something about these type of antenna.
> >
> > Is it that hard to understand?
> >
> > But ok, I'll explain a little further.
> > I'm installing a cb radio in my jeep, and I will be in very remote
areas,
> > therefore I considered the full quarter length whip.
> >
> > Any suggestions on what antenna to get?
> >
> > Thank you,
> >
> > Eric
> >
> >

> >
> >
> > "CW" <clinton.magers@comcast.net> wrote in message
> > news:bMOib.758913$YN5.732692@sccrnsc01...
> > > Yes, they exist. How's that?
> > >
> > >
> > > "Eric" <nobody@nowhere.org> wrote in message
> > > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > > Any suggestions?
> > > >
> > > > Thanks,
> > > >
> > > > Eric
> > > >
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2512. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 19:53:42 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <EgXib.561849$cF.237813@rwcrnsc53>
Source record: 106590

Couldn't find a shop in Utah.

Thanks for the help though,

Eric

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:jbXib.64293$vj2.32919@fed1read06...
> Sorry never owned either so can't say which is better -- maybe some one
else
> can help.
>
> Two considerations though -- radiation efficiency and mechanical
integrity.
> I suspect the radiation efficiency is about the same between the two.
>
> Some offroad vehicle owners might comment on the mechanical integrity as
far
> as banging into tree branches etc.
> 102" whips are usually spring mounted so have a certain amount of give to
> them.
>
> Maybe a post at rec.radio.cb will find more responses from
actual
> users.
>
> Also a CB shop will probably have words of wisdom.
> --
> 73 From The KeyBoard
> ----------------------------
> "Eric" <nobody@nowhere.org> wrote in message
> news:60Xib.281975$mp.220104@rwcrnsc51.ops.asp.att.net...
> > Is a fiber glass one better or worse than a stainless steel one?
> >
> > Thanks
> >
> > Eric
> >
> >
> >
> > "KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
> > news:l3Tib.63647$vj2.52984@fed1read06...
> > > Guess you are looking for a 102" CB whip antenna
> > > Radio Shack used to carry the stainless steel ones
> > >

> > > AND here is a fiberglass one by Shakespeare for $9.00
> > > http://www.valcoelectronics.com/cbantenna/whips.htm
> > > Scroll to bottom of page
> > >
> > > --
> > > 73 From TKBITW
> > > ------------------------------
> > > "Eric" <nobody@nowhere.org> wrote in message
> > > news:cgNib.757812$YN5.731961@sccrnsc01...
> > > > Any suggestions?
> > > >
> > > > Thanks,
> > > >
> > > > Eric
> > > >
> > > >
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2513. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 20:42:09 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmhn31$d3v$0@208.207.71.138>
Source record: 106591
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

dt wrote:
> Hams are not the only users of the affected spectrum. They may be the
> most vocal, but perhaps the easiest to discredit or deflect.
>
> What about the other users of the HF-thru-VHF spectrum? Police, Fire,
> EMS, Federal Government, Business, Utilities (the power companies
> themselves), Military, Aviation, etc., etc.?

> Do they not have consultants who are in touch with industry affairs?
>
> Does APCO (and other industry communications associations) not have
> knowledge about BPL and a position on it?

Before I retired I was a field engineer working with a statewide public safety organization which uses low band VHF for base to car communications statewide, and that system is still virtually as I left it nearly 10 years ago. I have learned that they are aware of the BPL docket and filed in opposition, and have some idea that it will impact their communications, but I wonder if they have a clear view of what looms should BPL be widely implemented. While working I spent considerable time on RF noise issues, and I am rather sure that such a radio system cannot coexist with BPL.

What happens is that when the noise intererence reaches a certain level, in a FM receiver the limiter saturates, and even a strong on-channel signal will not cause the squelch to open. The reciever remains quiet, and the call is unanswered.
I was able to locate one troublesome noise source which was reported as repeater trouble in that the repeater would ocassionally go quiet in mid-transmission when a car was calling in. By the time I would drive the substantial distance to the repeater, a thorough checkout found no problem with the repeate equipment whatever. After several fruitless trips and attempts to find the trouble, I finally happened to be onsite when the trouble appeared, and it was all limiter saturation. Looking around outside while the noise was present in an attempt to spot a source in the local rural area, I soon found it- an arc welder in a shop several hundred yards away. When the welder was in use, the arc caused noise that saturated the receiver limiter, effectively shutting down the repeater. We relocated that repeater to a more isolated site where it still functions as intended.
That example is but one case. BPL will, following power lines, also follow roads and streets since power lines follow streets and highway/road rights of way everywhere - the same places where police and highway patrol units'communications are active. The interference issue

simply WILL cause something drastic to be implemented, what I don't know. If common sense has anything to do with it, BPL will be sent packing. Widesp[read implementation of BPL spells the end of lowband VHF use by public safety organizations. And with states' budgets in the deflated condition they are in most places, the funding will not be available to replace those systems in the forseeable future.

I just called a former co-worker who is still working, and asked him if the organization knows that there is a BPL test site in the state. He said they did not. I suggested he might want to pass the word on up the chain so that they might want to send a mobile unit into the test area to get firsthand information on just what the effects might be. I'm also passing along all the info I've gathred here and from other sources. We'll need all the help we can get on this turkey.

In short, I'm coninced that while APCO and others may know
of the BPL docket I wonder if they have a very clear concept of
what it will do to them where low band VHF is used.
For instance, what have you heard from the state of Calorfinia, which is reported to use low band VHF for their statewide Highway Patrol, and has over 5,000 mobile units with no telling how many base stations?
I have heard nothing whatever from anyone there on BPL.

It seems evident that the BPL people are not publishing the existance of these very small test sites any more widely than necessary. So, they won't garner very many,if any, BPL-specific complaints, will they? And they'll be able to say "We must not be causing destructive interference since we haven't generated complaints". Of course limiting the numbers of users in test areas to a very few drastically limits the amount of interference potential. With so few BPL users online there *won't* be much interference caused, thus few or no complaints. Then they will conveniently pass over this fact, and the decision makers won't know the difference.

Someone with clout needs to take them to task with the FCC and force them to use much broader test areas with much more realistic noise levels generated so that a more realistic noise picture can be evaluated. As it stands, they may well get what they want by default.

Dick W0EX

>
>
> What is the ARRL doing to join forces with other affected spectrum
> users, perhaps forming a task force to promote common interests?
> Lobbying senators and congressmen, the Commission, NTIA, etc.?
>
> If the utilities' strategy is to divide and conquer, it appears they
> are being very effective.
>
> 73
> Dan (K0DAN)

>
>
>
> On 14 Oct 2003 14:03:08 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com>
> wrote:
>
>
>>W1RFI wrote:
>>
>>
>>>>You raise an interesting question, Carl. How exactly should the
>>>>average ham go about proving that the RFI is indeed BPL, when the BPL
>>>>people say
>>>>"That's not us!'??
>>>
>>>
>>>In the case in Emmaus, the PPL rep told a reporter that Carl had misidentified
>>>a "neon sign" (in a residential neighborhood) as BPL. First, Carl is
>>>professionally adept with spread spectrum, so he knows what an SS signal sounds
>>>like. The signal was heard only in the trial area and when I was in Emmaus, I
>>>worked with a local in the trial area who downloaded files for me. When the
>>>download started, the noise started; when it stopped, the noise stopped.
>>>
>>>What really proves it to be not a neon sign, however, is that the time-domain
>>>(oscilloscope) signature of the received signal does not have a pronounced
>>>120-Hz signature. Had the PPL representative actually looked at the signal, he
>>>would have known that his "explanation" was pretty transparent.
>>>
>>>I have extended by email a very cordial inviation for the PPL folks to attend a
>>>local club talk I gave; they did not respond. I then emailed a cordial
>>>invitation to work with them on interference issues; they did not respond. This
>>>boggles the mind, because if I were about to invest millions of dollars of my
>>>company's money and a national organization came to me and told me that there
>>>was a serious problem with the technology, and offered to drive over 200 miles
>>>just to show it to me, I think I would spend the hour or two and take a look.
>>>
>>
>>
>> It's beyond obvious that the BPL people are adamantly intent on
>>stonewealling and bypassing ham radio and anything else that tries to
>>get in the way.
>> They're aware that many of the impacted spectrum users are so widely
>>scattered that much of the interference caused by BPL even when it
>>becomes widely implemented they won't be noticed due to their limited
>>exposure caused by lack of adequately close proximity.
>>
>> Hams, which *are* pretty well scattered throughout the population,
>>should be ignored and their complaints deflected by such incorrect
>>assertions as the above "neon sign" explanation. Make it so that there
>>is so much question as to hams' competance to make such a call they can

>>be portrayed to be wrong, whatever the facts. It's obvious obfuscation
>>and an end-run around us, and whatever other protesters weigh in that
>>can be similarily deflected. They hope that the "serious" users of that
>>part of the spectrum will prove to be so few and widely scattered that
>>their protests will be few and managable.
>>
>> And once BPL installations are widespread, they know it would demand
>>a clearly demonstrated, very serious interference problem to csuse its
>>abandonment, and they don't think that will happen. They maybe right.
>>If so many users sign on that the sheer numbers of BPL users overwhelm
>>all the protests of spectrum pollution and damage to communications
>>sheer numbers and politics will prevail in their favor, they believe.
>>All they really need to do is get it approved and "out there" in large
>>amounts in most populated areas, then the situation will take care of
>>itself, they think.
>>
>> If allowed to proceed, BPL will forever change usability of the HF and
>>Low VHF part of the spectrum.
>
>

2514. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 20:53:15 UTC
From: Eric <nobody@nowhere.org>
Message-ID: <%mZib.470814$2x.189235@rwcrnsc52.ops.asp.att.net>
Source record: 106592

I got a stainless steel 102" whip (one piece) at radio shack, for about $15.
Will see how it works...
Thanks for all the replies and sorry for the multiple replies from my part,
my provider was timing out and I tried a few times...

Later,

Eric

"K7JEB" <k7jeb@qsl.remove.net> wrote in message
news:9hYib.26262$Rd4.24491@fed1read07...
>
> > Eric wrote:
> > I'll probably go for the steel one. I'm trying
> > to decide if a telescopic one is a good idea or not.
>
> Telescopic is a very, very bad choice for anything
> that bangs into tree branches or is exposed to
> moisture, particularly salt water.
>
> I had bad luck with fiberglass whips. The wire inside
> was either too small for amateur-level (100W) transmitters
> or had a splice or kink in it. I burned the wire in two
> inside the fiberglass - black spot on the outside shell
> and very intermittent operation.
>
> I have had good luck with the garden-variety, stainless-
> steel whips available from CB shops. If they get dinged-
> up or bent, it's just a matter of a little pressure with
> both hands and a knee to straighten them out. Besides,
> the funkier they look, the more off-road you look. And
> they can take kilowatts of power.
>
> If you can't find stainless-steel whips locally, order
> several (they're cheap here in Phoenix, about $18 each)
> and have them UPS'ed over. That way you'll have spares.
>
> Jim, K7JEB
>
>
>

2515. Another EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 20:58:10 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <CrZib.5178$VG6.1908@twister.southeast.rr.com>
Source record: 106593

Is there any way to view two or more SWR plots on top of each other (other than printing one on top of the other)?

Thanks,

Ron W4TQT

2516. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 21:17:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8c6a25$1_3@corp.newsgroups.com>
Source record: 106594

Jeffdeham wrote:
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>V^2/600=100w
>
> Where did the value of V and 600 come from in this formula?

V is the unknown. 600 ohms is the approximate ball park feedpoint
impedance for a traveling-wave antenna.

> I'd like to be able to calculate the voltages also for let's say my 5 watt QRP rig.

Remember, it is a really rough estimate. For 5w, V^2/600=5w, so
V ~ 55v RMS. The peak voltage at the end of a dipole fed with 5w
would be very roughly 150 volts.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2517. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 21:24:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8c6bbf_3@corp.newsgroups.com>
Source record: 106595

Brock wrote:
> I'm considering making a G5RV like antenna and tuning it by changing
> the length of twinlead by scraping off some of the insulation at
> various locations and attaching it to the radio with alligator clips.
> I'm wondering if the excess twinlead hanging off the connection point
> would be a problem?

The "excess twinlead hanging off the connection point" will act like
a stub and if you don't understand stubs, it will definitely be
a problem.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2518. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:05:02 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <h4CdnRcEvLVg7xGiU-KYuA@comcast.com>
Source record: 106596

"Eric" <nobody@nowhere.org> wrote in message
news:Z5Xib.561836$cF.238289@rwcrnsc53...
> I'll probably go for the steel one. I'm trying to decide if a telescopic
one
> is a good idea or not.

They MAKE a telescopic?
That would be a very bad idea. It would fold, like a carpenter's measuring
tape. Exactly once.

2519. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:05:05 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <BJudnV6JjcGd7hGiU-KYuQ@comcast.com>
Source record: 106597

> But ok, I'll explain a little further.
> I'm installing a cb radio in my jeep, and I will be in very remote areas,
> therefore I considered the full quarter length whip.

Your initial question was pretty vague.. :)

The steel whip is pretty robust.
I used to run one, with the spring removed so it was resonant on the ham 10 meter band.
Good results worldwide with 25W on sideband.

As I said, watch the short overhangs! :)
Otherwise, there isn't much to break on them, and no protruding coils to hang in the brush.

Now, I run a cobra 6000 centerload, and a Diamond SG7900.
A 102" whip isn't practical, on a roof mount. At least not when your roof is 7' off the pavement.
The cobra is mag mounted, so it fails soft, but still, the fall isn't good for it, or the car.
The 7900 dosen't bend, it breaks. If it didn't have such great gain, I wouldn't put up with it.

http://www.inchase.org/outflow/events/installnic2002/f5Mount.html
This is the 7900 mount.
I had a bit of a surprise with floopyness of the roof metal, but that was easily solved, once we found the right bit at the hardware store.

The problem with antennas, is that you can't get high gain, omnidirectional, and reasonable bandwidth, without also picking "large".

Keep the antenna as clear of the vehicle as possible, and make sure that what it's mounted to, is really grounded. Bumpers sometimes aren't these days, and few want to dig the hole in the side panel for the old ball mount.
(Side panels aren't what they used to be either!)

2520. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:10:21 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <VLidnQGJgsmh6RGiU-KYuA@comcast.com>
Source record: 106598

"KeyBoard In The Wilderness" <Keyboard73@zilcha.com> wrote in message
news:JBXib.64497$vj2.12836@fed1read06...
> Words of possible wisdom at URL:
> http://www.olypen.com/craigh/antennab.htm
>
> Discusses merits of SS vs Fiberglass flexing and also which is the better
> radiator.

Watch which he's talking about.

You can get a straight steel whip.
You can get s straight fiberglass whip.
You can also get a short fiberglass whip.

The short versions are compromises, to the degree that they are shorter.
A 2' antenna is not as good a radiator as a 3' antenna, all other things
being equal.
Usually, you end up mounting where some portion of the antenna is shadowed
by the vehicle, unless you do a roof mount. In this case, a shortened
antenna suffers even more.

There won't be much difference between fiberglass with a copper wire, and
stainless steel.
The copper is more conductive, but it's thinner. Steel is more resistive,
but larger diameter.
Me, I'd take the steel. Fiberglass breaks, steel bends.

2521. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:12:45 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <jj2dnYYRKd9R6RGiU-KYjA@comcast.com>
Source record: 106599

> I'll bet you'll find that their other actions are consistent with this
> model. I suspect that the ARRL's effort would better be spent locating
> and trying to persuade the purchased politicians that their political
> futures might be affected by approval, rather than trying to convince
> the BPL that there's something wrong with their attempt to make lots of
> money.
>
> Roy Lewallen, W7EL

At this point, they are probably still actively persuing investors.
If the investors get the idea that there's a potential dead end here, they
will go elsewhere.
The ones that are already in though, will be mad at us, most likely.
:(

2522. Re: Another EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:24:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <voottnfot733cb@corp.supernews.com>
Source record: 106600

No. You can, however, import the comma-delimited file LastZ.txt into a spreadsheet after each run, and plot them with the spreadsheet. See "LastZ.txt" in the EZNEC manual index.

Roy Lewallen, W7EL

Ron wrote:
> Is there any way to view two or more SWR plots on top of each other
> (other than printing one on top of the other)?
>
> Thanks,
>
> Ron W4TQT
>

2523. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:26:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <voou1lob1q4qa5@corp.supernews.com>
Source record: 106601

It's not clear to me what's meant by the voltage (presumably relative to ground) at the tip of a dipole. Suppose it's a quarter wavelength above ground. How would you measure it? Or, how would you measure the voltage at the top of a quarter wavelength vertical?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Jeffdeham wrote:
>
>> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>
>>> V^2/600=100w
>>
>>
>> Where did the value of V and 600 come from in this formula?
>
>
> V is the unknown. 600 ohms is the approximate ball park feedpoint
> impedance for a traveling-wave antenna.
>
>> I'd like to be able to calculate the voltages also for let's say my 5
>> watt QRP rig.
>
>
> Remember, it is a really rough estimate. For 5w, V^2/600=5w, so
> V ~ 55v RMS. The peak voltage at the end of a dipole fed with 5w
> would be very roughly 150 volts.

2524. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 22:59:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i6voovoofqkfk9mkfoddddia8qlajjihit@4ax.com>
Source record: 106602

On Tue, 14 Oct 2003 14:51:38 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>I also tried a less extreme termination, 50 - j100. This gave an SWR of 5.7.
>Conjugate matching at the source gave me 5.8. I think it is safe to say that
>source impedance does not affect SWR.

Hi Tam,

From the sublime to the ridiculous. The SWR of what? Where? :-)

A transmitter is loaded with two components and a meter placed between them - woohah! Using a SWR meter inappropriately is not proof of measuring SWR. More sense could be found in measuring the distribution of tea leaves.

The mythical lurkers should note all the effort that goes into a perversion of a vastly simpler exercise that could be conducted easily at the bench; and the reason for not going to the bench? Some infer too hard (by lack of effort); others explicitly state it doesn't matter (through reams of virtual pages gusting on about its inconsequence); and yet others deferring it with excuses it demands too much time for the effort.

But it does have its amusing moments, and I guess when all is said and done, that counts for something.

73's
Richard Clark, KB7QHC

2525. Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 23:04:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <330pov013losdn3kpn0qgu621ll1e5rgrm@4ax.com>
Source record: 106603
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Tue, 14 Oct 2003 18:27:50 +0000 (UTC), "Will Reeve"
<will@reeve.org.uk> wrote:

>Hi,
>
>I have an interesting project! I am using a RF receiver device which has a
>50 Ohm RF input. I want to use a PCB printed antenna on FR4 board, not
>unusual you say. but I need to pot the whole PCB in resin to make it
>waterproof. The receiver only needs to work when floating on water! Has
>anyone any experience in PCB antenna who would be so kind to comment on the
>effects, and possible actions to counter any effects, of the potting. The
>resin is much like araldite.
>
>
>
>Any thoughts much appreciated.
>
>
>
>Will
>

Hi Will,

Look into conformal coating as an alternative. Or simply mix acetone
and RTV to create one and paint it on. To cut down on water losses,
it would do well to provide an air jacket around the antenna elements
that is roughly a tenth wavelength in diameter (and from the tips).

73's
Richard Clark, KB7QHC

2526. Re: Pls comment on this dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 23:08:31 UTC
From: skaatz1@yahoo.com
Message-ID: <276c71c6.0310141508.6ac27715@posting.google.com>
Source record: 106604

Thanks to all.

I'll go with the seperate 15M wire, & let you know how it turns out.

73
Steve

K8SDK

2527. APS-13 Antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-14 23:50:18 UTC
From: djboutit2@aol.com
Message-ID: <20031014195018.00663.00000490@mb-m04.aol.com>
Source record: 106616

Http://www.starkelectronic.com/aps13.htm would this be a good if converted to FM broadcast transmitting. I have a 5/8 wave comet would the APS-13 be a better antenna & how much better of a antenna would it be.

2528. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 00:26:53 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vop53l8e9tnt79@corp.supernews.com>
Source record: 106605
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Write or call your local AM broadcast stations and tell them that
thier signal is being wiped out and you can't recieve them.

Clint
KB5ZHT

2529. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 00:32:33 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ROadnZkU29krCBGiU-KYgw@comcast.com>
Source record: 106606

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:i6voovoofqkfk9mkfoddddia8qlajjjihit@4ax.com...
>
> The mythical lurkers should note all the effort that goes into a
> perversion of a vastly simpler exercise that could be conducted easily
> at the bench; and the reason for not going to the bench? Some infer
> too hard (by lack of effort); others explicitly state it doesn't
> matter (through reams of virtual pages gusting on about its
> inconsequence); and yet others deferring it with excuses it demands
> too much time for the effort.
>
Richard,

A simulation of a circuit is better than the "bench". I have components with 0% tolerance, 0 length leads, no parasitic components, and no power limits. It does precisely what a physical meter is a compromise of.

It does not care whether there is a piece of coax connected to the circuit or not. Neither does the physical meter. Both find SWR by calculating the deviation of the load impedance from 50 Ohms.

Tam/WB2TT

2530. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 00:34:23 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.19f5b3df8108a6af9896af@news-60.giganews.com>
Source record: 106607

In article <8a9fd42a.0310130006.211dbb00@posting.google.com>, jerry-google-groups@bogosimeter.com says...
> Why build an unstable tower? What are the advantages of this design?

In addition to the insulate-from-ground comments, it's possible they used that design to lessen the risk of damage from earthquake and wind-loading. The guy wires are more flexible and can give a bit more than having the antenna anchored to the ground with steel sunk into concrete.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

2531. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:01:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmi68u$42l$1@sparta.btinternet.com>
Source record: 106609

The ball-park impedance, Zo, of any isolated reasonable length of wire such as part of a radio antenna, is 600 ohms.

It is first necessary to force yourselves to accept the uncomfortable idea that any length of wire is a single-wire transmission line.

Zo = 60*(Log(4*Length/dia) - 1) is near enough for most purposes. Jot it in your notebooks. Sorry I'm unable to provide a reference but you can quote ME if you like. I found it jotted in MY tattered notebook. ;o)

Even Terman knew that. But perhaps not having sufficient confidence in the matter he may never have said so explicitly. In which case, unless somebody can work it out from the information he cribbed from Grover et al, hardly anybody knows it. ;o)

In the case of a 40 meter dipole of length 20 meters, using 14 awg wire, the wire Zo = 588 ohms.

To calculate matched-loss in dB/100 feet of single-wire lines would be more complicated. It is akin to calculating what happens in the case of a Beverage. It is non-linear versus length.

Cecil's 600 ohms was correct but his description could be confusing. He need not have mentioned travelling-waves or any other sort of waves because that depends on whether or not a line or anenna wire is terminated. A line's termination has no effect on its Zo. Frequency does not enter the argument. Like any other sort of line it's just a matter of Sqrt(L/C).

A single-wire non-resonant transmission line is used to feed the original 1920's (?) Windom. The line's input impedance is around 600 ohms. It is correctly terminated by tapping into the resonant antenna at the appropriate off-center point. The line is of course low loss but it does radiate a bit. But then, who loses sleep about a bit of radiation from a feedline to a multi-directional antenna - it's not wasted.

I'm on Chinese vinyards' "Greatwall" white tonight. They have certainly woken up. ;o)

Reg, G4FGQ

2532. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:05:10 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <a31jb.1089$_i.100637@nnrp1.ptd.net>
Source record: 106608

Sorry Ed ... I miss-spoke ... they both begin with "A" and I
got the backwards ...

Carl - wk3c

"W1RFI" <w1rfi@aol.com> wrote in message
news:20031014081053.09700.00000225@mb-m24.aol.com...
> >The Emmaus test site video (test area #3) should be pretty representative
> >of the "main.net" system ... test area #4 is the Amperion OFDM system.
> >There could be others that might have different "signatures" ...
>
> Just as a mnor correction, test area #4, in Briarcliff Manor, NY, is an
Ambient
> system. The Amperion system is also OFDM and has a very similar sound. I
found
> it easily in Whitehall, PA, once I drove into the test area.
>
> 73,
> Ed Hare, W1RFI
>

2533. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:10:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ah5povg11n87m2ivt497avrs1bkqmcpkpp@4ax.com>
Source record: 106610

On Tue, 14 Oct 2003 20:32:33 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>A simulation of a circuit is better than the "bench". I have components with
>0% tolerance, 0 length leads, no parasitic components, and no power limits.
>It does precisely what a physical meter is a compromise of.
>
>It does not care whether there is a piece of coax connected to the circuit
>or not. Neither does the physical meter. Both find SWR by calculating the
>deviation of the load impedance from 50 Ohms.
>
>Tam/WB2TT
>

Hi Tam,

Simulations conform to nature, they do not enforce their own rules and
try to mimic someone's notion of "what should be."

If it does not care about coax, this kind of response is an implicit
statement of its being "too hard to manage" so-forget-about-it
approach to changing the problem to suit the answer. In other words,
a model of what? Nothing closer to the original than the oft-quoted
humor of "What is the definition of an elephant? A mouse built to
government specification!"

And so I return to the statement I objected to:
>source impedance does not affect SWR.
which is shown no where to have been attempted, and is shown nowhere
to have been proven. What SWR? Where?

I note the total absence of technical answers to these specific
questions with proofs of unrelated doodling offered instead.

The condescension of
>A simulation of a circuit is better than the "bench".
is absurd, especially when that same simulation fails to confirm bench
experience. I would challenge you to offer the testimony of any
single (credible) author of a simulator to stand by this profundity.

I note this last effort of yours is one of several iterations - which
simulation was the most perfect? The first or the last? Who is to
know? How is it to be known? Simulation did not describe to you what
you had to change in the simulation to achieve Nirvana. None of your
rationale for change emanated from the data, it sprang from the

experience of someone's bench providing superior results. If this exercise is so much better, it should have taken only one pass to accomplish. The negation of that is found in the failed attempts. Thus the assertion of:
>A simulation of a circuit is better than the "bench".
has been shown to be absurd through successive failures by the author of that statement.

As I have offered before, there is humor to be found in the disconnect and this bastardization by Cecil reigns supreme in examples. But to its credit, it keeps me amused and offers considerable fodder for the mythical lurker to observe where the logical landmines are (or in counting the field's litter of amputees attempting pirouettes). ;-)

73's
Richard Clark, KB7QHC

2534. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:15:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmi730$51l$1@sparta.btinternet.com>
Source record: 106611

Before I find myself inundated with invitations to attend tea-parties, in the formula for Zo replace "Log" with "Ln".

Reg.

2535. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:26:36 UTC
From: Jim Hampton <aa2qa@frontiernet.net>
Message-ID: <gn1jb.4425$KT.4111@news01.roc.ny>
Source record: 106612
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick,

I'm not at all sure who uses what spectrum in the areas where they are testing BPL, but I'd bet coffee for a week that those folks studied the situation carefully before proceeding. Where did they test (I don't know of all areas and I'm asking a sincere question)? The "promise" of BPL is to serve areas that are not served well by cable or DSL. Did they test a fairly substantial area in the country where they could demonstrate far-flung connections to the BPL, or did they test in densely populated areas that are already served by various broadband connection (where fire, police, emergency, etc. are very likely not on low band VHF)? Also, FM broadcasting is usually located near large population areas (since signals tend to die off pretty quickly after 40 or 60 miles). This means that if you have BPL in a city, it is unlikely that residents will experience capture effect on the FM receivers since they will be getting *huge* signals on their FM receivers. I note the "neon sign" comment in the thread. Neon signs are usually found in cities. Those test sites are likely located either in a city or in an area where the money interests already checked the FCC site to ensure no low band VHF use by police, fire, ambulance, etc.

Any thoughts on this, or am I crazy?

73 from Rochester, NY
Jim AA2QA

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmhn31$d3v$0@208.207.71.138...
>
> Before I retired I was a field engineer working with a statewide
> public safety organization which uses low band VHF for base to car
> communications statewide, and that system is still virtually as I left
> it nearly 10 years ago. I have learned that they are aware of the BPL
> docket and filed in opposition, and have some idea that it will impact
> their communications, but I wonder if they have a clear view of what
> looms should BPL be widely implemented. While working I spent
> considerable time on RF noise issues, and I am rather sure that such a
> radio system cannot coexist with BPL.
>
> What happens is that when the noise intererence reaches a certain
> level, in a FM receiver the limiter saturates, and even a strong
> on-channel signal will not cause the squelch to open. The reciever
> remains quiet, and the call is unanswered.
> I was able to locate one troublesome noise source which was reported
> as repeater trouble in that the repeater would ocassionally go quiet in

> mid-transmission when a car was calling in. By the time I would drive
> the substantial distance to the repeater, a thorough checkout found no
> problem with the repeate equipment whatever. After several fruitless
> trips and attempts to find the trouble, I finally happened to be onsite
> when the trouble appeared, and it was all limiter saturation. Looking
> around outside while the noise was present in an attempt to spot a
> source in the local rural area, I soon found it- an arc welder in a shop
> several hundred yards away. When the welder was in use, the arc caused
> noise that saturated the receiver limiter, effectively shutting down the
> repeater. We relocated that repeater to a more isolated site where it
> still functions as intended.
> That example is but one case. BPL will, following power lines, also
> follow roads and streets since power lines follow streets and
> highway/road rights of way everywhere - the same places where police and
> highway patrol units'communications are active. The interference issue
> simply WILL cause something drastic to be implemented, what I don't
> know. If common sense has anything to do with it, BPL will be sent
> packing. Widesp[read implementation of BPL spells the end of lowband VHF
> use by public safety organizations. And with states' budgets in the
> deflated condition they are in most places, the funding will not be
> available to replace those systems in the forseeable future.
>
> I just called a former co-worker who is still working, and asked him
> if the organization knows that there is a BPL test site in the state.
> He said they did not. I suggested he might want to pass the word on up
> the chain so that they might want to send a mobile unit into the test
> area to get firsthand information on just what the effects might be. I'm
> also passing along all the info I've gathred here and from other
> sources. We'll need all the help we can get on this turkey.
>
> In short, I'm coninced that while APCO and others may know
> of the BPL docket I wonder if they have a very clear concept of
> what it will do to them where low band VHF is used.
> For instance, what have you heard from the state of Calorfinia, which
> is reported to use low band VHF for their statewide Highway Patrol, and
> has over 5,000 mobile units with no telling how many base stations?
> I have heard nothing whatever from anyone there on BPL.
>
> It seems evident that the BPL people are not publishing the existance
> of these very small test sites any more widely than necessary. So, they
> won't garner very many,if any, BPL-specific complaints, will they? And
> they'll be able to say "We must not be causing destructive interference
> since we haven't generated complaints". Of course limiting the numbers
> of users in test areas to a very few drastically limits the amount of
> interference potential. With so few BPL users online there *won't* be
> much interference caused, thus few or no complaints. Then they will
> conveniently pass over this fact, and the decision makers won't know the
> difference.
>
> Someone with clout needs to take them to task with the FCC and force

> them to use much broader test areas with much more realistic noise
> levels generated so that a more realistic noise picture can be
> evaluated. As it stands, they may well get what they want by default.
>
> Dick W0EX

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.525 / Virus Database: 322 - Release Date: 10/9/03

2536. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:45:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vop9m1lk7nge1b@corp.supernews.com>
Source record: 106613

Tarmo Tammaru wrote:
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:i6voovoofqkfk9mkfoddddia8qlajjjihit@4ax.com...
>
>>The mythical lurkers should note all the effort that goes into a
>>perversion of a vastly simpler exercise that could be conducted easily
>>at the bench; and the reason for not going to the bench? Some infer
>>too hard (by lack of effort); others explicitly state it doesn't
>>matter (through reams of virtual pages gusting on about its
>>inconsequence); and yet others deferring it with excuses it demands
>>too much time for the effort.
>>
>
> Richard,
>
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> 0% tolerance, 0 length leads, no parasitic components, and no power limits.
> It does precisely what a physical meter is a compromise of.
>
> It does not care whether there is a piece of coax connected to the circuit
> or not. Neither does the physical meter. Both find SWR by calculating the
> deviation of the load impedance from 50 Ohms.
>
> Tam/WB2TT

And, consequently, the results you get should be exactly the same as
those of us using equations rather than modeling simulations get. I
don't see any reason why people who don't believe the equations would
believe simulation results.

Roy Lewallen, W7EL

2537. Re: Another EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 01:53:17 UTC
From: oldtime radio <nospam@spam.net>
Message-ID: <b4apovk4rqginip3lok435l4lbm5irl3mh@4ax.com>
Source record: 106614

I'm not sure if EZPlots will do what you want or not, but it's a nice
addition to EZNEC.

http://www.qsl.net/ac6la/ezplots.html

73'
otr

On Tue, 14 Oct 2003 20:58:10 GMT, Ron <rmrippy@hotmail.com> wrote:

>Is there any way to view two or more SWR plots on top of each other (other than
>printing one on top of the other)?
>
>Thanks,
>
>Ron W4TQT

2538. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 02:28:27 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <fh2jb.108631$qj6.4727200@news1.news.adelphia.net>
Source record: 106615
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

James Wilson wrote:
> What does BPL sound like? Can someone post a wav file somewhere so it can
> be identified? Is it worse that the Pennsylvania QSO party?

Did someone take over a frequency you owned?

- Mike KB3EIA -

2539. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 04:04:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmih10jac1@titan.btinternet.com>
Source record: 106617

> It does not care whether there is a piece of coax connected to the circuit
> or not. Neither does the physical meter. Both find SWR by calculating the
> deviation of the load impedance from 50 Ohms.
>
> Tam/WB2TT
>

Your attitude is quite correct Tam.

But the situation is even worse than that! The so-called SWR meter cannot even tell you the all-important sign of the deviation - just that a deviation in some unknown direction exists.

The indicated SWR is meaningless. It is *supposed* (?) by the meter to exist on a transmission line which does NOT exist. What does anybody ever do with the imaginary value except argue about it on these walls and over the air-waves.

The thing has been fooling gullible radio amaters and professionals ever since it was invented. Sounds very technical and knowledgable though. A good selling point. But it hardly engenders the amateur's "Self training and education in the art of communicating by radio". It is positively harmful.

In what year was it first introduced? I imagine it arrived very soon after the first expensive 5 watt RF transistor came off the production line.

However, the 0-to-infinity SWR scale can easily be treated as a typing error by dabbing on some of that white stuff.

Reg, G4FGQ

2540. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 04:13:05 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <51ipov09n521poshaq0pue055oru7g92u4@4ax.com>
Source record: 106618
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dick you bring up good technical and adminsitrative examples. My career too is in land mobile (public safety and railroads) and while there is plenty of trunking and digital taking place above 450 Mhz, there is also plenty of low and high band activity, and always will be.

The ARRL seems to be doing a good job studying the BPL issue and informing the ham community, but the public safety, industrial, business, government, etc., users will have a louder and more credible voice (safety of lives & property, commerce, homeland security, etc.).

I am wondering what the ARRL is doing to form coalitions with other (non-amateur) stakeholders, and to build concensus that has a loud and effective enough voice with the Commission and with Congress. Politically and techincally, the ARRL and/or the amateur community cannot stop this on their own.

73
Dan (K0DAN)

On 14 Oct 2003 20:42:09 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com> wrote:

>dt wrote:
> > Hams are not the only users of the affected spectrum. They may be the
> > most vocal, but perhaps the easiest to discredit or deflect.
> >
> > What about the other users of the HF-thru-VHF spectrum? Police, Fire,
> > EMS, Federal Government, Business, Utilities (the power companies
> > themselves), Military, Aviation, etc., etc.?
>
> > Do they not have consultants who are in touch with industry affairs?
> >
> > Does APCO (and other industry communications associations) not have
> > knowledge about BPL and a position on it?
>
>
> Before I retired I was a field engineer working with a statewide
>public safety organization which uses low band VHF for base to car
>communications statewide, and that system is still virtually as I left
>it nearly 10 years ago. I have learned that they are aware of the BPL
>docket and filed in opposition, and have some idea that it will impact
>their communications, but I wonder if they have a clear view of what
>looms should BPL be widely implemented. While working I spent
>considerable time on RF noise issues, and I am rather sure that such a

>radio system cannot coexist with BPL.
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> What happens is that when the noise intererence reaches a certain
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>problem with the repeate equipment whatever. After several fruitless
>trips and attempts to find the trouble, I finally happened to be onsite
>when the trouble appeared, and it was all limiter saturation. Looking
>around outside while the noise was present in an attempt to spot a
>source in the local rural area, I soon found it- an arc welder in a shop
>several hundred yards away. When the welder was in use, the arc caused
>noise that saturated the receiver limiter, effectively shutting down the
>repeater. We relocated that repeater to a more isolated site where it
>still functions as intended.
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>follow roads and streets since power lines follow streets and
>highway/road rights of way everywhere - the same places where police and
>highway patrol units'communications are active. The interference issue
>simply WILL cause something drastic to be implemented, what I don't
>know. If common sense has anything to do with it, BPL will be sent
>packing. Widesp[read implementation of BPL spells the end of lowband VHF
>use by public safety organizations. And with states' budgets in the
>deflated condition they are in most places, the funding will not be
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>the chain so that they might want to send a mobile unit into the test
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>also passing along all the info I've gathred here and from other
>sources. We'll need all the help we can get on this turkey.
>
> In short, I'm coninced that while APCO and others may know
>of the BPL docket I wonder if they have a very clear concept of
>what it will do to them where low band VHF is used.
> For instance, what have you heard from the state of Calorfinia, which
>is reported to use low band VHF for their statewide Highway Patrol, and
>has over 5,000 mobile units with no telling how many base stations?
>I have heard nothing whatever from anyone there on BPL.
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> It seems evident that the BPL people are not publishing the existance
>of these very small test sites any more widely than necessary. So, they
>won't garner very many,if any, BPL-specific complaints, will they? And
>they'll be able to say "We must not be causing destructive interference

>since we haven't generated complaints". Of course limiting the numbers
>of users in test areas to a very few drastically limits the amount of
>interference potential. With so few BPL users online there *won't* be
>much interference caused, thus few or no complaints. Then they will
>conveniently pass over this fact, and the decision makers won't know the
>difference.
>
> Someone with clout needs to take them to task with the FCC and force
>them to use much broader test areas with much more realistic noise
>levels generated so that a more realistic noise picture can be
>evaluated. As it stands, they may well get what they want by default.
>
>Dick W0EX
>
>
>>
>>
>> What is the ARRL doing to join forces with other affected spectrum
>> users, perhaps forming a task force to promote common interests?
>> Lobbying senators and congressmen, the Commission, NTIA, etc.?
>>
>> If the utilities' strategy is to divide and conquer, it appears they
>> are being very effective.
>>
>> 73
>> Dan (K0DAN)
>>
>>
>>
>> On 14 Oct 2003 14:03:08 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com>
>> wrote:
>>
>>
>>>W1RFI wrote:
>>>
>>>
>>>>>You raise an interesting question, Carl. How exactly should the
>>>>>average ham go about proving that the RFI is indeed BPL, when the BPL
>>>>>people say
>>>>>"That's not us!'??
>>>>
>>>>
>>>>In the case in Emmaus, the PPL rep told a reporter that Carl had misidentified
>>>>a "neon sign" (in a residential neighborhood) as BPL. First, Carl is
>>>>professionally adept with spread spectrum, so he knows what an SS signal sounds
>>>>like. The signal was heard only in the trial area and when I was in Emmaus, I
>>>>worked with a local in the trial area who downloaded files for me. When the
>>>>download started, the noise started; when it stopped, the noise stopped.
>>>>
>>>>What really proves it to be not a neon sign, however, is that the time-domain

>>>>(oscilloscope) signature of the received signal does not have a pronounced
>>>>120-Hz signature. Had the PPL representative actually looked at the signal, he
>>>>would have known that his "explanation" was pretty transparent.
>>>>
>>>>I have extended by email a very cordial inviation for the PPL folks to attend a
>>>>local club talk I gave; they did not respond. I then emailed a cordial
>>>>invitation to work with them on interference issues; they did not respond. This
>>>>boggles the mind, because if I were about to invest millions of dollars of my
>>>>company's money and a national organization came to me and told me that there
>>>>was a serious problem with the technology, and offered to drive over 200 miles
>>>>just to show it to me, I think I would spend the hour or two and take a look.
>>>>
>>>
>>>
>>> It's beyond obvious that the BPL people are adamantly intent on
>>>stonewealling and bypassing ham radio and anything else that tries to
>>>get in the way.
>>> They're aware that many of the impacted spectrum users are so widely
>>>scattered that much of the interference caused by BPL even when it
>>>becomes widely implemented they won't be noticed due to their limited
>>>exposure caused by lack of adequately close proximity.
>>>
>>> Hams, which *are* pretty well scattered throughout the population,
>>>should be ignored and their complaints deflected by such incorrect
>>>assertions as the above "neon sign" explanation. Make it so that there
>>>is so much question as to hams' competance to make such a call they can
>>>be portrayed to be wrong, whatever the facts. It's obvious obfuscation
>>>and an end-run around us, and whatever other protesters weigh in that
>>>can be similarily deflected. They hope that the "serious" users of that
>>>part of the spectrum will prove to be so few and widely scattered that
>>>their protests will be few and managable.
>>>
>>> And once BPL installations are widespread, they know it would demand
>>>a clearly demonstrated, very serious interference problem to csuse its
>>>abandonment, and they don't think that will happen. They maybe right.
>>>If so many users sign on that the sheer numbers of BPL users overwhelm
>>>all the protests of spectrum pollution and damage to communications
>>>sheer numbers and politics will prevail in their favor, they believe.
>>>All they really need to do is get it approved and "out there" in large
>>>amounts in most populated areas, then the situation will take care of
>>>itself, they think.
>>>
>>> If allowed to proceed, BPL will forever change usability of the HF and
>>>Low VHF part of the spectrum.
>>
>>

2541. How can I eliminate TV interference on shortwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 04:18:24 UTC
From: will7370@yahoo.com
Message-ID: <e88e9b5a.0310142018.478f1d3f@posting.google.com>
Source record: 106619

When my neighbors turn their TVs on, I have to turn off my shortwave radio because I get a terrible buzzing interference over most of the shortwave band. I can't hear a thing. I also get a similar problem when my wife turns on a florescent light in the kitchen. Is there anyway to reduce or eliminate this kind of interference?

Rob KC7BUM
Portland, Oregon

2542. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 04:47:11 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <h9kpovsvlat8uhemmqh8qcto1l5ebfk2qo@4ax.com>
Source record: 106620

On Tue, 14 Oct 2003 19:26:53 -0500, "Clint" <rattlehead at computron
dot net> wrote:

>Write or call your local AM broadcast stations and tell them that
>thier signal is being wiped out and you can't recieve them.

Only if it's true... Don't cry wolf, or we won't be believed when we
need it.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Clint
>KB5ZHT
>

2543. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 05:00:15 UTC
From: Bill Standard <whodatzinger@mailhot.com>
Message-ID: <zv4jb.1990$iD6.1551@edtnps84>
Source record: 106621

Question......
Why is it that some people say you need to add a 6" spring to a 102" whip in order to match it? Could someone explain this?

If you do the math (234 / Freq. in MHz = 1/4 wave) it ends up being 103.29" @ 27.185 MHz (CH 19 mid band) which if you add the mount, say a 1" stud plus the insulators, it comes out pretty close to 103.29" not counting the inch or so of exposed coax at the connection. I've never been able to add a spring (rat shacks were shorter than 6") without having to cut about the same amount off the whip in order to keep the SWR reasonable.
Thanks,
Bill

2544. Re: Plans for B&W BWD-65 & BWD-90 Folded Dipole Balun & Terminating Resistor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 05:27:56 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <mjmpov8o79ihjf3gncllrg27tpn45h5nu4@4ax.com>
Source record: 106659

On Tue, 14 Oct 2003 11:19:59 -0400, Dave <Dave@coldborst.org> wrote:

>I'd like to build a replica of the B&W 65 or 90 folded dipole antenna.
>

>
>Does anyone know where I can find a plan for the balun (or a resonably
>priced commercially made one)? How about the resistor?
>
>Thanks,
>
>Dave

I'm not sure whether you've been to the b&wantennas web site, but they
do sell some or their antenna parts a-la-carte.

Bob
k5qwg

2545. Re: How can I eliminate TV interference on shortwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 05:59:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <itnpovofonfqdmsi8ju1sdm8jh7sk334mv@4ax.com>
Source record: 106622

On 14 Oct 2003 21:18:24 -0700, will7370@yahoo.com (Robert Williams)
wrote:

>When my neighbors turn their TVs on, I have to turn off my shortwave
>radio because I get a terrible buzzing interference over most of the
>shortwave band. I can't hear a thing. I also get a similar problem
>when my wife turns on a florescent light in the kitchen. Is there
>anyway to reduce or eliminate this kind of interference?
>
>Rob KC7BUM
>Portland, Oregon

Hi Rob,

There's one of two possibilities, and possibly both.

1. You need to make your antenna remote from living spaces and
connect to it with a choked coaxial transmission line. Choking can be
accomplished using 1:1 BalUns or simply winding 6 to 8 loops of line
in 6 to 8 inch loops near the antenna connection. This will aid in
over-the-air interference if that is the problem (TVs and lights don't
usually bother one beyond 20-40 feet).

2. You need to isolate your radio's power source from power lines
that have noise arriving from these TVs or lights. Sometimes this can
be accomplished by merely plugging into a different AC outlet, or a
different one in a different room. The plan here is to move away from
a breaker that has noisy electronics on it. This will aid in
conduction noise reduction which seems to be more likely, but odd that
neighbors are involved (unless you are in an apartment situation). An
even simpler test is to disconnect all ground connections (this comes
in through the outlet in one form or another) and running off battery
power. This means that the antenna connection has to be free of a
ground connection too (and no wall-warts charging your batteries while
trying this either, nor having your audio-out plugged into your home
entertainment system or hi-fi). This is a shared ground problem if it
is indeed the source of noise.

73's
Richard Clark, KB7QHC

2546. Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 06:55:59 UTC
From: Adam 9A4QV <alicajic.adam@pu.hinet.hr>
Message-ID: <bmiqvfkvv1@ls219.htnet.hr>
Source record: 106623

Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on my mail.
Many antenna need to be tested in the field, HI.

Thanks,
Adam 9a4qv

2547. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 07:01:37 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmirch$q2c$0@208.206.142.98>
Source record: 106624

W1RFI wrote:
>>Exactly, must sent in complaints. Or the 'utilities' will say...."we got
>>very few complaints"
>
>
> Some of the trial areas have about 10 homes in them. The industry still says,
> with a straight face, we had no reports of interference, so this "proves" we
> won't interfere.
>
> 73,
> Ed Hare, W1RFI
>

Something occurred to me - If the BPL test areas are using only
2-22 mHz, they they WILL avoid critical interference complaints
from Low Band VHF Public Safety users and others, and will be able to
say "We had no complaints from (same)", while conveniently overlooking
the fact that they couldn't have had complaints because they didn't
generate any interference to those operations!

(I mentioned this to contacts in PubSafety. I also suggested spectrum
analysis to determine what spectrum is actually being used.)

So we are very careful to make certain that the interference we
find actually is BPL. And since they are only using a portion of the
spectrum that would be used under full implementation of BPL, they
will be able to say, about users of spectrum which they aren't testing
within, "We got no complaints from them" when in fact the interference
will occurr only when BPL is fully implemented!
And of course there will be no such complaints inasmuch as no
interference was generated! So those users get blindsided, having
assumed there would be no interference from BPL.
It's amazing how well they're playing both ends against the middle.
One REALLY has to think about all this to stay on top of this mess.

The longer one looks at BPL as presented the worse it smells.

Dick

2548. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 08:04:55 UTC
From: Thierry <tlombry@hotmNOSPAMail.com>
Message-ID: <3f8cffa6_2@news.vo.lu>
Source record: 106625

"Brock" <b_t_s@hotmail.com> wrote in message
news:c73c4162.0310141023.41010e82@posting.google.com...
> I'm considering making a G5RV like antenna and tuning it by changing
> the length of twinlead by scraping off some of the insulation at
> various locations and attaching it to the radio with alligator clips.
> I'm wondering if the excess twinlead hanging off the connection point
> would be a problem?
>

Hi,

I use a multiband G5RV from WIMO.de with 10m or so of twinlead copper ended with a balun 4:1 and coax.
My mother cut 1m of twinlead with the lawnmower... sorry Thierry... !
At first sight I though there could be a problem due to the velocity factor of 0.92 now a bit changed...
This was not a problem. I resoldered the cut part to the balun, make a new adjustement with with antenna tuner (built-in in my Kenwood TS-570D), VSWR= 1:1. My AT Tuner did a perfect job !
If you don't have a built-in AT tuner, the cheap and external manual Yaesu antenna tuner do the same job.
All is perfect again !

Info G5RV :http://www.astrosurf.com/lombry/qsl-g5rv.htm

Thierry
ON4SKY, LX3SKY

> Brock

2549. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:12:09 UTC
From: w1rfi@aol.com
Message-ID: <20031015071209.00305.00000861@mb-m27.aol.com>
Source record: 106523

> Proximity to the power grid would be the main clincher, IMO, but what
> about skywave propagation? That stuff could go around the world at QRP
> levels!

No single signal will be heard by skywave; the power levels are too low.

Here's the math:

Power level: -50 dBm/Hz
Corrected to 3000 Hz: add 35 dB
Coupler loss: -10 dB
Powerline antenna gain: -10 dB
Path loss VOACAP: -110 dB

That gives a received signal level of -145 dBm/3 kHz, well below the ambient noise at any HF station.

And millions of them may not make as much difference as we might think. They way these systems work, they share bandwidth between many users, so the signals are time muliplexed, so only one signal on a particular power line is active at a time. 100 shared signals have the same peak field strength as 1 signal, for the most part. So there may be 10,000 simultaneous emitters in a metro area. That will add 40 dB, bringing it just above the band noise -- interesting, but not conclusive.

The problem is local, and our concerns should be focused there.

73,
Ed Hare, W1RFI

2550. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:14:35 UTC
From: w1rfi@aol.com
Message-ID: <20031015071435.00305.00000862@mb-m27.aol.com>
Source record: 106520

>Ed, is there a URL where we can view the location of all the test sites
>now in use? How about future planned test sites?

Email me privately. I have put one together, but it has a lot of Mapquest maps that are copyrighted, so I am not posting it. It is essentially for the "fair use" of HQ staff and those working on the BPL issues in the field.

73,
Ed Hare, W1RFI

2551. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:17:05 UTC
From: w1rfi@aol.com
Message-ID: <20031015071705.00305.00000863@mb-m27.aol.com>
Source record: 106521

> Ed, is there some reason why radio amateurs cannot document their
> complaints,
if they exist, to the FCC directly?

They can, if they are certain that they are documenting BPL and not another source. It is possible to misidentify other sources as BPL, so having a time-domain and frequency-domain analysis of the received signal will be an important cross check.

73,
Ed Hare, W1RFI

2552. Re: Another EZNEC question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:19:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d2f60_5@corp.newsgroups.com>
Source record: 106626

Roy Lewallen wrote:
> No. You can, however, import the comma-delimited file LastZ.txt into a
> spreadsheet after each run, and plot them with the spreadsheet. See
> "LastZ.txt" in the EZNEC manual index.

What I do is use the Alt-PrtScn function to store screen images into
the clipboard. Then paste them, one at a time, into MSPAINT with the
"Draw Opaque" function turned off. They are then overlaid as an MSPAINT
document (.bmp, .gif, .jpg, .dib) which can be saved and/or printed.
It works great as long as the scaling is the same.

>> Is there any way to view two or more SWR plots on top of each other
>> (other than printing one on top of the other)?
--
73, Cecil http://www.qsl.net/w5dxp

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2553. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:26:17 UTC
From: w1rfi@aol.com
Message-ID: <20031015072617.00343.00000764@mb-m27.aol.com>
Source record: 106525

>Well.. I've been rather turned off by the "luddite"s in my local area.
>Until recently, our league section person was the head of the VEC group
>locally, an she refused to allow farnsworth testing for CW.

That is pretty serious. I have cc'ed Bart Jahnke, ARRL's VEC Manager, who will contact you for more details. Farnsworth testing is the "standard" for amateur exams and refusing to give it would be a pretty serious breach of ethics. Thanks for reporting it.

>I do see that the ARRL is going to be very important on this issue, and I'm
>available to make observations within any reasonable driving distance of my
>QTH. (Muncie Indiana)
>
>Wether I'm a member or not shouldn't affect the validity of my data.

You are correct, but your being a member or not will affect how much ARRL is able to do in what you have deemed to be an important area. The important things it has done so far have been paid for by someone else -- at 12 cents a day.

>I am interested to know how you're calibrating your mobile to get uV/Meter
>measurements.

I did a rough calibration of my mobile-whip dipole by comparing it against a half-wave dipole at the same height. From there, is is easy to calculate field strength.

I have a draft document on the measurement method -- email me at w1rfi@arrl.org and I will send it along to you. Feedback welcome.

73,
Ed Hare, W1RFI

2554. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:35:27 UTC
From: w1rfi@aol.com
Message-ID: <20031015073527.00343.00000765@mb-m27.aol.com>
Source record: 106524

>At this point, they are probably still actively persuing investors.
>If the investors get the idea that there's a potential dead end here, they
>will go elsewhere.
>The ones that are already in though, will be mad at us, most likely.

The investors may have already gotten some of the idea:

http://moneycentral.msn.com/scripts/webquote.dll?iPage=qd&Symbol=ABTG

The discussion board at:

http://ragingbull.lycos.com/mboard/boards.cgi?board=ABTG&read=2259

is interesting, although only a little bit of discussion on what they term "hammies." Interestingly, they seem blissfully unaware of the growing concern and discussion about the interference potential to all of HF. I would imagine that the BBC report alone should have sent the stock even lower, and when the NTIA study is done, if what I found in Emmaus, PA is reported as found, things may not look real good for the industry. I believe that it is easy enough to sign up to be able to post to the board, although I think it best that I not do so.

To my knowlege, Ambient (ABTG) is the only publically traded stock, although Main.net may be traded in Israel.

73,
Ed Hare, W1RFI

2555. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:36:39 UTC
From: w1rfi@aol.com
Message-ID: <20031015073639.00343.00000766@mb-m27.aol.com>
Source record: 106519

>Write or call your local AM broadcast stations and tell them that
>thier signal is being wiped out and you can't recieve them.

When I was in Emmaus, PA, I turned on the car AM radio and didn't hear any noise on the AM broadcast band. I believe that some of the reports may have been in error.

73,
Ed Hare, W1RFI

2556. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:38:48 UTC
From: w1rfi@aol.com
Message-ID: <20031015073848.00343.00000767@mb-m27.aol.com>
Source record: 106522

>Sorry Ed ... I miss-spoke ... they both begin with "A" and I
>got the backwards ...

As the bumper sticker says, "It happens!" :-)

Thanks for all your work on this one, Carl.

And the funny part was when the PPL representative told the reporter that an engineer who works in the spread-spectrum industry misidentified their spread-spectrum signals as a "neon sign." That one belonged in Dave's "Baghdad Bob" editorial. :-)

73,
Ed Hare, W1RFI

2557. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:40:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d3455_5@corp.newsgroups.com>
Source record: 106627

Roy Lewallen wrote:
> It's not clear to me what's meant by the voltage (presumably relative to
> ground) at the tip of a dipole. Suppose it's a quarter wavelength above
> ground. How would you measure it? Or, how would you measure the voltage
> at the top of a quarter wavelength vertical?

Who said anything about measuring it? We know it exists and can cause
corona in moist/salty circumstances. But I assume it could be measured
using something like an artificial ground at the tip of the monopole.

A dipole is akin to a leaky unterminated transmission line. The forward
wave travels out to the ends of the dipole where it is reflected by the
open circuit. Just as there is a large voltage at the end of an unterminated
transmission line, there is a large voltage at the ends of an unterminated
dipole (or at the end of a monopole). And just as we can make some assumptions
and estimate the magnitude of the voltage at the end of an unterminated
transmission line, we can make some assumptions and estimate the magnitude of
the voltage at the end of an unterminated dipole. The voltage anywhere along
a center-fed dipole is (Vfwd+Vref). The current anywhere along a
center-fed dipole is (Ifwd+Iref). The feedpoint impedance of a dipole is
(Vfwd+Vref)/(Ifwd+Iref) at the feedpoint. A CF dipole is a standing-wave
antenna with the voltages in phase and maximum at the tips. The voltages
are out of phase and minimum at the center feedpoint.

All we need is an estimate of the feedpoint impedance if the dipole was
terminated at each end thus turning it into a traveling-wave antenna.
I estimated about 600 ohms which put the tip voltage in the same ballpark
as Reg's estimate based on 'Q'.
--
73, Cecil http://www.qsl.net/w5dxp

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2558. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:48:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d361a_5@corp.newsgroups.com>
Source record: 106628

Richard Clark wrote:
> A transmitter is loaded with two components and a meter placed between
> them - woohah!

Richard, I've got Chipman's book now. Where does he say that SWR
depends upon the source impedance. He does describe a localized
resonance effect within a transmission line. Are you saying the
source impedance is a causal parameter for that localized resonance
effect?

Not arguing with you - just still trying to understand what you
are saying.
--
73, Cecil http://www.qsl.net/w5dxp

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2559. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 11:58:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d3873_5@corp.newsgroups.com>
Source record: 106629

Richard Clark wrote:
> As I have offered before, there is humor to be found in the disconnect
> and this bastardization by Cecil reigns supreme in examples.

Hmmmmm, that "bastardization by Cecil" supports your side of the
argument, Richard. Would you rather it not support your argument?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2560. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 13:26:51 UTC
From: G&R <spam@limbo.hell>
Message-ID: <pWbjb.7209$cT6.337431@news20.bellglobal.com>
Source record: 106526

Another program which you wish to consider for field applications is
AntennaPlot by VE3SQB from Degen Designs. We initially designed this
software for our own use, however feel that this is a valuable for both
amateurs and professionals alike.

This program works together with a A/D converter and produces accurate
results.

As this program is on selected release during initial offerings, it is best
to contact us directly at info@degendesigns.com for information and a copy.

73,
Guenther VE3CVS
info@degendesigns.com
www.degendesigns.com

"Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
news:bmiqvfkvv1@ls219.htnet.hr...
> Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on my
mail.
> Many antenna need to be tested in the field, HI.
>
> Thanks,
> Adam 9a4qv
>
>
>
>

2561. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 13:55:04 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <Ykcjb.1129$_i.106075@nnrp1.ptd.net>
Source record: 106527

"W1RFI" <w1rfi@aol.com> wrote in message
news:20031015073639.00343.00000766@mb-m27.aol.com...
> >Write or call your local AM broadcast stations and tell them that
> >thier signal is being wiped out and you can't recieve them.
>
> When I was in Emmaus, PA, I turned on the car AM radio and didn't hear any
> noise on the AM broadcast band. I believe that some of the reports may
have
> been in error.
>
> 73,
> Ed Hare, W1RFI

I can confirm what Ed reports above ... on my first drive through the Emmaus
BPL area, I didn't have my FT-817 with me ... I noted little/no BPL noise
in the AM broadcast band ... perhaps a bit of extra noise at the very upper
end of the band around 1600 kHz, but nothing like what exists on 80-15m.

Again, I want to help Ed drive the point home - false claims of "BPL
interference"
will do a LOT of harm to our cause ... I encourage anyone who thinks they
might
be experiencing BPL interference to communicate with Ed and let him help to
verify
things.

I also encourage everyone to send a donation to the ARRL's BPL fund - you
don't have to agree with *everything* the ARRL does to be willing to help
to overcome this major threat to our future on HF.

Carl - wk3c

2562. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 14:01:02 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <3uednaF-E8LUzhCiRVn-sQ@comcast.com>
Source record: 106528

Roy,

I am not sure Richard understands this, but I am simulating an actual
circuit. That is, the input to the simulator is a schematic diagram of the
circuit. With the present setup, a transient analysis is done by calculating
the waveform at 100 point for each cycle of the waveform. I could use more
sampling points, but it would run longer.

Tam/WB2TT
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vop9m1lk7nge1b@corp.supernews.com...
> Tarmo Tammaru wrote:
> > "Richard Clark" <kb7qhc@comcast.net> wrote in message
> > news:i6voovoofqkfk9mkfoddddia8qlajjjihit@4ax.com...
> >
> >>The mythical lurkers should note all the effort that goes into a
> >>perversion of a vastly simpler exercise that could be conducted easily
> >>at the bench; and the reason for not going to the bench? Some infer
> >>too hard (by lack of effort); others explicitly state it doesn't
> >>matter (through reams of virtual pages gusting on about its
> >>inconsequence); and yet others deferring it with excuses it demands
> >>too much time for the effort.
> >>
> >
> > Richard,
> >
> > A simulation of a circuit is better than the "bench". I have components
with
> > 0% tolerance, 0 length leads, no parasitic components, and no power
limits.
> > It does precisely what a physical meter is a compromise of.
> >
> > It does not care whether there is a piece of coax connected to the
circuit
> > or not. Neither does the physical meter. Both find SWR by calculating
the
> > deviation of the load impedance from 50 Ohms.
> >
> > Tam/WB2TT
>
> And, consequently, the results you get should be exactly the same as
> those of us using equations rather than modeling simulations get. I
> don't see any reason why people who don't believe the equations would
> believe simulation results.
>

> Roy Lewallen, W7EL
>

2563. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 14:14:58 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <CDcjb.1133$_i.106292@nnrp1.ptd.net>
Source record: 106529
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Jim Hampton" <aa2qa@frontiernet.net> wrote in message
news:gn1jb.4425$KT.4111@news01.roc.ny...
> Dick,
>
> I'm not at all sure who uses what spectrum in the areas where they are
> testing BPL, but I'd bet coffee for a week that those folks studied the
> situation carefully before proceeding. Where did they test (I don't know
of
> all areas and I'm asking a sincere question)?

The fact of the matter is that the ONLY serious technical studies
presented to the FCC in their Notice of Inquiry on BPL came from
the good work of Ed Hare, W1RFI, and his colleagues at ARRL.

The "access BPL" industry has done essentially nothing but "hand-
waving" and ignoring/denying that the problem exists. They want
to make $$$ ... and they don't appear to give a damn about the
impact on the other users of HF.

That they claim that "power wires don't radiate" (when NEC models,
as well as plain old common sense, indicate that they do) and that
"BPL is a 'point source' radiator" (how one can make that argument
when what they are building is essentially a large, distributed antenna
system) clearly indicate their deep state of "don't confuse the issue
with the facts" denial.

> The "promise" of BPL is to serve areas that are not served well
> by cable or DSL.

While DSL is not available in all areas due to the distance from the
central office factor and the phone companies' slow rollout in areas
of lower population density, acccording to the latest statistics I've
seen, cable "passes" 97%+ of US households. There are also
internet via satellite services available, using dishes like (sometimes
the same dish as) satellite TV services. There are also "WISPs"
who provide services using more appropriate spectrum in the low
microwave bands.

The business model for BPL is WAY less than compelling and its
technical suitability is poor as well, not only because of interference
TO the wide variety of licensed HF users, but also because of the
potential for interference to the BPL system FROM those licensed
users ... and BPL will have NO claim of protection from such interference.
My belief is that consumers deserve a more robust and reliable means
of receiving broadband internet services - one that doesn't present the

(bi-directional) interference issues of BPL - and that there are a number
of such alternatives available already.

> Did they test a
> fairly substantial area in the country where they could demonstrate
> far-flung connections to the BPL, or did they test in densely populated
> areas that are already served by various broadband connection (where fire,
> police, emergency, etc. are very likely not on low band VHF)?

Ed has a better overall view of the current deployments of BPL, but I know
they are few and limited in scope at the moment.

> Also, FM
> broadcasting is usually located near large population areas (since signals
> tend to die off pretty quickly after 40 or 60 miles). This means that if
> you have BPL in a city, it is unlikely that residents will experience
> capture effect on the FM receivers since they will be getting *huge*
signals
> on their FM receivers.

S9+10 on a VERY short whip (an "Outbacker Joey") is a pretty huge
signal to me ... with BPL proposing to go up to 80 MHz, I would
think that the FM broadcast band is at relatively low risk, though FM
receivers could experience some degree of "desense" if the BPL
signal at the front end was strong enough due to proximity.

> I note the "neon sign" comment in the thread. Neon
> signs are usually found in cities.

The "neon sign" assertion by the representative of PPL (the Emmaus
BPL system operator) is *pure* BS ... the signature was SS, NOT
a neon sign ...

> Those test sites are likely located
> either in a city or in an area where the money interests already checked
the
> FCC site to ensure no low band VHF use by police, fire, ambulance, etc.

I think you're giving them FAR too much credit for caring about anything
but deploying BPL ...

Carl - wk3c

2564. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 14:16:47 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <jN2dnY4AJeVqyxCiRVn-vw@comcast.com>
Source record: 106530

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bmih10jac1@titan.btinternet.com...
> But the situation is even worse than that! The so-called SWR meter cannot
> even tell you the all-important sign of the deviation - just that a
> deviation in some unknown direction exists.
> Reg, G4FGQ
>
Reg,

Actually the information we need is there, but not displayed. For RL > R0, the magnitude of the voltage sample is greater than the current sample. For RL<R0, the magnitude of the current sample is greater. For a 50 Ohm meter, the two samples are, of course, equal for the case where R0=50 Ohms. To display this information in common meters would be difficult, because the voltage sample is with respect to ground, but the current sample appears as a floating differential signal, with the voltage sample as a common mode signal.

All of this is simple to do in simulation, because I can use opamps with 1000V common mode range, and arbitrarily wide bandwidth.

Tam/WB2TT

2565. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 14:39:14 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <m_cjb.286327$mp.226264@rwcrnsc51.ops.asp.att.net>
Source record: 106531

Eric, We were serious in our questions regarding what do you want to
know about the 102 inch whip.

Many of us are amateur radio operators who use the 102 inch whip in a
variety of modes and on many frequencies different from the CB Band.

The 102 inch whip in your application will provide very good antenna.
However, your ground wave will be somewhere around 10 to 15 miles. The
antenna will not improve the ground wave. You may encounter some 'skip'
conditions but these are not reliable for communications.

Eric wrote:
> The message is titled 102" mobile antenna. It should ring a bell about being
> a MOBILE. That should ring another bell that makes you think it's for a
> vehicle.
> Suggestions were expected from people who have had experience with these, or
> can say something about these type of antenna.
>
> Is it that hard to understand?
>
> But ok, I'll explain a little further.
> I'm installing a cb radio in my jeep, and I will be in very remote areas,
> therefore I considered the full quarter length whip.
>
> Any suggestions on what antenna to get?
>
> Thank you,
>
> Eric
>
>
>
>
> "CW" <clinton.magers@comcast.net> wrote in message
> news:bMOib.758913$YN5.732692@sccrnsc01...
>
>>Yes, they exist. How's that?
>>
>>
>>"Eric" <nobody@nowhere.org> wrote in message
>>news:cgNib.757812$YN5.731961@sccrnsc01...
>>
>>>Any suggestions?
>>>
>>>Thanks,

>>>
>>>Eric
>>>
>>>
>>>
>>
>>
>
>

2566. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 14:52:56 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <1OudnSU6qe_twhCiRVn-hA@comcast.com>
Source record: 106532

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ah5povg11n87m2ivt497avrs1bkqmcpkpp@4ax.com...
> On Tue, 14 Oct 2003 20:32:33 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
> Hi Tam,
>
> Simulations conform to nature, they do not enforce their own rules and
> try to mimic someone's notion of "what should be."
>

No, I built an actual circuit, using perfect components.

> If it does not care about coax, this kind of response is an implicit
> statement of its being "too hard to manage" so-forget-about-it
> approach to changing the problem to suit the answer. In other words,
> a model of what? Nothing closer to the original than the oft-quoted
> humor of "What is the definition of an elephant? A mouse built to
> government specification!"

If you want, I will send you a PDF of the schematic.

>
> And so I return to the statement I objected to:
> >source impedance does not affect SWR.
> which is shown no where to have been attempted, and is shown nowhere
> to have been proven. What SWR? Where?

I measured the SWR at the point Cecil proposed. I don't recall him
specifying a transmission line either.

>
> I note the total absence of technical answers to these specific
> questions with proofs of unrelated doodling offered instead.
>
You want equations, OK.
For a meter balanced at 50 Ohms, we have
1) VF= V + 50I
2) VR=V - 50I

3) To keep this simple, let the load be resistive, and equal to R. Now, I =
V/R.

4) Let's define a G=(VP + VR)/(VP - VR).

Plugging 3 into 1 and 2, and then 4, we get

G= [V + (50V/R) + V - (50V/R)]/ [V + (50V/R) - (V- (50V/R)]

G= 2V/[100(V/R)]

5) G=R/50

But 5 is precisely the definition of SWR. Therefore G==SWR. Your Bird wattmeter does exactly this same thing.

> The condescension of
> >A simulation of a circuit is better than the "bench".
> is absurd, especially when that same simulation fails to confirm bench
> experience. I would challenge you to offer the testimony of any
> single (credible) author of a simulator to stand by this profundity.

I hate to tell you this, but all complicated designs have been proven in by simulations for years. Nobody builds a Pentium CPU before they make a chip. They simulate it.
>
> I note this last effort of yours is one of several iterations - which
> simulation was the most perfect? The first or the last? Who is to
> know? How is it to be known? Simulation did not describe to you what
> you had to change in the simulation to achieve Nirvana. None of your
> rationale for change emanated from the data, it sprang from the
> experience of someone's bench providing superior results. If this
> exercise is so much better, it should have taken only one pass to
> accomplish. The negation of that is found in the failed attempts.

In analog simulations there is a tradeoff between accuracy, and how long it takes. Also, I pointed out that I added opamps to the model so I would not be loading down the line with 10K resistors.

> Thus the assertion of:
> >A simulation of a circuit is better than the "bench".
> has been shown to be absurd through successive failures by the author
> of that statement.

Just for an example, I can make the source impedance anything I want. Do that on your bench.

>
> As I have offered before, there is humor to be found in the disconnect
> and this bastardization by Cecil reigns supreme in examples. But to
> its credit, it keeps me amused and offers considerable fodder for the
> mythical lurker to observe where the logical landmines are (or in
> counting the field's litter of amputees attempting pirouettes). ;-)
>
You have been talking to the Easter Bunny again.
Tam/WB2TT

> 73's
> Richard Clark, KB7QHC

2567. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 16:00:17 UTC
From: Stef <vee_ee_too_oh_doubleyou_ell_@rac.ca>
Message-ID: <dnrqovkv97ifc63pcdqh9kd3rpievk1vc8@4ax.com>
Source record: 106534

>
>I use a multiband G5RV from WIMO.de with 10m or so of twinlead copper ended
>with a balun 4:1 and coax.

If I were you, I would remove this 4:1 balun and solder the coax
direct to the twinlead. I would then use good coax right to the
radio.

The reason is: the impedance at the solder point is not 300 ohms and
with your balun, you're inserting more losses .

73, de Stef

2568. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 16:01:02 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310150801.3cf781fe@posting.google.com>
Source record: 106533
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Jim Hampton" <aa2qa@frontiernet.net> wrote in message
news:<gn1jb.4425$KT.4111@news01.roc.ny>...
> Dick,
>
> I'm not at all sure who uses what spectrum in the areas where they are
> testing BPL

Nobody knows how much interference the stuff could generate
eventually. The BPL proponents are advertising their intent to run
from 2 thru 80 Mhz inclusive. At considerably higher power levels than
they're using in the current test areas. There's a major threat in
itself and it's not being tested.

> but I'd bet coffee for a week that those folks studied the
> situation carefully before proceeding.

Would not surprise me one bit. But then along came hams with HF mobile
rigs like Carl wk3c, Ed Hare w1rfi and Bob Davidson w3hj and myself
who took ham radio into BPL test areas and are blowing the whistle.
Loudly.

> Where did they test (I don't know of
> all areas and I'm asking a sincere question)?

Go to the ARRL site for the complete list of known test areas. All of
those I know about so far are in the NE corridor in densly-populated
upscale +/- residential neigborhoods. Because that's where the money
is. Which also happen to be the same sorts of neighborhoods in which a
lot of hams live too.

> The "promise" of BPL is to
> serve areas that are not served well by cable or DSL

Total BS. BPL is quite expensive to deploy. A fiber optic feed line or
cable TV line has to run parallel to the power lines. These feed lines
inject the BPL signals into the low voltage power lines via taps
roughly at every street intersection or the neighborhood has no BPL.
If there isn't any cable or DSL service in your locale because there
isn't any ROI in it for those service providers there most likely
won't be any BPL either. They're all chasing the same dollars.

> Did they test a
> fairly substantial area in the country where they could demonstrate
> far-flung connections to the BPL,

Absolutely not. There are no "far-flung connections" to BPL per above.
In the Emmaus PA test area which I've visited BPL is only distributed
along a few blocks of maybe 3-4 residential streets. Completely
inconclusive test program to the point of being a contrived scam.

> or did they test in densely populated
> areas that are already served by various broadband connection

Seems like.

> (where fire,
> police, emergency, etc. are very likely not on low band VHF)?

Dunno. There are at least three test sites concentrated in the Lehigh
Valley region in PA and there are very few if any emergency services
still using lo-band VHF in PA. I have not seen any references to BPL
being tested in places like California and Dick's Missouri where
lo-band is still in use. What a big surprise eh?

> Also, FM
> broadcasting is usually located near large population areas (since signals
> tend to die off pretty quickly after 40 or 60 miles). This means that if
> you have BPL in a city, it is unlikely that residents will experience
> capture effect on the FM receivers since they will be getting *huge* signals
> on their FM receivers.

BPL as presently conceived is not supposed to run in either the AM or
FM broadcast bands. Plus there are guard bands between BPL and both
broadcast bands. 'Nother big surprise.

> I note the "neon sign" comment in the thread. Neon
> signs are usually found in cities.

There are "point source" neon signs fifty miles north of Butte,
they're *everywhere*.

> Those test sites are likely located
> either in a city or in an area where the money interests already checked the
> FCC site to ensure no low band VHF use by police, fire, ambulance, etc.

Covered above.

>
> Any thoughts on this, or am I crazy?

Certainly you're a crazy. All us frequent posters in this NG are
certified crazies. Where the hell have YOU been?!

>
> 73 from Rochester, NY
> Jim AA2QA

w3rv

>
>

> "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> news:bmhn31$d3v$0@208.207.71.138...
> >
> > Before I retired I was a field engineer working with a statewide
> > public safety organization which uses low band VHF for base to car
> > communications statewide, and that system is still virtually as I left

2569. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 16:32:02 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmjsq2gbn0@208.207.71.137>
Source record: 106535
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Carl R. Stevenson wrote:
> "Jim Hampton" <aa2qa@frontiernet.net> wrote in message
> news:gn1jb.4425$KT.4111@news01.roc.ny...
>

>>Those test sites are likely located
>>either in a city or in an area where the money interests already checked
>
> the
>
>>FCC site to ensure no low band VHF use by police, fire, ambulance, etc.
>
>
> I think you're giving them FAR too much credit for caring about anything
> but deploying BPL ...
>

Not at all. The fact that at least some test areas are using only up
to 22mHz means that they will cause NO interference to low band Public
Safety comms simply because they're NOT generating that interference, as
they will certainly be doing when BPL is rolled out in its full capability.
But for the purposes of convincing regulators, they can truthfully
say "We received no complaints from them" while carefully ignoring
the truth as noted above.
Do you really think decision makers in the FCC would
be aware of what actually happened? I sure don't. Even if they
hae a factual technical report from their own technical staff
on their desks. It's EASY to ignore paperwork when it fits the
purpose. Just don't read that part.

I've passed all this along to friends in that venue with a notation
on the fact that it is known that some test sites are NOT presently
active above 22 mHz so they will be aware that Low VHF noise may be
missing, and to not construe this as assuming that BPL will not cause
interference with lowband HF systems.

Dick

2570. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 16:42:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dmrqov063d4bk17vvqi504j4hbgc538qri@4ax.com>
Source record: 106536

On Wed, 15 Oct 2003 06:58:10 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> As I have offered before, there is humor to be found in the disconnect
>> and this bastardization by Cecil reigns supreme in examples.
>
>Hmmmmm, that "bastardization by Cecil" supports your side of the
>argument, Richard. Would you rather it not support your argument?

Hi Cecil,

No, it does not, and your poor attention to the details doesn't even
come close to the discussion I have offered. Bastardization means an
illegitimate substitute and your speculation fully qualifies.

73's
Richard Clark, KB7QHC

2571. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 16:58:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b3sqovcie9k1ji6a838p0l2a10s0qcbnpj@4ax.com>
Source record: 106537

On Wed, 15 Oct 2003 10:52:56 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:ah5povg11n87m2ivt497avrs1bkqmcpkpp@4ax.com...
>> On Tue, 14 Oct 2003 20:32:33 -0400, "Tarmo Tammaru"
>> <t-tammaru@home.com> wrote:
>> Hi Tam,
>>
>> Simulations conform to nature, they do not enforce their own rules and
>> try to mimic someone's notion of "what should be."
>>
>
>No, I built an actual circuit, using perfect components.

Built? How droll.

>> If it does not care about coax, this kind of response is an implicit
>> statement of its being "too hard to manage" so-forget-about-it
>> approach to changing the problem to suit the answer. In other words,
>> a model of what? Nothing closer to the original than the oft-quoted
>> humor of "What is the definition of an elephant? A mouse built to
>> government specification!"
>
>If you want, I will send you a PDF of the schematic.

And a schematic proves you have "built" a mouse to government
specifications? The amusement "builds."

>>
>> And so I return to the statement I objected to:
>> >source impedance does not affect SWR.
>> which is shown no where to have been attempted, and is shown nowhere
>> to have been proven. What SWR? Where?
>
>I measured the SWR at the point Cecil proposed. I don't recall him
>specifying a transmission line either.

You didn't measure anything, you modeled it, and you didn't answer the
question, instead using Cecil's "proposed point" as the scapegoat.
Soon the EE departments across the land will be teaching SWR
measurements to each component lead in a circuit if they follow this
"logic." This syllabus is suitable only for the Laughing Academies.

>>
>> I note the total absence of technical answers to these specific
>> questions with proofs of unrelated doodling offered instead.
>>
>You want equations, OK.

>5) G=R/50
>
>But 5 is precisely the definition of SWR. Therefore G==SWR. Your Bird
>wattmeter does exactly this same thing.

An appeal to a bench top instrument? Funny how models at some point
eventually require this anchor that the users insist is unnecessary.
Funnier still is that this whole affair arose of its failure in the
face of inappropriate application, and then the "model" inverting the
logic to prove the inappropriateness was in fact appropriate, which in
turn brings us back to the Bird to substantiate the model.

Next, models of earth, by using short rulers laid against the ground,
will prove it flat. :-)

>
>> The condescension of
>> >A simulation of a circuit is better than the "bench".
>> is absurd, especially when that same simulation fails to confirm bench
>> experience. I would challenge you to offer the testimony of any
>> single (credible) author of a simulator to stand by this profundity.
>
>I hate to tell you this, but all complicated designs have been proven in by
>simulations for years. Nobody builds a Pentium CPU before they make a chip.
>They simulate it.

Aw c'mon Tam, you don't hate to tell me that at all! Nobody built a
4004 before they made it? Your argument is simply the artifice of
myopic reasoning to force the question to the answer.

>>
>> I note this last effort of yours is one of several iterations - which
>> simulation was the most perfect? The first or the last? Who is to
>> know? How is it to be known? Simulation did not describe to you what
>> you had to change in the simulation to achieve Nirvana. None of your
>> rationale for change emanated from the data, it sprang from the
>> experience of someone's bench providing superior results. If this
>> exercise is so much better, it should have taken only one pass to
>> accomplish. The negation of that is found in the failed attempts.
>
>In analog simulations there is a tradeoff between accuracy, and how long it
>takes. Also, I pointed out that I added opamps to the model so I would not
>be loading down the line with 10K resistors.

Not responsive to the question at all. Which Model was the most
perfect in a world where all Models are perfect?

Your response (anticipated) begs the question: Why the need for 10GHZ GBW Op Amps when a diode, resistor, capacitor, and suitable Radio Shack meter could do the job? You beg accuracy (the common refuge of many here so untutored in the subject) when you demonstrate poor method of accomplishing the measure. Nothing demands 10K resistors except to satisfy the answer force fitting the question around it.

In my career in Metrology, I measured Hi-Q circuits long, long before 10GHz (or 100MHz, or 1MHz) GBW devices. The poverty of experience is not a suitable argument proving what was not measured.

>> Thus the assertion of:
>> >A simulation of a circuit is better than the "bench".
>> has been shown to be absurd through successive failures by the author
>> of that statement.
>
>Just for an example, I can make the source impedance anything I want. Do
>that on your bench.

In fact I demonstrated this exactly to this specific point, but of course that evidence is ignored to once again fit the question around the answer "built." Just like discarding the transmission line that doesn't fit the answer achieved, discarding my data to charge me with not having the capacity to do it is of similar caliber.

>>
>> As I have offered before, there is humor to be found in the disconnect
>> and this bastardization by Cecil reigns supreme in examples. But to
>> its credit, it keeps me amused and offers considerable fodder for the
>> mythical lurker to observe where the logical landmines are (or in
>> counting the field's litter of amputees attempting pirouettes). ;-)
>>
>You have been talking to the Easter Bunny again.
>Tam/WB2TT
>
>> 73's
>> Richard Clark, KB7QHC
>

As for equations. It is eminently obvious no "critics" here are going to utter a line of such work that fills an entire chapter from Chipman, and is found distributed across other chapters in its introduction. Even the Easter Bunny would be loath to cite Chipman to prove Chipman wrong. Talk about impeaching your sources. :-)

I have the advantage here. I could be wrong. I could be shown to be in error in my reading of Chipman. It hasn't happened. There are many here who hold copies of his work. There are none who dispute my recitation at any specific point, nor do they offer statements in his text expressed by him contradicting my interpretation. My advantage is that so many here are either lazy if I am wrong, or worse, too ashamed if I am right. And for such a small matter too. ;-)

It is indeed a poor model that cannot replicate results found from the math source offered for the unaltered question posed; but the flat earth society endures and the world tolerates (humors) their model.

73's
Richard Clark, KB7QHC

2572. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 17:32:29 UTC
From: fractenna@aol.com
Message-ID: <20031015133229.07995.00000292@mb-m16.aol.com>
Source record: 106540

>They can, if they are certain that they are documenting BPL and not another
>source. It is possible to misidentify other sources as BPL, so having a
>time-domain and frequency-domain analysis of the received signal will be an
>important cross check.
>
>73,
>Ed Hare, W1RFI
>

Good point. Ed, what does a plasma TV look like compared to BPL. Is the
multidomain signature quite different?

73,
Chip N1IR

2573. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 17:38:15 UTC
From: Adam 9A4QV <alicajic.adam@pu.hinet.hr>
Message-ID: <bmk0joput1@ls219.htnet.hr>
Source record: 106538

Thanks for offer, will consider your idea, already found on the web Antenna Plot, looks professional, only problem is AD-DA converter (25USD) if we are talking about the same.
If Polar plot measurements are true like they said, then much easier is to use just a sound card.
Seems,today not so many people use this kind of software to check the real diagram and the gain of the antenna.
Thanks again for the replay
Adam,9a4qv
"G&R" <spam@limbo.hell> wrote in message
news:pWbjb.7209$cT6.337431@news20.bellglobal.com...
> Another program which you wish to consider for field applications is
> AntennaPlot by VE3SQB from Degen Designs. We initially designed this
> software for our own use, however feel that this is a valuable for both
> amateurs and professionals alike.
>
> This program works together with a A/D converter and produces accurate
> results.
>
> As this program is on selected release during initial offerings, it is
best
> to contact us directly at info@degendesigns.com for information and a
copy.
>
> 73,
> Guenther VE3CVS
> info@degendesigns.com
> www.degendesigns.com
>
>
> "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> news:bmiqvfkvv1@ls219.htnet.hr...
> > Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on my
> mail.
> > Many antenna need to be tested in the field, HI.
> >
> > Thanks,
> > Adam 9a4qv
> >
> >
> >
> >
>
>

2574. The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:03:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b5vqov8mijv2l5l348tqkcieo82og2vg88@4ax.com>
Source record: 106539

>>Actually, several people (W8JI among them) have measured the output
>>impedance of common amateur linear amplifiers by at least a couple of
>>methods. The most credible measurements show, interestingly, a value
>>very close to 50 ohms when the amplifier is adjusted for normal operation.
>
>[sotto voce] "and yet it moves" - updated to
>
>>Of course, it doesn't really matter, but people continue to make a big
>>deal out of it.
>>
>>Roy Lewallen, W7EL

On Wed, 15 Oct 2003 06:48:09 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> A transmitter is loaded with two components and a meter placed between
>> them - woohah!
>
>Richard, I've got Chipman's book now. Where does he say that SWR
>depends upon the source impedance. He does describe a localized
>resonance effect within a transmission line. Are you saying the
>source impedance is a causal parameter for that localized resonance
>effect?
>
>Not arguing with you - just still trying to understand what you
>are saying.

Hi Cecil,

Your "not arguing" is as passive as your not looking at either the
text nor referencing my having answered this time and time before:

Chapter 3. Fig. 3-1 "Complete transmission line circuits"

Chapter 3. Fig. 3-2 "Equivalent circuits"

These may be resourced to the SAME answers to you Oct. 3.

Also introduced to you:

Chapter 4. Section 4.4 "Reflected Waves"
which describes the commonplace that any line terminated in an
impedance not the same as the characteristic of the line produces
reflections. This, of course, is something that you have no differed
upon, but on the same hand, neither have your carried it to its

logical conclusion which this section introduces as material being prepared for Chapter 8. Also note that this section explicitly references the figures described above.

The cogent point offered by Chipman (and has been reported here by me as a quote), that when a reflection occurs at the load and returns to the source:
"in general will be partially re-reflected there, depending on the boundary conditions established by the source Impedance Zs."
It should come as no surprise that this combination of source power and re-reflected power will produce a resultant that is dependant upon the length of the line. This conforms to the simple mechanics of interference which has been so ill-abused here.

Also quoted here:
Chapter 8. Section 8.2 "The practical importance of standing wave observations."
where in paragraph (e)
"... when the source impedance is not equal to the characteristic Impedance of the line, this conclusion does not apply. The General case is discussed more fully in Chapter 9."

Then of course there is more in Chapter 8
Chapter 8. Section 8.8 "Multiple Reflections."
This material shows the transient analysis and sets up the steady state analysis already anticipated above in Chapter 9.

Chapter 9. Section 9.10 "Return loss, reflection loss, and transmission loss."

This gives an equation (which modelers fail to appreciate in lesser work) that answers my earlier Challenge of how to reveal the Transmitter's characteristic Z through the measure of line loss due to mismatch at both ends of the line.

Chapter 10. Section 10.7 "Resonance curve methods for impedance measurement."

This offers how the voltage variation ALONG a transmission line is function of BOTH source Z and load Z. This was demonstrated by my bench example. Roy wanted that expressed as a formula specific to SWR, but as he stated he wasn't going to have his mind changed, I deemed it unnecessary to extend the math to perform that chore, and especially when this assemblage of Chipman's work is both unread, and when offered in recitation is unresponded to. Such is the quality of "peer review."

Chipman is but a single source that I have offered, but he does have a following and his material is written to be accessible.

As I have stated, my advantage is that I could be proven wrong by my interpretation, but none choose to do so with their own readings from the same source.

The question that remains:
Do you abandon the topic like the others?

73's
Richard Clark, KB7QHC

2575. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:23:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d92c7$1_1@corp.newsgroups.com>
Source record: 106541

Tarmo Tammaru wrote:
> I measured the SWR at the point Cecil proposed. I don't recall him
> specifying a transmission line either.

Everything was connected through three foot lengths of RG-400.
According to the guys over on sci.physics.electromag, that is a
long enough length to force a Z0 of 50 ohms upon the distributed
circuit. Is it easy for you to install some coax in your simulation?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2576. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:25:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d9346_1@corp.newsgroups.com>
Source record: 106542

Stef wrote:
> If I were you, I would remove this 4:1 balun and solder the coax
> direct to the twinlead. I would then use good coax right to the
> radio.
>
> The reason is: the impedance at the solder point is not 300 ohms and
> with your balun, you're inserting more losses .

True, but without a balun, one is introducing common mode effects.
I, personally, would use a 1:1 choke at the balanced to unbalanced
connection point.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2577. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:31:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d94aa_1@corp.newsgroups.com>
Source record: 106544

Richard Clark wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>Hmmmmm, that "bastardization by Cecil" supports your side of the
>>argument, Richard.
>
> No, it does not,

Yes, it does, even though you may not realize it. The "resonance effect"
localized energy exchange reported by Chipman exists worse case at a
conjugate match point where the reactances are at maximum values. Hopefully,
you realize that a conjugate match depends upon the source impedance, which
supports your argument.
--
73, Cecil http://www.qsl.net/w5dxp

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------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2578. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:32:15 UTC
From: G&R <spam@limbo.hell>
Message-ID: <fpgjb.7437$cT6.350550@news20.bellglobal.com>
Source record: 106546

The Dataq A/D converter is what we use, however, you are not limited to this.

Additionally, the main reason we designed our own software is that we felt the signal feed through the speaker, does not accurately reflect the actual performance as volume, AGC and radio signal processing does cause some variation.

Though, I must say Polar Plot was one of our initial considerations.

Thanks for the reply,
Guenther VE3CVS
info@degendesigns.com

"Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
news:bmk0joput1@ls219.htnet.hr...
> Thanks for offer, will consider your idea, already found on the web
Antenna
> Plot, looks professional, only problem is AD-DA converter (25USD) if we
are
> talking about the same.
> If Polar plot measurements are true like they said, then much easier is to
> use just a sound card.
> Seems,today not so many people use this kind of software to check the real
> diagram and the gain of the antenna.
> Thanks again for the replay
> Adam,9a4qv
> "G&R" <spam@limbo.hell> wrote in message
> news:pWbjb.7209$cT6.337431@news20.bellglobal.com...
> > Another program which you wish to consider for field applications is
> > AntennaPlot by VE3SQB from Degen Designs. We initially designed this
> > software for our own use, however feel that this is a valuable for both
> > amateurs and professionals alike.
> >
> > This program works together with a A/D converter and produces accurate
> > results.
> >
> > As this program is on selected release during initial offerings, it is
> best
> > to contact us directly at info@degendesigns.com for information and a
> copy.
> >
> > 73,
> > Guenther VE3CVS
> > info@degendesigns.com

> > www.degendesigns.com
> >
> >
> > "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> > news:bmiqvfkvv1@ls219.htnet.hr...
> > > Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on my
> > mail.
> > > Many antenna need to be tested in the field, HI.
> > >
> > > Thanks,
> > > Adam 9a4qv
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2579. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:34:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vor4ov5lufp748@corp.supernews.com>
Source record: 106543

The point is, that the simulator determines the voltage and current at each instant by solving the differential equations which are well known to us. Solving those very same equations for transmission lines and loads, then mathematically moving to the steady state frequency domain, gives us the familiar transmission line equations we use to calculate such things as SWR. So you're really doing the same thing as people who are calculating SWR from common equations. Doing the modeling does show that the common equations are being applied properly, but otherwise it should produce the same answer. The conclusion that SWR is affected by source impedance isn't supported by the theory established and verified in around 100 years of use -- that same theory that leads to the equations used by your simulator and to the common transmission line equations we use, so both tell us it isn't so. As usual, I'm having trouble understanding what Richard is saying, but he seems to be basing his premise solely on measurements he's made. If that's so, it would be foolish to toss out a hundred years of well-established theory on the basis of his measurements. As far as I can tell, he's offered no rational, logical, or mathematical explanation for his anomalous results, only taunts and insults, so the only rational conclusion is that there's something amiss with his measurement technique or instrumentation. Re-proving well-established theory every time a measurement seemingly contradicts it is a fool's errand of the first magnitude. Time is virtually always better spent in determining what's wrong with the measurements.

Roy Lewallen, W7EL

Tarmo Tammaru wrote:
> Roy,
>
> I am not sure Richard understands this, but I am simulating an actual
> circuit. That is, the input to the simulator is a schematic diagram of the
> circuit. With the present setup, a transient analysis is done by calculating
> the waveform at 100 point for each cycle of the waveform. I could use more
> sampling points, but it would run longer.
>
> Tam/WB2TT

2580. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:34:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d955a$1_1@corp.newsgroups.com>
Source record: 106545

Richard Clark wrote:
> I have the advantage here. I could be wrong. I could be shown to be
> in error in my reading of Chipman. It hasn't happened. There are
> many here who hold copies of his work. There are none who dispute my
> recitation at any specific point, nor do they offer statements in his
> text expressed by him contradicting my interpretation. My advantage
> is that so many here are either lazy if I am wrong, or worse, too
> ashamed if I am right. And for such a small matter too. ;-)

Your biggest problem is that you absolutely refuse to allow anyone to
agree with you.
--
73, Cecil http://www.qsl.net/w5dxp

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2581. Re: The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 18:43:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8d977f_1@corp.newsgroups.com>
Source record: 106547

Richard Clark wrote:
> Chapter 3. Fig. 3-1 "Complete transmission line circuits"

Been there, done that. It doesn't resemble anything you have said.

> Chapter 3. Fig. 3-2 "Equivalent circuits"

Been there, done that. It doesn't resemble anything you have said.

> Chapter 4. Section 4.4 "Reflected Waves"
> which describes the commonplace that any line terminated in an
> impedance not the same as the characteristic of the line produces
> reflections.

No argument - simple wave reflection stuff.

> It should come as no surprise that this combination of source power
> and re-reflected power will produce a resultant that is dependant upon
> the length of the line.

No argument - the superposed net total simply becomes the forward power.

> This offers how the voltage variation ALONG a transmission line is
> function of BOTH source Z and load Z.

Yes, my experiment seemed to support that assertion but you rejected it.
You have rejected every attempt of mine to agree with you. It appears that
your goal is complete and utter rejection by everyone on r.r.a.a before
you will achieve happiness. Good luck - you are well on your way.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2582. Re: The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 19:12:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8q6rovo4halkr69p0qlrim0eeptd4l11ej@4ax.com>
Source record: 106548

On Wed, 15 Oct 2003 13:43:39 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> Chapter 3. Fig. 3-1 "Complete transmission line circuits"
>
>Been there, done that. It doesn't resemble anything you have said.
>
>> Chapter 3. Fig. 3-2 "Equivalent circuits"
>
>Been there, done that. It doesn't resemble anything you have said.
>
>> Chapter 4. Section 4.4 "Reflected Waves"
>> which describes the commonplace that any line terminated in an
>> impedance not the same as the characteristic of the line produces
>> reflections.
>
>No argument - simple wave reflection stuff.
>
>> It should come as no surprise that this combination of source power
>> and re-reflected power will produce a resultant that is dependant upon
>> the length of the line.
>
>No argument - the superposed net total simply becomes the forward power.
>
>> This offers how the voltage variation ALONG a transmission line is
>> function of BOTH source Z and load Z.
>
>Yes, my experiment seemed to support that assertion but you rejected it.
>You have rejected every attempt of mine to agree with you. It appears that
>your goal is complete and utter rejection by everyone on r.r.a.a before
>you will achieve happiness. Good luck - you are well on your way.

Hi Cecil,

My goal is complete? That was demonstrated at the bench long ago.

You mistake abandonment and rejection, but you did answer my final
question. :-)

73's
Richard Clark, KB7QHC

2583. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 19:18:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v17rovs8q8djhtfdpv3u2je98fqf6jskrt@4ax.com>
Source record: 106549

On Wed, 15 Oct 2003 13:34:31 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> I have the advantage here. I could be wrong. I could be shown to be
>> in error in my reading of Chipman. It hasn't happened. There are
>> many here who hold copies of his work. There are none who dispute my
>> recitation at any specific point, nor do they offer statements in his
>> text expressed by him contradicting my interpretation. My advantage
>> is that so many here are either lazy if I am wrong, or worse, too
>> ashamed if I am right. And for such a small matter too. ;-)
>
>Your biggest problem is that you absolutely refuse to allow anyone to
>agree with you.

Hi Cecil,

The only complaint is the poor quality of such support. I would
prefer more robust coverage than the cut-and-paste variety. Clearly
you fail to even achieve a modicum of similitude to my thesis by
instead re-phrasing it in your own unnecessary elaborations that spin
off the wall into this "model" that proves you wrong (or so Tam would
have us believe). I see you offering no compelling rebuttal to him,
so the quality of effort, consistent with weak snippages from eminent
texts, is poor as I said.

If this is my biggest problem, it doesn't originate from me, but is
imposed upon me.

73's
Richard Clark, KB7QHC

2584. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 19:34:52 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <wjhjb.476057$2x.193575@rwcrnsc52.ops.asp.att.net>
Source record: 106550
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

The ARRL site, <http://www.arrl.org/tis/info/HTML/plc/#Field> , provides links to the following information:

"PLC is a "carrier-current" system, designed to intentionally conduct signals using electrical wiring. Although a carrier-current device is an unintentional emitter, because the power lines have such a significant potential to radiate and because a practical carrier-current device generally needs more signal than the permitted conducted emissions levels for unintentional emitters, carrier-current devices are not required to meet those conducted-emissions limits, but are required to meet the general radiated emissions limits in Sec. 15.209.

ï¿½ 15.209 states that the radiated emission limits of intentional radiators generally can't exceed the field strength levels specified in the following table:

Frequency (MHz) Field Strength (microvolts/meter @meters)

0.009-0.490 2400/F(kHz) 300

0.490-1.705 24000/F(kHz) 30

1.705-30.0 30 30

30-88 100 3

88-216 150 3

216-960 200 3

Above 960 500 3

Carrier-current devices are "Verified" as described in the Part-15 rules. This means that the manufacturer is required to test them to ensure that they comply with the FCC regulations. Under the present rules, they must be tested at 3 typical locations. "

Note that the HF Spectrum allows a S8 to S9 signal level, 30 uV/m at 30 meters distance.

2585. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 20:20:31 UTC
From: Jim Hampton <aa2qa@frontiernet.net>
Message-ID: <j_hjb.7334$Mk4.7148@news01.roc.ny>
Source record: 106551
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Brian,

I don't know about you, but I received a whole week pass from Belleveu :)

73 from Rochester, NY
Jim AA2QA

"Brian Kelly" <kelly@dvol.com> wrote in message
news:d22b54c3.0310150801.3cf781fe@posting.google.com...
> "Jim Hampton" <aa2qa@frontiernet.net> wrote in message
news:<gn1jb.4425$KT.4111@news01.roc.ny>...
> > Dick,
> > Any thoughts on this, or am I crazy?
>
> Certainly you're a crazy. All us frequent posters in this NG are
> certified crazies. Where the hell have YOU been?!
>
>
> w3rv
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.525 / Virus Database: 322 - Release Date: 10/9/03

2586. Re: How can I eliminate TV interference on shortwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 20:42:36 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <v7qdnbEMS4z_LBCiRVn-tA@comcast.com>
Source record: 106552

Robert,

If you ever buy a new SW radio, make sure it has a noise blanker. It won't completely eliminate the noise, but pulse type noise can easily be reduced by 20 db or more.

You should be able to fix the florescent light problem. First, I would replace the starter. On the TVs, get the neighbors to put ferrite beads on the TV power cords. If they use outdoor antennas, they might need those on the antenna leadins also.

And, of course, as Richard told you, get the antenna as far removed from all noise as you can.

Tam/WB2TT
"Robert Williams" <will7370@yahoo.com> wrote in message
news:e88e9b5a.0310142018.478f1d3f@posting.google.com...
> When my neighbors turn their TVs on, I have to turn off my shortwave
> radio because I get a terrible buzzing interference over most of the
> shortwave band. I can't hear a thing. I also get a similar problem
> when my wife turns on a florescent light in the kitchen. Is there
> anyway to reduce or eliminate this kind of interference?
>
> Rob KC7BUM
> Portland, Oregon

2587. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:03:00 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <z5mdnaNf9te2KxCiRVn-jw@comcast.com>
Source record: 106553

Richard,

Just a few words about modeling. Yes, they built a model of a 4004 before they made the chip. They stopped doing that somewhere around the 386.

As for my analog simulation, the simulator I am using is distributed by Linear Technology Inc so that people can model circuits using their chips. A lot of real world stuff is sort of simulated, where an analog signal is digitized, and all filtering and other audio stuff is actually done in a DSP.

If you want to see something that will really blow your mind, check out the Harris digital AM transmitter; and no, I don't mean a transmitter for digital audio.

Tam/WB2TT

2588. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:11:22 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <lOudncjKnpy8JRCiRVn-sA@comcast.com>
Source record: 106554

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f8d92c7$1_1@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > I measured the SWR at the point Cecil proposed. I don't recall him
> > specifying a transmission line either.
>
> Everything was connected through three foot lengths of RG-400.
> According to the guys over on sci.physics.electromag, that is a
> long enough length to force a Z0 of 50 ohms upon the distributed
> circuit. Is it easy for you to install some coax in your simulation?
> --
> 73, Cecil http://www.qsl.net/w5dxp
Cecil,

There are models for both lossy and non lossy transmission line. I have not used them, so it might take some learning. I can tell you though that given a load and transmission line, if you find the Z at the meter with an HP vector impedance meter, and then put a lumped impedance of that same value at the meter, you will get the same results. The meter is a crude impedance meter.

Tam/WB2TT

2589. Re: The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:18:06 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <uaidnTj1af4oJBCiRVn-hQ@comcast.com>
Source record: 106555

Richard,

I hope you are not mixing up analog steady state signals and reflections of pulses. The re reflection of a signal at a source depends not only on the impedance, but also on the voltage at the source.

Tam/WB2TT
"Richard Clark" <kb7qhc@comcast.net> wrote in message news:b5vqov8mijv2l5l348tqkcieo82og2vg88@4ax.com...
>
> >>Actually, several people (W8JI among them) have measured the output
> >>impedance of common amateur linear amplifiers by at least a couple of
> >>methods. The most credible measurements show, interestingly, a value
> >>very close to 50 ohms when the amplifier is adjusted for normal operation.
> >
> >[sotto voce] "and yet it moves" - updated to
> >
> >>Of course, it doesn't really matter, but people continue to make a big
> >>deal out of it.
> >>
> >>Roy Lewallen, W7EL
>
> On Wed, 15 Oct 2003 06:48:09 -0500, Cecil Moore
> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
> >Richard Clark wrote:
> >> A transmitter is loaded with two components and a meter placed between
> >> them - woohah!
> >
> >Richard, I've got Chipman's book now. Where does he say that SWR
> >depends upon the source impedance. He does describe a localized
> >resonance effect within a transmission line. Are you saying the
> >source impedance is a causal parameter for that localized resonance
> >effect?
> >
> >Not arguing with you - just still trying to understand what you
> >are saying.
>
> Hi Cecil,
>
> Your "not arguing" is as passive as your not looking at either the
> text nor referencing my having answered this time and time before:

>
> Chapter 3. Fig. 3-1 "Complete transmission line circuits"
>
> Chapter 3. Fig. 3-2 "Equivalent circuits"
>
> These may be resourced to the SAME answers to you Oct. 3.
>
> Also introduced to you:
>
> Chapter 4. Section 4.4 "Reflected Waves"
> which describes the commonplace that any line terminated in an
> impedance not the same as the characteristic of the line produces
> reflections. This, of course, is something that you have no differed
> upon, but on the same hand, neither have your carried it to its
> logical conclusion which this section introduces as material being
> prepared for Chapter 8. Also note that this section explicitly
> references the figures described above.
>
> The cogent point offered by Chipman (and has been reported here by me
> as a quote), that when a reflection occurs at the load and returns to
> the source:
> "in general will be partially re-reflected there, depending on
> the boundary conditions established by the source Impedance Zs."
> It should come as no surprise that this combination of source power
> and re-reflected power will produce a resultant that is dependant upon
> the length of the line. This conforms to the simple mechanics of
> interference which has been so ill-abused here.
>
> Also quoted here:
> Chapter 8. Section 8.2 "The practical importance of standing
> wave observations."
> where in paragraph (e)
> "... when the source impedance is not equal to the characteristic
> Impedance of the line, this conclusion does not apply. The
> General case is discussed more fully in Chapter 9."
>
> Then of course there is more in Chapter 8
> Chapter 8. Section 8.8 "Multiple Reflections."
> This material shows the transient analysis and sets up the steady
> state analysis already anticipated above in Chapter 9.
>
> Chapter 9. Section 9.10 "Return loss, reflection loss, and
> transmission loss."
>
> This gives an equation (which modelers fail to appreciate in lesser
> work) that answers my earlier Challenge of how to reveal the
> Transmitter's characteristic Z through the measure of line loss due to
> mismatch at both ends of the line.
>
> Chapter 10. Section 10.7 "Resonance curve methods for impedance

> measurement."
>
> This offers how the voltage variation ALONG a transmission line is
> function of BOTH source Z and load Z. This was demonstrated by my
> bench example. Roy wanted that expressed as a formula specific to
> SWR, but as he stated he wasn't going to have his mind changed, I
> deemed it unnecessary to extend the math to perform that chore, and
> especially when this assemblage of Chipman's work is both unread, and
> when offered in recitation is unresponded to. Such is the quality of
> "peer review."
>
> Chipman is but a single source that I have offered, but he does have a
> following and his material is written to be accessible.
>
> As I have stated, my advantage is that I could be proven wrong by my
> interpretation, but none choose to do so with their own readings from
> the same source.
>
> The question that remains:
> Do you abandon the topic like the others?
>
> 73's
> Richard Clark, KB7QHC
>

2590. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:22:28 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310151322.317013e1@posting.google.com>
Source record: 106556

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0310130857.1124da08@posting.google.com>...
> "Tom Sedlack" <cts050@nospamhere.email.mot.com> wrote in message The current max is at
> the feedpoint. Just guessing on the voltage, probably about 700 volts
> potential at the ends or so...x10 for a KW..
I had an E-mail that stated:

As P=V^2/R it follows V is proportional to the square root of P and
not directly proportional.

I was thinking the voltage for 1 kw would be in direct proportion. But
it seems not. 2100v? Thought I would throw this in. My original quote
may cause confusion. :/ MK

2591. Re: How can I eliminate TV interference on shortwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:34:41 UTC
From: Jake Donovan <jakedonovan_2nospam@cox.net>
Message-ID: <P3jjb.76963$AH4.36605@lakeread06>
Source record: 106557

What make and model?

As for your next door TV. It is either old and the flyback is arcing, newer and the tripler is cracked and arcing or they have big bucks and it's PLASMA. There should be no other reason to be getting noise from a TV next door.

Some one already suggested the 1st thing I would do with the lighting is to change out the starter. If you SW Radio has batteries, try it on batteries. If the noise is still there from the lights, it is the starter. If you are using AC, try a circuit not shared by the lighting.

If it does use batteries, take it for a walk and see where the noise is the worse and work from there.

JD

"Robert Williams" <will7370@yahoo.com> wrote in message
news:e88e9b5a.0310142018.478f1d3f@posting.google.com...
> When my neighbors turn their TVs on, I have to turn off my shortwave
> radio because I get a terrible buzzing interference over most of the
> shortwave band. I can't hear a thing. I also get a similar problem
> when my wife turns on a florescent light in the kitchen. Is there
> anyway to reduce or eliminate this kind of interference?
>
> Rob KC7BUM
> Portland, Oregon

2592. Re: Taking apart Hustler mobile mast?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:39:18 UTC
From: Jake Donovan <jakedonovan_2nospam@cox.net>
Message-ID: <98jjb.76977$AH4.7339@lakeread06>
Source record: 106558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Martin,

Why do you want to take it apart? Is the fold over cracked? (they are infamous for that.) I have 2 former fold over masts that I cut the knurl off and slid a tube up over the joint. A couple of rivets and a sprint load at the resonator end and I haven't bent one yet.

JD

"Martin" <marty123@optonline.net> wrote in message news:liiib.109121$Ri4.33496386@news4.srv.hcvlny.cv.net...
> While I'm waiting hopefully for some help from New-Tronics, I thought I
> would
> ask here if anyone would know how to take apart a Hustler mobile mast
> without wrecking it?
>
> The joint where the mast folds has two screws which I can remove, but the
> fit between the sections seems impossible to budge.
>
> Anyone have any actual experience with this?
>
> Marty K1FHR
>
>
>
>
>
>
>
>

2593. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 21:45:56 UTC
From: Jake Donovan <jakedonovan_2nospam@cox.net>
Message-ID: <nejjb.77001$AH4.28753@lakeread06>
Source record: 106559
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

A suggestion if it's an Icom rig. Icom rigs, most notably the 706, will not transmit full output with any input under 13+ volts. Vehicle has to be running.

Another problem is the rig shutting down and restarting every time you crank your engine. This isn't good for the rig, no mater who makes it. I have read reports of memory loss from this.

Go to your local car audio installer and get a 1/2 or 1 farad cap and hook it up in line between your radio and power source. No more spike or power drops when starting your vehicle.

JD

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:LUChb.616$_i.49017@nnrp1.ptd.net...
> Hello all,
>
> I am fortunate enough to have just acquired a new 2003 Ford Explorer
> (4x4, 4-door model) and wanted to solicit input from other owners of
> this vehicle as to their experiences with VHF/UHF and HF rig and
> antenna installation and wiring issues.
>
> I thought I might benefit from the experience of others in locating the
> wiring channels, good paths through the firewall to the battery, and
> perhaps experience in locating "remote head" radios in the forward
> of the two rear under-deck storage areas (or other locations).
>
> I plan to install a 2m/70cm transceiver and an HF plus (at least)
> 6m multiband rig in the vehicle. (probably both Yaesu).
>
> Additionally, any "gotchas" on mounting remote heads on the center
> console, etc. would be appreciated. (don't want to drill into something
> behind a pannel, but don't want to have to tear the whole vehicle apart
> to see what's behind, either, if it can be helped)
>
> 73 and thanks in advance for any insights that owners of this vehicle
> may provide,
>
> Carl - wk3c
>

2594. Re: BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 22:24:55 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <XOjjb.1730$P%1.1424469@newssvr28.news.prodigy.com>
Source record: 106560

"private" <private@private.com> wrote in message
news:3F8ACF65.BFA8CE2D@private.com...
> Is BPL still only in a testing phase yet to be approved by
> the FCC for a full scale build?
>
> It would be nice if there was a website set up clearly explaining
> what BPL is, how to detect it, where it is and will be deployed,
> information and .pdf forms to fill out and mail in to complain
> to the right people in the right areas of the country.
>
> If I wasn't so lazy and more computer literate I'd do it myself.
> Sounds like its something the ARRL should be more active in
> doing.
>

They are very active in it. Just go to their website and you can find
reports on their activities.

Dee D. Flint, N8UZE

2595. QZH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 22:34:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <biirov871fp3onfj1ah9vjiu7p9bv6pjho@4ax.com>
Source record: 106561

On Wed, 15 Oct 2003 17:18:06 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>I hope you are not mixing up analog steady state signals and reflections of
>pulses. The re reflection of a signal at a source depends not only on the
>impedance, but also on the voltage at the source.
>
>Tam/WB2TT

Hi Tam,

Found within the body of what I posted:
>>
>> Then of course there is more in Chapter 8
>> Chapter 8. Section 8.8 "Multiple Reflections."
>> This material shows the transient analysis and sets up the steady
>> state analysis already anticipated above in Chapter 9.

Didn't you say you studied under Chipman? This is HIS material, not
my derivations. Again, if I were wrong, there are enough copy holders
here to correct me. That has not come to pass in lo' these several
months.

73's
Richard Clark, KB7QHC

2596. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 22:50:01 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <HOqdnTXgCvmDUhCiRVn-tg@comcast.com>
Source record: 106562

"Bill Standard" <whodatzinger@mailhot.com> wrote in message
news:zv4jb.1990$iD6.1551@edtnps84...
> Question......
> Why is it that some people say you need to add a 6" spring to a 102" whip
in
> order to match it? Could someone explain this?

I guess it varies according to the mount and vehicle.
In my case, the whip, without spring, was just about perfect at 28.400,
which is exactly where I wanted it to be.

2597. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 22:58:29 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <gJSdncrrObaHTBCiRVn-gw@comcast.com>
Source record: 106564

"W7TI" <noway@nohow.com> wrote in message
news:apvqovk891709feghcs7kv0las81v1pstl@4ax.com...
> On Tue, 14 Oct 2003 18:10:59 GMT, "Eric" <nobody@nowhere.org> wrote:
>
> >Is it that hard to understand?
> >
> >But ok, I'll explain a little further.
> >I'm installing a cb radio in my jeep,
> ----------
>
> Well, how hard is this to understand: This is an AMATEUR RADIO
> NEWSGROUP.

And here, you might find a few helpful hams that will help you separate the reality of antennas from the marketing BS hanging on the wall in most truck stops.

And, unfortunately, a few intolerant folks like that one. . :-P

The CB band is just down the road from our 10 meter band, so we have a lot of things in common. The length of the antenna is only a few inches shorter for 10 meters, so many hams use CB antennas modified into the ham band. In fact, many hams use CB rigs converted to the ham band. It's even possible that a few hams actually use those "ham" rigs you see at truck stops!

I run two VHF rigs, a VHF/UHF, and a CB in my car, when I'm running "light". :)

It's hard to beat a CB for road info, on long trips.
I've yet to get any useful realtime road info on the ham bands.

One of my VHF rigs is position telemetry and messaging through the ham APRS systems.
http://www.findu.com/cgi-bin/find.cgi?kc6ete-9 This is where my car is, right now.
My wife uses this web page to check on my progress when I'm off on long trips, and other hams chat and send email.

2598. Comet B-10 VHF Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 22:59:11 UTC
From: Ed <goldenoak@comcast.net>
Message-ID: <55hrovo2ndpekuj91hauc5vipaj9oakt7u@4ax.com>
Source record: 106563

Hello,
I recently bought a Comet B-10 mobile antenna. However, I
noticed it's only rated for 50 watts, and my Icom IC-208H puts out 55
watts. I traded the B-10 in for a Comet-Maldol EX-104B which is only a
couple inches longer than the B-10; the bases look almost identical.
The EX-104B is rated for 100 watts. Anyone have any idea why these
two antennas are rated so differently for power handling?
--Ed G--

2599. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:09:29 UTC
From: Dave Bushong <dbushong@adelphia.net>
Message-ID: <Jskjb.109163$qj6.5008647@news1.news.adelphia.net>
Source record: 106565

Hi Ed,

If it's rated for 50 watts, your 55-watt transmitter will work just fine. You will lose 3dB in your cable and connectors, and only deliver 30-40 watts to the antenna.

Generally speaking, for any antenna from a reputable antenna provider, the more metal in the sky, the better. But an inch or two won't make enough difference to be discernable.

In fact, 10 dB is how much it takes for a mobile listener, listening to NBFM, to notice the difference.

TEN DB! That means you have to change from 1 watt to 10 watts for me to hear the difference.

As always, I say: work on the antenna first, receiver second, transmitter third. You are doing the right thing.

All the best,
Dave

Ed wrote:

> Hello,
> I recently bought a Comet B-10 mobile antenna. However, I
> noticed it's only rated for 50 watts, and my Icom IC-208H puts out 55
> watts. I traded the B-10 in for a Comet-Maldol EX-104B which is only a
> couple inches longer than the B-10; the bases look almost identical.
> The EX-104B is rated for 100 watts. Anyone have any idea why these
> two antennas are rated so differently for power handling?
> --Ed G--
>

2600. Re: How can I eliminate TV interference on shortwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:11:26 UTC
From: Irv Finkleman <finkirv@NOSPAMshaw.ca>
Message-ID: <3F8DD31A.3F78E078@NOSPAMshaw.ca>
Source record: 106566

Robert Williams wrote:
>
> When my neighbors turn their TVs on, I have to turn off my shortwave
> radio because I get a terrible buzzing interference over most of the
> shortwave band. I can't hear a thing. I also get a similar problem
> when my wife turns on a florescent light in the kitchen. Is there
> anyway to reduce or eliminate this kind of interference?
>
> Rob KC7BUM
> Portland, Oregon

Simple things first. If your receiver doesn't have a polarized ac plug,
try turning it around -- sometimes that can make a difference. especially
if it is coming through the ac lines.

Hope this helps -- its quick and simple.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2601. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:16:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8uirov8hr88ibp85i6gdtchdfmnjvg38ju@4ax.com>
Source record: 106567

On Wed, 15 Oct 2003 17:03:00 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>Just a few words about modeling. Yes, they built a model of a 4004 before
>they made the chip. They stopped doing that somewhere around the 386.
>
>As for my analog simulation, the simulator I am using is distributed by
>Linear Technology Inc so that people can model circuits using their chips. A
>lot of real world stuff is sort of simulated, where an analog signal is
>digitized, and all filtering and other audio stuff is actually done in a
>DSP.
>
>If you want to see something that will really blow your mind, check out the
>Harris digital AM transmitter; and no, I don't mean a transmitter for
>digital audio.
>
>Tam/WB2TT
>

Hi Tam,

I've used many simulators, including Spice and Electronic Workbench.
I've also read and adhere to Robert Pease's comments, a columnist and
engineer extraordinaire who can be just as dismissive about these
tools, especially when they cloud common sense with the impression of
legitimacy through presenting a number on the basis of faulty
presumptions.

For example, there is no way you can simulate a perfect resistor
simply and confirm it at the bench. So which is more important, the
pipe dream of a virtual circuit, or the real circuit that fails to
perform as forecast? I've seen your recitation of equations. I've
seen many like them applied to precision work that falls flat on its
face when they hit the wall of reality. Basically those so-called
simulations frequently fail to attend to many matters that are
unnoticed to 1% accuracy when the equation supplies 6 places of
resolution in perfection. No such thing could ever be duplicated
without further elaboration of the model, and as evidenced by your
example (and the successive iterations), you are in jeopardy of just
such failures in this "proof" offered.

I've measured the Ohm to seven places of resolution and 6 places of
accuracy. Ohm's Law was not enough, but it did guide at every turn in
the road that found error galore. To accomplish it, it took the

understanding of the Galvanic series, temperature, expansion, humidity, actual power dissipated, noise, drift, as a host of many sources of error that go unnoticed and un modeled in ad-hoc simulations. There is of course no demand for such precision to reveal the characteristic Z of the source, that can be accomplished far simpler and is documented by the same authorities who took such care in measuring the Ohm. The point of the matter, and this has been shown in Chipman, that the presumption of a matching source in the discussion of SWR is often taken for granted, and then dismissed as a necessity.

The proof of a simulator is found in its suite of tests that confirm what is demonstrable. If your simulator cannot predict the loss of real coaxial line when faced with mismatches at both ends, then it is not simulating actual performing conditions. You did not express any condition of source Z within your equations, when if fails from that reason, it necessarily invalidates the simulation. You claim, and Cecil says otherwise, that there was no line specified (making the specification of SWR rather obscure as a model), and as the inclusion of a line was a necessary correlative to the exhibition of source Z, it follows that your model is two steps removed from that argument by your own admission. So, what is this a model of? Just what do you mean by SWR? Which model is the most perfect if they are all better than bench measurements? What impelled the process of changing the model when even the first one is so much better than the bench? The 80386 would have never beat an abacus with those metaphorical questions hanging over its model.

I've seen digital transmitters. Circuit Cellar Ink has covered this form of modulation at least half a dozen years ago or more where Don Lancaster offered that a digital string can present (through a low pass filter) a power curve with distortion 60dB down (simply a matter of string length and clocking).

73's
Richard Clark, KB7QHC

2602. Re: The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:33:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <onlrovs0nfkkqn8kvl6ccarck22ffkfse1@4ax.com>
Source record: 106568

originally appeared in the new subject QZH that came as a consequence
of my typing my call FTL and Agent catching it all in with the ALT
key. :-)

On Wed, 15 Oct 2003 17:18:06 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>I hope you are not mixing up analog steady state signals and reflections of
>pulses. The re reflection of a signal at a source depends not only on the
>impedance, but also on the voltage at the source.
>
>Tam/WB2TT

Hi Tam,

Found within the body of what I posted:
>>
>> Then of course there is more in Chapter 8
>> Chapter 8. Section 8.8 "Multiple Reflections."
>> This material shows the transient analysis and sets up the steady
>> state analysis already anticipated above in Chapter 9.

Didn't you say you studied under Chipman? This is HIS material, not
my derivations. Again, if I were wrong, there are enough copy holders
here to correct me. That has not come to pass in lo' these several
months.

73's
Richard Clark, KB7QHC

2603. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:43:26 UTC
From: Herbert Khaury <Herbert@tiptoe.tp>
Message-ID: <f7GcndeuoZ0CRhCiU-KYhQ@comcast.com>
Source record: 106469

Yes, maybe.

--

"Eric" <nobody@nowhere.org> wrote in message
news:cgNib.757812$YN5.731961@sccrnsc01...
> Any suggestions?
>
> Thanks,
>
> Eric
>
>
>

2604. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:53:46 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ZZednaMPLMetQxCiRVn-tg@comcast.com>
Source record: 106470

Richard,

I went to a Bob Pease seminar a few years ago, great guy.

You are missing one of the points of the simulation. I am not trying to market an SWR meter. I simulated it with ideal parts so that the instrument is not affecting the reading. How are you going to measure an SWR of 65:1 with a real meter?

I did change the source impedance, and it did not change the SWR within the limits of what I could resolve. In addition, as I told Slick a couple of months ago, I used a real meter (Kenwood SW2000) to measure the SWR with two different source impedances and two different load impedances, and the source impedance made no difference.

I don't know that the Harris transmitter is the same as what was described in Circuit Cellar. The Harris has no modulators and no linear amplifiers; just a bank of 65 CW power modules that get switched on and off and synthesize the desired envelope power at something like a 20 KHz rate. Sort of a D/A converter that runs at a power level of 50 KW.

2605. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-15 23:56:14 UTC
From: w1rfi@aol.com
Message-ID: <20031015195614.12813.00000336@mb-m10.aol.com>
Source record: 106475

>Good point. Ed, what does a plasma TV look like compared to BPL. Is the
>multidomain signature quite different?

I have not looked at a plasma TV, Chip, but I would make that diagnosis primarily on on the basis of the sphere of influence. In the BPL test areas, the interference was heard over the entire area that had the BPL couplers in place.

There are other indicators, too. Knowing the involved BPL manufacturer would let one pretty easily compare what was heard on the air to the known characteristics of the BPL system involved. Interference from plasma TVs is not going to be "modulated" with digital signals, as would a BPL signal. Those OFDM carriers in the Ambient and Amperion BPL systems would be pretty hard to confuse with anything else.

Another characteristic to look for is spectral occupancy. If the signal appears suddenly in spectrum, is heard over several MHz, then suddenly tapers off, that also matches the BPL characteristics, not that from other devices.

If the signal is noiselike, but clearly digital in sound, one can also look for the bursts of the downloads, followed by the shorter, "keep alive" pulses that some of the systems do.

If all of the above added up and started at the same time the BPL system was brought on line, I would feel comfortable with my diagnosis.

73,
Ed Hare, W1RF

2606. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 00:02:28 UTC
From: w1rfi@aol.com
Message-ID: <20031015200228.12813.00000338@mb-m10.aol.com>
Source record: 106474

> I've passed all this along to friends in that venue with a notation
>on the fact that it is known that some test sites are NOT presently
>active above 22 mHz so they will be aware that Low VHF noise may be
>missing, and to not construe this as assuming that BPL will not cause
>interference with lowband HF systems.

What should be passed along is that some systems ARE using low-band VHF, and that the rules permit them to do so. In Briarcliff Manor, NY, I heard fundamental BPL signals on low VHF, and harmonics of the 22 MHz stuff in that range, too. By my guess, what I heard there was about S6 or so.

Some of the BPL stuff is frequency agile, so they may be able to avoid the spectrum of known users, but that would mean that any "out of area" low-band use (some state agencies have licenses for same) would possibly run into trouble.

I am willing to work with any of the involved agencies in the W2/W3 trial areas, get them started, then go home so they can develop independent results.

73,
Ed Hare, W1RFI

2607. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 00:05:00 UTC
From: w1rfi@aol.com
Message-ID: <20031015200500.12813.00000340@mb-m10.aol.com>
Source record: 106473

>I also encourage everyone to send a donation to the ARRL's BPL fund - you
>don't have to agree with *everything* the ARRL does to be willing to help
>to overcome this major threat to our future on HF.

I don't agree with everything the ARRL does either, Carl, so we are even on that score. I have seen ARRL board motions pass 8:7, so in that case, 7 members of the ARRL board didn't agree, either.

Every year or two, I look at the big picture and decide to keep going. The League's work on BPL this year has justified my 12 cents a day every single day that I know of!

73,
Ed Hare, W1RFI

2608. Re: QZH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 00:06:05 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <_ridnfQ_m7KOfBCiRVn-gw@comcast.com>
Source record: 106471

Richard,

Yes, I took a course from Chipman, but before he published his book. He used Adler, Chu, and Fano in his class. Reason I mentioned pulses is that most of what we did in class with reflections involved pulses. You may remember me giving Roy a hard time a few months ago, because I wasn't used to his way of thinking. He was right and I was wrong. I don't have the Chipman book.

Tam/WB2TT
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:biirov871fp3onfj1ah9vjiu7p9bv6pjho@4ax.com...
> On Wed, 15 Oct 2003 17:18:06 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >Richard,
> >
> >I hope you are not mixing up analog steady state signals and reflections
of
> >pulses. The re reflection of a signal at a source depends not only on the
> >impedance, but also on the voltage at the source.
> >
> >Tam/WB2TT
>
> Hi Tam,
>
> Found within the body of what I posted:
> >>
> >> Then of course there is more in Chapter 8
> >> Chapter 8. Section 8.8 "Multiple Reflections."
> >> This material shows the transient analysis and sets up the steady
> >> state analysis already anticipated above in Chapter 9.
>
> Didn't you say you studied under Chipman? This is HIS material, not
> my derivations. Again, if I were wrong, there are enough copy holders
> here to correct me. That has not come to pass in lo' these several
> months.
>
> 73's
> Richard Clark, KB7QHC

2609. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 00:08:55 UTC
From: Adam 9A4QV <alicajic.adam@pu.hinet.hr>
Message-ID: <bmkng7$m8h$1@ls219.htnet.hr>
Source record: 106472

Hello again,

The problem with AD converter is "solved" in PolarPlot with solution, not to use AGC, and if possible to use an constant level of audio from the radio, on modern radios this can be paket and data jack, on ft-847 i have 2 possibilities to pick up the constant signal, normally which can not be compared with AD converter.

Thanks, Adam
"G&R" <spam@limbo.hell> wrote in message
news:fpgjb.7437$cT6.350550@news20.bellglobal.com...
> The Dataq A/D converter is what we use, however, you are not limited to
> this.
>
> Additionally, the main reason we designed our own software is that we felt
> the signal feed through the speaker, does not accurately reflect the
actual
> performance as volume, AGC and radio signal processing does cause some
> variation.
>
> Though, I must say Polar Plot was one of our initial considerations.
>
> Thanks for the reply,
> Guenther VE3CVS
> info@degendesigns.com
>
>
>
>
>
> "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> news:bmk0joput1@ls219.htnet.hr...
> > Thanks for offer, will consider your idea, already found on the web
> Antenna
> > Plot, looks professional, only problem is AD-DA converter (25USD) if we
> are
> > talking about the same.
> > If Polar plot measurements are true like they said, then much easier is
to
> > use just a sound card.
> > Seems,today not so many people use this kind of software to check the
real
> > diagram and the gain of the antenna.
> > Thanks again for the replay
> > Adam,9a4qv

> > "G&R" <spam@limbo.hell> wrote in message
> > news:pWbjb.7209$cT6.337431@news20.bellglobal.com...
> > > Another program which you wish to consider for field applications is
> > > AntennaPlot by VE3SQB from Degen Designs. We initially designed this
> > > software for our own use, however feel that this is a valuable for
both
> > > amateurs and professionals alike.
> > >
> > > This program works together with a A/D converter and produces accurate
> > > results.
> > >
> > > As this program is on selected release during initial offerings, it is
> > best
> > > to contact us directly at info@degendesigns.com for information and a
> > copy.
> > >
> > > 73,
> > > Guenther VE3CVS
> > > info@degendesigns.com
> > > www.degendesigns.com
> > >
> > >
> > > "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> > > news:bmiqvfkvv1@ls219.htnet.hr...
> > > > Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on
my
> > > mail.
> > > > Many antenna need to be tested in the field, HI.
> > > >
> > > > Thanks,
> > > > Adam 9a4qv
> > > >
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>

2610. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 01:06:16 UTC
From: fractenna@aol.com
Message-ID: <20031015210616.12913.00000217@mb-m23.aol.com>
Source record: 106481

>>Good point. Ed, what does a plasma TV look like compared to BPL. Is the
>>multidomain signature quite different?
>
>I have not looked at a plasma TV, Chip, but I would make that diagnosis
>primarily on on the basis of the sphere of influence. In the BPL test areas,
>the interference was heard over the entire area that had the BPL couplers in
>place.
>
>There are other indicators, too. Knowing the involved BPL manufacturer would
>let one pretty easily compare what was heard on the air to the known
>characteristics of the BPL system involved. Interference from plasma TVs is
>not
>going to be "modulated" with digital signals, as would a BPL signal. Those
>OFDM carriers in the Ambient and Amperion BPL systems would be pretty hard to
>confuse with anything else.
>
>Another characteristic to look for is spectral occupancy. If the signal
>appears
>suddenly in spectrum, is heard over several MHz, then suddenly tapers off,
>that
>also matches the BPL characteristics, not that from other devices.
>
>If the signal is noiselike, but clearly digital in sound, one can also look
>for
>the bursts of the downloads, followed by the shorter, "keep alive" pulses
>that
>some of the systems do.
>
>If all of the above added up and started at the same time the BPL system was
>brought on line, I would feel comfortable with my diagnosis.
>
>73,
>Ed Hare, W1RF
>

Hi Ed,

I think a general description of other RFI sources would be helpful for any radio amateur to make a 'first cut' assessment. It might also help you isolate the truly legitimate cases of BPL RFI--if and when they exist.

I do have a concern that hams not make too many false alarms. Sounds like you are on top of the the problem and I wish you the best.

73,
Chip N1IR

2611. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 01:21:15 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <8gsrovkdpi6klk3gjsml2b2hil4m1os9c4@4ax.com>
Source record: 106476

Ed...

Is the ARRL preparing a FAQ for amateurs who have scopes, spectrum
analyzers, or service monitors, etc., as to how they might go about
inspecting a suspected chunk of spectrum and how detect, identify,
qualify whey they see/hear?

73
Dan (K0DAN)
>
>I have not looked at a plasma TV, Chip, but I would make that diagnosis
>primarily on on the basis of the sphere of influence. In the BPL test areas,
>the interference was heard over the entire area that had the BPL couplers in
>place.
>
>There are other indicators, too. Knowing the involved BPL manufacturer would
>let one pretty easily compare what was heard on the air to the known
>characteristics of the BPL system involved. Interference from plasma TVs is not
>going to be "modulated" with digital signals, as would a BPL signal. Those
>OFDM carriers in the Ambient and Amperion BPL systems would be pretty hard to
>confuse with anything else.
>
>Another characteristic to look for is spectral occupancy. If the signal appears
>suddenly in spectrum, is heard over several MHz, then suddenly tapers off, that
>also matches the BPL characteristics, not that from other devices.
>
>If the signal is noiselike, but clearly digital in sound, one can also look for
>the bursts of the downloads, followed by the shorter, "keep alive" pulses that
>some of the systems do.
>
>If all of the above added up and started at the same time the BPL system was
>brought on line, I would feel comfortable with my diagnosis.
>
>73,
>Ed Hare, W1RF

2612. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 01:27:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vmrrovcmunp91539oju7a3pkp870q7uk92@4ax.com>
Source record: 106477

On Wed, 15 Oct 2003 19:53:46 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>Richard,
>
>I went to a Bob Pease seminar a few years ago, great guy.
>
>You are missing one of the points of the simulation. I am not trying to
>market an SWR meter. I simulated it with ideal parts so that the instrument
>is not affecting the reading. How are you going to measure an SWR of 65:1
>with a real meter?

Hi Tam,

A very good question. The Metrologist wouldn't, there are better
techniques that are more accurate.
>
>I did change the source impedance, and it did not change the SWR within the
>limits of what I could resolve. In addition, as I told Slick a couple of
>months ago, I used a real meter (Kenwood SW2000) to measure the SWR with two
>different source impedances and two different load impedances, and the
>source impedance made no difference.

That too is unremarkable. The difference is not resolved at one point
as I have demonstrated.
>
>I don't know that the Harris transmitter is the same as what was described
>in Circuit Cellar. The Harris has no modulators and no linear amplifiers;
>just a bank of 65 CW power modules that get switched on and off and
>synthesize the desired envelope power at something like a 20 KHz rate. Sort
>of a D/A converter that runs at a power level of 50 KW.
>
No, this misses the mark considerably. The lowest bit rate is half
the Fo of the transmit frequency (typically the bit rate is equal to
the Fo). It is accomplished with a ROM lookup table to achieve the
modulation (much like the Circuit Cellar Ink articles by Don Lancaster
but with significant differences too as his discussion was strictly
CW).

73's
Richard Clark, KB7QHC

2613. Opinions on Yaesu "ATAS" Mobile Antenna? (from experienced users, please)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 01:50:23 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <zPmjb.1252$_i.111143@nnrp1.ptd.net>
Source record: 106478

I would appreciate experience-based opinions on the quality, durability, effectiveness, and convenience of Yaesu's ATAS-100 and ATAS-120 auto-tune multiband antenna system.

I am about to make some decisions on a new mobile installation and am looking at the Yaesu FT-857 ... which supports the ATAS system.

There is also a third-party controller from W4RT which claims to make any "screwdriver" type antenna compatible with the ATAS functions in the Yaesu FT-847, 857, and 897 ...

The Yaesu antenna does not require an intermediate controller, but I'm curious as to folks' experience with it ...

73,
Carl - wk3c

2614. Re: Opinions on Yaesu "ATAS" Mobile Antenna? (from experienced users, please)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:10:21 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <MM6dner7tdKMYxCiRVn-sA@comcast.com>
Source record: 106479

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:zPmjb.1252$_i.111143@nnrp1.ptd.net...
> I would appreciate experience-based opinions on the quality,
> durability, effectiveness, and convenience of Yaesu's ATAS-100
> and ATAS-120 auto-tune multiband antenna system.

I haven't used them, but I've examined an ATAS-100 directly. I was thinking
of buying it.
Looks pretty "inexpensive" relative to the other screwdrivers out there.
I didn't think it would hold up in use.
I have the 847.

So far, I haven't found my price/performance point.

> There is also a third-party controller from W4RT which claims
> to make any "screwdriver" type antenna compatible with the
> ATAS functions in the Yaesu FT-847, 857, and 897 ...

Yaesu has an interesting system. Two voltages, one voltage says "go up" and
the other one says "go down". It's not complicated to decode :)

2615. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:19:32 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310151819.66151764@posting.google.com>
Source record: 106480

"G&R" <spam@limbo.hell> wrote in message
news:<fpgjb.7437$cT6.350550@news20.bellglobal.com>...
> The Dataq A/D converter is what we use, however, you are not limited to
> this.
>
> Additionally, the main reason we designed our own software is that we felt
> the signal feed through the speaker, does not accurately reflect the actual
> performance as volume, AGC and radio signal processing does cause some
> variation.
>
> Though, I must say Polar Plot was one of our initial considerations.
>
> Thanks for the reply,
> Guenther VE3CVS
> info@degendesigns.com
>
>
>
>
>
In defence of Bob Freath G4HFQ who wrote the Polar plot program.Peter
Dodd,G3LDO
wrote in RADCOM November '02 issue " The volume of the beat note, in
the SSB or CW mode of a plain unmodulated carrier has good correlation
with the RF input level, provided the receiver is operated in a linear
manner"
Some may well remember the article written by Peter in one of the
early
ARRL compendiums where he described the use of a computor with a A/D
converter
but without the goodies as supplied on
WWW.bob.freeth.dial.pipex.com/polarplot
I'll be very interested in this new program from Canada to see if they
can supply equal goodies when creating polar plots as an advance over
what Peter
wrote about in those early days.
Regards
Art

> "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> news:bmk0joput1@ls219.htnet.hr...
> > Thanks for offer, will consider your idea, already found on the web
> Antenna
> > Plot, looks professional, only problem is AD-DA converter (25USD) if we

> are
> > talking about the same.
> > If Polar plot measurements are true like they said, then much easier is to
> > use just a sound card.
> > Seems,today not so many people use this kind of software to check the real
> > diagram and the gain of the antenna.
> > Thanks again for the replay
> > Adam,9a4qv
> > "G&R" <spam@limbo.hell> wrote in message
> > news:pWbjb.7209$cT6.337431@news20.bellglobal.com...
> > > Another program which you wish to consider for field applications is
> > > AntennaPlot by VE3SQB from Degen Designs. We initially designed this
> > > software for our own use, however feel that this is a valuable for both
> > > amateurs and professionals alike.
> > >
> > > This program works together with a A/D converter and produces accurate
> > > results.
> > >
> > > As this program is on selected release during initial offerings, it is
> best
> > > to contact us directly at info@degendesigns.com for information and a
> copy.
> > >
> > > 73,
> > > Guenther VE3CVS
> > > info@degendesigns.com
> > > www.degendesigns.com
> > >
> > >
> > > "Adam 9A4QV" <alicajic.adam@pu.hinet.hr> wrote in message
> > > news:bmiqvfkvv1@ls219.htnet.hr...
> > > > Hello, can somebody send me PolarPlot v1.6, not the latest v2.0 on my
> mail.
> > > > Many antenna need to be tested in the field, HI.
> > > >
> > > > Thanks,
> > > > Adam 9a4qv
> > > >
> > > >
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2616. Re: 102" mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:40:49 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <vos1a95ps436dd@corp.supernews.com>
Source record: 106482

Eric;

I wish to endorse the comments below.
For years, until 1958, 11 meters was a ham band. The FCC in response to requests for a cheap and easy to use radio communications service created the "Class D General Radio Service" and removed 11 meters from amateur service. At the time many (most?) amateur radio operators were, to put it mildly, *issed. Some still have to get over it. However a very large percentage of present hams either started as or are also CBers. Ignore any and all negative comments about CBers. While some comments are justified understand that not all hams are pure as the driven snow either. CB radio does have a valuable place in the scheme of things.
One of the benefits of amateur radio is the knowledge one gains along the way to acquiring a license. As my flight instructor told me when I passed my pilot's test. A license is just the start of your education.
I hope that you haven't taken any offense to the casual comments about your initial request for help. Your question was rather vague. The information that was given is good and should get you started along the way.
Having said all that I have I encourage you to look into the wonderful world of amateur radio and acquire an amateur radio license. With the probable demise of the code test gaining a license has never been easier. No matter your interest, you will find something in radio electronics that will interest you and give you a lifetime of activity.
Dave WD9BDZ

Dave VanHorn wrote:
> "W7TI" <noway@nohow.com> wrote in message
> news:apvqovk891709feghcs7kv0las81v1pstl@4ax.com...
>
>>On Tue, 14 Oct 2003 18:10:59 GMT, "Eric" <nobody@nowhere.org> wrote:
>>
>>
>>>Is it that hard to understand?
>>>
>>>But ok, I'll explain a little further.
>>>I'm installing a cb radio in my jeep,
>>
>>____
>>
>>Well, how hard is this to understand: This is an AMATEUR RADIO
>>NEWSGROUP.
>
>
> And here, you might find a few helpful hams that will help you separate the
> reality of antennas from the marketing BS hanging on the wall in most truck

> stops.
>
> And, unfortunately, a few intolerant folks like that one. . :-P
>
> The CB band is just down the road from our 10 meter band, so we have a lot
> of things in common. The length of the antenna is only a few inches shorter
> for 10 meters, so many hams use CB antennas modified into the ham band. In
> fact, many hams use CB rigs converted to the ham band. It's even possible
> that a few hams actually use those "ham" rigs you see at truck stops!
>
> I run two VHF rigs, a VHF/UHF, and a CB in my car, when I'm running "light".
> :)
>
> It's hard to beat a CB for road info, on long trips.
> I've yet to get any useful realtime road info on the ham bands.
>
> One of my VHF rigs is position telemetry and messaging through the ham APRS
> systems.
> http://www.findu.com/cgi-bin/find.cgi?kc6ete-9 This is where my car is,
> right now.
> My wife uses this web page to check on my progress when I'm off on long
> trips, and other hams chat and send email.
>
>
>
>

2617. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:48:03 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3F8E06E0.4080109@ix.netcom.com>
Source record: 106483
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Carl R. Stevenson wrote:

>>
>>
>
>S9+10 on a VERY short whip (an "Outbacker Joey") is a pretty huge
>signal to me ... with BPL proposing to go up to 80 MHz, I would
>think that the FM broadcast band is at relatively low risk, though FM
>receivers could experience some degree of "desense" if the BPL
>signal at the front end was strong enough due to proximity.
>
TV channels 2, 3, 4, and 5 will get clobbered by the junk going up to 80MHz.
The video signal is AM modulated onto the channel carrier (with a
portion of the
lower sideband suppressed) and will have no ability to reject the BPL
noise.
The effect would be somewhat similar to a sparky vacuum cleaner motor
throwing
white and black spots throuout the picture. The sound, being FM, will fare
better. Well, there's digital HDTV, but most everyone still uses analog TV.
And I don't get cable or satellite.

2618. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:53:44 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <iOnjb.811$h47.805@bignews4.bellsouth.net>
Source record: 106484
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"Jake Donovan" <jakedonovan_2nospam@cox.net> wrote in message
news:nejjb.77001$AH4.28753@lakeread06...
> A suggestion if it's an Icom rig. Icom rigs, most notably the 706, will
not
> transmit full output with any input under 13+ volts. Vehicle has to be
> running.
>
> Another problem is the rig shutting down and restarting every time you
crank
> your engine. This isn't good for the rig, no mater who makes it. I have
> read reports of memory loss from this.
>
> Go to your local car audio installer and get a 1/2 or 1 farad cap and hook
> it up in line between your radio and power source. No more spike or
power
> drops when starting your vehicle.

I always shut off my radios prior to starting my vehicle. Too risky NOT to.

Jerry
K4KWH

>
> JD
>
> "Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
> news:LUChb.616$_i.49017@nnrp1.ptd.net...
> > Hello all,
> >
> > I am fortunate enough to have just acquired a new 2003 Ford Explorer
> > (4x4, 4-door model) and wanted to solicit input from other owners of
> > this vehicle as to their experiences with VHF/UHF and HF rig and
> > antenna installation and wiring issues.
> >
> > I thought I might benefit from the experience of others in locating the
> > wiring channels, good paths through the firewall to the battery, and
> > perhaps experience in locating "remote head" radios in the forward
> > of the two rear under-deck storage areas (or other locations).
> >
> > I plan to install a 2m/70cm transceiver and an HF plus (at least)
> > 6m multiband rig in the vehicle. (probably both Yaesu).
> >
> > Additionally, any "gotchas" on mounting remote heads on the center
> > console, etc. would be appreciated. (don't want to drill into something

> > behind a pannel, but don't want to have to tear the whole vehicle apart
> > to see what's behind, either, if it can be helped)
> >
> > 73 and thanks in advance for any insights that owners of this vehicle
> > may provide,
> >
> > Carl - wk3c
> >
>
>

2619. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 02:58:52 UTC
From: brianburke@juno.com
Message-ID: <f45722ac.0310151858.755a1d16@posting.google.com>
Source record: 106485
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Mike Coslo <mcoslo@adelphia.net> wrote in message
news:<fh2jb.108631$qj6.4727200@news1.news.adelphia.net>...
> James Wilson wrote:
> > What does BPL sound like? Can someone post a wav file somewhere so it can
> > be identified? Is it worse that the Pennsylvania QSO party?
>
> Did someone take over a frequency you owned?
>
> - Mike KB3EIA -

Mike, that was kinda rude.

2620. View from the tower, was (Opposing BPL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 03:08:45 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ni2sov00hcaidfkq049nv2kb4jqmqek5tk@4ax.com>
Source record: 106486

On Wed, 15 Oct 2003 20:20:31 GMT, "Jim Hampton"
<aa2qa@frontiernet.net> wrote:

>Brian,
>
>I don't know about you, but I received a whole week pass from Belleveu :)
I'm not sure about the crazy part, but...
For those who have a "good" broadband connection here is a panoramic
view from the top of my tower. If you don't have broad band, don't
waste your time. This thing is 19.5 megs. It should take under a
minute with cable, and close to 10 minutes with ADSL, so you can
imagine how long it'd take with a dial up connection.
http://www.rogerhalstead.com/towerview.htm
I stood on the triangular top plate of the ROHN 45 G (at 100 feet) and
shot the entire series hand held. The camera was set to manual, but
the wind was gusting to 20 MPH plus, so a few of them didn't line up
good enough for a proper match when making the panorama.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2621. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 03:14:58 UTC
From: brianburke@juno.com
Message-ID: <f45722ac.0310151914.299a4ff6@posting.google.com>
Source record: 106487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Jim Hampton" <aa2qa@frontiernet.net> wrote in message
news:<j_hjb.7334$Mk4.7148@news01.roc.ny>...
> Brian,
>
> I don't know about you, but I received a whole week pass from Belleveu :)
>
> 73 from Rochester, NY
> Jim AA2QA

So you got three hots and a cot AND a weeks pass (all paid) and the
rest of us have to learn it because you had to do it?

That's not the way it works anymore.

I'm no longer an instrument of national policy.

2622. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 03:19:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8e1081_6@corp.newsgroups.com>
Source record: 106488

Tarmo Tammaru wrote:
> There are models for both lossy and non lossy transmission line. I have not
> used them, so it might take some learning. I can tell you though that given
> a load and transmission line, if you find the Z at the meter with an HP
> vector impedance meter, and then put a lumped impedance of that same value
> at the meter, you will get the same results.

Not in reality, you won't. Any TV ghosting that exists because of reflections will disappear when you go to a lumped impedance. And the noise across the lumped impedance will not be identical to the noise associated with a long transmission line.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2623. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 03:25:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8e11e1$1_6@corp.newsgroups.com>
Source record: 106489

Mark Keith wrote:
> I was thinking the voltage for 1 kw would be in direct proportion. But
> it seems not. 2100v? Thought I would throw this in. My original quote
> may cause confusion. :/ MK

Assuming Reg's value of Z0=600 ohms for the wire in a dipole, the RMS voltage
will be about Sqrt(600*1000) = 775v. The net voltage will be double that
value or 1550v making the peak voltage about 2190 volts.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2624. Re: Question about Teeter Towers I've seen on I-5

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 03:52:29 UTC
From: mxduffie@axtxom.net
Message-ID: <du4sovs6hpo8uamhiniomc1s5nb80tt7u0@4ax.com>
Source record: 106491

On 13 Oct 2003 18:44:18 -0700, jerry-google-groups@bogosimeter.com
(Jerry Asher) wrote:

> Thanks to all that replied. I've been puzzled by this for about nine
> months of such trips now, and finally remembered to post.

Towers that come down to a single point are preferred because there
is no side stress on the base or the bottom of the tower. If each
leg were to come down to the base, any imbalance would be felt on a
single SMALLER and WEAKER point (the tower leg), stressing that
point.

gm
--
Replace x in adr with c

2625. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 04:13:02 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vos6mkdvhegi1e@corp.supernews.com>
Source record: 106490

I'd really be interested in learning where that 10 dB figure came from. I admittedly have very little experience in using NBFM, but 10 dB seems awfully large to make a perceptable difference. I recall from a communications course that FM detection has a threshold effect -- below a certain S/N ratio, the noise effectively multiplies the modulation, rather than adding to it as it does in low S/N AM. This is described by Carlson in _Communication Systems_ as "mutilation" of the modulation. It seems from his analysis that it would take much less than 10 dB to cross the threshold, that is, to go from noisy but recognizable modulation to badly distorted, "mutilated" audio.

In a quick experiment with a NBFM receiver and signal generator set for 5 kHz deviation, I could easily tell the difference in quieting resulting from each 3 dB change in signal level, when the signal was below full quieting. Subjective examination of the output signal on a scope showed a transition from a recognizable but noisy sine wave to apparent noise only, with a signal level change of only 2 dB.

So, what's the basis for the 10 dB figure?

Roy Lewallen, W7EL

Dave Bushong wrote:
> . . .
> In fact, 10 dB is how much it takes for a mobile listener, listening to
> NBFM, to notice the difference.
>
> TEN DB! That means you have to change from 1 watt to 10 watts for me to
> hear the difference.
> . . .

2626. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 04:50:38 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bmm31f$olitc$11@ID-189073.news.uni-berlin.de>
Source record: 106494

Lemme know if you make it to the Tri-Cities area (Bay, Saginaw, Midland area) Ed.

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
"W1RFI" <w1rfi@aol.com> wrote in message
news:20031014081053.09700.00000225@mb-m24.aol.com...
> >The Emmaus test site video (test area #3) should be pretty representative
> >of the "main.net" system ... test area #4 is the Amperion OFDM system.
> >There could be others that might have different "signatures" ...
>
> Just as a mnor correction, test area #4, in Briarcliff Manor, NY, is an Ambient
> system. The Amperion system is also OFDM and has a very similar sound. I found
> it easily in Whitehall, PA, once I drove into the test area.
>
> 73,
> Ed Hare, W1RFI
>

2627. Re: BPL questions??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 04:54:05 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bmm31g$olitc$12@ID-189073.news.uni-berlin.de>
Source record: 106495

That would be Bay, Midland and Saginaw counties.

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
>
> It is reported that PG&E may be doing a small trial "in the bay area." A
local
> Michigan radio station just ran a piece that the service should soon be
> available in parts of Michigan. Rumors about possible deployment in
Florida
> have been bantered about.
>
> If any hams live near the trial areas and can take an HF mobile station
into
> the area, or suspect they may have BPL interference at home, contact me at
> w1rfi@arrl.org. I can provide more information and a map of the areas
> involved.
>
> 73,
> Ed Hare, W1RFI
> ARRL Lab
>

2628. horz/vertical 2 meter spacing????? thanks

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 04:54:14 UTC
From: kc5cqa@yahoo.com
Message-ID: <cm8sovo5lri17co8dgfas1jgsb6n1042p9@4ax.com>
Source record: 106492

I made a post last week, with that 'input', have decided to
install only two antennas , one a duel band 2/440 vertical ground
plane, and a two meter horz ground plane,(looks like a 4 leave
clover),,,,,,,,I plan to have the duel bander on the top, what I
would like to know is how far part should I 'space' these two antenna?
I can easily keep them four to six feet
apart, If I have to I can make that distance greater,,, but will take
a little "fabrication". I really appreciate your input. I have read
the books, but there is nothing like experience. cl 73

2629. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 05:30:17 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310152130.7d19cb59@posting.google.com>
Source record: 106493
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

Dave Shrader <david.shrader@comcast.net> wrote in message
news:<wjhjb.476057$2x.193575@rwcrnsc52.ops.asp.att.net>...
> The ARRL site, <http://www.arrl.org/tis/info/HTML/plc/#Field> , provides
> links to the following information:
>
> "PLC is a "carrier-current" system, designed to intentionally conduct
> signals using electrical wiring. Although a carrier-current device is an
> unintentional emitter, because the power lines have such a significant
> potential to radiate and because a practical carrier-current device
> generally needs more signal than the permitted conducted emissions
> levels for unintentional emitters, carrier-current devices are not
> required to meet those conducted-emissions limits, but are required to
> meet the general radiated emissions limits in Sec. 15.209.
>
> ï¿½ 15.209 states that the radiated emission limits of intentional
> radiators generally can't exceed the field strength levels specified in
> the following table:
>
> Frequency (MHz) Field Strength (microvolts/meter @meters)
>
> 0.009-0.490 2400/F(kHz) 300
>
> 0.490-1.705 24000/F(kHz) 30
>
> 1.705-30.0 30 30
>
> 30-88 100 3
>
> 88-216 150 3
>
> 216-960 200 3
>
> Above 960 500 3
>
> Carrier-current devices are "Verified" as described in the Part-15
> rules. This means that the manufacturer is required to test them to
> ensure that they comply with the FCC regulations. Under the present
> rules, they must be tested at 3 typical locations. "

What's the FCC definition of "typical locations"??

> Note that the HF Spectrum allows a S8 to S9 signal level, 30 uV/m at 30
> meters distance.

15.209 is the problem, it's grossly outdated, did not foresee anything like BPL and the limits needs to be revised downward which is one piece of this brawl. Ref: Tailpipe emissions regs, same basic problem, different pollution media.

Another piece of it is that the BPL crowd wants permission to bust the already inadequate limits in 15.209. They're playing the regulatory loopholes game. The Japanese jumped past their regulatory Catch-22 techo-babble and abolished BPL period. We need to follow the Japanese lead and we're working on it.

w3rv

2630. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 15:51:47 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <n8zjb.569538$Oz4.537512@rwcrnsc54>
Source record: 106496
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

I have a 706 MKIIg in a 2003 Ranger. I don't know if this is applicable or not but thought I'd pass it on.

How can I run Power and antennas out of vehicle to battery, antenna mounts etc.?

Answer: In my old Ranger [1985] just below the driver side left hip under the floor mat is a 3/4 inch drain hole with a grommet as a plug. I released the aluminum cover from the door/mat area and lifted the mat. Sure enough the plug was there!! I clipped out a 3/8 diameter section from the center of the grommet and sliced one end open. After running the necessary wires through the grommet it was reinstalled and sealed with Coax-Seal [$3.00 at HRO].

There was no need to punch holes, drill holes, etc.

Deacon Dave, W1MCE

2631. Re: View from the tower, was (Opposing BPL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 16:00:39 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3F8EC092.9040402@comcast.net>
Source record: 106497

Look at that BPL antenna in the foreground!!!!

Roger Halstead wrote:

> On Wed, 15 Oct 2003 20:20:31 GMT, "Jim Hampton"
> <aa2qa@frontiernet.net> wrote:
>
>
>>Brian,
>>
>>I don't know about you, but I received a whole week pass from Belleveu :)
>
> I'm not sure about the crazy part, but...
> For those who have a "good" broadband connection here is a panoramic
> view from the top of my tower. If you don't have broad band, don't
> waste your time. This thing is 19.5 megs. It should take under a
> minute with cable, and close to 10 minutes with ADSL, so you can
> imagine how long it'd take with a dial up connection.
> http://www.rogerhalstead.com/towerview.htm
> I stood on the triangular top plate of the ROHN 45 G (at 100 feet) and
> shot the entire series hand held. The camera was set to manual, but
> the wind was gusting to 20 MPH plus, so a few of them didn't line up
> good enough for a proper match when making the panorama.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

2632. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 16:52:05 UTC
From: Jake Donovan <jakedonovan_2nospam@cox.net>
Message-ID: <S0Ajb.78097$AH4.36360@lakeread06>
Source record: 106498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

Jerry,

Are you telling me you have NEVER turned the key with the radios on? Never?
Ah come on... it happens to the best of us. :-)

I actually learned to use the CAPs when I had a AL500. It cured all dimming
of head lights and other electrical devices in the vehicle when keying. I
had two of them and have used at leat one of them with every new vehicle I
have gotten even though I no longer run an amp. I see it as another safety
device. It also has an added benefit, it does a good job if you have a
little alternator whine.

My wife's old Honda would dim its headlights every time a 40 watt 2 meter
rig was keyed. (Small battery and my guess, a smaller alternator.)
"Jerry" <joxendi@bellsouth.net> wrote in message
news:iOnjb.811$h47.805@bignews4.bellsouth.net...
>
> "Jake Donovan" <jakedonovan_2nospam@cox.net> wrote in message
> news:nejjb.77001$AH4.28753@lakeread06...
> > A suggestion if it's an Icom rig. Icom rigs, most notably the 706, will
> not
> > transmit full output with any input under 13+ volts. Vehicle has to be
> > running.
> >
> > Another problem is the rig shutting down and restarting every time you
> crank
> > your engine. This isn't good for the rig, no mater who makes it. I
have
> > read reports of memory loss from this.
> >
> > Go to your local car audio installer and get a 1/2 or 1 farad cap and
hook
> > it up in line between your radio and power source. No more spike or
> power
> > drops when starting your vehicle.
>
>
> I always shut off my radios prior to starting my vehicle. Too risky NOT
to.
>
>
>
> Jerry
> K4KWH

>
>
>
> >
> > JD
> >
> > "Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
> > news:LUChb.616$_i.49017@nnrp1.ptd.net...
> > > Hello all,
> > >
> > > I am fortunate enough to have just acquired a new 2003 Ford Explorer
> > > (4x4, 4-door model) and wanted to solicit input from other owners of
> > > this vehicle as to their experiences with VHF/UHF and HF rig and
> > > antenna installation and wiring issues.
> > >
> > > I thought I might benefit from the experience of others in locating
the
> > > wiring channels, good paths through the firewall to the battery, and
> > > perhaps experience in locating "remote head" radios in the forward
> > > of the two rear under-deck storage areas (or other locations).
> > >
> > > I plan to install a 2m/70cm transceiver and an HF plus (at least)
> > > 6m multiband rig in the vehicle. (probably both Yaesu).
> > >
> > > Additionally, any "gotchas" on mounting remote heads on the center
> > > console, etc. would be appreciated. (don't want to drill into
something
> > > behind a pannel, but don't want to have to tear the whole vehicle
apart
> > > to see what's behind, either, if it can be helped)
> > >
> > > 73 and thanks in advance for any insights that owners of this vehicle
> > > may provide,
> > >
> > > Carl - wk3c
> > >
> >
> >
>
>

2633. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 16:59:07 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310160859.530621b3@posting.google.com>
Source record: 106500

Roy Lewallen <w7el@eznec.com> wrote in message news:<voou1lob1q4qa5@corp.supernews.com>...
> It's not clear to me what's meant by the voltage (presumably relative to
> ground) at the tip of a dipole. Suppose it's a quarter wavelength above
> ground. How would you measure it? Or, how would you measure the voltage
> at the top of a quarter wavelength vertical?
>
> Roy Lewallen, W7EL

Indeed... Or putting it another way, the potential between two points does not have a unique value in the presence of a time-varying magnetic field, which certainly is the case for a radiating dipole. If you measure the voltage drop along the wire, it's essentially zero, so along the wire the voltage between the end points of the dipole is essentially the same as the voltage across the feedpoint. The only difference between the ends and the feedpoint is due to I*R drop in the wire. The voltage at the top of Roy's vertical, made out of fairly large diameter aluminum tubing, is essentially the same as the voltage at the bottom of that tube, if you measure along the tube.

It would be better to talk about electric field strengths in the vicinity of the dipole. You could find the potential along a path from the field if you wished.

(I'm recalling that Roy turned on a lightbulb in my head quite a few years ago about this. And I'm sad that Kevin, W9CF, doesn't jump in on things like this very often these days, though I can understand why.)

Cheers,
Tom

2634. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 16:59:23 UTC
From: froggers <not.froggers@nospam.ntlworld.com>
Message-ID: <M6Ajb.772$e02.677685@newsfep1-win.server.ntli.net>
Source record: 106499
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

A suggestion if it's an Icom rig. Icom rigs, most notably the 706, will
> > not
> > > transmit full output with any input under 13+ volts. Vehicle has to be
> > > running.
> > >
> > > Another problem is the rig shutting down and restarting every time you
> > crank
> > > your engine. This isn't good for the rig, no mater who makes it. I
> have
> > > read reports of memory loss from this.
> > >
> > > Go to your local car audio installer and get a 1/2 or 1 farad cap and
> hook
> > > it up in line between your radio and power source. No more spike or
> > power
> > > drops when starting your vehicle.

May be, but you would have to also put a diode in line, in front of the capacitor, to prevent the capacitor from helping to start the engine, and that loses 0.5 of a volt unless you get a special one !

Nick

2635. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 17:00:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8ECEB6.448A6E46@uci.edu>
Source record: 106501

Cecil Moore wrote:
>
> Tarmo Tammaru wrote:
> > There are models for both lossy and non lossy transmission line. I have not
> > used them, so it might take some learning. I can tell you though that given
> > a load and transmission line, if you find the Z at the meter with an HP
> > vector impedance meter, and then put a lumped impedance of that same value
> > at the meter, you will get the same results.
>
> Not in reality, you won't. Any TV ghosting that exists because of reflections will
> disappear when you go to a lumped impedance. And the noise across the lumped
> impedance will not be identical to the noise associated with a long transmission line.

Isn't the point just to test SWR dependency on source impedance?

73, ac6xg

2636. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 17:24:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8ed50f_2@127.0.0.1>
Source record: 106502

Tom Bruhns wrote:
> If you measure the voltage drop along the wire, it's essentially zero,
> so along the wire the voltage between the end points of the dipole is
> essentially the same as the voltage across the feedpoint.

Brain fart? The feedpoint impedance is the ratio of voltage to current.
The feedpoint impedance of a halfwave centerfed is low, around 70 ohms.
The feedpoint impedance of a halfwave endfed is high, thousands of ohms.

The voltage at the middle of a dipole is low and the current is high.
The same holds true for a 1/4WL monopole feedpoint fed against ground.

The voltage at the ends of a 1/2WL monopole is high and the current
is low. The same is true for the open end of a 1/4WL monopole.

The sum of the forward wave and reflected wave causes standing waves
on an antenna like the above. The voltages, currents, and impedances
vary somewhat akin to an SWR circle on a Smith Chart.
--
73, Cecil, W5DXP

2637. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 17:33:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8ed71d_2@127.0.0.1>
Source record: 106503

Jim Kelley wrote:

> Cecil Moore wrote:
>
>>Tarmo Tammaru wrote:
>>>There are models for both lossy and non lossy transmission line. I have not
>>>used them, so it might take some learning. I can tell you though that given
>>>a load and transmission line, if you find the Z at the meter with an HP
>>>vector impedance meter, and then put a lumped impedance of that same value
>>>at the meter, you will get the same results.
>>
>>Not in reality, you won't. Any TV ghosting that exists because of reflections will
>>disappear when you go to a lumped impedance. And the noise across the lumped
>>impedance will not be identical to the noise associated with a long transmission line.
>
> Isn't the point just to test SWR dependency on source impedance?

Just pointing out that the "same results" statement above is a little
too broad. Any deviation in the waves from cycle to cycle due to
modulation and noise shows up as reflected energy.
--
73, Cecil, W5DXP

2638. Sapphire TSB-3305

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 17:34:16 UTC
From: Al Cristaldi <megaman@cybernet1.com>
Message-ID: <bmmkqn0bra@enews4.newsguy.com>
Source record: 106504

Seeking information on above listed antenna model. Appears to be an exact copy (weight, dimensions, etc.) of a Diamond X-510MA, need a manual, thanks.

73 DE AL KK7GV

2639. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 18:01:32 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8EDCFC.3102F6F1@uci.edu>
Source record: 106505

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > Cecil Moore wrote:
> >
> >>Tarmo Tammaru wrote:
> >>>There are models for both lossy and non lossy transmission line. I have not
> >>>used them, so it might take some learning. I can tell you though that given
> >>>a load and transmission line, if you find the Z at the meter with an HP
> >>>vector impedance meter, and then put a lumped impedance of that same value
> >>>at the meter, you will get the same results.
> >>
> >>Not in reality, you won't. Any TV ghosting that exists because of reflections will
> >>disappear when you go to a lumped impedance. And the noise across the lumped
> >>impedance will not be identical to the noise associated with a long transmission line.
> >
> > Isn't the point just to test SWR dependency on source impedance?
>
> Just pointing out that the "same results" statement above is a little
> too broad. Any deviation in the waves from cycle to cycle due to
> modulation and noise shows up as reflected energy.

Tarmo's simulation results seem to conflict with Richard's
interpretation of Chipman. Lately you've been leaning toward Richard's
point of view. How does the story end? ;-)

73, Jim AC6XG

2640. Re: QST Article: An Easy to Build, Dual-Band Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 18:44:38 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8ee718$0$3674$5402220f@news.sunrise.ch>
Source record: 106506

Dear Roy, Richard, Art and other readers,

I had a look at that thread (for other readers' convenience included at the bottom of this message).
Although it is not immediately answering my question whether inverted groundplane verticals present fewer losses than normal verticals, it contains some
interesting observations. Again for the sake of the other readers, I took the liberty to rephrase and summarise these in terms that are more common in antenna literature:

The electromagnetic field around an antenna exists out of two parts: a near field and a far field.

Due to maths, the near field rapidly becomes negligible at larger distances, whereas the far field is the field we use normally to communicate.

Losses in the near and far field can be reduced by reducing ground losses in the immediate vecinity of the antenna. This can be done through installing the antenna above "good RF ground", empoying a low impedance radial system (burried or elevated) for verticals < or = 5/8 lambda or choosing a (double so long!) vertical antenna with a built-in return-path (half square, bobtail curtain, and half wavelength vertical). NOTE: Both the half square and the bobtail curtain can be interpreted as an array of 2, respectively 3 inverted ground plane verticals! (For a brief description see John Devolder, ON4UN, "Low-Band Dxing," chapter 12)

Losses in the far field are in addition also caused by the ground properties at larger distances from the antenna, and are therefore less controlable (apart from choosing a coastal or salt-lake QTH).

Now, my assumption is that by inverting a vertical ground plane, some of the near field ground losses could be prevented by presenting the high impedance end of the radiator to the low impedance of the earth immediately underneath. This tremendous mismatching would cause less coupling of the antenna's near field into the lossy earth.

Assumptions of the mind are one thing, but eventually the proof of the pudding is in the eating (and this goes especially to Richard!).
(Art, you see, you don't need to convince me anymore about antenna modelling ;-) However, I do will post a message about a possible bug in AO!)
So I used version 1.0 of Roy's software, called EZNEC to model a couple of swiftly designed (i.e. non-resonant) antennas.
(Roy, we need to talk about upgrading my version - I will send you a seperate email for this.)
Here are the results:

Normal 80m (3.650MHz) ground plane vertical
with 4 elevated radials 4.5m above "good" ground (according to Christman
KB8I, see also John Devolder, ON4UN, "Low-Band Dxing," chapter 9)
radiator and radial lengths: 20m
maximum height 24.5m
azimuth 0°: 0.23dBi @ 22° elevation
azimuth 45°: 0.21dBi @ 22° elevation

Inverted 80m ground plane vertical
with 4 elevated radials 24.5m above "good" ground
radiator and radial lengths: 20m
maximum height 24.5m
azimuth 0°: 0.08dBi @ 22° elevation
azimuth 45°: 0.12dBi @ 22° elevation

Result: 0.09-0.15dB in favour of the normal ground plane. The radials up in the air of the inverted ground plane probably cause some shielding.

The same difference remains when we lower both antennas to 1m above ground:

Normal 80m ground plane vertical
with 4 elevated radials 1m above "good" ground
radiator and radial lengths: 20m
maximum height 21m
azimuth 0°: 0.00dBi @ 24° elevation
azimuth 45°: 0.00dBi @ 24° elevation

Inverted 80m ground plane vertical
with 4 elevated radials 21m above "good" ground
radiator and radial lengths: 20m
maximum height 21m
azimuth 0°: -0.16dBi @ 25° elevation
azimuth 45°: -0.11dBi @ 25° elevation

Being an appartment dweller myself, I once dreamed of putting up an inverted ground plane antenna using the building as a support for the radiator and the roof as support and hideawy for the two elevated radials.

Normal 80m ground plane vertical
with 2 elevated radials 1m above "good" ground
radiator and radial lengths: 20m
maximum height 21m
azimuth 0°: -0.86dBi @ 24° elevation
azimuth 45°: -0.66dBi @ 24° elevation
azimuth 90°: -0.45dBi @ 24° elevation

Inverted 80m ground plane vertical
with 2 elevated radials 21m above "good" ground
radiator and radial lengths: 20m
maximum height 21m
azimuth 0°: 0.55dBi @ 29° elevation
azimuth 45°: 0.05dBi @ 26° elevation
azimuth 90°: -0.96dBi @ 21° elevation

Result: Now, the balance turned in favour of the inverted groundplane
vertical in 3 of the 2 azimuth headings, probably because fewer radials for
the inverted GP means less shielding.
Differences for 0°, 45° and 90° azimuth are 1.41dB, 0.71dB and -0.51dB,
respectively.

FIRST TAKE-AWAY MESSAGE: Do not rely on accounts of particular antenna
installation, always model your own antenna installation before jumping to
conclusions.

Ok, but now taking into account Roy's previous thread. How does a low dipole
at the same height of 21m stands out of this?
azimuth 0°: -5.77dBi @ 30° elevation
azimuth 90°: 4.23dBi @ 30° elevation

Result: In its preferred azimuthal direction, a low dipole, even at a height
of about a quarter wavelength, still outperforms any ground plane vertical
antenna. This is an eye-opener, taking into account that low dipoles (a.k.a.
cloud burners) send most of their energy radially away from earth, without
any ionospheric diffraction right into space. Most of the gain of the low
dipole is pattern gain, however. This means that performance in the
perpendicular azimuthal direction is extremely bad with -5.77dBi.

SECOND TAKE-AWAY MESSAGE: Appartment dwellers might find an effective
radiating system in installing a dipole on the roof of their building (may
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equal to the sum of the currents in the radials.

PS1: I have posted also an exact copy of this message under the subject
"Inverted ground plane antenna: compared with normal GP and low dipole." in
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PS2: Please, send your comments to the newsgroup under above-mentioned
header. As of tomorrow I will be on a business trip for the next two weeks
and will only be able to respond occasionally.
(Not that I am afraid of you guys!!! :-P)

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73 de Serge ON4BAA - HB9DWU

propagation & ham info at:
http://salsawaves.com/propagation/

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> of the most recent answers, go to groups.google.com and find my posting
> on July 21, 2003 in the thread "Re: efficiency of horizontal vs vertical
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> Roy Lewallen, W7EL

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> > What about using an inverted 1/4wave groundplane in order to avoid
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All messages from thread
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From: Ron (rmrippy@hotmail.com)
Subject: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-15 18:38:29 PST

There doesn't appear to be any ground loss resistance in horizontal antennas
(e.g., dipoles) such as there is in verticals. Does this mean that verticals
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virtually always less efficient than horizontals due to their ground loss?

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From: Roy Lewallen (w7el@eznec.com)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-15 19:01:01 PST

A vertical dipole, or a base fed half wave vertical, has good efficiency
and no significant ground loss. That is, there's no appreciable loss
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other verticals, such as a base fed quarter wavelength, ground loss due
to return currents can be reduced to an arbitrarily low value by using a
good enough system of radials.

However, after the wave is launched from the antenna, vertically
polarized signals react differently than horizontally polarized ones
when they strike the ground. Horizontally polarized waves are reflected
with little loss, except ones at high angles. With vertically polarized
waves, it's the low angle ones that take the greatest beating. And since

most vertical antennas tend to concentrate radiation at low angles, a
very sizable fraction of the total radiated power is often lost in the
ground reflection. This mostly takes place well beyond a reasonably
sized radial field, so radials don't help. The only way to reduce this
loss is to see that the reflection takes place from highly conductive
ground, like sea water(*). Otherwise, you lose most of the power that
you want the most.

(*) The effective conductivity of the ground improves as frequency
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Roy Lewallen, W7EL

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From: Bob Colenso (bcolenso@aol.com..nospam)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-21 15:16:10 PST

But aren't there ground independant verticals, like the Half Square or a
Bob-Tail-Curtain?

U of M
GO BLUE!!!

God, Guns, and Guts
Protect America!!!Message 4 in thread
From: Yuri Blanarovich (k3bu@aol.comnoSaddam)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-21 15:30:11 PST

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Every vertical "needs" the ground for its efficient performance especially
at
the low angles. Vertical dipoles and their elevated cousins are still
"looking"
out at the ground, farther waway and with a bit less of participation.
Wanna see dramatic display of salt water "ground" performance/contribution?
Take your any verticaly polarized antenna and compare its performace between
ground ground and salt water ground. You would see somewhere between 10 - 15
dB
difference.

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From: Roy Lewallen (w7el@eznec.com)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-21 16:51:50 PST

There are two quite distinct sources of ground loss involved with
vertical antennas. You're talking about one, and Yuri is talking about
the other. Makes for a lively discussion, but it's a lot like the blind
men describing the elephant.

One type of loss is caused when it's necessary to connect one conductor
of the feedline to the Earth. Current returning to this feedline
conductor is equal in magnitude to the current flowing into the antenna
from the other conductor, and it creates a simple I^2 * R loss flowing
through the ground. This loss can be minimized by using a system of
ground radials to decrease the loss resistance R near the base of the
antenna, where the current density is highest. Another solution is to
use a vertical antenna with a high feedpoint resistance. Examples are
the half square, bobtail curtain, and half wavelength vertical. These
antennas require very little feedpoint current, and consequently very
little ground current. They can be very efficient with only a very
simple ground system.

But there's another source of loss, encountered after the signal is
radiated. When a vertically polarized signal strikes the ground, a lot
of its energy is lost to heating of the ground. This is particularly
true at low angles of incidence. The end result is severe attenuation of
low angle radiation. Particularly for low angles, this occurs farther
away from the antenna than a reasonable radial system extends. So you're
stuck with this loss, unless you can physically move your antenna to a
swamp or similar high-conductivity environment. Horizontally polarized
waves react differently.

The demo version of EZNEC will show this quite dramatically. If you
choose the MININEC type ground model, it acts like you have a perfect
radial system. That is, the first source of loss I mentioned is zero.
But the second is still there. You can simulate the effect of ground
system loss simply by adding a resistive "load" at the antenna base.
Compare the patterns of a vertical and horizontal, *to the same scale*,
by superimposing them on a 2D plot, using different qualities of ground.
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Roy Lewallen, W7EL

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From: luke (luke^2@noluke.com)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 07:12:04 PST

Hi,

Good answers to the question !

Always walk away a little smarter after reading this group !

73 luke

Roy wrote:

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> vertical antennas. You're talking about one, and Yuri is talking about
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>
Read the rest of this message... (24 more lines)

Message 7 in thread
From: sideband (AINO8SPAMW@cac.net)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 19:01:10 PST

Really? Even a vertical dipole?

de AI8W, Chris

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From: Yuri Blanarovich (k3bu@aol.comnoSaddam)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 19:23:32 PST

>
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>
>de AI8W, Chris

Yesereee!
K2KW and "team vertical" (Force 12) did some tests and measurements across
the
San Francisco Bay and found that using half wave vertical dipole and moving
it
from the salt water/beach boundary (0 dB reference) they would get 3 dB gain
being 1/4 wave away from the edge, - 2dB for 1/2 wave and + 2 dB for 3/4
wave.
Anything that is vertically polarized gets help from better ground,

especially
at the low angles in the pattern.
Claims of advertisers that their wundervertical needs no radials or ground
are
full of SWR!

I am trying to find some practical results of verticals being operated on
the
side of a hill. Anyone out there with experience?

Yuri da vertical fan BUm

2641. Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 18:47:10 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8ee7af$0$3663$5402220f@news.sunrise.ch>
Source record: 106507

Dear Roy, Richard, Art and other readers,

I had a look at that thread (for other readers' convenience included at the bottom of this message).
Although it is not immediately answering my question whether inverted groundplane verticals present fewer losses than normal verticals, it contains some
interesting observations. Again for the sake of the other readers, I took the liberty to rephrase and summarise these in terms that are more common in antenna literature:

The electromagnetic field around an antenna exists out of two parts: a near field and a far field.

Due to maths, the near field rapidly becomes negligible at larger distances, whereas the far field is the field we use normally to communicate.

Losses in the near and far field can be reduced by reducing ground losses in the immediate vecinity of the antenna. This can be done through installing the antenna above "good RF ground", empoying a low impedance radial system (burried or elevated) for verticals < or = 5/8 lambda or choosing a (double so long!) vertical antenna with a built-in return-path (half square, bobtail curtain, and half wavelength vertical). NOTE: Both the half square and the bobtail curtain can be interpreted as an array of 2, respectively 3 inverted ground plane verticals! (For a brief description see John Devolder, ON4UN, "Low-Band Dxing," chapter 12)

Losses in the far field are in addition also caused by the ground properties at larger distances from the antenna, and are therefore less controlable (apart from choosing a coastal or salt-lake QTH).

Now, my assumption is that by inverting a vertical ground plane, some of the near field ground losses could be prevented by presenting the high impedance end of the radiator to the low impedance of the earth immediately underneath. This tremendous mismatching would cause less coupling of the antenna's near field into the lossy earth.

Assumptions of the mind are one thing, but eventually the proof of the pudding is in the eating (and this goes especially to Richard!).
(Art, you see, you don't need to convince me anymore about antenna modelling ;-) However, I do will post a message about a possible bug in AO!)
So I used version 1.0 of Roy's software, called EZNEC to model a couple of swiftly designed (i.e. non-resonant) antennas.
(Roy, we need to talk about upgrading my version - I will send you a seperate email for this.)
Here are the results:

Normal 80m (3.650MHz) ground plane vertical
with 4 elevated radials 4.5m above "good" ground (according to Christman
KB8I, see also John Devolder, ON4UN, "Low-Band Dxing," chapter 9)
radiator and radial lengths: 20m
maximum height 24.5m
azimuth 0°: 0.23dBi @ 22° elevation
azimuth 45°: 0.21dBi @ 22° elevation

Inverted 80m ground plane vertical
with 4 elevated radials 24.5m above "good" ground
radiator and radial lengths: 20m
maximum height 24.5m
azimuth 0°: 0.08dBi @ 22° elevation
azimuth 45°: 0.12dBi @ 22° elevation

Result: 0.09-0.15dB in favour of the normal ground plane. The radials up in the air of the inverted ground plane probably cause some shielding.

The same difference remains when we lower both antennas to 1m above ground:

Normal 80m ground plane vertical
with 4 elevated radials 1m above "good" ground
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maximum height 21m
azimuth 0°: 0.00dBi @ 24° elevation
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> Yuri Message 6 in thread
From: luke (luke^2@noluke.com)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 07:12:04 PST

Hi,

Good answers to the question !

Always walk away a little smarter after reading this group !

73 luke

Roy wrote:

> There are two quite distinct sources of ground loss involved with
> vertical antennas. You're talking about one, and Yuri is talking about
> the other. Makes for a lively discussion, but it's a lot like the blind
> men describing the elephant.
>
> One type of loss is caused when it's necessary to connect one conductor
> of the feedline to the Earth. Current returning to this feedline
> conductor is equal in magnitude to the current flowing into the antenna
> from the other conductor, and it creates a simple I^2 * R loss flowing
> through the ground. This loss can be minimized by using a system of
> ground radials to decrease the loss resistance R near the base of the
> antenna, where the current density is highest. Another solution is to
> use a vertical antenna with a high feedpoint resistance. Examples are
> the half square, bobtail curtain, and half wavelength vertical. These
> antennas require very little feedpoint current, and consequently very
> little ground current. They can be very efficient with only a very
> simple ground system.
>
> But there's another source of loss, encountered after the signal is
> radiated. When a vertically polarized signal strikes the ground, a lot
> of its energy is lost to heating of the ground. This is particularly
> true at low angles of incidence. The end result is severe attenuation of
> low angle radiation. Particularly for low angles, this occurs farther
> away from the antenna than a reasonable radial system extends. So you're
> stuck with this loss, unless you can physically move your antenna to a
> swamp or similar high-conductivity environment. Horizontally polarized
> waves react differently.
>
> The demo version of EZNEC will show this quite dramatically. If you
> choose the MININEC type ground model, it acts like you have a perfect
> radial system. That is, the first source of loss I mentioned is zero.
> But the second is still there. You can simulate the effect of ground
> system loss simply by adding a resistive "load" at the antenna base.
> Compare the patterns of a vertical and horizontal, *to the same scale*,
> by superimposing them on a 2D plot, using different qualities of ground.
> You'll find it quite educational.
>
> Roy Lewallen, W7EL
>
Read the rest of this message... (24 more lines)

Message 7 in thread
From: sideband (AINO8SPAMW@cac.net)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 19:01:10 PST

Really? Even a vertical dipole?

de AI8W, Chris

Yuri Blanarovich wrote:
>>But aren't there ground independant verticals, like the Half Square or a
>>Bob-Tail-Curtain?
>>
>>
>>
>>U of M
>>GO BLUE!!!
>>
>>God, Guns, and Guts
>>Protect America!!!
>>
>
>
> Every vertical "needs" the ground for its efficient performance especially
at
> the low angles. Vertical dipoles and their elevated cousins are still
"looking"
> out at the ground, farther waway and with a bit less of participation.
> Wanna see dramatic display of salt water "ground"
performance/contribution?
> Take your any verticaly polarized antenna and compare its performace
between
> ground ground and salt water ground. You would see somewhere between 10 -
15 dB
> difference.
>
> Yuri
Message 8 in thread
From: Yuri Blanarovich (k3bu@aol.comnoSaddam)
Subject: Re: efficiency of horizontal vs vertical antennas

View this article only
Newsgroups: rec.radio.amateur.antenna
Date: 2003-07-22 19:23:32 PST

>
>Really? Even a vertical dipole?
>
>de AI8W, Chris

Yesereee!
K2KW and "team vertical" (Force 12) did some tests and measurements across
the
San Francisco Bay and found that using half wave vertical dipole and moving
it
from the salt water/beach boundary (0 dB reference) they would get 3 dB gain
being 1/4 wave away from the edge, - 2dB for 1/2 wave and + 2 dB for 3/4
wave.
Anything that is vertically polarized gets help from better ground,

especially
at the low angles in the pattern.
Claims of advertisers that their wundervertical needs no radials or ground
are
full of SWR!

I am trying to find some practical results of verticals being operated on
the
side of a hill. Anyone out there with experience?

Yuri da vertical fan BUm

2642. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 18:55:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o4ptovohd1qt8amdfe7ae4j5ako2e62f0j@4ax.com>
Source record: 106508

On Thu, 16 Oct 2003 10:00:38 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:
>Cecil Moore wrote:
>> Tarmo Tammaru wrote:
>> > There are models for both lossy and non lossy transmission line. I have not
>> > used them, so it might take some learning. I can tell you though that given
>> > a load and transmission line, if you find the Z at the meter with an HP
>> > vector impedance meter, and then put a lumped impedance of that same value
>> > at the meter, you will get the same results.
>>
>> Not in reality, you won't. Any TV ghosting that exists because of reflections will
>> disappear when you go to a lumped impedance. And the noise across the lumped
>> impedance will not be identical to the noise associated with a long transmission line.
>
>Isn't the point just to test SWR dependency on source impedance?
>
>73, ac6xg

Hi Jim,

It "was" but through these twists and turns, the point has become a
amorphous blob.

Tam has shown an appreciation for my interpretation of Chipman's work
being focused on transient analysis (it has that in Chapter 8) and a
worry that my data is forced to that criteria - it is not, it is
strictly steady state results and also supported by Chipman's steady
state formulas (found in Chapter 9).

Chapter 8 reveals the obvious state of a transmission line being
mismatched at both ends supporting a bedlam of wave mixings - the
bedlam is simply the artifact of an unknown length in the path,
otherwise it is quite predictable and formulaic. The steady state
solutions presume you know this length (or in his terms, the position
along the line mismatched at both ends) to find the dependency of
measured voltage in terms of source AND load Z.

Cecil, as usual complains without adding anything:
On Wed, 15 Oct 2003 13:43:39 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>Yes, my experiment seemed to support that assertion but you rejected it.
Where this "seeming" was rejected for good reason (or poor reason
depending upon the source ;-) as he had poorly bounded his example (it
did not include the necessary transmission line which evidences the
source Characteristic Z) and he was forever explaining minutia at the
expense of the topic. 600 posting marathons of that kind of

repetition is unnecessary. My data and sources can stand quite well on their own without the need for rubber crutches.

Speaking of repetition, this is all covered in my new thread "The Impact of Source characteristic Z upon SWR measurement - the Galilean Defense re-revisited"
As such there is actually nothing new to add, and absolutely no holders of Chipman's work have offered any rebuttal - elliptical criticism notwithstanding. :-)

73's
Richard Clark, KB7QHC

2643. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 19:19:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8eef2f$1_2@127.0.0.1>
Source record: 106509

Jim Kelley wrote:
> Tarmo's simulation results seem to conflict with Richard's
> interpretation of Chipman. Lately you've been leaning toward Richard's
> point of view. How does the story end? ;-)

I suspect it ends up with me being mistaken when I said that
instantaneous power is *as* useless as tits on a boar hog. If
the instantaneous power is screwing up the wattmeter readings,
instantaneous power is *more* useless than tits on a boar hog. :-)
--
73, Cecil, W5DXP

2644. Re: Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 19:23:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmmr7hcdb1@hercules.btinternet.com>
Source record: 106510

Dear Serge,

Yes. But why make such a song and a dance about it.

It's quite obvious a 'ground plane' on the ground, or even shallow-buried, causes greater losses in the ground than any elevated ground plane. The greater the elevation the more efficient the antenna becomes. Eventually, with sufficient height, the efficiency equals that of dipole in free space whatever the antenna's orientation or form of groundplane it employs.

Have a good holiday.

Reg, G4FGQ

2645. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 19:35:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8EF2ED.159A9BF9@uci.edu>
Source record: 106511

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Tarmo's simulation results seem to conflict with Richard's
> > interpretation of Chipman. Lately you've been leaning toward Richard's
> > point of view. How does the story end? ;-)
>
> I suspect it ends up with me being mistaken when I said that
> instantaneous power is *as* useless as tits on a boar hog. If
> the instantaneous power is screwing up the wattmeter readings,
> instantaneous power is *more* useless than tits on a boar hog. :-)

The story must be like a daytime serial. :-)

73, Jim AC6XG

2646. To slope or not to sloper?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 19:42:59 UTC
From: Robert Scott <robscott@hargray.com>
Message-ID: <bmmshj$dj48$1@news3.infoave.net>
Source record: 106512

I need to get on 30m. I only have about 50 confirmed on this band. My question is should I put up a dipole at 50 feet boadside to EU or wouldn't I be better to slope it toward Europe for DX?
Any opinions would be appreciated!
73
Rob
WR3Y/4

2647. Bug in Antenna Optimizer v6.5 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 19:47:47 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8ef5e4$0$3658$5402220f@news.sunrise.ch>
Source record: 106513

Dear all,
I have encountered something what appears to be a bug in Antenna Optimizer v6.5.
Modelling a 70cm colineair antenna with stub and gamma match yielded contradictory results in the 2D and 3D radiation patterns and gain.

I have included the 70COLIN.ANT file below for those who want to experiment with it.

You will see that the 3D radiation pattern reports 4.99dBi gain. The 0° elevation azimuth-plot yields an almost uniform gain pattern of 4.01dBi. This is still ok, because the higher gain direction can be at a higher elevation. The 0° azimuth elevation-plot is also still ok.

Plotting a 90° or 270° azimuth elevation-plots is what really produces the most akward results with an asymmetrical end-fire pattern and a gain of 5.25dBi, not observed in the 3D-plot, nor the azimuth pattern.

Could it be that AO is assuming a symmetry that is not there?
Is this bug/problem known and has it been reported yet?

I tried to contact the author of this sofware, Bryan Beezley on k6sti@n2.net but unfortunately this email address does not seem to be active anymore. Has anybody Bryan's new email address?

```
70cm Colinear
Free Space
434.971 MHz

8 copper wires, mm
wdiam = 12 ; antenna wire diameter
fdiam = 12 ; feeder diameter
elem = 338.1602 ; element length
stub = 142.5328 ; stub length
hshort = 30 ; half the short length

elstop = hshort + elem

1 0 0 -elstop 0 0 -hshort wdiam ; lower element
1 0 -stub -hshort 0 0 -hshort wdiam ; lower stub part
1 0 -stub -hshort 0 -stub 0 wdiam ; lower short half

1 0 -stub 0 0 -stub hshort wdiam ; upper short half
1 0 -stub hshort 0 0 hshort wdiam ; upper stub part
1 0 0 hshort 0 0 elstop wdiam ; upper element
```

1 0 -stub 0 0 0 0 fdiam ; feeder
1 0 0 -hshort 0 0 0 wdiam ; gamma

1 source
Wire 7, End1

--

PS: Please, send your comments to the newsgroup. As of tomorrow I will be on a business trip for the next two weeks and will only be able to respond occasionally. Hopefully, by the time I am back you guys have found / fought it out all ;-)

73 de Serge ON4BAA - HB9DWU

propagation & ham info at:
http://salsawaves.com/propagation/

2648. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 20:21:13 UTC
From: "Rudy Marcelletti, K8SWD" <rudym@net-link.net>
Message-ID: <votvbtjfut86ab@corp.supernews.com>
Source record: 106514

What happens to a BPL signal when a 100 or 500 watt mobile is under the line?

The 10 house area may be a good place to hold a mobile antenna shoot out.

If you can't hear anything, send in complaints about the noise. If the home owners can't see anything on their computers, I am sure they will complain.

Normally power line noise we hear is power wasted to ground from arcing and that costs the power companies money because it is not metered power and therefore not billable. Report areas where there is high noise. You will be surprised--sometimes it goes away totally!
--
Rudy Marcelletti, K8SWD
"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message news:bmirch$q2c$0@208.206.142.98...
> W1RFI wrote:
> >>Exactly, must sent in complaints. Or the 'utilities' will say...."we got
> >>very few complaints"
> >
> >
> > Some of the trial areas have about 10 homes in them. The industry still says,
> > with a straight face, we had no reports of interference, so this "proves" we
> > won't interfere.
> >
> > 73,
> > Ed Hare, W1RFI
> >
>
>
>
> Something occurred to me - If the BPL test areas are using only
> 2-22 mHz, they they WILL avoid critical interference complaints
> from Low Band VHF Public Safety users and others, and will be able to
> say "We had no complaints from (same)", while conveniently overlooking
> the fact that they couldn't have had complaints because they didn't
> generate any interference to those operations!
>
> (I mentioned this to contacts in PubSafety. I also suggested spectrum
> analysis to determine what spectrum is actually being used.)
>
> So we are very careful to make certain that the interference we

> find actually is BPL. And since they are only using a portion of the
> spectrum that would be used under full implementation of BPL, they
> will be able to say, about users of spectrum which they aren't testing
> within, "We got no complaints from them" when in fact the interference
> will occurr only when BPL is fully implemented!
> And of course there will be no such complaints inasmuch as no
> interference was generated! So those users get blindsided, having
> assumed there would be no interference from BPL.
> It's amazing how well they're playing both ends against the middle.
> One REALLY has to think about all this to stay on top of this mess.
>
> The longer one looks at BPL as presented the worse it smells.
>
> Dick
>

2649. Re: off-center dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 21:02:29 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8f076c$0$3666$5402220f@news.sunrise.ch>
Source record: 106515

Hello Paul,

If it is a true balun, it does not matter.
However out of proper experience, I would recommend using an additional 1:1 current balun between your (voltage?) balun and the coax.

Although a 6:1 balun offers more possibilities, I also had to design an off-center fed dipole around a 4:1 balun I had at hand.
You can find design details here: http://salsawaves.com/antennas/windom.html

73 de Serge ON4BAA - HB9DWU

"PDRUNEN" <pdrunen@aol.com> wrote in message news:20031013224237.07995.00000238@mb-m16.aol.com...
> Hi Group,
>
> In the process of fab'ing a off-center dipole. The short end is 40 feet and
> the long end is 80 feet. At the feed point I have a 4:1 balun. The balun I
> purchased new, I believe it has w2un on the side of it. I don't have it here
> at the computer.
>
> The question is what side of the 4:1 should I feed the long end, or does it
> matter?
>
> Paul
> KJ4UO

2650. Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 21:05:15 UTC
From: private <private@private.com>
Message-ID: <3F8F080B.FBB7CB20@private.com>
Source record: 106516

I have an old shortwave radio and want a decent wire antenna
for it.
Would connecting a single insulated wire up through the wall,
through the attic and laid on the roof have a good chance of
working decently?
It will probably be about 125' from radio to the end of the
antenna.
I hope I don't need a ground at the radio.

2651. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 21:48:02 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8F1212.FF1ED05D@uci.edu>
Source record: 106517

Richard Clark wrote:
> My data and sources can stand quite well
> on their own without the need for rubber crutches.

Certainly true about your sources standing well on their own. You
should probably let them. ;-)

73 de ac6xg

2652. Help antennn spacings.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 22:16:47 UTC
From: kc5cqa@yahoo.com
Message-ID: <u36uovctmn4p1n2r123tpk5dhq0enfdkl7@4ax.com>
Source record: 106518

I made a post last week, with that 'input', have decided to
install only two antennas , one a duel band 2/440 vertical ground
plane, and a two meter horz ground plane,(looks like a 4 leave
clover),,,,,,,,I plan to have the duel bander on the top, what I
would like to know is how far part should I 'space' these two antenna?
I can easily keep them four to six feet
apart, If I have to I can make that distance greater,,, but will take
a little "fabrication". I really appreciate your input. I have read
the books, but there is nothing liketalking to someone who as already
''been there, done that" cl 73

2653. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 22:18:20 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <YT6dnWbetOWwhBKiU-KYkA@crocker.com>
Source record: 106419

"private" <private@private.com> wrote in message
news:3F8F080B.FBB7CB20@private.com...
> I have an old shortwave radio and want a decent wire antenna
> for it.
> Would connecting a single insulated wire up through the wall,
> through the attic and laid on the roof have a good chance of
> working decently?
> It will probably be about 125' from radio to the end of the
> antenna.
> I hope I don't need a ground at the radio.
>

it would be safer if you did ground the radio, exposing a wire outside is
just asking for lightning to come visiting.

2654. Re: To slope or not to sloper?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 22:38:39 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <P5Fjb.9992$kx.3281@newsread2.news.atl.earthlink.net>
Source record: 106420

Try em both and see which does the job you want.

Dan/W4NTI

"Robert Scott" <robscott@hargray.com> wrote in message
news:bmmshj$dj48$1@news3.infoave.net...
> I need to get on 30m. I only have about 50 confirmed on this band. My
> question is should I put up a dipole at 50 feet boadside to EU or wouldn't
I
> be better to slope it toward Europe for DX?
> Any opinions would be appreciated!
> 73
> Rob
> WR3Y/4
>
>

2655. Dipoles & Tuned Circuits

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 22:54:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmn7jf$7q6$1@hercules.btinternet.com>
Source record: 106421

I received an e-mail asking for a little more about 1/2-wave dipoles and tuned circuits. The guts of the reply is reproduced here. It's a popular subject. It may be of interest to other learners.

==========

You can't really get away from the arithmetic. Read the following, draw a circuit, think about it, then read it again. ;o)

If you have a tuned circuit, L, C and R in series, and apply a voltage across the ends then a current will flow.

Current = volts divided by impedance Z.

Z = Squareroot (Square(R) + Square(XL - XC))

Where XL and XC are the reactances of L and C. Reactances cannot be directly added to resistances. All are measured in ohms. XC has a negative sign.

Magnitudes of both reactances XL and XC can be much larger than R.

As frequency increases the reactance of L increases and the reactance of C decreases.

At some frequency, the resonant frequency, XC becomes equal in magnitude to XL and they cancel each other out in the formula.

We are then left with Z = R. There is only the resistance R to limit the current. So the current at resonance can be much larger than at frequencies higher and lower than the resonant frequency.

So the large current develops large voltages across L and C. These voltages, at resonance, can be much larger than the source voltage which is driving the circuit.

At resonance the voltage across the coil is Q times the input driving voltage.

A dipole is very similar to a tuned circuit. The wire has inductance and reactance. The circuit resistance is the antenna's radiation resistance. The wire has capacitance to the rest of the universe. Like inductance it can be calculated from the wire's dimensions, length and diameter. Radiation resistance can also be calculated from the antenna's dimensions. After all, there's only two of them available.

And that's how a large voltage appears at the ends of the entenna, considerably larger than the driving voltage. It's a sort of voltage transformer.

It is also an impedance transformer. It is possible to calculate the impedance seen looking into one end. There are such things as end-fed dipoles such as 1/2-wave verticals.

The volts at the ends of the dipole are in antiphase with each other and and zero in the center. The current is a maximum in the center and zero at the ends. Graphs of amps and volts versus distance along the wire are not straight lines - they are sinewave curves.

Tuned circuits, as you know, are used all over the place. The only resistance in circuit may be the RF resistance of wire in the coil itself and very high Q values are obtainable. Q's of several hundreds are common in transmitter coils, in antenna loading coils and in antenna tuners to keep power losses very small.

In antennas, of course, the power "developed" in the fictional radiation resistance is made good use of - it is radiated!

I trust the foregoing will be helpul. Have fun.

Yours, Reg, G4FGQ

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

2656. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 23:22:35 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <maGdnYHNs6PTtRKiRVn-uA@comcast.com>
Source record: 106422

Cecil,

I thought that we were considering steady state single frequency sine waves.
The whole thing becomes so much more straight forward when talking about
pulses.....

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f8e1081_6@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > There are models for both lossy and non lossy transmission line. I have
not
> > used them, so it might take some learning. I can tell you though that
given
> > a load and transmission line, if you find the Z at the meter with an HP
> > vector impedance meter, and then put a lumped impedance of that same
value
> > at the meter, you will get the same results.
>
> Not in reality, you won't. Any TV ghosting that exists because of
reflections will
> disappear when you go to a lumped impedance. And the noise across the
lumped
> impedance will not be identical to the noise associated with a long
transmission line.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2657. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 23:46:15 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <GPidneDnFYJHsBKiRVn-gg@comcast.com>
Source record: 106423

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:3F8EDCFC.3102F6F1@uci.edu...
>>
> Tarmo's simulation results seem to conflict with Richard's
> interpretation of Chipman. Lately you've been leaning toward Richard's
> point of view. How does the story end? ;-)
>
> 73, Jim AC6XG

Jim,
It probably can't be proven, unless somebody comes up with an alternative definition for SWR. If you look at my simulator equations of a few listings back, I proved that what my model (and the Bird wattmeter) call SWR is RL/Z0. So, unless I screwed up, running any number of simulations is not going to disprove that.

If you look at textbook examples where they transmit pulses, The source impedance determines what V+ is, and whether there is a second reflection from the source, but NOT what the reflection at the load end is. Lets delve on this for a second. It seems fair to say that if the source impedance determines V+, clearly it has an effect on V-. But, that does not mean it has anything to do with rho.

Tam/WB2TT

2658. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-16 23:53:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F8F2F72.A5E2D1CF@cwis.net>
Source record: 106424

'private',
It ought to work fairly well. It would be nice
to have a ground at the radio but it really isn't
absolutely necessary. Keep the antenna as far from
the house wiring as possible.
'Doc

2659. Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 00:15:19 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <rwGjb.59222$mQ2.27782@newsread1.news.atl.earthlink.net>
Source record: 106425

I am going to put up a horizontal loop @ about 60' in hopes of having a decent 160-10 antenna. Is there any adavntage to increasing the the total length from 1 wavelength at the lowest freq. (about 530') to 2 wavelengths(1,060'). i have the space & the wire & I'm wondering if it's worth the extra effort.

Also, am I better off with a 3/8 WL inverted L on 160.

2660. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 00:18:34 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310161618.3da603c4@posting.google.com>
Source record: 106426

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f8ed50f_2@127.0.0.1>...
> Tom Bruhns wrote:
> > If you measure the voltage drop along the wire, it's essentially zero,
> > so along the wire the voltage between the end points of the dipole is
> > essentially the same as the voltage across the feedpoint.
>
> Brain fart?

Just so we're clear on this, no, certainly not.

If you care why, consider the direction of the electric field adjacent
to the conductor, and integrate the component of that field parallel
to the conductor along the path of the conductor. You will in general
get a different answer than if you integrate along a path from the tip
of the antenna, out say a quarter wavelength, then parallel to the
antenna for a half wave, then back to the other end of the antenna.
There is no such thing as "the voltage" between the ends of your
excited dipole at an instant in time. There are infinitely many
potentials, as there are infinitely many paths you can follow through
the (time-varying) magnetic field.

Cheers,
Tom

2661. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 00:39:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8F3A4B.62D8251B@uci.edu>
Source record: 106427

Tarmo Tammaru wrote:
> Jim,
> It probably can't be proven, unless somebody comes up with an alternative
> definition for SWR. If you look at my simulator equations of a few listings
> back, I proved that what my model (and the Bird wattmeter) call SWR is
> RL/Z0. So, unless I screwed up, running any number of simulations is not
> going to disprove that.

It's hard to imagine how Rs (Zs) could have any effect on that ratio.

> If you look at textbook examples where they transmit pulses, The source
> impedance determines what V+ is, and whether there is a second reflection
> from the source, but NOT what the reflection at the load end is.

Unless I = 0, source impedance should certainly have an effect on source voltage. My car battery this morning comes to mind. Seemed to have developed a high internal resistance. It's doing some serious current limiting.

Chipmans explanation re: re-reflection was eloquent I thought.

> Lets delve
> on this for a second. It seems fair to say that if the source impedance
> determines V+, clearly it has an effect on V-. But, that does not mean it
> has anything to do with rho.

I don't know how else to look at it.

The question that comes to mind is whether the argument is about the effect source impedance has on actual SWR, or the effect it has on measured SWR - considering the real world limitations of metering instruments. Perhaps people are talking about different things.

73, Jim AC6XG

2662. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 01:15:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F8F42C3.3BFBC3A4@uci.edu>
Source record: 106428

Tom Bruhns wrote:
> There is no such thing as "the voltage" between the ends of your
> excited dipole at an instant in time.

Perhaps they meant the voltage 'across' the ends of the dipole. The ends should always be an electrical half-wave out of phase, right? There should only be two instants of time during a period when the difference in potential from end to end is zero.

What are you saying exactly, Tom?

73, Jim AC6XG

2663. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 02:47:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8f5a72_1@corp.newsgroups.com>
Source record: 106430

Tarmo Tammaru wrote:
> It seems fair to say that if the source impedance
> determines V+, clearly it has an effect on V-. But, that does not mean it
> has anything to do with rho.

Chipman seems to say that an SWR meter can be disturbed by a localized energy exchange between reactive values with opposite signs. The impedance of the source has an effect upon where in the transmission line those localized energy exchanges occur.
--
73, Cecil http://www.qsl.net/w5dxp

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2664. Re: View from the tower, was (Opposing BPL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 02:50:40 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <amluovc405rr6nms93reqjo50k7ifpfb0a@4ax.com>
Source record: 106429

On Thu, 16 Oct 2003 16:00:39 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Look at that BPL antenna in the foreground!!!!
That's nearly half a mile away and probably not the type of lines
they'd be using. I think they need their feed points closer together
than those towers.

So far I get very little noise from that line, but the one feeding the
neighborhood comes in from the south through a mile of woods. It has
some very noise spots, but of the intermittent variety.

>
>Roger Halstead wrote:
>
>> On Wed, 15 Oct 2003 20:20:31 GMT, "Jim Hampton"
>> <aa2qa@frontiernet.net> wrote:
>>
>>
>>>Brian,
>>>
>>>I don't know about you, but I received a whole week pass from Belleveu :)
>>
>> I'm not sure about the crazy part, but...
>> For those who have a "good" broadband connection here is a panoramic
>> view from the top of my tower. If you don't have broad band, don't
>> waste your time. This thing is 19.5 megs. It should take under a
>> minute with cable, and close to 10 minutes with ADSL, so you can
>> imagine how long it'd take with a dial up connection.
>> http://www.rogerhalstead.com/towerview.htm
>> I stood on the triangular top plate of the ROHN 45 G (at 100 feet) and
>> shot the entire series hand held. The camera was set to manual, but

BTW, I was thoroughly belted to the mast coming out the top of the
tower. Where I was standing the mast is really two concentric steel
tubes. One is 1 1/2 while the other is 2 inch. Both have 1/4 inch
wall. There are two 21 foot lengths of 1 1/2 welded together and then
a single two inch, 21 feet long over the middle.

I put all that up by hand and welded the two center masts together
inside the tower.

>> the wind was gusting to 20 MPH plus, so a few of them didn't line up
>> good enough for a proper match when making the panorama.

20 MPH gusts make all that steel shift around while the tower hardly
quivers. When the wind gets up around 60 to 70 MPH the top of the
mast with the pair of 12L 2 meter antennas and a pari of 11L 440s
looks like a Bluegill fly rod that just hooked into a Largemouth Bass.
It's amazing those two arrays have held together this long.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>>
>> Roger Halstead (K8RI EN73 & ARRL Life Member)
>> www.rogerhalstead.com
>> N833R World's oldest Debonair? (S# CD-2)

2665. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 02:51:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8f5b55_1@corp.newsgroups.com>
Source record: 106433

Jim Kelley wrote:
> It's hard to imagine how Rs (Zs) could have any effect on that ratio.

Consider a reactive load where energy can be locally exchanged between
the load reactance and the impedance looking back into the feedline.
Zs can certainly affect the impedance looking back into the feedline.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2666. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 02:56:52 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <cfmuovga62fuu1r1t5mst9hi4288e150h4@4ax.com>
Source record: 106431

On 16 Oct 2003 09:59:07 -0700, k7itm@aol.com (Tom Bruhns) wrote:

>Roy Lewallen <w7el@eznec.com> wrote in message
news:<voou1lob1q4qa5@corp.supernews.com>...
>> It's not clear to me what's meant by the voltage (presumably relative to
>> ground) at the tip of a dipole. Suppose it's a quarter wavelength above
>> ground. How would you measure it? Or, how would you measure the voltage
>> at the top of a quarter wavelength vertical?
>>
>> Roy Lewallen, W7EL
>
>Indeed... Or putting it another way, the potential between two points
>does not have a unique value in the presence of a time-varying
>magnetic field, which certainly is the case for a radiating dipole.
>If you measure the voltage drop along the wire, it's essentially zero,
>so along the wire the voltage between the end points of the dipole is
>essentially the same as the voltage across the feedpoint. The only
>difference between the ends and the feedpoint is due to I*R drop in
>the wire. The voltage at the top of Roy's vertical, made out of

Ahhh...with the impedance variation I beg to differ.
Otherwise how could I draw a 3 or 4 inch arc off the end of a 160
meter dipole.

The end of the antenna is high impedance while the center (in the case
of a half wave dipole) is low. Low voltage and high current at the
center with high voltage and low current at the ends.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2667. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 02:57:03 UTC
From: Phil Kane <Phil.Kane@nov.shmovz.ka.pop>
Message-ID: <xnfcneeyarg.hmvgz2b.pminews@netnews.comcast.net>
Source record: 106432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

On 15 Oct 2003 22:30:17 -0700, Brian Kelly wrote:

>> This means that the manufacturer is required to test them to
>> ensure that they comply with the FCC regulations. Under the present
>> rules, they must be tested at 3 typical locations. "
>
>What's the FCC definition of "typical locations"??

De facto: any place where the results support the stand that one is
advocating.

--
73 de K2ASP - Phil Kane

2668. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 03:00:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8f5d87_1@corp.newsgroups.com>
Source record: 106434

Tom Bruhns wrote:
> There is no such thing as "the voltage" between the ends of your
> excited dipole at an instant in time.

Please reference Fig 1, page 2-2, in the 15th edition of the ARRL
Antenna Book. "Current and voltage distribution on a 1/2WL wire.

The RMS (or peak) values of the voltages at the ends of the dipole
are maximum and 180 degrees out of phase. The ratio of net voltage to
net current is the impedance anywhere along the wire.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2669. Re: Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 03:34:26 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310161934.33b3baff@posting.google.com>
Source record: 106435

"Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com> wrote in message news:<3f8ee7af$0$3663$5402220f@news.sunrise.ch>...
> Dear Roy, Richard, Art and other readers,
>
> I had a look at that thread (for other readers' convenience included at the
> bottom of this message).
> Although it is not immediately answering my question whether inverted
> groundplane verticals present fewer losses than normal verticals, it
> contains some
> interesting observations. Again for the sake of the other readers, I took
> the liberty to rephrase and summarise these in terms that are more common in
> antenna literature:

Why are you calling them "inverted ground planes"? To me , an inverted ground plane would be one that is standing on it's end, with the radials on top.
It's just a ground plane. Period. A ground plane is any vertical that uses elevated radials to supply the lower part of the antenna. "Not to be confused with decoupling radials." Adding decoupling radials to a half wave that is elevated, does not turn it into a "ground plane". It's still an elevated 1/2 wave with a decoupling section. A ground mount vertical, is well, a ground mount vertical.
>
> The electromagnetic field around an antenna exists out of two parts: a near
> field and a far field.
>
> Due to maths, the near field rapidly becomes negligible at larger distances,
> whereas the far field is the field we use normally to communicate.
>
> Losses in the near and far field can be reduced by reducing ground losses in
> the immediate vecinity of the antenna.

Reducing ground losses under the antenna will have no effect on ground losses in the far field. Those are fixed per the existing ground cdx at the time, and are unchangable by you, unless you move, change seasons, or can have someone make it rain over the whole area for four days. Rain dancing" :/ I'm not sure what difference that actually makes as fresh water is not near as conductive as salt water, but I think helps a small bit. But, yes, if you reduce losses at the antenna, you have more to work with out in the far field. So if far field losses were say 2 db to a certain point when using an angle of 5 degrees, if you reduce losses at the antenna by 2 db, "adding radials" you will see that extra 2 db at the receiving end over the less

radialed version. But the far field losses in DB will be the same.
"2db".

>
> Losses in the far field are in addition also caused by the ground properties
> at larger distances from the antenna, and are therefore less controlable
> (apart from choosing a coastal or salt-lake QTH).
>
> Now, my assumption is that by inverting a vertical ground plane, some of the
> near field ground losses could be prevented by presenting the high impedance
> end of the radiator to the low impedance of the earth immediately
> underneath. This tremendous mismatching would cause less coupling of the
> antenna's near field into the lossy earth.

True, if you actually inverted a ground plane. But adding radials at
the top would be silly... But, yes, if you had a 1/4 wave vertical,
and fed it from the top, say with a feedline running up through the
middle, the point of max current would then be at the top, and high
voltage at the bottom. You would see less ground loss than a base fed
1/4 wave, but you still couldn't totally ignore ground losses under
the antenna. I would still lay out radials.
>

> Here are the results:
>
> Normal 80m (3.650MHz) ground plane vertical
> with 4 elevated radials 4.5m above "good" ground (according to Christman
> KB8I, see also John Devolder, ON4UN, "Low-Band Dxing," chapter 9)
> radiator and radial lengths: 20m
> maximum height 24.5m
> azimuth 0ï¿½: 0.23dBi @ 22ï¿½ elevation
> azimuth 45ï¿½: 0.21dBi @ 22ï¿½ elevation
>
> Inverted 80m ground plane vertical
> with 4 elevated radials 24.5m above "good" ground
> radiator and radial lengths: 20m
> maximum height 24.5m
> azimuth 0ï¿½: 0.08dBi @ 22ï¿½ elevation
> azimuth 45ï¿½: 0.12dBi @ 22ï¿½ elevation
>
> Result: 0.09-0.15dB in favour of the normal ground plane. The radials up in
> the air of the inverted ground plane probably cause some shielding.

This model is faulty as far as I'm concerned. The lower antenna is too
low to the ground to show low ground losses with only 4 radials. The
higher antenna would kick it's tail. I don't care what the model says.
In fact, the antenna at 75 ft would be VERY effective to DX at night.
Thats just over a 1/4 up. The pattern will be good.
>
> The same difference remains when we lower both antennas to 1m above ground:
>

> Normal 80m ground plane vertical
> with 4 elevated radials 1m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0ï¿½: 0.00dBi @ 24ï¿½ elevation
> azimuth 45ï¿½: 0.00dBi @ 24ï¿½ elevation
>
> Inverted 80m ground plane vertical
> with 4 elevated radials 21m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0ï¿½: -0.16dBi @ 25ï¿½ elevation
> azimuth 45ï¿½: -0.11dBi @ 25ï¿½ elevation

Again, this model is faulty, and /or misleading when compared to real world results. An 80m vertical at 3 ft off the ground, with only 4 radials would be a dog compared to the higher one at 63 ft.
If you had a ground mount with 120 radials, which is usually considered a "near optimum ground system", you would need 60 radials at 1/8 wave up to equal the 120 on the ground. At 1/4 wave up, you would need about 8-10 radials for the same low ground losses. At 1/2 wave up, you only need 3 or 4. Once you get to a 1/2 wave, the ground losses are very low, and start to compete with the efficiency of a dipole at that height. But from personal use, I can tell you that even just 4 radials at 1/4 wave up , will do a good job. But 4 radials at 1/8 wave up, will be a dog in comparison. When thinking of radials for a ground plane, and the proper number of them to equal a certain reference, you must think in terms of wavelength for the freq to be used.

>
> Being an appartment dweller myself, I once dreamed of putting up an inverted
> ground plane antenna using the building as a support for the radiator and
> the roof as support and hideawy for the two elevated radials.

It will work, but the ground losses will depend on the height above ground in wavelength for the band in use, and the number of radials used. Refer to the specs above to equal the "120 radial reference".
BTW, I think Reg squirms in his chair every time I bring up 120 radials. :) But I still think it's a good reference to compare to for top results. Nothing I've ever seen in the real world has ever departed from the "specs" I've given above as far as comparing the number of elevated radials, to the number of radials used with a ground mount system.

>
> Ok, but now taking into account Roy's previous thread. How does a low dipole
> at the same height of 21m stands out of this?
> azimuth 0ï¿½: -5.77dBi @ 30ï¿½ elevation
> azimuth 90ï¿½: 4.23dBi @ 30ï¿½ elevation
>

> Result: In its preferred azimuthal direction, a low dipole, even at a height
> of about a quarter wavelength, still outperforms any ground plane vertical
> antenna.

Depends where you are talking, and the angle being used to make that
path. Sure, if you are on 80m, and work 200 miles away, the dipole
will almost always be better. But not so on long paths. The angles
used on long hauls will be fairly low. When modeling, compare the gain
at say 5-10 degrees off the horizon. But even this is deceptive. I
don't totally agree with the way most programs model and compare
ground mount to elevated verticals. I think most programs understate
the gain of elevated verticals, when used at the lower than 1 wave
heights on the lower bands. The patterns seem ok, but the way they
deal with the decreasing ground losses when elevated, seems a little
suspect to me. I find I have to crank up the ground quality to show
the gains I see in the real world. On the low bands, the increase
when using the ground plane vs dipole would usually be greater in the
real world, than is modeled. I think part of this is because the
programs don't seem to take into account the differences between
losses vs freq, and also take take into account the quirks of
propagation on the lower bands. It's my opinion that if you had two
antennas with the exact equal gain in a certain direction and angle,
and one was horizontal, and one vertical, the vertical would win on
160m long paths.
But a modeling program will not deal with that, so you have to
consider it on your own.

>
MK

2670. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 03:37:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8f6625$1_8@corp.newsgroups.com>
Source record: 106436

Jim Kelley wrote:
> It's hard to imagine how Rs (Zs) could have any effect on that ratio.

Here's an interesting quote from _Transmission_Lines_, by Chipman, page 175:

"Equation (8.27) demonstrates explicitly that the shape of a standing wave pattern representing |V(d)| as a function of d on a transmission line is in no way affected by the quantities, Vs, Zs, and rho(s) at the source."
--
73, Cecil http://www.qsl.net/w5dxp

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2671. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 04:08:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vouqqk4jrcoq9f@corp.supernews.com>
Source record: 106437

Source impedance DOES affect the amount of energy moving in and sloshing around in a transmission line. It DOESN'T affect the ratio of forward to reflected waves, and therefore DOESN'T affect the SWR.

Once again, here's a way to see why. I'll restrict the discussion to a lossless line for simplicity. When you first turn the source on, a forward wave (voltage and current) travels toward the load. The source impedance does play a role in determining the size of this wave; it can be determined by analysis of a simple voltage divider circuit, with the source voltage dividing between the source impedance and the line Z0. A portion of the forward wave is reflected from the load unless the line is perfectly matched. The fraction which is reflected has nothing to do with the source impedance, and in fact it can easily be calculated from only the line and load impedances. That fraction (magnitude and angle) is known as the reflection coefficient -- you can find the formula in any transmission line text, or derive it yourself very easily.

Take a look at the system just before the reflected wave returns to the source. At each point along the line we have a forward wave and a reflected wave, which vectorially add. These create standing waves and, if the line is long enough, we can calculate the SWR directly as the ratio of maximum to minimum voltage along the line. A little bit of algebra will show that the SWR is determined entirely by the ratio of forward to reflected waves -- their absolute values don't matter (except, of course, as it affects their ratio). Given a reflection coefficient, you can calculate the SWR.

Ok, now suppose that some fraction of the returning wave reflects from the source and heads back toward the load. Say, X percent of it. When it reaches the load, exactly the same fraction of it is reflected as was the case for the original forward wave. That is, if the new forward wave is X percent of the original, then the new reflected wave is also X percent of the original reflected wave. If we add the new forward and reflected waves to the original ones, and take the ratio of forward to reverse, we find that the ratio of the new, combined forward wave to the new, combined reflected wave is exactly the same as it was for the first forward and reflected waves. It doesn't matter what X is -- no matter what fraction of the reflected wave bounces off the source, the same fraction of that new forward wave is reflected from the load. The SWR is the same as it was for the original pair of waves. Eventually, we build up a large number of pairs of forward and reflected waves. And the ratio of each forward wave to its corresponding reflected wave is always the same -- it's the reflection coefficient of the load. So when we add all the forward waves into a single forward wave and all the reflected waves into a single reflected wave, we get the same ratio. And that ratio

doesn't depend in any way on the source impedance or what fraction of each returning wave is re-reflected from the source.

One of the nice things about this way of looking at it is that it's entirely supported by the theory and equations describing transmission line operation which engineers have used to design working systems for the past hundred years or so.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> It's hard to imagine how Rs (Zs) could have any effect on that ratio.
>
>
> Consider a reactive load where energy can be locally exchanged between
> the load reactance and the impedance looking back into the feedline.
> Zs can certainly affect the impedance looking back into the feedline.

2672. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 04:17:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F8F6D45.F16832A0@cwis.net>
Source record: 106438

"T.E.O",
If you have the room, by all means put up the larger
loop. How will it compare to a 3/8w inverted "L"? Beats
me, never had an inverted "L".
'Doc

2673. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 04:37:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vousgdp3ctd657@corp.supernews.com>
Source record: 106439

Holy mackrel, Mr. Science!

But gee, you can see that from even a casual glance at the equations you'll find in virtually any transmission line text. It's kind of like saying that wow, Terman concludes that resistance is voltage divided by current, so now we can believe it too.

People who believe that SWR is affected by source impedance have either rejected established theory, or don't have the background or interest to read and understand what we consider to be very simple equations. So I'd hardly expect them to be impressed by someone pointing out what the equations and established theory say clearly and unambigously. You can't fight Ouija boards with math.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> It's hard to imagine how Rs (Zs) could have any effect on that ratio.
>
>
> Here's an interesting quote from _Transmission_Lines_, by Chipman, page
> 175:
>
> "Equation (8.27) demonstrates explicitly that the shape of a standing wave
> pattern representing |V(d)| as a function of d on a transmission line is in
> no way affected by the quantities, Vs, Zs, and rho(s) at the source."

2674. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 05:23:45 UTC
From: tdonaly@aol.com
Message-ID: <20031017012345.29144.00000539@mb-m12.aol.com>
Source record: 106440

Cecil wrote,
>
>
>Tom Bruhns wrote:
>> There is no such thing as "the voltage" between the ends of your
>> excited dipole at an instant in time.
>
>Please reference Fig 1, page 2-2, in the 15th edition of the ARRL
>Antenna Book. "Current and voltage distribution on a 1/2WL wire.
>
>The RMS (or peak) values of the voltages at the ends of the dipole
>are maximum and 180 degrees out of phase. The ratio of net voltage to
>net current is the impedance anywhere along the wire.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>
>

Cecil, that picture is a gross simplification. In order to show that there's
a unique voltage between the ends of a dipole, you first have to show that
the time-varying electric field between those ends is conservative.
Go ahead. (My money is on Tom, however.)
73,
Tom Donaly, KA6RUH

2675. Re: Bug in Antenna Optimizer v6.5 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 05:29:03 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bmnva2$8q3$1@reader2.nmix.net>
Source record: 106441

Serge Stroobandt, ON4BAA wrote:

> I tried to contact the author of this sofware, Bryan Beezley on
> k6sti@n2.net but unfortunately this email address does not seem to be
> active anymore. Has anybody Bryan's new email address?

Serge,

I exchanged a couple e-mails with Brian in August at the address bb@n2.net.

Bill / W5WVO

2676. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 05:30:37 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <7r7sovcpg8uipgddus61fk2vmcqk5nueuv@4ax.com>
Source record: 106442

On Wed, 15 Oct 2003 23:09:29 GMT, Dave Bushong <dbushong@adelphia.net>
wrote:

>Hi Ed,
>
>If it's rated for 50 watts, your 55-watt transmitter will work just
>fine. You will lose 3dB in your cable and connectors, and only deliver
>30-40 watts to the antenna.
>
>snip<
>
>All the best,
>Dave
>
>
How do you figure a 3 dB loss? A mobile installation 'typically' uses
RG-58 which at 2 meters has about 4.5 dB loss per 100 feet and most
mobile antenna's come with 15 - 20 feet of cable. As I see it, that's
about 1 dB loss (or thereabouts) for the cable and I've seen connector
loss figures hover around 0.5 dB. At a 1.5 dB loss roughly 1/4 of the
signal is not unreasonable which would put it at the 40 watts you
mention. I don't [totally] aruge your conclusion - just your 3 dB
assertion.

Am I missing something?
Howard

2677. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 06:19:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vov2gsmet2su56@corp.supernews.com>
Source record: 106443

What kind of connector has 0.5 dB loss at 2 meters? And what's the loss mechanism? Is there some kind of connector out there filled with carbon or something? Who made the measurements and how?

The ARRL Antenna Book shows RG-58/U and RG-58B/U (plain copper center conductor) as having just under 6 dB/100' attenuation at 2 meters, and RG-58A/U and RG-58C/U (tinned copper) as about 6.5 dB/100'. I checked a 100' piece of RG-58C/U in my junk box and found it to be 5.6 dB/100' at 146 MHz. So I'd expect 20 feet or so to have just over 1 dB of attenuation, almost certainly not enough to notice except perhaps just barely, if you were right at the noise level. Certainly it wouldn't be noticeably improved by using some other kind of cable.

Oh, and that measurement was made with BNC connectors on both ends. The loss of those connectors shouldn't be measurable except with extremely sensitive equipment.

Roy Lewallen, W7EL

Howard wrote:
>
> How do you figure a 3 dB loss? A mobile installation 'typically' uses
> RG-58 which at 2 meters has about 4.5 dB loss per 100 feet and most
> mobile antenna's come with 15 - 20 feet of cable. As I see it, that's
> about 1 dB loss (or thereabouts) for the cable and I've seen connector
> loss figures hover around 0.5 dB. At a 1.5 dB loss roughly 1/4 of the
> signal is not unreasonable which would put it at the 40 watts you
> mention. I don't [totally] aruge your conclusion - just your 3 dB
> assertion.
>
> Am I missing something?
> Howard

2678. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 06:30:40 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310162230.7f688765@posting.google.com>
Source record: 106444

Jim Kelley <jwkelley@uci.edu> wrote in message news:<3F8F42C3.3BFBC3A4@uci.edu>...
> Tom Bruhns wrote:
> > There is no such thing as "the voltage" between the ends of your
> > excited dipole at an instant in time.
>
> Perhaps they meant the voltage 'across' the ends of the dipole. The
> ends should always be an electrical half-wave out of phase, right?
> There should only be two instants of time during a period when the
> difference in potential from end to end is zero.
>
> What are you saying exactly, Tom?

I'm saying that if you measure the voltage between two points on a good conductor, in a path along that conductor, it will be very small. The electric field is always perpendicular to a perfect conductor at the surface of that conductor. For a conductor with resistance, the drop along it is I*R, and therefore the nearby electric field is in general not quite perpendicular, but unless it's a darned inefficient antenna, it's very nearly so.

I'm also saying that the voltage (potential) between two points depends, in general, on the path you take between the two points. You should be _especially_ aware of that fact when you're in the presence of time-varying magnetic fields, such as you have around a powered antenna.

As I said, if you measure the potential along a line perpendicular to the antenna, it will be large (when the antenna is excited with some power). I fully expect the electric field to be high near the wire, but perpendicular to the wire, NOT parallel to it.

Cheers,
Tom

2679. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 06:42:24 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310162242.6002554b@posting.google.com>
Source record: 106445

Roger Halstead <newsgroup@rogerhalstead.com> wrote in message
news:<cfmuovga62fuu1r1t5mst9hi4288e150h4@4ax.com>...
...
> Ahhh...with the impedance variation I beg to differ.
> Otherwise how could I draw a 3 or 4 inch arc off the end of a 160
> meter dipole.

You're welcome to differ, but indeed you may not be differing at all.
I did NOT say there was a low electrical field strength near the
antenna. Rather, the field _must_be_ essentially perpendicular to the
conductor, at the conductor's surface. So the potential between the
antenna and a point a short distance away, along a line parallel to
the electric field (that is, perpendicular to the antenna wire) may be
quite high. If the electric field exceeds the breakdown voltage of
air, you'll get corona. But if you see corona streamers, are they
_parallel_to_ the antenna wire? I doubt it...they will almost
certainly be perpendicular to the wire, where they meet the wire's
surface.

As I've suggested in other posts in this thread, I'll be happy to
listen to explanations about fields around an antenna, but if you're
going to talk about voltages between two points, be sure you specify
the path along which you will measure those voltages. If you tell me
there is a large voltage along a good conductor, then I know there is
a very large heat dissipation in that wire. But if your meter and its
leads have enclosed an area outside the wire, you have not measured
the voltage along the wire, but rather around the loop composed of the
wire and the meter's leads.

Cheers,
Tom

2680. Re: Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 08:13:49 UTC
From: "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com>
Message-ID: <3f8fa4bc$0$3663$5402220f@news.sunrise.ch>
Source record: 106446

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0310161934.33b3baff@posting.google.com...
> "Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com> wrote in
message news:<3f8ee7af$0$3663$5402220f@news.sunrise.ch>...
> > Dear Roy, Richard, Art and other readers,
> >
> > I had a look at that thread (for other readers' convenience included at
the
> > bottom of this message).
> > Although it is not immediately answering my question whether inverted
> > groundplane verticals present fewer losses than normal verticals, it
> > contains some
> > interesting observations. Again for the sake of the other readers, I
took
> > the liberty to rephrase and summarise these in terms that are more
common in
> > antenna literature:
>
> Why are you calling them "inverted ground planes"? To me , an inverted
> ground plane would be one that is standing on it's end, with the
> radials on top.
> It's just a ground plane. Period. A ground plane is any vertical that
> uses elevated radials to supply the lower part of the antenna. "Not to
> be confused with decoupling radials." Adding decoupling radials to a
> half wave that is elevated, does not turn it into a "ground plane".
> It's still an elevated 1/2 wave with a decoupling section. A ground
> mount vertical, is well, a ground mount vertical.

Hello Mark,

For all clarity, when I say inverted groundplane, I really do mean a quarter
wave vertical fed at the top, with radials at the top!

--

73 de Serge ON4BAA - HB9DWU
http://salsawaves.com/propagation/

2681. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 08:21:33 UTC
From: Thierry <tlombry@hotmNOSPAMail.com>
Message-ID: <3f8fa689_1@news.vo.lu>
Source record: 106447

Hi,

Your best antenna is a magnetic loop, not cumbersome at all (dia. 1m),
light, easy to install.
I tested the Wellbrook ALA 1530 ane 330 : very fine. (I kept it as spare
receive antenna)
See at http://www.astrosurf.com/lombry/qsl-ala330.htm

Thierry
ON4SKY, LX3SKY
ex-SWL ONL5183

"private" <private@private.com> wrote in message
news:3F8F080B.FBB7CB20@private.com...
> I have an old shortwave radio and want a decent wire antenna
> for it.
> Would connecting a single insulated wire up through the wall,
> through the attic and laid on the roof have a good chance of
> working decently?
> It will probably be about 125' from radio to the end of the
> antenna.
> I hope I don't need a ground at the radio.
>

2682. Re: Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 08:44:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmoa64$rs1$1@titan.btinternet.com>
Source record: 106448

```
> For all clarity, when I say inverted groundplane, I really do mean a
quarter
> wave vertical fed at the top, with radials at the top!
>
============================

You should have said you are working on the underbelly of an aeroplane.
Makes a lot difference where you have your shack.
```

2683. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 09:11:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmoboe$18n$1@titan.btinternet.com>
Source record: 106449

> Source impedance DOES affect the amount of energy moving in and sloshing
> around in a transmission line. It DOESN'T affect the ratio of forward to
> reflected waves, and therefore DOESN'T affect the SWR.
>
==========

But it DOES affect the indicated SWR and so the indicated SWR is incorrect.

It is the meter which is at fault ! It is designed to indicate correctly
only when the source is 50 ohms.

Here's the proof - Rho = (50-Zt) / (50+Zt) - which you may have seen
before.

SWR, of course, is calculated from Rho and the meter scale is calibrated
accordingly.

If the source is not what the meter expects then it gives the wrong answers.
And its faithful worshippers believe it!

Reg, G4FGQ

2684. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 09:18:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <AhNc1KAIP7j$EA+m@ifwtech.co.uk>
Source record: 106450

Tom Bruhns wrote:
>I'm also saying that the voltage (potential) between two points
>depends, in general, on the path you take between the two points. You
>should be _especially_ aware of that fact when you're in the presence
>of time-varying magnetic fields, such as you have around a powered
>antenna.
>

In practice that will means that the voltage you measure between say the end of a whip and ground will depend on how you choose to route the connecting leads to the voltmeter, and how you connect to ground... and above (below?) all on what you define "ground" to be.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2685. 5 Band 2 Element Cubex Quad Install - Pictures

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 09:54:02 UTC
From: JS <wd1v@removethisamsat.org>
Message-ID: <171020030554020178%wd1v@removethisamsat.org>
Source record: 106451

http://www.qsl.net/wd1v/Quad/cubex.html

2686. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 10:07:23 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <KaPjb.31462$os2.458469@news2.e.nsc.no>
Source record: 106452

You loose something and you gain something else. The longer loop (320m) will give you a lower elevation angle at the low frequencies (160, 80 m...), but the beam pattern on 20m - 10 meter will suffer. Look at W4RNL's analysis http://www.cebik.com/atl1.html. Even a 160m loop is inferior to an 80m loop on 10 meters. Remember to scale his figures, as the 320m loop will have this problem already on 20 meters.

(An 80m loop is my main antenna)

Sverre LA3ZA
www.qsl.net/la3za

> I am going to put up a horizontal loop @ about 60' in hopes of having a
> decent 160-10 antenna. Is there any adavntage to increasing the the total
> length from 1 wavelength at the lowest freq. (about 530') to 2
> wavelengths(1,060'). i>

2687. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 10:23:35 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <6jgvovg9pfbpah3jlev4ok9marr25bp1hm@4ax.com>
Source record: 106453

On Fri, 17 Oct 2003 00:15:19 GMT, "T.E.O" <rfmscpa@earthlink.net>
wrote:

>I am going to put up a horizontal loop @ about 60' in hopes of having a
>decent 160-10 antenna. Is there any adavntage to increasing the the total
>length from 1 wavelength at the lowest freq. (about 530') to 2
>wavelengths(1,060'). i have the space & the wire & I'm wondering if it's
>worth the extra effort.
>
>Also, am I better off with a 3/8 WL inverted L on 160.

As someone has already pointed out you will not see great results on
20-- through ten, unless the major lobes happen to land where you want
to talk most offten.. I've use a 160M (530') Loop here with very good
results for about 5 years now. But I would suggest puting up some
form of vertical also.. to help fill in those nulls in the pattern..
with my loop and a vertical i've been able to work just about
everything I want.. as for the 3/8 wav inverted L-- it is a good
antenna but you would like the loop better..
73 Dave Kc1di

2688. Re: View from the tower, was (Opposing BPL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:06:01 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3F8FCCF0.6040205@comcast.net>
Source record: 106454

Yeah Roger, I used to live within 100 meters of three sets of 3 phase high tension lines and they were VERY quiet. In 38 years of operation from that location I can't recall more than a handful of noisy times, generally during high humidity in July/August, when the insulators would corona. These were generally cleaned up within a few days to a week.

DD, W1MCE

Roger Halstead wrote:

2689. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:15:24 UTC
From: w1rfi@aol.com
Message-ID: <20031017071524.05767.00000756@mb-m10.aol.com>
Source record: 106455

>Is the ARRL preparing a FAQ for amateurs who have scopes, spectrum
>analyzers, or service monitors, etc., as to how they might go about
>inspecting a suspected chunk of spectrum and how detect, identify,
>qualify whey they see/hear?

Not at this time, Dan. I want to talk with amateurs who are going to go into the trial areas, to share my experiences and to make sure I learn as much as possible from theirs. FAQs are a great way for beginners to learn about a subject, but some things are still best left to real dialogue.

73,
Ed Hare, W1RFI

2690. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:28:37 UTC
From: w1rfi@aol.com
Message-ID: <20031017072837.05767.00000757@mb-m10.aol.com>
Source record: 106457

>I think a general description of other RFI sources would be helpful for any
>radio amateur to make a 'first cut' assessment. It might also help you
>isolate
>the truly legitimate cases of BPL RFI--if and when they exist.

There are several RFI sources that would be the most common ones misidentified as BPL. The first is "conventional" power-line noise. It is usually characterized by having a *noisy* 120-Hz component, as the sparking takes place on the positive and negative peaks of the 60-Hz wave. Another is similar, occurring from things like lamp dimmers, motor controllers, flourescent lights, etc. Those sources usually have a 120- or 60-Hz component, but the noise on the peaks is usually quite a bit less noisy looking.

Switch-mode power supplies can also be noisy, but they generally have noise that ranges from reasonably coherent (carrier-like) to broad, buzzy clumps of noise, spaced every N kHz, where N is the free-running rate of the switcher frequency. N is typically 10-50 kHz or so. Some switchers make noise that is fairly close to gaussian-distributed noise, with a pretty uniform distibribution of power vs frequency (power spectral density). One key diagnostic for a switcher is that the N kHz tends to drift around a bit. A series of noisy carriers or clumps of noise that are spaced every 15 kHz, for example, may drift up the band as the unit is turned on and warms up over an hour or so. If so, it is almost certainly a switcher.

(I do, btw, suspect that the "plasma tv" problem is really a switch-mode problem, as some amateurs have reported no interference from plasma TVs. On my long list of things to do is to take the Lab's Icom R-3 receiver to the local big electronics store and see if I can get some estimates of the noise level from various equipments.)

Probably the most diagnostic, however, it the distribution of noise signal vs frequency. BPL is designed to use specific spectrum, and as one tunes a general coverage receiver from 2 to 80 MHz, its onset will be rather sudden, it will persist for at least several MHz, then taper off just as abruptly.

>I do have a concern that hams not make too many false alarms. Sounds like you
>are on top of the the problem and I wish you the best.

There are no guarantees, but I am hoping that by talking to each of the hams that report BPL interference, between them and me we can reach the correct conclusion. If things don't add up, I will suggest that it not be reported. Each report of actual interference is precious right now, and I would be willing to go to the trial area to verify a questionable case.

Thanks for your interest.

73,
Ed Hare, W1RFI

2691. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:32:41 UTC
From: w1rfi@aol.com
Message-ID: <20031017073241.05767.00000758@mb-m10.aol.com>
Source record: 106456

>TV channels 2, 3, 4, and 5 will get clobbered by the junk going up to 80MHz.
>The video signal is AM modulated onto the channel carrier (with a
>portion of the
>lower sideband suppressed) and will have no ability to reject the BPL
>noise.
>The effect would be somewhat similar to a sparky vacuum cleaner motor
>throwing
>white and black spots throuout the picture. The sound, being FM, will fare
>better. Well, there's digital HDTV, but most everyone still uses analog TV.
>And I don't get cable or satellite.

2 to 80 MHz is the spectrum that the BPL folks asked to try in their experimental license applications. I have not seen any BPL above 50 MHz -- so far.

And at the levels I have seen BPL, digital TV won't help. The digital TV demodulation process can ignore noise up to a point. An analog TV signal that was somewhat noisy, but perfectly watchable, would probably be clean on digital. An analog signal that was noisy, but still just watchable would have many digital errors that would result in portions of the screen locking up for a few seconds at a time, loss of audio for seconds, etc. And just a little bit past that point, the digital TV signal would fall apart all together.

73,
Ed Hare, W1RFI

2692. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:36:47 UTC
From: w1rfi@aol.com
Message-ID: <20031017073647.05767.00000759@mb-m10.aol.com>
Source record: 106458

>Under the present
>> rules, they must be tested at 3 typical locations. "

>What's the FCC definition of "typical locations"??

There is none.

>15.209 is the problem, it's grossly outdated, did not foresee anything
>like BPL and the limits needs to be revised downward which is one
>piece of this brawl. Ref: Tailpipe emissions regs, same basic problem,
>different pollution media.

A good tailpipe analogy would be to consider the present tailpipe emissions limits. We can still breathe with the number of cars that emit. Now, the equivalent to BPL emissions occurring on several MHz at a time would be to stack 100 cars on top of each other and have them all running at the same time. The equivalent to building the system as large as an entire community is to do that for every square inch of roadway. Would the emissions limits that work for an occasional car passing by your home still work under those circumstances, or would we all choke to death in a matter of minutes?

73,
Ed Hare, W1RFI

2693. Re: To slope or not to sloper?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:38:49 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <gskvovkbvi3oq84u7dva5u1oeu638b8scf@4ax.com>
Source record: 106459

On Thu, 16 Oct 2003 15:42:59 -0400, "Robert Scott"
<robscott@hargray.com> wrote:

>I need to get on 30m. I only have about 50 confirmed on this band. My
>question is should I put up a dipole at 50 feet boadside to EU or wouldn't I
>be better to slope it toward Europe for DX?
>Any opinions would be appreciated!
>73
>Rob
>WR3Y/4
>
Hi Rob,
30 M is my favorite band and I've worked qrp Dxcc twice now on that
band. I would say your best bet is to go with the dipole 50 feet is
just abput right for 30m.. But with that said i would also say you
should put up a vertical so that you can switch between the two
antennas quickly.. you will find that the vertical will at times work
better.. I find this particularly true when working Africa and the
south pacific. Anywat you'll up that country total in no time with
that arrangement. 73 See you on 30M Dave , KC1DI

P.S. Also pay particual attention if you can to the 1hr just before
sundown and the hour just after sunrise .. I've worked some great dx
in those two hours of the day.

2694. Adjustment of simple balanced tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 11:50:38 UTC
From: "Edward A. Feustel" <efeustel@erols.com>
Message-ID: <bmol2j$m6q$1@bob.news.rcn.net>
Source record: 106460

I am new to this type of tuner and am hoping to benefit from other's experience.

My new balanced tuner has a parallel lc circuit. The output to the antenna is taken by clips placed on the
coil. A series tuned link is used from the 50 ohm input.

What is a short process for tuning? I have tried moving the taps around at 3 turn intervals and
trying to minimize the SWR. It seems that if I tune the series tuned link off resonance the reflected
power decreases, but so does the incident power. Ditto the parallel link.

Must I put the tap on each turn of (the large coil) and see what comes out lowest? Or are there
some "shortcuts". Is it likely that I will be able to produce a match over a wide range of impedances
with this tuner? My first experiences have been rather frustrating to say the least.

Thanks.
Ed

2695. Re: Inverted ground plane antenna: compared with normal GP and low dipole.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 13:29:46 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <k9Sjb.89431$a16.35025@lakeread01>
Source record: 106461

Check out Cebik's article on the center-fed Inverted L
http://www.cebik.com/ltv.html. He loves it and so do I.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"Serge Stroobandt, ON4BAA" <REMOVEs_stroobandt@hotmail.com> wrote in message
news:3f8ee7af$0$3663$5402220f@news.sunrise.ch...
> Dear Roy, Richard, Art and other readers,
>
> I had a look at that thread (for other readers' convenience included at
the
> bottom of this message).
> Although it is not immediately answering my question whether inverted
> groundplane verticals present fewer losses than normal verticals, it
> contains some
> interesting observations. Again for the sake of the other readers, I took
> the liberty to rephrase and summarise these in terms that are more common
in
> antenna literature:
>
> The electromagnetic field around an antenna exists out of two parts: a
near
> field and a far field.
>
> Due to maths, the near field rapidly becomes negligible at larger
distances,
> whereas the far field is the field we use normally to communicate.
>
> Losses in the near and far field can be reduced by reducing ground losses
in
> the immediate vecinity of the antenna. This can be done through installing
> the antenna above "good RF ground", empoying a low impedance radial system
> (burried or elevated) for verticals < or = 5/8 lambda or choosing a
(double
> so long!) vertical antenna with a built-in return-path (half square,
bobtail
> curtain, and half wavelength vertical). NOTE: Both the half square and the
> bobtail curtain can be interpreted as an array of 2, respectively 3
inverted

> ground plane verticals! (For a brief description see John Devolder, ON4UN,
> "Low-Band Dxing," chapter 12)
>
> Losses in the far field are in addition also caused by the ground
properties
> at larger distances from the antenna, and are therefore less controlable
> (apart from choosing a coastal or salt-lake QTH).
>
> Now, my assumption is that by inverting a vertical ground plane, some of
the
> near field ground losses could be prevented by presenting the high
impedance
> end of the radiator to the low impedance of the earth immediately
> underneath. This tremendous mismatching would cause less coupling of the
> antenna's near field into the lossy earth.
>
> Assumptions of the mind are one thing, but eventually the proof of the
> pudding is in the eating (and this goes especially to Richard!).
> (Art, you see, you don't need to convince me anymore about antenna
modelling
> ;-) However, I do will post a message about a possible bug in AO!)
> So I used version 1.0 of Roy's software, called EZNEC to model a couple of
> swiftly designed (i.e. non-resonant) antennas.
> (Roy, we need to talk about upgrading my version - I will send you a
> seperate email for this.)
> Here are the results:
>
> Normal 80m (3.650MHz) ground plane vertical
> with 4 elevated radials 4.5m above "good" ground (according to Christman
> KB8I, see also John Devolder, ON4UN, "Low-Band Dxing," chapter 9)
> radiator and radial lengths: 20m
> maximum height 24.5m
> azimuth 0�: 0.23dBi @ 22� elevation
> azimuth 45�: 0.21dBi @ 22� elevation
>
> Inverted 80m ground plane vertical
> with 4 elevated radials 24.5m above "good" ground
> radiator and radial lengths: 20m
> maximum height 24.5m
> azimuth 0�: 0.08dBi @ 22� elevation
> azimuth 45�: 0.12dBi @ 22� elevation
>
> Result: 0.09-0.15dB in favour of the normal ground plane. The radials up
in
> the air of the inverted ground plane probably cause some shielding.
>
> The same difference remains when we lower both antennas to 1m above
ground:
>

> Normal 80m ground plane vertical
> with 4 elevated radials 1m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0°: 0.00dBi @ 24° elevation
> azimuth 45°: 0.00dBi @ 24° elevation
>
> Inverted 80m ground plane vertical
> with 4 elevated radials 21m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0°: -0.16dBi @ 25° elevation
> azimuth 45°: -0.11dBi @ 25° elevation
>
> Being an appartment dweller myself, I once dreamed of putting up an
inverted
> ground plane antenna using the building as a support for the radiator and
> the roof as support and hideawy for the two elevated radials.
>
> Normal 80m ground plane vertical
> with 2 elevated radials 1m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0°: -0.86dBi @ 24° elevation
> azimuth 45°: -0.66dBi @ 24° elevation
> azimuth 90°: -0.45dBi @ 24° elevation
>
> Inverted 80m ground plane vertical
> with 2 elevated radials 21m above "good" ground
> radiator and radial lengths: 20m
> maximum height 21m
> azimuth 0°: 0.55dBi @ 29° elevation
> azimuth 45°: 0.05dBi @ 26° elevation
> azimuth 90°: -0.96dBi @ 21° elevation
>
> Result: Now, the balance turned in favour of the inverted groundplane
> vertical in 3 of the 2 azimuth headings, probably because fewer radials
for
> the inverted GP means less shielding.
> Differences for 0°, 45° and 90° azimuth are 1.41dB, 0.71dB and -0.51dB,
> respectively.
>
> FIRST TAKE-AWAY MESSAGE: Do not rely on accounts of particular antenna
> installation, always model your own antenna installation before jumping to
> conclusions.
>
> Ok, but now taking into account Roy's previous thread. How does a low
dipole
> at the same height of 21m stands out of this?

> azimuth 0°: -5.77dBi @ 30° elevation
> azimuth 90°: 4.23dBi @ 30° elevation
>
> Result: In its preferred azimuthal direction, a low dipole, even at a
height
> of about a quarter wavelength, still outperforms any ground plane vertical
> antenna. This is an eye-opener, taking into account that low dipoles
(a.k.a.
> cloud burners) send most of their energy radially away from earth, without
> any ionospheric diffraction right into space. Most of the gain of the low
> dipole is pattern gain, however. This means that performance in the
> perpendicular azimuthal direction is extremely bad with -5.77dBi.
>
> SECOND TAKE-AWAY MESSAGE: Appartment dwellers might find an effective
> radiating system in installing a dipole on the roof of their building (may
> droop off at the ends) and making it (behind the current balun) remotely
> switchable into an inverted ground plane vertical antenna for working the
> directions that lie in the dip of the azimuthal dipole pattern. That is,
the
> current balun should also be employed to make the vertical radiator
current
> equal to the sum of the currents in the radials.
>
> PS1: I have posted also an exact copy of this message under the subject
> "Inverted ground plane antenna: compared with normal GP and low dipole."
in
> order to attract more readers with this more appropriate title.
>
> PS2: Please, send your comments to the newsgroup under above-mentioned
> header. As of tomorrow I will be on a business trip for the next two weeks
> and will only be able to respond occasionally.
> (Not that I am afraid of you guys!!! :-P)
>
> --
> 73 de Serge ON4BAA - HB9DWU
>
> propagation & ham info at:
> http://salsawaves.com/propagation/
>
>
>
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vommtp653g0q51@corp.supernews.com...
> > That question has been answered several times in this newsgroup. For one
> > of the most recent answers, go to groups.google.com and find my posting
> > on July 21, 2003 in the thread "Re: efficiency of horizontal vs vertical
> > antennas".
> >

> > Roy Lewallen, W7EL
> >
> > Serge Stroobandt, ON4BAA wrote:
> > >
> > > This conversation is starting to get interesting :-)
> > >
> > > INVERTED GROUNDPLANES:
> > > What about using an inverted 1/4wave groundplane in order to avoid
> ground
> > > losses?
> > > Then you have the high impedance point of the antenna close to the
lossy
> > > (low impedance) earth.
> > > Due to the severe mismatch less power will couple into the earth.
> > >
> > > The low impedance point (feed point) of the antenna is safely high up
in
> the
> > > (high impedance) air then.
> > >
> > >
> All messages from thread
> Message 1 in thread
> From: Ron (rmrippy@hotmail.com)
> Subject: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-15 18:38:29 PST
>
>
> There doesn't appear to be any ground loss resistance in horizontal
antennas
> (e.g., dipoles) such as there is in verticals. Does this mean that
verticals
> are
> virtually always less efficient than horizontals due to their ground loss?
>
> RonMessage 2 in thread
> From: Roy Lewallen (w7el@eznec.com)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-15 19:01:01 PST
>
>

> A vertical dipole, or a base fed half wave vertical, has good efficiency
> and no significant ground loss. That is, there's no appreciable loss
> from current flowing through the ground to a feedline terminal. For
> other verticals, such as a base fed quarter wavelength, ground loss due
> to return currents can be reduced to an arbitrarily low value by using a
> good enough system of radials.
>
> However, after the wave is launched from the antenna, vertically
> polarized signals react differently than horizontally polarized ones
> when they strike the ground. Horizontally polarized waves are reflected
> with little loss, except ones at high angles. With vertically polarized
> waves, it's the low angle ones that take the greatest beating. And since
> most vertical antennas tend to concentrate radiation at low angles, a
> very sizable fraction of the total radiated power is often lost in the
> ground reflection. This mostly takes place well beyond a reasonably
> sized radial field, so radials don't help. The only way to reduce this
> loss is to see that the reflection takes place from highly conductive
> ground, like sea water(*). Otherwise, you lose most of the power that
> you want the most.
>
> (*) The effective conductivity of the ground improves as frequency
> decreases. So verticals tend to do better at lower frequencies, and
> often outperform horizontal dipoles on 160 and 80 meters, even over
> average ground.
>
> Roy Lewallen, W7EL
>
> Ron wrote:
> > There doesn't appear to be any ground loss resistance in horizontal
> > antennas (e.g., dipoles) such as there is in verticals. Does this mean
> > that verticals are virtually always less efficient than horizontals due
> > to their ground loss?
> >
> > Ron
> >
> > Message 3 in thread
> From: Bob Colenso (bcolenso@aol.com..nospam)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-21 15:16:10 PST
>
>
> But aren't there ground independant verticals, like the Half Square or a
> Bob-Tail-Curtain?
>
>

>
> U of M
> GO BLUE!!!
>
> God, Guns, and Guts
> Protect America!!!Message 4 in thread
> From: Yuri Blanarovich (k3bu@aol.comnoSaddam)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-21 15:30:11 PST
>
>
> >
> >But aren't there ground independant verticals, like the Half Square or a
> >Bob-Tail-Curtain?
> >
> >
> >
> >U of M
> >GO BLUE!!!
> >
> >God, Guns, and Guts
> >Protect America!!!
> >
>
> Every vertical "needs" the ground for its efficient performance especially
> at
> the low angles. Vertical dipoles and their elevated cousins are still
> "looking"
> out at the ground, farther waway and with a bit less of participation.
> Wanna see dramatic display of salt water "ground"
performance/contribution?
> Take your any verticaly polarized antenna and compare its performace
between
> ground ground and salt water ground. You would see somewhere between 10 -
15
> dB
> difference.
>
> YuriMessage 5 in thread
> From: Roy Lewallen (w7el@eznec.com)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna

> Date: 2003-07-21 16:51:50 PST
>
>
> There are two quite distinct sources of ground loss involved with
> vertical antennas. You're talking about one, and Yuri is talking about
> the other. Makes for a lively discussion, but it's a lot like the blind
> men describing the elephant.
>
> One type of loss is caused when it's necessary to connect one conductor
> of the feedline to the Earth. Current returning to this feedline
> conductor is equal in magnitude to the current flowing into the antenna
> from the other conductor, and it creates a simple I^2 * R loss flowing
> through the ground. This loss can be minimized by using a system of
> ground radials to decrease the loss resistance R near the base of the
> antenna, where the current density is highest. Another solution is to
> use a vertical antenna with a high feedpoint resistance. Examples are
> the half square, bobtail curtain, and half wavelength vertical. These
> antennas require very little feedpoint current, and consequently very
> little ground current. They can be very efficient with only a very
> simple ground system.
>
> But there's another source of loss, encountered after the signal is
> radiated. When a vertically polarized signal strikes the ground, a lot
> of its energy is lost to heating of the ground. This is particularly
> true at low angles of incidence. The end result is severe attenuation of
> low angle radiation. Particularly for low angles, this occurs farther
> away from the antenna than a reasonable radial system extends. So you're
> stuck with this loss, unless you can physically move your antenna to a
> swamp or similar high-conductivity environment. Horizontally polarized
> waves react differently.
>
> The demo version of EZNEC will show this quite dramatically. If you
> choose the MININEC type ground model, it acts like you have a perfect
> radial system. That is, the first source of loss I mentioned is zero.
> But the second is still there. You can simulate the effect of ground
> system loss simply by adding a resistive "load" at the antenna base.
> Compare the patterns of a vertical and horizontal, *to the same scale*,
> by superimposing them on a 2D plot, using different qualities of ground.
> You'll find it quite educational.
>
> Roy Lewallen, W7EL
>
> Yuri Blanarovich wrote:
> >>But aren't there ground independant verticals, like the Half Square or a
> >>Bob-Tail-Curtain?
> >>
> >>
> >>
> >>U of M

> >>GO BLUE!!!
> >>
> >>God, Guns, and Guts
> >>Protect America!!!
> >>
> >
> >
> > Every vertical "needs" the ground for its efficient performance
especially
> at
> > the low angles. Vertical dipoles and their elevated cousins are still
> "looking"
> > out at the ground, farther waway and with a bit less of participation.
> > Wanna see dramatic display of salt water "ground"
> performance/contribution?
> > Take your any verticaly polarized antenna and compare its performace
> between
> > ground ground and salt water ground. You would see somewhere between
10 -
> 15 dB
> > difference.
> >
> > Yuri Message 6 in thread
> From: luke (luke^2@noluke.com)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-22 07:12:04 PST
>
>
> Hi,
>
> Good answers to the question !
>
> Always walk away a little smarter after reading this group !
>
> 73 luke
>
> Roy wrote:
>
> > There are two quite distinct sources of ground loss involved with
> > vertical antennas. You're talking about one, and Yuri is talking about
> > the other. Makes for a lively discussion, but it's a lot like the blind
> > men describing the elephant.
> >
> > One type of loss is caused when it's necessary to connect one conductor
> > of the feedline to the Earth. Current returning to this feedline

> > conductor is equal in magnitude to the current flowing into the antenna
> > from the other conductor, and it creates a simple I^2 * R loss flowing
> > through the ground. This loss can be minimized by using a system of
> > ground radials to decrease the loss resistance R near the base of the
> > antenna, where the current density is highest. Another solution is to
> > use a vertical antenna with a high feedpoint resistance. Examples are
> > the half square, bobtail curtain, and half wavelength vertical. These
> > antennas require very little feedpoint current, and consequently very
> > little ground current. They can be very efficient with only a very
> > simple ground system.
> >
> > But there's another source of loss, encountered after the signal is
> > radiated. When a vertically polarized signal strikes the ground, a lot
> > of its energy is lost to heating of the ground. This is particularly
> > true at low angles of incidence. The end result is severe attenuation of
> > low angle radiation. Particularly for low angles, this occurs farther
> > away from the antenna than a reasonable radial system extends. So you're
> > stuck with this loss, unless you can physically move your antenna to a
> > swamp or similar high-conductivity environment. Horizontally polarized
> > waves react differently.
> >
> > The demo version of EZNEC will show this quite dramatically. If you
> > choose the MININEC type ground model, it acts like you have a perfect
> > radial system. That is, the first source of loss I mentioned is zero.
> > But the second is still there. You can simulate the effect of ground
> > system loss simply by adding a resistive "load" at the antenna base.
> > Compare the patterns of a vertical and horizontal, *to the same scale*,
> > by superimposing them on a 2D plot, using different qualities of ground.
> > You'll find it quite educational.
> >
> > Roy Lewallen, W7EL
> >
> Read the rest of this message... (24 more lines)
>
> Message 7 in thread
> From: sideband (AINO8SPAMW@cac.net)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-22 19:01:10 PST
>
>
>
> Really? Even a vertical dipole?
>
> de AI8W, Chris
>

> Yuri Blanarovich wrote:
> >>But aren't there ground independant verticals, like the Half Square or a
> >>Bob-Tail-Curtain?
> >>
> >>
> >>
> >>U of M
> >>GO BLUE!!!
> >>
> >>God, Guns, and Guts
> >>Protect America!!!
> >>
> >
> >
> > Every vertical "needs" the ground for its efficient performance
especially
> at
> > the low angles. Vertical dipoles and their elevated cousins are still
> "looking"
> > out at the ground, farther waway and with a bit less of participation.
> > Wanna see dramatic display of salt water "ground"
> performance/contribution?
> > Take your any verticaly polarized antenna and compare its performace
> between
> > ground ground and salt water ground. You would see somewhere between
10 -
> 15 dB
> > difference.
> >
> > Yuri
> Message 8 in thread
> From: Yuri Blanarovich (k3bu@aol.comnoSaddam)
> Subject: Re: efficiency of horizontal vs vertical antennas
>
>
> View this article only
> Newsgroups: rec.radio.amateur.antenna
> Date: 2003-07-22 19:23:32 PST
>
>
> >
> >Really? Even a vertical dipole?
> >
> >de AI8W, Chris
>
> Yesereee!
> K2KW and "team vertical" (Force 12) did some tests and measurements across
> the
> San Francisco Bay and found that using half wave vertical dipole and

moving
> it
> from the salt water/beach boundary (0 dB reference) they would get 3 dB
gain
> being 1/4 wave away from the edge, - 2dB for 1/2 wave and + 2 dB for 3/4
> wave.
> Anything that is vertically polarized gets help from better ground,
> especially
> at the low angles in the pattern.
> Claims of advertisers that their wundervertical needs no radials or ground
> are
> full of SWR!
>
> I am trying to find some practical results of verticals being operated on
> the
> side of a hill. Anyone out there with experience?
>
> Yuri da vertical fan BUm
>
>
>
>

2696. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 13:30:18 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F8FEC6A.9D192DD@gte.net>
Source record: 106462

Sverre Holm wrote:

> You loose something and you gain something else. The longer loop (320m) will
> give you a lower elevation angle at the low frequencies (160, 80 m...)

I did not see this in L.B.'s article (in a quick read through) and it would seem to go against the basic premise that takeoff angle is solely a function of height above ground. I did a loop model in AO and did not see any changes in takeoff angle as I changed loop circumference. Can you point me to the section.

Tnx,

Dale W4OP

2697. Justice AM Antenna for $50 USD at CCrane.com Free Shipping

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 13:38:10 UTC
From: Bill Beam <billbeam@spamaol.com>
Message-ID: <34svovcnc6opdg2t0bif6glvmb3odlkmua@4ax.com>
Source record: 106463

Half price and free shipping - Mines on the way. FYI

2698. Re: Adjustment of simple balanced tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:02:13 UTC
From: pa1are <a.harteveld@noio.tudelft.nl>
Message-ID: <bmosp3$be9$1@news.tudelft.nl>
Source record: 106464

Allways start tapping at the outer ends of the coil (total L) and try to
find a point where SWR=1.
If you don't succeed try tappping more toward the centre of the coil until
you can get SWR=1 by turning the capacitors.
I prefer the classic Z-match... easier to use.

73, Arend PA1ARE

"Edward A. Feustel" <efeustel@erols.com> wrote in message
news:bmol2j$m6q$1@bob.news.rcn.net...
> I am new to this type of tuner and am hoping to benefit from other's
> experience.
>
> My new balanced tuner has a parallel lc circuit. The output to the antenna
> is taken by clips placed on the
> coil. A series tuned link is used from the 50 ohm input.
>
> What is a short process for tuning? I have tried moving the taps around at
3
> turn intervals and
> trying to minimize the SWR. It seems that if I tune the series tuned link
> off resonance the reflected
> power decreases, but so does the incident power. Ditto the parallel link.
>
> Must I put the tap on each turn of (the large coil) and see what comes out
> lowest? Or are there
> some "shortcuts". Is it likely that I will be able to produce a match over
a
> wide range of impedances
> with this tuner? My first experiences have been rather frustrating to say
> the least.
>
> Thanks.
> Ed
>
>

2699. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:14:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8ffa34_2@127.0.0.1>
Source record: 106466

Tarmo Tammaru wrote:
> I thought that we were considering steady state single frequency sine waves.
> The whole thing becomes so much more straight forward when talking about
> pulses.....

It is still straight forward when we take reality into account. :-)
Pure steady state single frequency sine waves, sans noise and/or
jitter, exist only in the human mind.
--
73, Cecil, W5DXP

2700. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:15:27 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310170615.2edf4120@posting.google.com>
Source record: 106465
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

"Phil Kane" <Phil.Kane@nov.shmovz.ka.pop> wrote in message
news:<xnfcneeyarg.hmvgz2b.pminews@netnews.comcast.net>...
> On 15 Oct 2003 22:30:17 -0700, Brian Kelly wrote:
>
> >> This means that the manufacturer is required to test them to
> >> ensure that they comply with the FCC regulations. Under the present
> >> rules, they must be tested at 3 typical locations. "
> >
> >What's the FCC definition of "typical locations"??
>
> De facto: any place where the results support the stand that one is
> advocating.

Oh golly, I would never have guessed that . .

2701. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:23:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f8ffc18_2@127.0.0.1>
Source record: 106468

Roy Lewallen wrote:
> Source impedance DOES affect the amount of energy moving in and sloshing
> around in a transmission line. It DOESN'T affect the ratio of forward to
> reflected waves, and therefore DOESN'T affect the SWR.

That's not the question. The question is: Does it affect the SWR meter?
Does the localized energy exchange between two reactances (your own "third
power" term), as alluded to by Chipman, cause erroneous SWR readings from
a directional wattmeter?
--
73, Cecil, W5DXP

2702. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:23:41 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <RWSjb.31543$os2.459493@news2.e.nsc.no>
Source record: 106467

> I did not see this in L.B.'s article (in a quick read through) and it would
> seem to go against the basic premise that takeoff angle is solely a function of
> height above ground. I did a loop model in AO and did not see any changes in
> takeoff angle as I changed loop circumference. Can you point me to the section.

Look at the first three figures with elevation plots for an 80m loop at 3.5, 7 and 14 MHz and see how the elevation angle falls with frequency (as well as with height). This performance is scalable, so consider these 3 figures as a loop of size one, two and four wavelengths. Then 80m/3.5 is the same as a 160m loop at 1.8 MHz, and 80m/7 MHz is the same as a 2*160m loop at 1.8 MHz and so on. From this follows the results that a loop is a cloud warmer (NVIS) at 1 wavelength and becomes a better and better DX antenna as frequency increases. But only up to a point, as a 160m loop at 28 MHz does not fully develop its main lobes and loses gain compared to a 80m loop at 28 MHz, the same with a 2*160m loop at 14 MHz and so on.

Sverre
LA3ZA

2703. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:44:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90010b_2@127.0.0.1>
Source record: 106369

Roy Lewallen wrote:
> People who believe that SWR is affected by source impedance have either
> rejected established theory, or don't have the background or interest to
> read and understand what we consider to be very simple equations. So I'd
> hardly expect them to be impressed by someone pointing out what the
> equations and established theory say clearly and unambigously. You can't
> fight Ouija boards with math.

The question remains: Does the localized exchange of energy between
reactances, as presented by Chipman and by you as a third power term,
cause a directional coupler error?

```
Source---w---(-j500)---x---(+j500)---y---50 ohm load
| |
+---braid---------braid--------braid------+
```

Given the phasor addition that happens in a directional coupler,
does it handle all cases of voltage and current properly? In the
above example, the measured SWR is 1:1 at 'w' and 'y' but not
at 'x'.

I remember someone saying that an SWR meter reading is correct only
when the SWR is 1:1.
--
73, Cecil, W5DXP

2704. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 14:49:11 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <JrR+3FEnFAk$EA3G@ifwtech.co.uk>
Source record: 106370

Reg Edwards wrote:
>> Source impedance DOES affect the amount of energy moving in and sloshing
>> around in a transmission line. It DOESN'T affect the ratio of forward to
>> reflected waves, and therefore DOESN'T affect the SWR.
>>
>==========
>
>But it DOES affect the indicated SWR and so the indicated SWR is incorrect.
>
>It is the meter which is at fault ! It is designed to indicate correctly
>only when the source is 50 ohms.
>
>Here's the proof - Rho = (50-Zt) / (50+Zt) - which you may have seen
>before.
>
>SWR, of course, is calculated from Rho and the meter scale is calibrated
>accordingly.
>
>If the source is not what the meter expects then it gives the wrong answers.
>And its faithful worshippers believe it!

Sorry, Reg, for the last few weeks I'd believed you'd been trying to make some profound point about this. But it's rather the opposite: all you're saying is that the indication on the "SWR" scale of the meter depends on the actual power level... which is obvious.

That's why the SWR result *always* has to be based on some kind of ratio between forward and reflected readings on the meter, to allow for varying power levels.

1. For a Bird-43 type of meter, you have to read the forward *and* the reflected indicated "power" levels, and plug *both* of those numbers into the little formula to calculate SWR... which involves the ratio of those two numbers.

2. With an ordinary manual SWR meter, you avoid taking a ratio by *always* tweaking the knob to adjust the forward reading to full-scale as the first step. That compensates for whatever power level you happen to be using. Then the SWR indication will read correctly on the reverse setting.

If you omit that first step, then you're not using the instrument correctly. Don't blame the SWR meter for that.

3. With an MFJ-259 or similar, the RF output is electronically levelled to a constant value, so instead of the front-panel pot in (2) above

there is an internal set-and-forget trimpot.

4. A computing SWR meter does the calculation for you, at whatever power level you happen to be using, so it displays an SWR reading that should not vary with power (within the design limitations of the meter).

If you RTFM and use the SWR meter correctly, either you or the meter will *always* compensate for whatever power level you happen to be using.

As others have said - again and again, and correctly - the source impedance of the transmitter affects only the power level; it does not in any way affect the steady-state rho or SWR.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2705. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:23:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f900a2a_2@127.0.0.1>
Source record: 106371

Tdonaly wrote:
>>Please reference Fig 1, page 2-2, in the 15th edition of the ARRL
>>Antenna Book. "Current and voltage distribution on a 1/2WL wire.
>>
>>The RMS (or peak) values of the voltages at the ends of the dipole
>>are maximum and 180 degrees out of phase. The ratio of net voltage to
>>net current is the impedance anywhere along the wire.

> Cecil, that picture is a gross simplification. In order to show that there's
> a unique voltage between the ends of a dipole, you first have to show that
> the time-varying electric field between those ends is conservative.

Each leg of a dipole is a one-wire transmission line with a Z0 around
600 ohms (according to Reg). These kinds of antennas are known as
"standing-wave" antennas because of (surprise) their standing waves as
depicted by the diagram in the ARRL Antenna Book. The center feedpoint
impedance is not 600 ohms because of the reflections from the ends.
Feedpoint impedance equals (Vfwd+Vref)/(Ifwd/Iref), just like a
transmission line.

The forward voltage wave hits an open circuit at the end of the dipole.
The reflected voltage wave possesses reversed direction and reversed phase,
just like an open circuit in a transmission line. The net voltage at the end
of a dipole is 2 times the forward voltage, just like an open circuit in
a transmission line. Thus, standing waves are created on the antenna wires.
The two ends of the dipole are also 180 degrees out of phase.

If you curve a dipole into a circle and measure the end-to-end voltage
with an RF voltmeter, you will get a voltage in the ballpark of four
times the forward voltage on the antenna.

You can use a fluorescent light bulb to locate the maximum electric
field. That will be at the ends of a 1/2WL dipole or at the top of
a 1/4WL monopole. I'm surprised you guys haven't ever done that.
--
73, Cecil, W5DXP

2706. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:28:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f900b67_2@127.0.0.1>
Source record: 106372

Tom Bruhns wrote:
> I'm saying that if you measure the voltage between two points on a
> good conductor, in a path along that conductor, it will be very small.

True for DC and RF traveling waves. Not true for standing waves. A
1/2WL dipole is a *standing-wave* antenna. What do you get when you
measure the voltage between the voltage maximum and voltage minimum
on a feedline with a 10:1 SWR? Exactly the same principle applies
to *standing-wave* antennas.
--
73, Cecil, W5DXP

2707. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:31:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f900c2b_2@127.0.0.1>
Source record: 106373

Tom Bruhns wrote:
> If you tell me
> there is a large voltage along a good conductor, then I know there is
> a very large heat dissipation in that wire.

There are large voltages along my open-wire feedline when
the SWR is high, but very low heat dissipation in that wire.
Hint: think standing waves on the antenna wire.
--
73, Cecil, W5DXP

2708. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:42:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f900eb8_2@127.0.0.1>
Source record: 106374

Reg Edwards wrote:
> If the source is not what the meter expects then it gives the wrong answers.
> And its faithful worshippers believe it!

If reflections are not allowed to reach the source (typical of
most ham installations) the source impedance cannot have any
effect on the SWR meter readings. Most ham installations are
Z0-matched to 50 ohms thus eliminating reflections between the
Z0-match point and the source.

You are describing systems where reflections are allowed
to reach the source which is atypical of ham installations.
--
73, Cecil, W5DXP

2709. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:44:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f900f10_2@127.0.0.1>
Source record: 106375

Ian White, G3SEK wrote:
> In practice that will means that the voltage you measure between say the
> end of a whip and ground will depend on how you choose to route the
> connecting leads to the voltmeter, and how you connect to ground... and
> above (below?) all on what you define "ground" to be.

How about using an artificial ground at the measurement point?
--
73, Cecil, W5DXP

2710. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 15:51:28 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <NMadnQz4dpx2jw2iRVn-jA@comcast.com>
Source record: 106376

http://www.rochesterdandc.com/biznews/10178L23KFO_EDev_business.shtml

Not a lot of hard info here, but politics in action.

2711. Re: Justice AM Antenna for $50 USD at CCrane.com Free Shipping

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 16:01:43 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031017120143.08672.00000574@mb-m11.aol.com>
Source record: 106388

>Half price and free shipping - Mines on the way. FYI

Ok, I'll bite. What's a Justice AM Antenna?
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

2712. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 16:16:56 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <vs10pvs1nic0vr1u42g9j822tifau6m15q@4ax.com>
Source record: 106377

On Fri, 17 Oct 2003 09:11:42 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|> Source impedance DOES affect the amount of energy moving in and sloshing
|> around in a transmission line. It DOESN'T affect the ratio of forward to
|> reflected waves, and therefore DOESN'T affect the SWR.
|>
|==========================
|
|But it DOES affect the indicated SWR and so the indicated SWR is incorrect.
|
|It is the meter which is at fault ! It is designed to indicate correctly
|only when the source is 50 ohms.
|
|Here's the proof - Rho = (50-Zt) / (50+Zt) - which you may have seen
|before.
|
|SWR, of course, is calculated from Rho and the meter scale is calibrated
|accordingly.
|
|If the source is not what the meter expects then it gives the wrong answers.
|And its faithful worshippers believe it!

I hope you meant to say that the meter "expects" to see the correct
line Zo.

Rho, SWR, RL, etc. are figures of merit for how well the load matches
the transmission line impedance (Zo), thus to derive this figure of
merit the meter's internal reference should be the same as Zo not Zs.

Your "50" in the equation above is simply a special case. Let Zs, Zo
and Zl(Zt) all equal 75. The line is perfectly matched, but plug 75
into your formula and see what happens.

This brings up an interesting paradox: all real lines have some loss,
thus Zo = Ro-jX. Unless Zl = Zo = Ro-jX the line is mismatched.

Likewise, the meter reference should also equal Ro-jX if the actual
line condition is to be measured.

As far as the source Z having any influence on SWR, Roy is (as usual)
exactly correct.

Wes N7WS

2713. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 16:47:05 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F901A82.FAC00DE2@gte.net>
Source record: 106378

Sverre Holm wrote:

> > I did not see this in L.B.'s article (in a quick read through) and it
> would
> > seem to go against the basic premise that takeoff angle is solely a
> function of
> > height above ground. I did a loop model in AO and did not see any changes
> in
> > takeoff angle as I changed loop circumference. Can you point me to the
> section.
>
> Look at the first three figures with elevation plots for an 80m loop at 3.5,
> 7 and 14 MHz and see how the elevation angle falls with frequency (as well
> as with height). This performance is scalable, so consider these 3 figures
> as a loop of size one, two and four wavelengths. Then 80m/3.5 is the same as
> a 160m loop at 1.8 MHz, and 80m/7 MHz is the same as a 2*160m loop at 1.8
> MHz and so on. From this follows the results that a loop is a cloud warmer
> (NVIS) at 1 wavelength and becomes a better and better DX antenna as
> frequency increases. But only up to a point, as a 160m loop at 28 MHz does
> not fully develop its main lobes and loses gain compared to a 80m loop at 28
> MHz, the same with a 2*160m loop at 14 MHz and so on.
>
> Sverre
> LA3ZA

What you are not accounting for is the fact that all 3 plots are taken at 3 different heights in FEET. So the plots showing a 3.5 MHz loop at say 70' is about 1/4 wavelength high, but that same loop at 14 mHz is a full wavelength up- this accounts for the lower takeoff angle, not the increased length of the loop.

Modeling supports this.
Dale W4OP

2714. K3PF 5 Element 2 Meter Yagi (Radio Shack) SWR Bandwith??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 16:56:19 UTC
From: WS6S <sam@nospam.severs.com>
Message-ID: <171020030958303493%sam@nospam.severs.com>
Source record: 106379

I'd like to hear responses from anyone out there who completed the K3PF/ Radio Shack 2 Meter beam (QST, July 1999) who can comment on the 2:1 SWR bandwith of the finished product. If it's cut for 144 MHz what 2:1 SWR bandwith can I expect? Or for 146 MHz?

This is a great & simple project but K3PF makes no mention as to what to expect in this area and I would like to kn ow before I start cutting.

Please post all replies to the newsgroup...Thanks in advance!

Sam WS6S

2715. How to connect external antenna to GE Super Radio III

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 17:15:21 UTC
From: jimdummyacct@hotmail.com
Message-ID: <62584dc4.0310170915.e920356@posting.google.com>
Source record: 106380

I'm sorry, probably a very novice question here, but I'm a novice. :-) Just trying to pull in a very weak AM station signal in an office building, and wanting to connect an external antenna to my GE Super Radio III. I've visited a Radio Shack to see their AM/FM Indoor Antenna, and I've also called Best Buy about the two Terk antennas they have in-store. In neither case was the store attendant certain as to how these antennas would actually connect to my radio, so I'm hoping someone here can help. As most of you probably already know, the radio has three screws on the back: AM, FM, and Ground. The antenna I saw at Radio Shack had a coax cable with an adaptor that ended in the little hook connectors (like you'd find on an old TV) that would be suited to such screws, but the guy there said the coax cable was only for FM. It also had a plain wire pair connection that he said was for AM (he was too busy with other customers to help further, though, and just kind of mumbled this to his coworker, so I'm not sure). I haven't yet seen the connections on the Terks, but the guy at Best Buy said over the phone that it would probably require some sort of transformer to connect.

Can anyone help with how exactly one of these antennas must be connected to these screws on the back of the radio? Thanks very much.

Jim

2716. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 17:25:07 UTC
From: tdonaly@aol.com
Message-ID: <20031017132507.09910.00001056@mb-m21.aol.com>
Source record: 106389

Cecil wrote,
>
>You can use a fluorescent light bulb to locate the maximum electric
>field. That will be at the ends of a 1/2WL dipole or at the top of
>a 1/4WL monopole. I'm surprised you guys haven't ever done that.
>--
>73, Cecil, W5DXP

Do you actually read other people's posts? Or, do you just react to them.
Do you know the difference between an E field (a vector field) and a
V field (a scalar field)? Do you know what a conservative field is? Is the
E field surrounding the ends of a dipole conservative, or not? If it is, (it
isn't)
then the voltages are unique, and if it isn't (it isn't) then the voltages
aren't
unique and what you get depends on how you measure it. There is a good,
abeit challenging discussion of this in Vladimir Rojansky's book
Electromagnetic Fields and Waves under the heading 99. A. C.
Voltmeters. He writes about a ring, but the difficulties, it seems to me,
would apply to measuring voltage at the ends of a dipole, as well.
Whaowncha read it, Cecil, and tell us what you think.
73,
Tom Donaly, KA6RUH

(P.S. I reserve the right to be wrong.)

2717. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 17:31:40 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <IIVjb.38460$Hb.599591@news4.e.nsc.no>
Source record: 106381

> What you are not accounting for is the fact that all 3 plots are taken at
3
> different heights in FEET. So the plots showing a 3.5 MHz loop at say 70'
is
> about 1/4 wavelength high, but that same loop at 14 mHz is a full
wavelength up-
> this accounts for the lower takeoff angle, not the increased length of the
loop.

Good point, height has to be taken into account, except at 160 meters, since a full wavelength loop has a 90 deg. take-off angle (cloudwarmer) independent of height. A 2 wavelength loop will have a lower take-off angle regardless of height (the higher, the lower angle).

At medium frequencies, it is the height relative to wavelength which is the dominant factor as you point out. Scaling of the examples in http://www.cebik.com/atl1.html shows this also:
- 80m loop @ 7 MHz and height 75' = 22.9 m = 0.57 wavelengths: elevation peak at 26 degrees
- 80m loop @ 14 MHz and height 35' = 10.7 m = 0.54 wavelengths: elevation peak at 26 degrees
Same take-off angle, at approximately the same relative height.

At high frequencies, the following statements from Cebik concerning the 80 m loop relative the 160 m loop can still be extrapolated to 160m vs. 320 m loop, I would say: "One might well argue for some installations that the benefits derived on 80 meters from the larger loop are offset by the disadvantages on some of the higher bands." "There is a strong possibility that, if your interests are in upper HF operations, the large 160-meter loop will prove to be a disappointment. Its true virtue lies in the lower HF region, especially on 80 meters, with reasonable good performance through 20 meters." "Although the 80-meter loop shows poor performance on 80 meters for every application other than NVIS, the smaller loop has distinct advantages over the larger loop on almost every other band."

Sverre, LA3ZA

2718. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 17:53:10 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <w4adncvLF8MHsQ2iRVn-uA@comcast.com>
Source record: 106382

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f8f5b55_1@corp.newsgroups.com...
> Consider a reactive load where energy can be locally exchanged between
> the load reactance and the impedance looking back into the feedline.
> Zs can certainly affect the impedance looking back into the feedline.
> --
> 73, Cecil http://www.qsl.net/w5dxp
Cecil,

I did that, and the SWR did not change. But, then you could say this was by definition because the meter measured RL/Z0.

Tam/WB2TT

2719. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:06:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90305a$1_2@127.0.0.1>
Source record: 106383

Tarmo Tammaru wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>Consider a reactive load where energy can be locally exchanged between
>>the load reactance and the impedance looking back into the feedline.
>>Zs can certainly affect the impedance looking back into the feedline.

> I did that, and the SWR did not change. But, then you could say this was by
> definition because the meter measured RL/Z0.

Chipman alludes to the problem not occurring with a resistive load
or with lossless lines. If the load is 50+j500 and the impedance
looking back into the lossy line is 50-j500, this seems to be
the correct conditions to cause the localized resonant energy
transfer problem.
--
73, Cecil, W5DXP

2720. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:09:29 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <sLqdnaktwvfzrQ2iRVn-hA@comcast.com>
Source record: 106384

Cecil,

You saw my simulations of your example. I got an SWR of 66.3 for ZS=0 and 69.1 for ZS= j400. That is as close as I can resolve. I had thought that if it was going to change, I would get an SWR of 1:1 for the conjugate matched case. What I had neglected, and maybe you also, is the fact that when you connect an SWR meter into the middle of a resonant series tuned circuit, the current is 90 degrees out of phase with the voltage.

Tam/WB2TT
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f8f5a72_1@corp.newsgroups.com...
> Tarmo Tammaru wrote:
> > It seems fair to say that if the source impedance
> > determines V+, clearly it has an effect on V-. But, that does not mean it
> > has anything to do with rho.
>
> Chipman seems to say that an SWR meter can be disturbed by a localized energy
> exchange between reactive values with opposite signs. The impedance of the
> source has an effect upon where in the transmission line those localized
> energy exchanges occur.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2721. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:13:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0ca53h93ls24@corp.supernews.com>
Source record: 106385

Huh?

Humor me, in what way does that equation constitute proof? Where is the source impedance in that equation?

An SWR meter will correctly indicate the SWR on a transmission line if the transmission line connected to its output equals the design impedance of the meter, regardless of the source impedance. If the transmission line connected to its output doesn't equal the design impedance of the meter, the meter won't correctly indicate the SWR on the the transmission line, again regardless of the source impedance.

Why does this seem so complicated?

Roy Lewallen, W7EL

Reg Edwards wrote:
>>Source impedance DOES affect the amount of energy moving in and sloshing
>>around in a transmission line. It DOESN'T affect the ratio of forward to
>>reflected waves, and therefore DOESN'T affect the SWR.
>>
>
> ==========
>
> But it DOES affect the indicated SWR and so the indicated SWR is incorrect.
>
> It is the meter which is at fault ! It is designed to indicate correctly
> only when the source is 50 ohms.
>
> Here's the proof - Rho = (50-Zt) / (50+Zt) - which you may have seen
> before.
>
> SWR, of course, is calculated from Rho and the meter scale is calibrated
> accordingly.
>
> If the source is not what the meter expects then it gives the wrong answers.
> And its faithful worshippers believe it!
> ---
> Reg, G4FGQ
>
>

2722. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:15:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0cea1ruojeb1@corp.supernews.com>
Source record: 106386

Huh?

Reflections reach the source at my station any time the SWR isn't 1:1. But source reflections have no effect on SWR. I explained why in a recent posting.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Reg Edwards wrote:
>
>> If the source is not what the meter expects then it gives the wrong
>> answers.
>> And its faithful worshippers believe it!
>
>
> If reflections are not allowed to reach the source (typical of
> most ham installations) the source impedance cannot have any
> effect on the SWR meter readings. Most ham installations are
> Z0-matched to 50 ohms thus eliminating reflections between the
> Z0-match point and the source.
>
> You are describing systems where reflections are allowed
> to reach the source which is atypical of ham installations.
> --
> 73, Cecil, W5DXP
>

2723. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:17:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0chja8985m22@corp.supernews.com>
Source record: 106387

Can someone please explain to me why a lower takeoff angle is better?

Roy Lewallen, W7EL

Dale Parfitt wrote:
>
> Sverre Holm wrote:
>
>
>>You loose something and you gain something else. The longer loop (320m) will
>>give you a lower elevation angle at the low frequencies (160, 80 m...)
>
>
> I did not see this in L.B.'s article (in a quick read through) and it would
> seem to go against the basic premise that takeoff angle is solely a function of
> height above ground. I did a loop model in AO and did not see any changes in
> takeoff angle as I changed loop circumference. Can you point me to the section.
>
> Tnx,
>
> Dale W4OP
>

2724. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:24:25 UTC
From: richardharrison@webtv.net
Message-ID: <27935-3F9033D9-154@storefull-2313.public.lawson.webtv.net>
Source record: 106391

Ian, G3SEK wrote:
"1. For a Bird-43 type of meter, you have to read the forward "and" the reflected indicated "power" levels, and plug "both" of these numbers into the little formula to calculate SWR...which involves the ratio of those two numbers."

Yes. Bird gives:
"VSWR = 1+sqrt Pref/Pfwd / 1-sq rt Pref/Pfwd

To eliminate calculations, the Model 43 instruction book includes charts which give VSWR when Pref and Pfwd intersect on a chart.

A VSWR slide-rule has been produced by Bird which does the same as the charts, and more.

Bird has published a useful series of technical papers, "Watts New From Bird" Revisited. One paper, "The Directional Wattmeter", says:
"What is the effect of load impedance on the accuracy of the THRULINE? The design formulas show that the only imopedance influeincing the output voltage is Zo, the characteristic impedannce of the line at the point of measurement. Since each THRULINE wattmeter is supplied with a section of 50-ohm line, this Zo is accurately known. The load impedance only affects the forward and reflected power levels which the THRULINE measures.

Where should the weattmeter be inserted? Again referring to the formulas, we see that the elements extract a voltage proportional to either Ef or Er. While the total E varies along an improperly terminated 50-ohm line, the component voltages do not. This is simply another way of saying that the energy contained in the forward wave remains the same from the source to the load where some or all of it is reflected (unless the load is 50 ohms) and the reflected energy remains the same from the load back to the source. Our directional power meter can, therefore, be placed anywhere between the source and the load.

Reg`s statement:
"But it DOES affect the indicated SWR and so the indicated SWR is incorrect." does not apply to the Bird Model 43 wattmeter.

Best regards, Richard Harrison, KB5WZI

2725. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:26:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f903520_2@127.0.0.1>
Source record: 106390

Tarmo Tammaru wrote:

> Cecil,
> You saw my simulations of your example. I got an SWR of 66.3 for ZS=0 and
> 69.1 for ZS= j400. That is as close as I can resolve. I had thought that if
> it was going to change, I would get an SWR of 1:1 for the conjugate matched
> case. What I had neglected, and maybe you also, is the fact that when you
> connect an SWR meter into the middle of a resonant series tuned circuit, the
> current is 90 degrees out of phase with the voltage.

Well, almost 90 degrees. V*I*cos(theta) still has to equal the forward
power minus reflected power even at that point. A quick and dirty phasor
diagram seems to indicate that the SWR meter bridge circuitry would get
pretty screwed up at point 'x' in the following:

```
Source---w---(-j500)---x---(+j500)---y---50 ohm load
| |
+----------------braid--------------------+
```

The SWR meter would indicate close to 1:1 at points 'w' and 'y' but
would detect a forward and reflected power of approximately five times
the delivered power at point 'x', offscale on both needles, which is
what happened when I installed my SWR meter at that point.

The SWR bridge circuit phasor adds the two phasors. Even when they are
90 degrees out of phase, they add up to a large magnitude that gets
rectified and routed to the meter.

You may be correctly predicting the actual SWR but I doubt that you
are correctly predicting the response of the bridge circuitry in the
SWR meter.
--
73, Cecil, W5DXP

2726. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:36:26 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <smc0pvgvkpgtambtbmento5s7r8etstnls@4ax.com>
Source record: 106392

On 17 Oct 2003 11:28:37 GMT, w1rfi@aol.com (W1RFI) wrote:

<snip>
>
>Switch-mode power supplies can also be noisy, but they generally have noise
>that ranges from reasonably coherent (carrier-like) to broad, buzzy clumps of
>noise, spaced every N kHz, where N is the free-running rate of the switcher
>frequency. N is typically 10-50 kHz or so. Some switchers make noise that is
>fairly close to gaussian-distributed noise, with a pretty uniform
>distibribution of power vs frequency (power spectral density). One key
>diagnostic for a switcher is that the N kHz tends to drift around a bit. A
>series of noisy carriers or clumps of noise that are spaced every 15 kHz, for
>example, may drift up the band as the unit is turned on and warms up over an
>hour or so. If so, it is almost certainly a switcher.
>
Watch out for Silicon Controlled Rectifiers (SCRs) used for power
switching. They switch on the during a portion of the positive
swinging cycle generating a *sometimes* huge pulse and are usually
used in pairs. They are always 60 cycle, but as there is one on each
polarity there will be two equally spaced pulses appearing as if they
were a single 120 cycle repetition. OTOH a 3-phase system might look
a bit confusing. However the pulse train "should" be symmetrical
based on 120 degree spacing of a 60 cycle base which might give the
appearance of 180 cps. These things are bad enough that the pulses
from one system can cause false triggering in another SCR system
nearby.

<snip>

Precip static and in particular, snow static does a very good job of
imitating the sound of some bpl, *but* it looks entirely different
when seen as a time domain display. The static will be a display of
relatively evenly spaced pulses that will *usually* increase in
frequency over time. A single unterminated half wave 75 meter dipole
can blank out a whole city block on some frequencies. The voltages
generated can make the ignition coil in a car look puny.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

<snip>

>Thanks for your interest.
>
>73,

>Ed Hare, W1RFI

2727. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:39:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f903833_2@127.0.0.1>
Source record: 106393

Roy Lewallen wrote:
> Why does this seem so complicated?

The SWR bridge circuitry may not correctly display the
actual SWR. Please see my latest response to Tarmo.

The SWR bridge samples the current and voltage and
performs a phasor addition and subtraction to get
voltages proportional to the forward and reflected
powers. If there is a high voltage caused by reactive
components, it will be close to 90 degrees away from
the current. But phasor adding these two values gives
something slightly greater in magnitude than the high
reactive voltage. That high voltage gets rectified and
displayed as the forward power when it is not actually
the forward power but reactive power flowing from one
reactance to another.
--
73, Cecil, W5DXP

2728. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:51:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f903b17_2@127.0.0.1>
Source record: 106395

Roy Lewallen wrote:
> Huh?

Huh, indeed. The scope of my statement is less than yours and my statement is a sub-set of yours. If my statement is wrong, then so is yours. However, it is within the bounds of logical possibility that my statement might be correct and yours might be wrong. I'm not asserting that is the case, just that it is within the bounds of logical possibilities.

> Reflections reach the source at my station any time the SWR isn't 1:1.
> But source reflections have no effect on SWR. I explained why in a
> recent posting.

Yes, but you didn't prove that source reflections have no effect on an SWR meter.

>> If reflections are not allowed to reach the source (typical of
>> most ham installations) the source impedance cannot have any
>> effect on the SWR meter readings.

You say source reflections have no effect on SWR. I say if reflections are not allowed to reach the source, the source impedance cannot have any effect on the SWR meter readings.

My statement is a sub-set of yours and of lessor scope than yours. If my statement is wrong, yours must also, by the rules of classical logic, be wrong. :-)
--
73, Cecil, W5DXP

2729. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:54:54 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F903AFE.3191B467@uci.edu>
Source record: 106396

Cecil Moore wrote:
> The SWR bridge samples the current and voltage and
> performs a phasor addition and subtraction to get
> voltages proportional to the forward and reflected
> powers. If there is a high voltage caused by reactive
> components, it will be close to 90 degrees away from
> the current. But phasor adding these two values gives
> something slightly greater in magnitude than the high
> reactive voltage. That high voltage gets rectified and
> displayed as the forward power when it is not actually
> the forward power but reactive power flowing from one
> reactance to another.
> --
> 73, Cecil, W5DXP

The power flow fairy sure has a lot of warts. :-)

73, jk ac6xg

2730. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 18:54:59 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310171054.31a927ba@posting.google.com>
Source record: 106394

w1rfi@aol.com (W1RFI) wrote in message
news:<20031017073647.05767.00000759@mb-m10.aol.com>...
> >Under the present
> >> rules, they must be tested at 3 typical locations. "
> >
> >What's the FCC definition of "typical locations"??
> >
> There is none.

. . . 'nuff sed . .

>
> >15.209 is the problem, it's grossly outdated, did not foresee anything
> >like BPL and the limits needs to be revised downward which is one
> >piece of this brawl. Ref: Tailpipe emissions regs, same basic problem,
> >different pollution media.
> >
> A good tailpipe analogy would be to consider the present tailpipe emissions
> limits. We can still breathe with the number of cars that emit. Now, the
> equivalent to BPL emissions occurring on several MHz at a time would be to
> stack 100 cars on top of each other and have them all running at the same time.
> The equivalent to building the system as large as an entire community is to do
> that for every square inch of roadway. Would the emissions limits that work for
> an occasional car passing by your home still work under those circumstances, or
> would we all choke to death in a matter of minutes?

Very good analogy. Choke = Dead. Get sombody from over at the EPA to
submit comments on w3hj's spectrum analyzer screen grabs of SS BPL.
He/she would no doubt understand the problem better than the FCC gloms
can.

The silence is deafening. Did I scare you away from the meeting?

> 73,
> Ed Hare, W1RFI

w3rv

2731. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 19:04:47 UTC
From: richardharrison@webtv.net
Message-ID: <8696-3F903D4F-95@storefull-2312.public.lawson.webtv.net>
Source record: 106398

Roy, W7EL wrote:
"But source reflections have no effect on SWR."

That`s right. The load is going to take a fixed percentage of energy imposed on it and reflect the rest regardless of the actual magnitudes.

All the source impedance can do is to affect the magnitude imposed on the load.

SWR is based only upon percentage of energy reflected regardless of its actual magnitude, not how big or small the energy making the ratio. 1/2, 2/4, and 4/8 are all the same ratio.

Cecil has a valid point. If Roy had a properly tuned tuner between his transmitter and his feedline, the SWR seen by the transmitter would be 1:1, and that means no reflected energy reaching the transmitter. Reflections reaching the tuner are either wasted in the tuner or re-reflected by it if the tuner is properly adjusted and no reflections make it to the transmitter.

Best regards, Richard Harrison, KB5WZI

2732. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 19:09:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f903f20_2@127.0.0.1>
Source record: 106397

Roy Lewallen wrote:
> Can someone please explain to me why a lower takeoff angle is better?

Quoting from an old ARRL Antenna Book:

"Rays entering the ionized region at angles above the critical
angle are not bent enough to be returned to Earth, and are lost
in space."

"A significant loss of signal occurs with each hop. ... Assuming
that both waves do reach the same point, the (one-hop) low-angle
wave will contain more energy" (than the two-hop higher angle wave).
--
73, Cecil, W5DXP

2733. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 19:24:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90429d_2@127.0.0.1>
Source record: 106399

Tdonaly wrote:
> Do you know the difference between an E field (a vector field) and a
> V field (a scalar field)? Do you know what a conservative field is? Is the
> E field surrounding the ends of a dipole conservative, or not?

Heh, heh, reminds me of the [color] box on the job applications
in the 50's. The choice was []White, []Black, []Other_____.
I checked 'Other' and wrote 'tan'.

Bend the ends of a resonant dipole around close to each other and
measure the voltage with a shielded differential RF voltmeter. For
100 watts input, you will get almost 1000 volts RMS between the ends,
a far cry from the ~70 volts RMS at the center feedpoint.
--
73, Cecil, W5DXP

2734. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 19:30:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0grqa127suf7@corp.supernews.com>
Source record: 106400

As commonly used (as on this thread), takeoff angle is a property of an antenna, meaning the angle at which the antenna gain is maximum. What does that have to do with the angle of the wave being used for communication? Does changing the takeoff angle of your antenna somehow magically change the height of the ionosphere?

Let's say the wave angle for communication is ten degrees. I have one antenna with a takeoff angle of ten degrees and another with a takeoff angle of 20 degrees. Which is better?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Can someone please explain to me why a lower takeoff angle is better?
>
>
> Quoting from an old ARRL Antenna Book:
>
> "Rays entering the ionized region at angles above the critical
> angle are not bent enough to be returned to Earth, and are lost
> in space."
>
> "A significant loss of signal occurs with each hop. ... Assuming
> that both waves do reach the same point, the (one-hop) low-angle
> wave will contain more energy" (than the two-hop higher angle wave).
> --
> 73, Cecil, W5DXP
>

2735. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 19:51:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9048eb_2@127.0.0.1>
Source record: 106401

Roy Lewallen wrote:
> As commonly used (as on this thread), takeoff angle is a property of an
> antenna, meaning the angle at which the antenna gain is maximum.

We've been through all this before with references being provided to
prove that the definition of "take-off-angle" is not limited to the
angle of maximum antenna gain.
--
73, Cecil, W5DXP

2736. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 20:22:59 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <XuwpmRCj+Ek$EAVa@ifwtech.co.uk>
Source record: 106402

Cecil Moore wrote:
>Roy Lewallen wrote:
>> Why does this seem so complicated?
>
>The SWR bridge circuitry may not correctly display the
>actual SWR. Please see my latest response to Tarmo.
>
>The SWR bridge samples the current and voltage and
>performs a phasor addition and subtraction to get
>voltages proportional to the forward and reflected
>powers. If there is a high voltage caused by reactive
>components, it will be close to 90 degrees away from
>the current. But phasor adding these two values gives
>something slightly greater in magnitude than the high
>reactive voltage. That high voltage gets rectified and
>displayed as the forward power when it is not actually
>the forward power but reactive power flowing from one
>reactance to another.

Even in this unusual situation, the behavior of the meter is completely predictable, including the incorrect power indication.

Remember that the meter doesn't actually measure power - it is only *calibrated* to *indicate* power. When placed in a situation where its calibration is not valid, then of course it won't indicate power correctly. But even its wrong indication can be predicted if you know the detailed values to plug into a circuit model.

There's really no mystery about it.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2737. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 20:29:13 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <$P+zOaDZEFk$EACz@ifwtech.co.uk>
Source record: 106403

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>> In practice that will means that the voltage you measure between say
>>the end of a whip and ground will depend on how you choose to route
>>the connecting leads to the voltmeter, and how you connect to
>>ground... and above (below?) all on what you define "ground" to be.
>
>How about using an artificial ground at the measurement point?

Define one, if you can! What are its properties, and how would you
achieve them?

It's rather like the early wireless users who "earthed" their receivers
to the aspidistra pot in the corner of the room - after all, it
contained earth, so why didn't it work?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2738. FM Reception Static Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 20:41:04 UTC
From: mBird <no@spam.com>
Message-ID: <AtYjb.36199$Hs.22627@twister.nyroc.rr.com>
Source record: 106404

Hi --

Radio: Harman Kardon Home stereo AVR-125
Location: on the edge of what the station shows is there signal area on their website -- about 40 miles from the station

I get static (very slight but noticeable enough) when listening to Public Radio. I have the basic two-wire antenna that came with the stereo. I tried using an AM/FM Amplified Indoor Antenna (from Radio Shack) but that actually made the static worse no matter how I positioned or set. Please advice on what I could do. The static is so small you almost can't hear it but it is just enough to make music programs less than the best they could be.

Thank you

2739. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 20:57:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9059f4_3@corp.newsgroups.com>
Source record: 106407

Ian White, G3SEK wrote:
> Even in this unusual situation, the behavior of the meter is completely
> predictable, including the incorrect power indication.
>
> There's really no mystery about it.

My point exactly! So, in the same vein, can the source impedance
adversely affect the SWR meter reading?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2740. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 20:59:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0m1nhsbvhj5e@corp.supernews.com>
Source record: 106405

Please check the context of its use in this thread.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> As commonly used (as on this thread), takeoff angle is a property of
>> an antenna, meaning the angle at which the antenna gain is maximum.
>
>
> We've been through all this before with references being provided to
> prove that the definition of "take-off-angle" is not limited to the
> angle of maximum antenna gain.
> --
> 73, Cecil, W5DXP
>
>

2741. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:00:32 UTC
From: tdonaly@aol.com
Message-ID: <20031017170032.28427.00001121@mb-m12.aol.com>
Source record: 106413

Cecil wrote,
>
>
>Bend the ends of a resonant dipole around close to each other and
>measure the voltage with a shielded differential RF voltmeter. For
>100 watts input, you will get almost 1000 volts RMS between the ends,
>a far cry from the ~70 volts RMS at the center feedpoint.
>--
>73, Cecil, W5DXP
>

You missed the point, again, Cecil. Carry on.
73,
Tom Donaly, KA6RUH

2742. Re: FM Reception Static Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:01:33 UTC
From: dplatt@radagast.org
Message-ID: <vp0m5d8a7bkmf6@corp.supernews.com>
Source record: 106406

>Hi --
>
>Radio: Harman Kardon Home stereo AVR-125
>Location: on the edge of what the station shows is there signal area on
>their website -- about 40 miles from the station
>
>I get static (very slight but noticeable enough) when listening to Public
>Radio. I have the basic two-wire antenna that came with the stereo. I
>tried using an AM/FM Amplified Indoor Antenna (from Radio Shack) but that
>actually made the static worse no matter how I positioned or set. Please
>advice on what I could do. The static is so small you almost can't hear it
>but it is just enough to make music programs less than the best they could
>be.

Indoor amplified antennas are usually useless, or worse than. They amplify both the signal _and_ the impulse noise, and add additional (thermal) noise.

What you need, is an antenna mounted outdoors - up as high as is practical, on the roof or on a mast. It should be a directional type (probably a log-periodic, so that it covers the whole FM band) and should be pointed towards the station you wish to receive. If you're listening to stations whose transmitters are in different directions, you may want to install a remote-controlled antenna rotator.

Most such antennas are designed to hook up to 300-ohm twinlead - you should install an outdoor-rated matching transformer ("balun") right at the antenna, and then run RG-6 or RG-59 coaxial cable to your stereo. Ground the antenna mast, and ground the cable just before it enters the building using a static-discharge block.

This will give you a substantially better signal.

Also, check around your house with a portable AM radio tuned between stations. See if you can figure out what's generating the static - it might be an electric motor, for example. If you can isolate it to one specific appliance, install a powerline noise filter between that appliance and the wall outlet - this will keep the noise from getting onto the house wiring and being transmitted to the radio (either directly through the power line, or via radiation from the wiring).

[Further followups redirected to rec.audio.tech, a more usual newsgroup for this sort of question.]

--
Dave Platt <dplatt@radagast.org> AE6EO

Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2743. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:14:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f905de4_3@corp.newsgroups.com>
Source record: 106409

Roy Lewallen wrote:
> Please check the context of its use in this thread.

I apologize if I missed the context. I don't read all the articles
and sometimes jump into the middle of a thread, ill equipped for
comprehending the context.

But, to answer your earlier question: Why is take-off-angle important?
Consider a 1/4WL 80m vertical used on 10m and you will know why.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2744. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:16:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp0n235q2vgk9b@corp.supernews.com>
Source record: 106408

How 'bout you model it with your concept of an "artificial ground", and let us know the result? You can measure the voltage with EZNEC by connecting the two points to be measured with a wire and inserting a zero amplitude current source in the wire. The source will act like an open circuit, and the voltage will be reported in the Source Data output.

After you've determined the voltage relative to your "artificial ground", modify the "artificial ground" and note the effect on the voltage. Then see if you can figure out what the voltage is between the "artificial ground" and the Earth. Or, give us your justification for assuming that it's zero. If it is zero, via what path? As Tom has been saying, the voltage between two points depends on the path you take between them.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Ian White, G3SEK wrote:
>
>> In practice that will means that the voltage you measure between say
>> the end of a whip and ground will depend on how you choose to route
>> the connecting leads to the voltmeter, and how you connect to
>> ground... and above (below?) all on what you define "ground" to be.
>
>
> How about using an artificial ground at the measurement point?
> --
> 73, Cecil, W5DXP
>

2745. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:19:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f905ef6$1_3@corp.newsgroups.com>
Source record: 106410

Roy Lewallen wrote:
> After you've determined the voltage relative to your "artificial
> ground", modify the "artificial ground" and note the effect on the
> voltage. Then see if you can figure out what the voltage is between the
> "artificial ground" and the Earth. Or, give us your justification for
> assuming that it's zero. If it is zero, via what path? As Tom has been
> saying, the voltage between two points depends on the path you take
> between them.

Wow, you sure ASSume a lot from a simple question. Let's turn it around
and you guys prove that the voltage at the ends of a dipole is less
than or equal to the feedpoint voltage even though a florescent light
bulb is brighter at the ends.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2746. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:51:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <FsRN2lBnRGkEAW@ifwtech.co.uk>
Source record: 106411

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>> Even in this unusual situation, the behavior of the meter is
>>completely predictable, including the incorrect power indication.
>> There's really no mystery about it.
>
>My point exactly! So, in the same vein, can the source impedance
>adversely affect the SWR meter reading?

It will affect both the forward and reverse readings, but in equal proportion, so it won't affect the indicated or calculated SWR (unless there are nonlinearities in the meter, or the meter is not being used correctly).

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2747. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 21:54:57 UTC
From: "Dan, danl, danny boy, Redbeard, actually Greybeard now" <danlx@execpc.com>
Message-ID: <k5p0pv07i6e1pohhd249c2vhjh6vu86v3n@4ax.com>
Source record: 106412

On 17 Oct 2003 11:15:24 GMT, w1rfi@aol.com (W1RFI) sent into the
ether:

>>Is the ARRL preparing a FAQ for amateurs who have scopes, spectrum
>>analyzers, or service monitors, etc., as to how they might go about
>>inspecting a suspected chunk of spectrum and how detect, identify,
>>qualify whey they see/hear?
>
>Not at this time, Dan. I want to talk with amateurs who are going to go into
>the trial areas, to share my experiences and to make sure I learn as much as
>possible from theirs. FAQs are a great way for beginners to learn about a
>subject, but some things are still best left to real dialogue.
>
>73,
>Ed Hare, W1RFI

Hi Ed, good work. I probably missed it, but will ask anyway, is there
a list of the areas that are being tested? Anything in the Northern
IL or Southern WI areas?

Dan, N9JBF
Dan, N9JBF
Amateur radio - What a hobby!
Remove left x for direct reply

2748. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 22:40:41 UTC
From: tdonaly@aol.com
Message-ID: <20031017184041.10929.00000638@mb-m15.aol.com>
Source record: 106415

Cecil wrote,
>
>Wow, you sure ASSume a lot from a simple question. Let's turn it around
>and you guys prove that the voltage at the ends of a dipole is less
>than or equal to the feedpoint voltage even though a florescent light
>bulb is brighter at the ends.
>--
>73, Cecil http://www.qsl.net/w5dxp

What causes the light to light up, Cecil, an E field, or a V field?
You can't seem to get over the fact that the voltage between
two points in a time varying E field may not be unique and thus
not measurable. Go read the book I told you to read, Cecil,
and you'll understand why.
73,
Tom Donaly, KA6RUH

2749. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 22:41:53 UTC
From: yankneck696@aol.com
Message-ID: <a8791500.0310171441.244e88a3@posting.google.com>
Source record: 106414

Dumb question:
What about using 2 different loops. One inside of the other. Do the
320 & the 80 inside of it. Who has tried this?
Ed
KB1DQX

2750. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 23:31:45 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310171531.61e405e3@posting.google.com>
Source record: 106416

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f900c2b_2@127.0.0.1>...
> Tom Bruhns wrote:
> > If you tell me
> > there is a large voltage along a good conductor, then I know there is
> > a very large heat dissipation in that wire.
>
> There are large voltages along my open-wire feedline when
> the SWR is high, but very low heat dissipation in that wire.
> Hint: think standing waves on the antenna wire.

It's TEM line, right? The voltages are practically all ACROSS the
line, between the conductors. There is very little voltage ALONG the
conductors, just I*R (and note the directions for _that_). Go look up
Faraday's Law of Magnetic Induction, and refresh your understanding of
Kirchoff's Voltage Law and Ohm's Law as well. Those three pretty much
let you figure it all out.

Cheers,
Tom

2751. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-17 23:52:39 UTC
From: k9sqg@aol.com
Message-ID: <20031017195239.28427.00001143@mb-m12.aol.com>
Source record: 106417

Well, the answer is, it depends...

As you increase the length of a horizontal loop, it will have lower angle lobes that exhibit some slight gain on frequencies HIGHER than the fundamental frequency. The gain might not be dramatic but the lower angle of radiation is a plus.

For multiband operation, the inverted L is not recommended in most cases. On its fundamental frequency, it is a nice, all around antenna since you get high angle radiation from the horizontal portion and vertical, lower angle radiation from the vertical section. However, depending on bands of operation, you can get phase interference from the vertical and horizontal sections that might be undesirable. Each situation is site specific and band specific.

What you will notice is that the horizontal loop will have 1-2 s units lower noise than a vertical or inverted, based upon my empirical data collected over a three year period with a vertical and loop in the same region.

Enjoy your antenna experiments.

73s,

Evan

2752. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 00:30:25 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <BQ%jb.1735$W16.1520@newsread2.news.atl.earthlink.net>
Source record: 106418

Let me restate my goal.

Here is my situation. I live in Northern MI & have 5+ acres of mostly woods with many hardwood trees averaging 60'. I also have about 1500'of wire & a 3 element tribander for 10-15 & 20. I use a 100 watt transceiver - no amp. I live in a rural, low-noise environment.

I also want to work 160, 80/75, 40, &17. I don't mind doing separate wire antennas for these bands but would prefer 1 antenna. I have a homebrew link-coupled tuner that covers 160-17 (plug in link-coils).

I want to work stateside & DX on 160 & 75 & 17.

What is the best use of my 1500' of wire to achieve my goals.

TNX

Terry
W8EJO

"T.E.O" <rfmscpa@earthlink.net> wrote in message
news:rwGjb.59222$mQ2.27782@newsread1.news.atl.earthlink.net...
> I am going to put up a horizontal loop @ about 60' in hopes of having a
> decent 160-10 antenna. Is there any adavntage to increasing the the total
> length from 1 wavelength at the lowest freq. (about 530') to 2
> wavelengths(1,060'). i have the space & the wire & I'm wondering if it's
> worth the extra effort.
>
> Also, am I better off with a 3/8 WL inverted L on 160.
>
>
>
>

2753. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 00:51:31 UTC
From: PDQ <pdq@volaris.net>
Message-ID: <171020031951311418%pdq@volaris.net>
Source record: 106319

In article <Ykcjb.1129$_i.106075@nnrp1.ptd.net>, Carl R. Stevenson
<wk3cqth@wk3c.com> wrote:

Hi Carl,

I made a trip to the Cape Giradeu MO test area. This ws a very limited
test area encompassing maybe 10 - 15 homes judging from the inductors I
saw on the utility poles. I found that BPL seems to operate in an
"idle" mode and a active demand mode.

When in the idle mode the intereference from the upper BC band through
20 meters is quite noticable and was registering S7 - S9 on the meter
of my IC-737 connected to a Hustler antenna with 40 and 20 meter
resonators attached. It was also audible from about 1520 and up on the
BC band.

When in active mode, (probably when someone was downloading something)
the S meter readings went to 30+ over S9 and the top of the broadcast
band was seriously hacked up. I also detected effects at the bottem of
the FM broadcast band. The highest reading I saw was on the 20 meter
band. When in the active mode, I could detect serious levels of BPL
interference at 500 feet growing weaker out to about 1,000 feet when
it dropped below my traditional mobile noise level.

After hearing it and seeing it's potential for devestating interference,
I am of the opinion that it will be a serious problem for anyone using
the spectrum between 1.6 and 88 MHZ. In addition, I am willing to bet
that the radiation will be rich in harmonics.

73
George
K3UD

EX- WA3DNC, W3GEO

> "W1RFI" <w1rfi@aol.com> wrote in message
> news:20031015073639.00343.00000766@mb-m27.aol.com...
> > >Write or call your local AM broadcast stations and tell them that
> > >thier signal is being wiped out and you can't recieve them.
> >
> > When I was in Emmaus, PA, I turned on the car AM radio and didn't hear any
> > noise on the AM broadcast band. I believe that some of the reports may
> have
> > been in error.
> >
> > 73,
> > Ed Hare, W1RFI

>
> I can confirm what Ed reports above ... on my first drive through the Emmaus
> BPL area, I didn't have my FT-817 with me ... I noted little/no BPL noise
> in the AM broadcast band ... perhaps a bit of extra noise at the very upper
> end of the band around 1600 kHz, but nothing like what exists on 80-15m.
>
> Again, I want to help Ed drive the point home - false claims of "BPL
> interference"
> will do a LOT of harm to our cause ... I encourage anyone who thinks they
> might
> be experiencing BPL interference to communicate with Ed and let him help to
> verify
> things.
>
> I also encourage everyone to send a donation to the ARRL's BPL fund - you
> don't have to agree with *everything* the ARRL does to be willing to help
> to overcome this major threat to our future on HF.
>
> Carl - wk3c
>

2754. Re: K3PF 5 Element 2 Meter Yagi (Radio Shack) SWR Bandwith??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 01:29:31 UTC
From: Dale Parfitt <parinc@gte.net>
Message-ID: <3F9094F5.965C991D@gte.net>
Source record: 106320

WS6S wrote:

> I'd like to hear responses from anyone out there who completed the
> K3PF/ Radio Shack 2 Meter beam (QST, July 1999) who can comment on the
> 2:1 SWR bandwith of the finished product. If it's cut for 144 MHz what
> 2:1 SWR bandwith can I expect? Or for 146 MHz?
>
> This is a great & simple project but K3PF makes no mention as to what
> to expect in this area and I would like to kn ow before I start
> cutting.
>
> Please post all replies to the newsgroup...Thanks in advance!
>
> Sam WS6S

Although I cannot answer your VSWR BW question, it is hardly the most
important factor when judging a Yagi's performance. You can be well assured
that the gain and F/B will fall off much more rapidly.

Dale W4OP

2755. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 02:06:22 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <cv61pvgml01vlterev0uf816ja3ir7jif8@4ax.com>
Source record: 106321

Roy,
I don't have any "real" reference to the connector loss, just folklore. I took the cable loss from the same source as you - if there is error chalk it up to sloppy reading of the graph 8-} I do see that we both quoted the same 1 dB of cable loss, that tells me I'm on track. I did re-read my 'guesstimate' of power loss in the cable and it does look like my math is off a bit.

I agree with what you say regarding the loss not being enough to notice and thanks for steering me straight on the connector loss. Personally, I've never tried to measure connector loss nor have I gone obsessive-compulsive about changing everything to BNC or N connetors, I just don't see any return on the effort for 2 meters. I use PL-259's with the exception of antenna's that have N connectors; have never fretted the "folklore" impedance bump issue either - just concentrate on making a solid connection and not melting the dielectric when soldering the braid to the shell, then follow with good weatherproofing.

Howard
On Thu, 16 Oct 2003 23:19:57 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>What kind of connector has 0.5 dB loss at 2 meters? And what's the loss
>mechanism? Is there some kind of connector out there filled with carbon
>or something? Who made the measurements and how?
>
>The ARRL Antenna Book shows RG-58/U and RG-58B/U (plain copper center
>conductor) as having just under 6 dB/100' attenuation at 2 meters, and
>RG-58A/U and RG-58C/U (tinned copper) as about 6.5 dB/100'. I checked a
>100' piece of RG-58C/U in my junk box and found it to be 5.6 dB/100' at
>146 MHz. So I'd expect 20 feet or so to have just over 1 dB of
>attenuation, almost certainly not enough to notice except perhaps just
>barely, if you were right at the noise level. Certainly it wouldn't be
>noticeably improved by using some other kind of cable.
>
>Oh, and that measurement was made with BNC connectors on both ends. The
>loss of those connectors shouldn't be measurable except with extremely
>sensitive equipment.
>
>Roy Lewallen, W7EL
>
>Howard wrote:
>>
>> How do you figure a 3 dB loss? A mobile installation 'typically' uses

>> RG-58 which at 2 meters has about 4.5 dB loss per 100 feet and most
>> mobile antenna's come with 15 - 20 feet of cable. As I see it, that's
>> about 1 dB loss (or thereabouts) for the cable and I've seen connector
>> loss figures hover around 0.5 dB. At a 1.5 dB loss roughly 1/4 of the
>> signal is not unreasonable which would put it at the 40 watts you
>> mention. I don't [totally] aruge your conclusion - just your 3 dB
>> assertion.
>>
>> Am I missing something?
>> Howard

2756. Re: How to connect external antenna to GE Super Radio III

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 03:48:48 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <AK2kb.163962$%h1.160007@sccrnsc02>
Source record: 106323

You have to be careful about listening to store personnel about things like this. Most don't have a clue but instead of telling you that, they make something up. In this case: clueless. Any antenna that Radio Shack now carries is a waste of money (they discontinued the good ones). The Terk is a good antenna. It requires no connection to the radio. It works by induction. Sit it close to your radio and tune it. It does have a provision to be able to connect it to the radio but there is no need and often works poorly that way. Due to the considerable gain the GE has already, an external antenna will help very little if at all.Your best bet is to get near a window. It is the steel frame of the office building that blocks the signal. Another option is to run a wire out the window. I have not been able to determine that the external antenna screws are actually hooked to anything. I tried a seventy foot wire on mine one time with no difference whatsoever. Another option (again, if you can run a wire outside or at least near a window) is the Justice am antenna sold by C. Crane. It is a small unit that mounts remotely and coax is run to your radio. The connection to your radio is by induction so there is no physical connection. Thos who I have talked to that have tried it say that it works quite well and it would undoubtedly solve your problem if you could get it next to or outside a window. The down side is it costs about $100.00.

"Jim" <jimdummyacct@hotmail.com> wrote in message
news:62584dc4.0310170915.e920356@posting.google.com...
> I'm sorry, probably a very novice question here, but I'm a novice. :-)
> Just trying to pull in a very weak AM station signal in an office
> building, and wanting to connect an external antenna to my GE Super
>

2757. ??antennn spacings.??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 04:42:49 UTC
From: kc5cqa@yahoo.com
Message-ID: <j5h1pvoh4j0h5e8j30uftedi2vb9a586c0@4ax.com>
Source record: 106324

I made a post last week, with that 'input', have decided to
install only two antennas , one a duel band 2/440 vertical ground
plane, and a two meter horz ground plane,(looks like a 4 leave
clover),,,,,,,,I plan to have the duel bander on the top, what I
would like to know is how far part should I 'space' these two antenna?
I can easily keep them four to six feet
apart, If I have to I can make that distance greater,,, but will take
a little "fabrication". I really appreciate your input. I have read
the books, but there is nothing liketalking to someone who as already
''been there, done that" cl 73

2758. horz/vertical 2 meter spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 04:43:39 UTC
From: kc5cqa@yahoo.com
Message-ID: <v6h1pvgkjptr50rcmsu7dmrdkcllbmhb6l@4ax.com>
Source record: 106325

I made a post last week, with that 'input', have decided to
install only two antennas , one a duel band 2/440 vertical ground
plane, and a two meter horz ground plane,(looks like a 4 leave
clover),,,,,,,,I plan to have the duel bander on the top, what I
would like to know is how far part should I 'space' these two antenna?
I can easily keep them four to six feet
apart, If I have to I can make that distance greater,,, but will take
a little "fabrication". I really appreciate your input. I have read
the books, but there is nothing like experience. cl 73

2759. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 04:52:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90c92c_2@corp.newsgroups.com>
Source record: 106326

Tdonaly wrote:
> Cecil wrote,
>>Bend the ends of a resonant dipole around close to each other and
>>measure the voltage with a shielded differential RF voltmeter. For
>>100 watts input, you will get almost 1000 volts RMS between the ends,
>>a far cry from the ~70 volts RMS at the center feedpoint.

> You missed the point, again, Cecil. Carry on.

Nope, you missed the point. This ain't rocket science.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2760. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 04:53:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90c970$1_2@corp.newsgroups.com>
Source record: 106327

Ian White, G3SEK wrote:

> Cecil Moore wrote:
>> My point exactly! So, in the same vein, can the source impedance
>> adversely affect the SWR meter reading?
>
> It will affect both the forward and reverse readings, but in equal
> proportion, so it won't affect the indicated or calculated SWR (unless
> there are nonlinearities in the meter, or the meter is not being used
> correctly).

How about what Chipman says?
--
73, Cecil http://www.qsl.net/w5dxp

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2761. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 04:55:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90c9d0_2@corp.newsgroups.com>
Source record: 106328

Tdonaly wrote:
> What causes the light to light up, Cecil, an E field, or a V field?
> You can't seem to get over the fact that the voltage between
> two points in a time varying E field may not be unique and thus
> not measurable. Go read the book I told you to read, Cecil,
> and you'll understand why.

Why not just tell me to read the Bible where God is the cause
of everything - same difference.
--
73, Cecil http://www.qsl.net/w5dxp

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2762. Re: Horizonatl loops > 1 wavelength

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:02:30 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F90C966.D78E14D6@cwis.net>
Source record: 106329

Terry,
I'd use as much of your wire I could, and get it as high as possible. Ought to work pretty good on 160 meters. and not bad on the other bands. With the link tuned (balanced?) tuner, it should 'go' just about anywhere. May not have the lowest 'take-off'/radiation angle, but who cares? No single antenna is going to be 'good' everywhere.
'Doc

2763. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:05:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90cc27_2@corp.newsgroups.com>
Source record: 106330

Tom Bruhns wrote:
> There is very little voltage ALONG the conductors, ...

Depends upon how long the conductors are. The difference along a
1/4WL conductor is known to be minimum VS maximum assuming a
minimum at one end. Are you saying that EZNEC doesn't display
the current distribution on an antenna when I press the 'i' key?
--
73, Cecil http://www.qsl.net/w5dxp

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2764. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:23:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmqioc$89h$1@sparta.btinternet.com>
Source record: 106331

I am sorely tempted but will refrain from calling the whole lot of you a bunch of old wives.

Kindly desist in trying to put words into my mouth.

I have NOT said that changing the source impedance changes the SWR indication. It doesn't !

I HAVE said that if the line is NOT 50 ohms then the SWR reading, even if it doesn't change, BECOMES GROSSLY INCORRECT !

So "in practice", even if there IS a line of some sort, as you don't know what the line impedance or generator impedance is, then the SWR indication and the reflection coefficient from which it is derived are MEANINGLESS, USELESS !

As Tarmo must by now be exhausted in repeating, and I have been saying for years, all the meter tells you is whether or not the complex load on the transmitter deviates in some unknown diirection from a purely resistive 50 ohms.

That is what the thing is there for. Which is all anybody needs to know anyway.

Even to mention SWR in the present context dis-orients novices and earners - which we all were at some time or other.

So change the name of the instrument to TLI. It's not a meter anyway.

I also have reservations about so-called reflected power. But that's another matter.

Regards, Reg, G4FGQ

2765. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:38:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <k7KdnaqMjporTA2iRVn-tg@comcast.com>
Source record: 106332

"PDQ" <pdq@volaris.net> wrote in message
news:171020031951311418%pdq@volaris.net...
> In article <Ykcjb.1129$_i.106075@nnrp1.ptd.net>, Carl R. Stevenson
> <wk3cqth@wk3c.com> wrote:
>
>
> Hi Carl,
>
> I made a trip to the Cape Giradeu MO test area. This ws a very limited
> test area encompassing maybe 10 - 15 homes judging from the inductors I
> saw on the utility poles. I found that BPL seems to operate in an
> "idle" mode and a active demand mode.

You might want to contact this fellow.

http://iamnee.com/

I don't remember if he's a ham, I worked with him on a project there a
couple years ago. He does have nice spectrum analysis tools, and he lives
there in Cape G.

2766. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:54:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmqkj7ali1@sparta.btinternet.com>
Source record: 106333

If the reflected and forward powers are known and the Bird is a short or zero distance from the transmitter, why would anybody want to know the reflection coefficient and SWR anyway?

Of what use are they except to use the graphical calculator to calculate the forward and reflected powers?

It seems the Bird designer was wise enough to omit the SWR scale from the meter.

Reg G4FGQ

2767. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 05:58:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f90d8c6$1_4@corp.newsgroups.com>
Source record: 106334

Tdonaly wrote:
> What causes the light to light up, Cecil, an E field, or a V field?

According to quantum electrodynamics, fields don't exist. So are
you talking about photons or virtual photons above? In either case,
voltage can still be measured by a voltmeter.
--
73, Cecil http://www.qsl.net/w5dxp

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2768. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 06:27:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmqmfs$313$1@hercules.btinternet.com>
Source record: 106335

> Reg`s statement:
> "But it DOES affect the indicated SWR and so the indicated SWR is
> incorrect." does not apply to the Bird Model 43 wattmeter.
>
==========

I've never seen one but there's nothing special about a Bird. It behaves exactly the same as those from other manufacturers.

If the line between generator and meter is NOT 50 ohms then the actual SWR on that line is NOT the value indicated by the meter. As I said, the indicated SWR is incorrect.

It is important to distinguish between indicated and actual SWR's. It is fatal to worship the meter as being error free and so make the same incorrect assumptions as the meter does.

Reg, G4FGQ

2769. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 06:36:18 UTC
From: tdonaly@aol.com
Message-ID: <20031018023618.10246.00000316@mb-m22.aol.com>
Source record: 106336

Cecil wrote,
>
>Why not just tell me to read the Bible where God is the cause
>of everything - same difference.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

That's about the kind of reply I expected, which is too bad.
It sort of reminds me of the Catholic clerics who refused to
look through Galileo's telescope.
73,
Tom Donaly, KA6RUH

2770. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 06:54:35 UTC
From: tdonaly@aol.com
Message-ID: <20031018025435.10246.00000318@mb-m22.aol.com>
Source record: 106337

Cecil wrote,
>
>Tdonaly wrote:
>> What causes the light to light up, Cecil, an E field, or a V field?
>
>According to quantum electrodynamics, fields don't exist. So are
>you talking about photons or virtual photons above? In either case,
>voltage can still be measured by a voltmeter.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

I see you've gone into objection-stopper mode: write something
whether it makes sense or not. Evidently, you don't know what
makes the little light light up, or you'd answer the question.
73,
Tom Donaly, KA6RUH

2771. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 07:36:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <h1TUQlFu1Ok$EATO@ifwtech.co.uk>
Source record: 106339

Reg Edwards wrote:
>If the reflected and forward powers are known and the Bird is a short or
>zero distance from the transmitter, why would anybody want to know the
>reflection coefficient and SWR anyway?
>
>Of what use are they except to use the graphical calculator to calculate the
>forward and reflected powers?
>
>It seems the Bird designer was wise enough to omit the SWR scale from the
>meter.

Sorry, evidently I didn't make my point clearly enough.

The cheap-and-cheerful "SWAR meter" has a "sensitivity" control to
standardize the forward reading to full-scale. That standardization step
is what allows you to then switch to reverse, and read SWR on a
pre-printed scale.

Bird 43 is designed and marketed as a wattmeter, and one of its selling
points is that each element is factory-calibrated. It deliberately has
no "sensitivity" control that a user could set incorrectly. But that
also means that it cannot have a universally valid SWR scale. Instead
you have to take both readings, forward and reverse, and do the
calculation that Richard H quoted from the manual.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2772. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 08:02:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <M3JwIGOPk$EAm5@ifwtech.co.uk>
Source record: 106338

Reg Edwards wrote:
>> Reg`s statement:
>> "But it DOES affect the indicated SWR and so the indicated SWR is
>> incorrect." does not apply to the Bird Model 43 wattmeter.
>>
>==========
>
>I've never seen one but there's nothing special about a Bird. It behaves
>exactly the same as those from other manufacturers.
>
>If the line between generator and meter is NOT 50 ohms then the actual SWR
>on that line is NOT the value indicated by the meter. As I said, the
>indicated SWR is incorrect.
>

Everybody knows that the meter only claims to indicate rho/SWR on its "downstream" (load, antenna) side. It doesn't claim to say or know anything about rho/SWR on the upstream (generator, TX) side.

Likewise (responding to your other post) everybody knows that an SWR meter that is designed for a 50-ohm system reference impedance will not show correct results if you redefine the system reference impedance to say 75 ohms.

Here we all were, earnestly discussing the finer points of Smith charts, directional voltage-current-power waves, complex Zo and whatnot; and suddenly you're re-stating obvious novice-level facts as if everyone except you had missed them.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2773. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 08:46:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp1vg2428qngd7@corp.supernews.com>
Source record: 106340

Reg Edwards wrote:
> I am sorely tempted but will refrain from calling the whole lot of you a
> bunch of old wives.
>
> Kindly desist in trying to put words into my mouth.
>
> I have NOT said that changing the source impedance changes the SWR
> indication. It doesn't !
> . . .

I posted:

>Source impedance DOES affect the amount of energy moving in and sloshing
>> around in a transmission line. It DOESN'T affect the ratio of forward to
>> reflected waves, and therefore DOESN'T affect the SWR.
>>

To which you replied:

==========

But it DOES affect the indicated SWR and so the indicated SWR is incorrect.

and:

If the source is not what the meter expects then it gives the wrong answers.
And its faithful worshippers believe it!

========== End of quote

Better check on the worm-wood content of that wine you've been drinking.
Another tip is to save a copy of each message you post. Then when you
encounter that blank spot in your memory, you can at least read what you
posted the night before.

Sad, isn't it, when the Old Wives can remember stuff you wrote better
than you can.

Roy Lewallen, W7EL
-- Again confirmed as a Reg's Old Wife

2774. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 08:50:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp1vnqt9tc2vd4@corp.supernews.com>
Source record: 106341

He's truly a master, isn't he?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Tdonaly wrote:
>
>> What causes the light to light up, Cecil, an E field, or a V field?
>
>
> According to quantum electrodynamics, fields don't exist. So are
> you talking about photons or virtual photons above? In either case,
> voltage can still be measured by a voltmeter.

2775. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 09:26:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmr10r$t1i$1@sparta.btinternet.com>
Source record: 106342

"Ian White, G3SEK" wrote >
>Everybody knows that the meter only claims to indicate rho/SWR on its
> "downstream" (load, antenna) side. It doesn't claim to say or know
> anything about rho/SWR on the upstream (generator, TX) side.
>
==========

Ian, there must by a dictation error in the foregoing. Would you care to correct it ?

However, it must be admitted, when the only transmission line at the station is between meter and the antenna such a mistake must be fairly common amongst the ignorant.

Reg, G4FGQ

2776. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 10:15:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmr3sg$n8c$1@hercules.btinternet.com>
Source record: 106343

> Better check on the worm-wood content of that wine you've been drinking.
> Another tip is to save a copy of each message you post. Then when you
> encounter that blank spot in your memory, you can at least read what you
> posted the night before.
>
> Sad, isn't it, when the Old Wives can remember stuff you wrote better
> than you can.
>
> Roy Lewallen, W7EL
> -- Again confirmed as a Reg's Old Wife

==========

Dear Roy, a display of annoyance signifies weakness of argument.

Reg

2777. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 12:13:05 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <QYMIrSCR5Sk$EAXa@ifwtech.co.uk>
Source record: 106344

Reg Edwards wrote:
>"Ian White, G3SEK" wrote >
>>Everybody knows that the meter only claims to indicate rho/SWR on its
>> "downstream" (load, antenna) side. It doesn't claim to say or know
>> anything about rho/SWR on the upstream (generator, TX) side.
>>
>==========
>
>Ian, there must by a dictation error in the foregoing. Would you care to
>correct it ?
>
No - I meant exactly what I said. The meter can only indicate the
rho/SWR of whatever is connected downstream (load side) of the meter
itself.

Whatever is upstream is merely an RF source. Both the forward and
reflected readings are determined by the power level of the source
(obviously) but they are both affected in the same proportion, so the
rho/SWR result stays the same - as it must, because rho/SWR is only
affected by downstream conditions.

>However, it must be admitted, when the only transmission line at the station
>is between meter and the antenna such a mistake must be fairly common
>amongst the ignorant.

We seem to be talking past each other, Reg, not to each other. Since
neither of us is "ignorant", each of us must be saying something that
the other one is missing.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2778. Re: horz/vertical 2 meter spacing?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 12:48:38 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <GEakb.5886$Ec1.526043@bgtnsc05-news.ops.worldnet.att.net>
Source record: 106345

Generally you want to keep your antenna's separated by at least 1/4
wavelength of the lowest frequency.
So if its a dual band VHF/UHF, you want to stay at least 18 inches from the
other antenna if it is also VHF.
But you always want to stay a 1/4 wave apart for general practice.

2779. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 13:35:06 UTC
From: Tom Wagner <tfwagner@snet.net>
Message-ID: <ekbkb.5600$jp4.3164@newssvr17.news.prodigy.com>
Source record: 106346

Most of this discussion on BPL focuses on the impact of
BPL on HF reception. What would 1500w of continuous RTTY
do to the users of BPL? How would a BPL modem, which is
necessarily wideband cope with gross overload?

Tom - N1MM
Check out the N1MM Free Contest Logger at:
http://www.n1mm.com
http://groups.yahoo.com/group/N1MMLogger/

2780. Re: How to connect external antenna to GE Super Radio III

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 14:12:51 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <01i2pv8cpcgaif2pq31mnf2ns03drptjjo@4ax.com>
Source record: 106322

On 17 Oct 2003 10:15:21 -0700, jimdummyacct@hotmail.com (Jim) wrote:

>I'm sorry, probably a very novice question here, but I'm a novice. :-)
> Just trying to pull in a very weak AM station signal in an office
>building, and wanting to connect an external antenna to my GE Super
>Radio III. I've visited a Radio Shack to see their AM/FM Indoor
>Antenna, and I've also called Best Buy about the two Terk antennas
>they have in-store. In neither case was the store attendant certain
>as to how these antennas would actually connect to my radio, so I'm
>hoping someone here can help. As most of you probably already know,
>the radio has three screws on the back: AM, FM, and Ground. The
>antenna I saw at Radio Shack had a coax cable with an adaptor that
>ended in the little hook connectors (like you'd find on an old TV)
>that would be suited to such screws, but the guy there said the coax
>cable was only for FM. It also had a plain wire pair connection that
>he said was for AM (he was too busy with other customers to help
>further, though, and just kind of mumbled this to his coworker, so I'm
>not sure). I haven't yet seen the connections on the Terks, but the
>guy at Best Buy said over the phone that it would probably require
>some sort of transformer to connect.
>
>Can anyone help with how exactly one of these antennas must be
>connected to these screws on the back of the radio? Thanks very much.
>
>Jim

I believe the GE super radio has a built-in 8-inch ferrite core
antenna for AM reception. This is probably as good as, or better than,
anything for AM in the Radio Shack units.

You might try just connecting an odd length of copper wire to the
screw on your radio labeled "AM." 10 or 20 feet. See what happens.

Move the radio around. Move the wire around. If you can open your
office window, throw the wire out the window.

Receiving signals in an office building is tricky, because you're in a
steel box, so to speak. It's good at blocking AM signals.

Bob
k5qwg

2781. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 14:40:44 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310180640.4aa2638c@posting.google.com>
Source record: 106347

Cecil, I'm sorry you don't understand that in the presence of
time-varying fields, the potential between two points depends on the
path you take. Grasping that concept can be very empowering in
understanding what's going on in antennas, and in transmission lines,
and in inductors and transformers. I can only hope that some lurkers
have benefitted from the discussion.

Cheers,
Tom

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f90cc27_2@corp.newsgroups.com>...
> Tom Bruhns wrote:
> > There is very little voltage ALONG the conductors, ...
>
> Depends upon how long the conductors are. The difference along a
> 1/4WL conductor is known to be minimum VS maximum assuming a
> minimum at one end. Are you saying that EZNEC doesn't display
> the current distribution on an antenna when I press the 'i' key?

2782. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 14:56:50 UTC
From: brianburke@juno.com
Message-ID: <f45722ac.0310180656.4b0945af@posting.google.com>
Source record: 106348
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

kelly@dvol.com (Brian Kelly) wrote in message
news:<d22b54c3.0310170615.2edf4120@posting.google.com>...
> "Phil Kane" <Phil.Kane@nov.shmovz.ka.pop> wrote in message
news:<xnfcneeyarg.hmvgz2b.pminews@netnews.comcast.net>...
> > On 15 Oct 2003 22:30:17 -0700, Brian Kelly wrote:
> >
> > >> This means that the manufacturer is required to test them to
> > >> ensure that they comply with the FCC regulations. Under the present
> > >> rules, they must be tested at 3 typical locations. "
> > >
> > >What's the FCC definition of "typical locations"??
> >
> > De facto: any place where the results support the stand that one is
> > advocating.
>
> Oh golly, I would never have guessed that . .

Its a complex issue. Thank goodness we have lawyers and engineers to
figure it all out for us.

2783. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 16:16:42 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bmrp1a$8b0$0@208.206.142.110>
Source record: 106349

Reg Edwards wrote:

>>Better check on the worm-wood content of that wine you've been drinking.
>>Another tip is to save a copy of each message you post. Then when you
>>encounter that blank spot in your memory, you can at least read what you
>>posted the night before.
>>
>>Sad, isn't it, when the Old Wives can remember stuff you wrote better
>>than you can.
>>
>>Roy Lewallen, W7EL
>>-- Again confirmed as a Reg's Old Wife
>
>
> ============================
>
> Dear Roy, a display of annoyance signifies weakness of argument.
> ----
> Reg

Golly, Reg. You might want to observe the annoyance content of your
"old wives" postings.

2784. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 17:00:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmrrj7$9b6$1@titan.btinternet.com>
Source record: 106350

"Ian White, G3SEK" wrote -
> No - I meant exactly what I said. The meter can only indicate the
> rho/SWR of whatever is connected downstream (load side) of the meter
> itself.
>
==========

(1) I'm sure we are agreed our meters will correctly indicate Rho and SWR only on 50-ohm lines.

(2) Insofar as the meter is concerned the transmitter's load impedance is the input impedance of the transmission line between the meter and the antenna. There may or may not be an intervening Z-match network.

(3) Insofar as the transmitter is concerned the line between meter and antenna can be ANY impedance. It is desirable only that line length with its Zo transform the antenna input impedance to somewhere near to 50 ohms (Like a G5RV on 14.15 MHz). If things become difficult then a Z-match can be inserted. Once we have selected Zo for this line we are no longer interested in its SWR. And if we WERE interested a 50-ohm SWR meter would be incapable of correctly measuring it.

(4) Note that when a Z-match is located at the transmitter end of this feedline, and varied, the actual SWR on this line cannot change - yet the SWR meter responds readily to the Z-match settings.

(5) The only line which, ideally, MUST be 50 ohms coax and have a small SWR, certainly if it is of appreciable length, is that between the meter and the transmitter. Otherwise the load directly presented to the transmitter would not be 50 ohms. Any other impedance would transform the 50 ohms seen immediately on the antenna side of the meter to some other value.

(6) It is the SWR on this line which the meter indicates. (If this line is NOT 50-ohms then the meter incorrectly indicates the standing waves on it. Which is what I said before and a lot of people disagreed. Not that a false indication is of great consequence when it is the incorrect choice of line Zo where the problem arises.)

(7) In practice at HF the length of this 50-ohm coax is often negligible. The meter is often inside the transmitter box. As the misleading idea of standingwaves on this short, even zero-length coax is nonsense the name of the instrument should be changed to TLI. (Transmitter Loading Indicator). Which is all that it is!

(8) Then the topic of conversation on this newsgroup can then diverted back to where it belongs - the far more important non-measured SWR on the main feedline to the antenna.

Reg, G4FGQ

2785. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 17:41:16 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmrtvsjpg1@sparta.btinternet.com>
Source record: 106351

To anybody interested.

We have a HF Transmitter + 50-ohm coax + SWR meter + Tuner + Feedline of any Zo + Antenna.

Suppose it is all tuned-up and ready to go. The transmitter is loaded with exactly 50-ohms resistive.

Now change the 50-ohm coax to shorter length of 75-ohm Zo.

As everybody agrees (after perhaps a little meter recalibration) the SWR meter indication will not change. BUT THE TRANSMITTER WILL NOW BE INCORRECTLY LOADED.

Where does the inconistency lie ? Does it lie in the change in effective source impedance?

2786. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:01:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918223$1_1@corp.newsgroups.com>
Source record: 106352

Tdonaly wrote:
> I see you've gone into objection-stopper mode: write something
> whether it makes sense or not.

Sorry, my neighbor forced some Amaretto upon me yesterday. The fact that the voltage is hard to measure doesn't prove that it doesn't exist. Simply loop the ends of the dipole close together and measure the voltage with an RF voltmeter. It's a no brainer. These are copper wires. No need to discuss fields.

During 1/2 cycle, there is an excess of electrons on one end. During the next 1/2 cycle, there is an excess of electrons on the other end. A voltmeter measures excesses of electrons between two wires very well.

Or take a look at the end feedpoint impedance of a 1/2WL monopole. It's a no brainer to discover that the voltage is high and the current is low. So what is the feedpoint voltage for a 1/2WL end-fed monopole? EZNEC says it is around 3500 ohms giving a feedpoint voltage of about 550v for 100w compared to a 1/4WL monopole's feedpoint voltage of about 60v. Do you not understand that the voltage to current ratios vary from high to low at 1/4WL intervals along a wire antenna?

So please tell us how photons manage to light up a florescent light bulb.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2787. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:05:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918316_1@corp.newsgroups.com>
Source record: 106353

Roy Lewallen wrote:
> He's truly a master, isn't he?

Ask an irrelevant question - obtain an irrelevant answer. :-)

>> Tdonaly wrote:
>>> What causes the light to light up, Cecil, an E field, or a V field?
>>
>> According to quantum electrodynamics, fields don't exist. So are
>> you talking about photons or virtual photons above? In either case,
>> voltage can still be measured by a voltmeter.
--
73, Cecil http://www.qsl.net/w5dxp

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2788. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:09:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f91840c$1_1@corp.newsgroups.com>
Source record: 106354

Reg Edwards wrote:
> However, it must be admitted, when the only transmission line at the station
> is between meter and the antenna such a mistake must be fairly common
> amongst the ignorant.

If I read what Richard said correctly, the Bird has a built-in
50 ohm transmission line. And what about the coax connection from
the source to the Bird? The guys over on sci.physics.electromag
said that two feet of 50 ohm coax guarantees a 50 ohm environment
for a wattmeter.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2789. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:10:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918455_1@corp.newsgroups.com>
Source record: 106355

Reg Edwards wrote:
> Dear Roy, a display of annoyance signifies weakness of argument.

Reg, do you ever display annoyance? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2790. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:17:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9185d0$1_1@corp.newsgroups.com>
Source record: 106356

Tom Bruhns wrote:
> Cecil, I'm sorry you don't understand that in the presence of
> time-varying fields, the potential between two points depends on the
> path you take.

I know that, Tom, but we are talking about measuring the RF voltage
between two copper wires one inch apart. The path is well defined.
It is a no brainer. There is no need for obfuscation. The measurement
proves the voltages at the ends of a dipole to be at least a magnitude
higher than the voltage at the feedpoint. Are you not aware of how
the ratio of voltage to current varies over 1/4WL of a wire antenna?
--
73, Cecil http://www.qsl.net/w5dxp

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2791. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:26:17 UTC
From: froggers <not.froggers@nospam.ntlworld.com>
Message-ID: <aAfkb.670$2r6.813008@newsfep1-win.server.ntli.net>
Source record: 106357
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f89dfaf$1_6@corp.newsgroups.com...
> W4WNT wrote:
> > I'm using double faced tape to hold the mount for the head of an Icom 706 in
> > place on the console of a Jeep. Should work also in an Explorer. This
> > allows you to remove the head and pt it out of site when the car is parked.
>
> Are you sure that's not velcro?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
No Cecil,

He said he uses the tape to hold the mount - he then detaches the head from the mount
to conceal it.

Nick

2792. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:31:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5503pv8m7lpukqbfg186jr6s9l8kg4nsg7@4ax.com>
Source record: 106358

On Sat, 18 Oct 2003 17:41:16 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>To anybody interested.
>
>We have a HF Transmitter + 50-ohm coax + SWR meter + Tuner + Feedline of any
>Zo + Antenna.
>
>
>Suppose it is all tuned-up and ready to go. The transmitter is loaded with
>exactly 50-ohms resistive.

This begs the need for the unknown load and tuner. A Dummy load would
accomplish as much and completely shield the system. The last time I
offered such a simplified scenario (completely shielded system that
is), I was asked if I considered Common Mode currents (a knee jerk
question if ever there was one).
>
>
>Now change the 50-ohm coax to shorter length of 75-ohm Zo.
>
A 600 Ohm Transmission line would produce more dramatic effect, but
violate shielding (unless the experimenter practiced superlative
balance - but let's not involve bench issues ;-)
>
>As everybody agrees (after perhaps a little meter recalibration) the SWR
>meter indication will not change.

Perhaps, perhaps not. The unknown lengths before and after the
substitution bear on this. However, given the scenario of going from
50 Ohm to 75 Ohm line, undoubtedly the data will not resolve any
change.

>BUT THE TRANSMITTER WILL NOW BE
>INCORRECTLY LOADED.

For those who "trust formulas" (carefully, arbitrarily, capriciously,
casually) obtained, this is of no consequence. Observe how in another
thread, a quarterwave dipole will exhibit no voltage drop because it
is metallic along its length (never mind the inline radiation loss).
For that argument they can prove it with Ohm's Law. It is charming
how so many can argue this in terms of the path of the instrument
leads, and wholly neglect the absurdity of its attempt for any great
length. Fundamentals are the first casualty of argument.
>
>

>Where does the inconistency lie ? Does it lie in the change in effective
>source impedance?
>
I know you are not trying to be amusing, Reg (you have long lost your
crown of the clown in these postings); but when I step away for a day
and find 100+ postings, the majority of which occupy these issues of
"no importance" argued with the vehemence of the proselytizer,
thumping of the bible, and slurs mumbled through their snorkels in
what they acknowledge to be a cess-pool, I find their capacity to
amuse has not slacked (ï¿½ 3dB).

73's
Richard Clark, KB7QHC

2793. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:44:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918c3a_1@corp.newsgroups.com>
Source record: 106360

Reg Edwards wrote:
> Where does the inconistency lie ? Does it lie in the change in effective
> source impedance?

It lies in using the wrong coax Z0 for the situation. Assuming it's
long enough to develop 75 ohms, it will cause 4% of the forward power
to be reflected back toward the source at the meter. Guess you can't
call it a TLI after all since it is faithfully reporting the 50 ohm
SWR and not making the transmitter happy. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2794. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:46:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bms1q2jve1@titan.btinternet.com>
Source record: 106359

"Cecil Moore" wrote
> > Dear Roy, a display of annoyance signifies weakness of argument.
>
> Reg, do you ever display annoyance? :-)
==========

Yes Cec, but you can't hear the sound of banging doors and breaking glass
over the internet.

Reg.

2795. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:48:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918d0a$1_1@corp.newsgroups.com>
Source record: 106361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

froggers wrote:
> He said he uses the tape to hold the mount - he then detaches the head from the mount
> to conceal it.

I use Velcro.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2796. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 18:57:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f918f39_1@corp.newsgroups.com>
Source record: 106362

Richard Clark wrote:
> Observe how in another
> thread, a quarterwave dipole will exhibit no voltage drop because it
> is metallic along its length (never mind the inline radiation loss).

Consider that if it were terminated with resistors that cause no
reflections, it would be a traveling wave antenna and the voltage drop
would indeed be very low in spite of the radiation.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2797. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 19:39:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0n53pvk6iau9ont9c9vj23k93t1adsh3sm@4ax.com>
Source record: 106363

On Sat, 18 Oct 2003 13:57:22 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>Consider that if
How charming....

2798. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 19:43:27 UTC
From: tdonaly@aol.com
Message-ID: <20031018154327.07126.00000396@mb-m21.aol.com>
Source record: 106364

Cecil wrote,
>
>
>Tdonaly wrote:
>> I see you've gone into objection-stopper mode: write something
>> whether it makes sense or not.
>
>Sorry, my neighbor forced some Amaretto upon me yesterday. The
>fact that the voltage is hard to measure doesn't prove that it
>doesn't exist. Simply loop the ends of the dipole close together
>and measure the voltage with an RF voltmeter. It's a no brainer.
>These are copper wires. No need to discuss fields.
>
>During 1/2 cycle, there is an excess of electrons on one end.
>During the next 1/2 cycle, there is an excess of electrons on
>the other end. A voltmeter measures excesses of electrons between
>two wires very well.
>
>Or take a look at the end feedpoint impedance of a 1/2WL
>monopole. It's a no brainer to discover that the voltage is high
>and the current is low. So what is the feedpoint voltage for a
>1/2WL end-fed monopole? EZNEC says it is around 3500 ohms giving
>a feedpoint voltage of about 550v for 100w compared to a 1/4WL
>monopole's feedpoint voltage of about 60v. Do you not understand
>that the voltage to current ratios vary from high to low at 1/4WL
>intervals along a wire antenna?
>
>So please tell us how photons manage to light up a florescent
>light bulb.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

After all this time and all these posts, you're still trying to use
circuit theory to explain electromagnetic phenomena in
situations where length and time, as parameters, just can't
be ignored. Secondly, you haven't even demonstrated that you
took time to digest and understand Tom's original post, which
you responded to with a knee-jerk "Brain fart." That's o.k. for
you. If you really want to believe in a simplified view of
electronics that's fine. But, for the rest of us, all the books,
the research, the mathematics, and the thinking of people
from Faraday to Feynman, actually mean something.
73,

Tom Donaly, KA6RUH

2799. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:19:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4m73pvkgu24kiggdvc53u05bpckf8j0bvt@4ax.com>
Source record: 106365

On Sat, 18 Oct 2003 13:09:42 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>The guys over on sci.physics.electromag said that two feet of
>50 ohm coax guarantees a 50 ohm environment for a wattmeter.
At DC? 100Hz? 10KHz? ...
... 10GHz? 1THz?
Poor bounding as usual.

2800. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:20:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bms79n$5ni$1@sparta.btinternet.com>
Source record: 106366

"Cecil Moore" wrote > Reg Edwards wrote:
> > Where does the inconistency lie ? Does it lie in the change in
effective
> > source impedance?
>
> It lies in using the wrong coax Z0 for the situation. Assuming it's
> long enough to develop 75 ohms, it will cause 4% of the forward power
> to be reflected back toward the source at the meter. Guess you can't
> call it a TLI after all since it is faithfully reporting the 50 ohm
> SWR and not making the transmitter happy. :-)
> --
==========
Cec, wrong! It is true the very incorrect use of 75-ohm line by the system designer is the reason for the UNDETECTED deviation from 50 ohms of the Tx load.

The reason it is undetected is because the SWR meter is in error. Although the meter indication has not changed since the 50-ohm cable was in situ, it is now in error because it can measure correctly only on 50-ohm lines but the actual line being measured is 75-ohms.

So the meter can still be called a TLI. The moral of the story is "If the connection between transmitter and SWR meter or TLI is of appreciable length then always use 50-ohm coax."

Good to see you are still taking an interest. ;o)

Reg, G4FGQ

2801. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:25:23 UTC
From: tdonaly@aol.com
Message-ID: <20031018162523.07126.00000397@mb-m21.aol.com>
Source record: 106367

>
>
>Tom Bruhns wrote:
>> Cecil, I'm sorry you don't understand that in the presence of
>> time-varying fields, the potential between two points depends on the
>> path you take.
>
>I know that, Tom, but we are talking about measuring the RF voltage
>between two copper wires one inch apart. The path is well defined.

That's one path.

>It is a no brainer. There is no need for obfuscation.

Universally recognized principles of electromagnetics are obfuscation?

> The measurement
>proves the voltages at the ends of a dipole to be at least a magnitude
>higher than the voltage at the feedpoint.

You changed the geometry. But even if you hadn't, you might be
able to say the changing electrical fields are greater at the ends of
a dipole, but not the voltages, because the voltages
aren't uniquely defined.

> Are you not aware of how
>the ratio of voltage to current varies over 1/4WL of a wire antenna
>--
>73, Cecil http://www.qsl.net/w5dxp
>

There's not much point in arguing with you Cecil, since you don't want
to countenance the more sophisticated ideas of some of the other
posters to explain what's going on at the ends of a dipole. That's
too bad. You'll give some people the impression that things are
as simple as you say they are when things are not simple
at all. If they were, even an old hick like me could become an
engineer, and the job wouldn't pay much at all.
73,
Tom Donaly, KA6RUH

2802. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:32:29 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <TT$4ZONdNak$EAWQ@ifwtech.co.uk>
Source record: 106270

Reg Edwards wrote:
>"Ian White, G3SEK" wrote -
>> No - I meant exactly what I said. The meter can only indicate the
>> rho/SWR of whatever is connected downstream (load side) of the meter
>> itself.
>>
>==========
>
We're agreed, down to and including point 5.

>(1) I'm sure we are agreed our meters will correctly indicate Rho and SWR
>only on 50-ohm lines.
>
>(2) Insofar as the meter is concerned the transmitter's load impedance is
>the input impedance of the transmission line between the meter and the
>antenna. There may or may not be an intervening Z-match network.
>
>(3) Insofar as the transmitter is concerned the line between meter and
>antenna can be ANY impedance. It is desirable only that line length with its
>Zo transform the antenna input impedance to somewhere near to 50 ohms (Like
>a G5RV on 14.15 MHz). If things become difficult then a Z-match can be
>inserted. Once we have selected Zo for this line we are no longer
>interested in its SWR. And if we WERE interested a 50-ohm SWR meter would
>be incapable of correctly measuring it.
>
>(4) Note that when a Z-match is located at the transmitter end of this
>feedline, and varied, the actual SWR on this line cannot change - yet the
>SWR meter responds readily to the Z-match settings.
>
>(5) The only line which, ideally, MUST be 50 ohms coax and have a small
>SWR, certainly if it is of appreciable length, is that between the meter and
>the transmitter. Otherwise the load directly presented to the transmitter
>would not be 50 ohms. Any other impedance would transform the 50 ohms seen
>immediately on the antenna side of the meter to some other value.
>
... so we're OK as far as here.

The reasons you give why the impedance of that connecting line between
the transmitter and the meter must be 50 ohms are all correct. But
there's another reason - or at least, another way of looking at the same
situation: because the SWR meter has been calibrated for a 50 ohm system
reference impedance, it will not correctly indicate a 50 ohm load to the
transmitter unless the connecting line is also of 50 ohms impedance (or
is too short to matter).

> (6) It is the SWR on this line which the meter indicates.

No, it isn't! The value of rho or SWR obtained from the forward and reflected readings of the meter is the rho/SWR of the *load* connected to the meter's *output* terminals.

Where the confusion arises is because the SWR on that 50 ohm connecting line will be numerically equal to the SWR indicated by the meter - but that's only because they are both 50-ohm devices. It is *not* because the meter is reacting to the standing waves on its input side.

(If you change the impedance of that connecting line, then as you say in (5) above, the load impedance presented to the transmitter will change, so the power output will change. However, the forward and reflected signals from the meter will both be affected in the same proportion, so the rho/SWR result will not change.)

Or look at it another way: think of the meter as a bridge, fed by that same connecting line - after all, some SWR meters are literally three-resistor bridges with the unknown load impedance forming the fourth arm. The bridge balance is not affected in any way by the length or impedance of the line that is merely energizing the bridge. Only the load impedance affects the bridge balance.

> (If this line is
>NOT 50-ohms then the meter incorrectly indicates the standing waves on it.
>Which is what I said before and a lot of people disagreed.

And they were right, because the rho/SWR reading will *not* change.

What's incorrect is to believe that the rho/SWR meter is measuring "standing waves" OR ANYTHING ELSE to do with its input line. It ain't.

>Not that a false
>indication is of great consequence when it is the incorrect choice of line
>Zo where the problem arises.)
>
That contradicts what you said in (5) above. If the meter falsely indicates correct transmitter loading, that certainly could be of consequence.

>(7) In practice at HF the length of this 50-ohm coax is often negligible.
>The meter is often inside the transmitter box. As the misleading idea of
>standingwaves on this short, even zero-length coax is nonsense

Reg, you must be about the only person in the world who worries about that. The term "SWR" has almost completely freed itself from its original literal associations with standing waves. Everyone else accepts SWR as just one among the many mathematically interchangeable ways of expressing the quality of an impedance match or mismatch. None of them is either more or less valid than any of the others.

> the name of
>the instrument should be changed to TLI. (Transmitter Loading Indicator).
>Which is all that it is!

>
It is indeed, so the very best of luck with your campaign to change its
name... ;-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2803. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:32:45 UTC
From: w1rfi@aol.com
Message-ID: <20031018163245.08854.00000389@mb-m14.aol.com>
Source record: 106368

>I probably missed it, but will ask anyway, is there
>a list of the areas that are being tested? Anything in the Northern
>IL or Southern WI areas?

Nothing in those areas, at least not for now. I have most of the locations pinned down, but I have not posted them on a "public" URL. A few of the utilities and one of the BPL manufacturers (Ambient) is being very cooperative. One of the promises I made is that ARRL will help them determine the interference potential of BPL systems, but that we will do it in a way that is minimally disruptive to them. Having hordes of hams showing up in these areas would probably not be a good idea, especially seeing as it would only take one of the ones who offered to use the couplers for target practice to undermine months of building good will.

If you are willing to do a more quiet foray into the test areas, email me and let me know and I can provide some info, although it will be a good drive for you.

I have posted the cities involved, and can repeat the list if it is needed.

73,
Ed Hare, W1RFI

2804. Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:39:15 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2003.10.18.20.39.14.920467@spam.spam>
Source record: 106269

I would like to bury my coax for a distance of about 20ft. The location consist of 6" of crushed decorative rocks over the top of very rocky soil.

I intend to take the LMR-400 coax and push it through a garden hose to add a layer of protection. However, I am worried that condensation will quickly fill the airspace of the hose with water and it will either penetrate the coax outer jacket or interfere with the performance of it in some unknown negative way.

I can not flood the garden hose with petroleum oil as it will soon eat through the PVC jacket of the coax or garden hose. Ideally, I would like to flood the hose with the same stuff they put into underground cables. It has a honey consistency and is not easily displaced by water. I was hoping for some type of silicon oil but am unable to find anything similar at the hardware store.

Anybody have any suggestions?

2805. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:41:36 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <GDo9t3NAWak$EA10@ifwtech.co.uk>
Source record: 106271

Reg Edwards wrote:
>To anybody interested.
>
>We have a HF Transmitter + 50-ohm coax + SWR meter + Tuner + Feedline of any
>Zo + Antenna.
>
>
>Suppose it is all tuned-up and ready to go. The transmitter is loaded with
>exactly 50-ohms resistive.
>
>
>Now change the 50-ohm coax to shorter length of 75-ohm Zo.
>
>
>As everybody agrees (after perhaps a little meter recalibration) the SWR
>meter indication will not change. BUT THE TRANSMITTER WILL NOW BE
>INCORRECTLY LOADED.
>
>
>Where does the inconistency lie ?

The inconsistency lies in failing to meet the requirement that:

1. the correct load impedance for the transmitter

and

2. the system reference impedance for which the SWR meter was calibrated

and

3. the impedance of that connecting line

...must all be the same.

See the longer reply to your other message. (This is yet another way of
saying the same things.)

> Does it lie in the change in effective
>source impedance?

That's the one place where the inconsistency definitely does *not* come
from.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2806. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 20:45:22 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <jIGdnWMKkLvBOwyiRVn-vA@comcast.com>
Source record: 106272

Having hordes of hams showing up in these areas
> would probably not be a good idea, especially seeing as it would only take
one
> of the ones who offered to use the couplers for target practice to
undermine
> months of building good will.

Defnintely not fair play!

> If you are willing to do a more quiet foray into the test areas, email me
and
> let me know and I can provide some info, although it will be a good drive
for
> you.
>
> I have posted the cities involved, and can repeat the list if it is
needed.

I can do a quiet sniff within any reasonable distance of east central
indiana.

BTW: I was wondering exactly how you calibrate your system for field
strength values.

2807. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 21:27:38 UTC
From: Martin <admin@127.0.0.1>
Message-ID: <bmsgoo$2ec$1$8302bc10@news.demon.co.uk>
Source record: 106275

"yea right" <spam@spam.spam> wrote in message
news:pan.2003.10.18.20.39.14.920467@spam.spam...
> I would like to bury my coax for a distance of about 20ft. The location
> consist of 6" of crushed decorative rocks over the top of very rocky soil.
>
> I intend to take the LMR-400 coax and push it through a garden hose to add
> a layer of protection. However, I am worried that condensation will
> quickly fill the airspace of the hose with water and it will either
> penetrate the coax outer jacket or interfere with the performance of it in
> some unknown negative way.
>
> I can not flood the garden hose with petroleum oil as it will soon eat
> through the PVC jacket of the coax or garden hose. Ideally, I would like
> to flood the hose with the same stuff they put into underground cables. It
> has a honey consistency and is not easily displaced by water. I was hoping
> for some type of silicon oil but am unable to find anything similar at the
> hardware store.
>
> Anybody have any suggestions?

Get two rubber / plastic boots - the type used on electrical installations.
a large container of petroleum or KY jelly fill both end of the hose once
you have the coaxial through it this should stop any air getting in or out
and
so prevent the condensation problem. Finally put the boots over tube ends
again filled with jelly and using come electrical tape , tape over it.
Go over the electrical tape with self amalgamating tape them one more
layer of electrical tape to keep out the UV and "BOBS your uncle"
job should be a good one.

TTFN Martin G1GYC

2808. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 22:08:48 UTC
From: k9sqg@aol.com
Message-ID: <20031018180848.29144.00000681@mb-m12.aol.com>
Source record: 106273

Use rigid PVC tubing, cement fittings as needed. It will provide more physical protection than a garden hose. Any condensation that develops should be minimal. However, even if it were severe, if the coax couldn't stand up to it then it couldn't stand up to rain, snow, frost, etc. either. I used coax buried in this way and had no trouble with it for 15 years.

2809. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 22:52:25 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F91C428.2EBBED2A@cwis.net>
Source record: 106274

Don't worry about it. Save the 'worry' for something that's
more likely to happen, you may run short...
'Doc

2810. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-18 23:35:15 UTC
From: Thierry <"see my website">
Message-ID: <3f91ce2f$1_1@news.vo.lu>
Source record: 106276

"helmsman" <helmsmandelete@mindspring.com> wrote in message
news:u9b3pvoc2586uvlng0b2qil8nnr30so3gv@4ax.com...
> yea right <spam@spam.spam> wrote:
>
> .
> Don't buy goods made in France or Germany and vacation somewhere else!

And you call that a OM, respectfully of the ham spirit, worldwide ?

Thierry
ON4SKY, LX3SKY

2811. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 00:18:11 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmsl83qso1@sparta.btinternet.com>
Source record: 106277

Dear Ian, please forgive me. The twists and contortions in your use of the English language are too involved for me unravel. No useful purpose would be served.

However, between us, you HAVE contributed to an excellent demonstration of the nonsensical mess which occurs when standing waves, reflection coefficients, conjugate matches, virtual thingammies, Cecil's guaranteed environments, etc, etc, are dragged in in futile attempts to explain what goes on on that most simple imaginable of all connections between the transmitter output and that so-called SWR meter.

It is not, as you imply, a trivial derisory matter to get yourself off the hook. However you are in good company. For many years it has mis-informed and confused newcomers, CB-ers, genuine students, and has obstructed education in general about understanding the operation and adjustment of antenna systems. And the eminent 'guru's' have managed successfully to mis-inform and confuse themselves as evidenced by the incessant squabbling on this newsgroup.

Fortunately, with radio, any bloody thing will work, even if you DON'T, as you should, use 50-ohm coax between Tx and TLI. It's not likely to blow up your transistorised PA. ;o)

Incidentally, if you DO use 75-ohm coax because you just happen to have a reel of it lying around, then do as I did with one of my ancient home-brew transeivers and use a 75-ohm TLI. Just change the setting of one preset resistor or capacitor in a 50-ohm model. As you say, it's only a 3-arm bridge !

Swap the connections to the little toroidal current transformer and you have a crude thru-power meter PROVIDED the Tx load really is 50-ohms.. Forget about reflected power - which nobody wants to know anyway - its scale has no more use or meaning than that for the defunct SWR. Try the typist's white stuff.

"Carry on London. Sweet violets."

Regards from a Californian-Wine-imbibing Italian Clown. ;o) ;o) ;o) ;o) ;o) ;o)

=======================
For Free Radio Design Software
go to http://www.g4fgq.com
=======================

2812. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 00:26:16 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <_OOdnaEsjO2jRwyiRVn-gQ@comcast.com>
Source record: 106278

Whoa, I did that experiment for Slick a month ago. I replaced the short piece of LMR240 between the transmitter and Kenwood SW2000 meter with a precisely measured 1/4 wavelength piece of RG59 75 Ohm coax. The loading changed, as expected, but the SWR reading did NOT change for SWR values of 1:1 and 1.6:1. The transmitter now saw a load of 112.5 Ohms. The Kenwood now saw a different source impedance.

I don't see any inconsistency. 100W into 112.5 Ohms requires a voltage of 106V RMS. In a transmitter with a fixed ratio output transformer that may not be doable. It is designed to put out 70.7V RMS into 50 Ohms, with some margin.

Tam/WB2TT
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bmrtvsjpg1@sparta.btinternet.com...
> To anybody interested.
>
> We have a HF Transmitter + 50-ohm coax + SWR meter + Tuner + Feedline of any
> Zo + Antenna.
>
>
> Suppose it is all tuned-up and ready to go. The transmitter is loaded with
> exactly 50-ohms resistive.
>
>
> Now change the 50-ohm coax to shorter length of 75-ohm Zo.
>
>
> As everybody agrees (after perhaps a little meter recalibration) the SWR
> meter indication will not change. BUT THE TRANSMITTER WILL NOW BE
> INCORRECTLY LOADED.
>
>
> Where does the inconistency lie ? Does it lie in the change in effective
> source impedance?
>
>

2813. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 00:26:45 UTC
From: Jer <abuse@supernews.com>
Message-ID: <9Tkkb.33143$Z86.26369@twister.socal.rr.com>
Source record: 106279

Yea right, tell that to the 1000's of Americans buried there defending those countries. Damm straight I don't buy anything made there much less vacation there!! If I had my way, we would disinter all of them and bring them home to hallowed ground here in America!

Screw the french and the krauts!

de jer

"Thierry" <see my website> wrote in message news:3f91ce2f$1_1@news.vo.lu...
>
> "helmsman" <helmsmandelete@mindspring.com> wrote in message
> news:u9b3pvoc2586uvlng0b2qil8nnr30so3gv@4ax.com...
> > yea right <spam@spam.spam> wrote:
> >
> > .
> > Don't buy goods made in France or Germany and vacation somewhere else!
>
> And you call that a OM, respectfully of the ham spirit, worldwide ?
>
> Thierry
> ON4SKY, LX3SKY
>
>

2814. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 00:31:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmsm06$g3f$1@hercules.btinternet.com>
Source record: 106280

Ian said -

> No, it isn't!

==========

Yes, it is!

Reg. ;o)

2815. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 00:54:03 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3f91dfe9.112997343@news.galilei.com>
Source record: 106281

Hi yea right

I would use standard PVC conduit and boxes, it's cheaper than garden hose and more impervious to cuts.

I doubt if your going to be able to 'push' a coax through a hose, or even conduit for that matter. You will probably have to 'pull' it through using a fishtape.
As the distance increases, so does the friction against the walls of whatever you are pulling it through.
One cannot even pull a piece of romex through 15 feet of PVC without a fishtape and some wirelube from your local electrical supply house.

TTUL
Gary

2816. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 01:43:58 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <C%lkb.91972$a16.25174@lakeread01>
Source record: 106282

Your going to all that trouble to "protect" 20 feet of coax? It is not worth the time, hassle or money. Put it down and replace it every couple of years if you think there is a problem.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"yea right" <spam@spam.spam> wrote in message
news:pan.2003.10.18.20.39.14.920467@spam.spam...
> I would like to bury my coax for a distance of about 20ft. The location
> consist of 6" of crushed decorative rocks over the top of very rocky soil.
>
> I intend to take the LMR-400 coax and push it through a garden hose to add
> a layer of protection. However, I am worried that condensation will
> quickly fill the airspace of the hose with water and it will either
> penetrate the coax outer jacket or interfere with the performance of it in
> some unknown negative way.
>
> I can not flood the garden hose with petroleum oil as it will soon eat
> through the PVC jacket of the coax or garden hose. Ideally, I would like
> to flood the hose with the same stuff they put into underground cables. It
> has a honey consistency and is not easily displaced by water. I was hoping
> for some type of silicon oil but am unable to find anything similar at the
> hardware store.
>
> Anybody have any suggestions?

2817. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 02:06:29 UTC
From: k4yz@aol.com
Message-ID: <5c01b95b.0310181806.72c3e588@posting.google.com>
Source record: 106283
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

brianburke@juno.com (Brian) wrote in message
news:<f45722ac.0310180656.4b0945af@posting.google.com>...

> Its a complex issue. Thank goodness we have lawyers and engineers to
> figure it all out for us.

Heaven forbid that you'd ever take the initiative to think for yourself, Brain.

Steve, K4YZ

2818. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 02:31:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmst16oin1@hercules.btinternet.com>
Source record: 106284

The inconsistency is that the power level changed, the load on the transmitter changed, but the SWR meter gave no indication of it.

What's wrong ?

2819. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 03:22:08 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vp40ohgchb18a0@corp.supernews.com>
Source record: 106285

I agree with Bill (W7TI). The Davis Coax is just what it says it is on
his WEB site. I use it anyplace where I can not use hard-line.
Just make up a jumper using the Bury-Flex, put it in the ground, and
forget about it. If you wish, a spiral plastic wrap exists that will
provide some cushion and is very easy to use.
Take some loss measurements to compare once a year. I bet you will
not ever find a need to replace the coax.
73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"W7TI" <noway@nohow.com> wrote in message
news:ebr3pv8oopof189dg8hasvg26e50lr4jv5@4ax.com...
> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
>
> >I would like to bury my coax for a distance of about 20ft. The
location
> >consist of 6" of crushed decorative rocks over the top of very rocky
soil.
> <snip>
>
> ----------
>
> Get some Davis Bury-Flex coax and forget about the fancy protection
> stuff. If you're really paranoid, design the installation so you can
> pull the old coax and replace it every time you start to wake up
nights
> and worry about it.
>
> http://www.davisrf.com/ham1/coax.htm
>
> --
> Bill, W7TI
>

2820. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 03:39:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f92098c_1@corp.newsgroups.com>
Source record: 106286

Tdonaly wrote:
> But, for the rest of us, all the books,
> the research, the mathematics, and the thinking of people
> from Faraday to Feynman, actually mean something.

I don't recall Faraday or Feynman ever saying that the impedance
of an antenna wire is constant up and down the wire.
--
73, Cecil http://www.qsl.net/w5dxp

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2821. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 03:40:57 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9209ef$1_1@corp.newsgroups.com>
Source record: 106287

Richard Clark wrote:

> On Sat, 18 Oct 2003 13:09:42 -0500, Cecil Moore
> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
>>The guys over on sci.physics.electromag said that two feet of
>>50 ohm coax guarantees a 50 ohm environment for a wattmeter.
>
> At DC? 100Hz? 10KHz? ...
> ... 10GHz? 1THz?
> Poor bounding as usual.

The frequency discussed was 10 MHz. Shall I add my family tree
to the context?
--
73, Cecil http://www.qsl.net/w5dxp

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2822. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 03:45:58 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3F9208F6.2493EAAF@rickfrazier.com>
Source record: 106289

Gary:

Maybe I've been lucky, but I've had no difficulty in pushing RG-8 through a 20 foot section of 1" PVC, and on a good day, have even got RG6 (tv cable) through one that didn't have any other wires in it. Pushing 12-2 w/ground or 14-2 w/ground romex through a similar distance isn't a big deal unless you've got corners to deal with... Sigh... Your mileage may vary, depending upon your patience and luck. By the way, it is much more difficult to push wire uphill than down, or even on the level... Of course, with a really long run, I'd build it up 20 feet at a time, or push a pull-tape through it (or blow a nylon through using air pressure) before pulling a bundle through the PVC.

Another possibility is the seamless black flexible pipe. I've been quite successful in pushing a single coax through a 1 1/4" diameter 25' long section of black flexible pipe....

There are lots of possibilities, but for something that is a single coax run of only 20 feet, I might tend towards just direct burial of a good grade of coax and worry about it in a few years. Otherwise, it's probably good to use conduit, even if you have to periodically go out and blow out the "condensation" the original poster was worried about.

--Rick AH7H

"Gary V. Deutschmann, Sr." wrote:

> Hi yea right
>
> I would use standard PVC conduit and boxes, it's cheaper than garden
> hose and more impervious to cuts.
>
> I doubt if your going to be able to 'push' a coax through a hose, or
> even conduit for that matter. You will probably have to 'pull' it
> through using a fishtape.
> As the distance increases, so does the friction against the walls of
> whatever you are pulling it through.
> One cannot even pull a piece of romex through 15 feet of PVC without a
> fishtape and some wirelube from your local electrical supply house.
>
> TTUL
> Gary

2823. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 03:54:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f920d36_1@corp.newsgroups.com>
Source record: 106288

Reg Edwards wrote:

> "Cecil Moore" wrote:
>>It lies in using the wrong coax Z0 for the situation. Assuming it's
>>long enough to develop 75 ohms, it will cause 4% of the forward power
>>to be reflected back toward the source at the meter. Guess you can't
>>call it a TLI after all since it is faithfully reporting the 50 ohm
>>SWR and not making the transmitter happy. :-)

> Cec, wrong! It is true ...

:-)

> The reason it is undetected is because the SWR meter is in error.

The SWR meter reading is perfectly predictable and therefore is not
in error. The error is the user's ignorance (or stupidity). One time,
back in the 50's, I used a Simpson meter to measure the screen grid
voltage on my 6146. Was the Simpson in error? Nope, I was in error.
Can't blame ignorance on an inanimate meter.
--
73, Cecil http://www.qsl.net/w5dxp

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2824. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 04:12:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f921154_1@corp.newsgroups.com>
Source record: 106290

Tdonaly wrote:
> Universally recognized principles of electromagnetics are obfuscation?

Complicating a simple measurement task beyond belief is obfuscation.

> You changed the geometry. But even if you hadn't, you might be
> able to say the changing electrical fields are greater at the ends of
> a dipole, but not the voltages, because the voltages
> aren't uniquely defined.

When a dipole is bent into an open loop, the relative voltage between
the ends is uniquely defined just like the voltage across a transmission
line is uniquely defined. If I poke two wires through two holes in a
faraday cage and ask you to measure the 10 MHz voltage between them
with 10% accuracy, would you say it can't be done?

> You'll give some people the impression that things are
> as simple as you say they are when things are not simple
> at all.

The measurement may be extremely challenging, but the *concepts* are simple.
All you need to do is note the similarity of the transmission line impedances
on an SWR circle to a wire antenna. If the spacing on a transmission line is
an appreciable percentage of a wavelength, the transmission line will radiate.
That's all a center-fed wire antenna is - a transmission line with large
spacing between the conductors and it radiates.
--
73, Cecil http://www.qsl.net/w5dxp

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2825. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 04:21:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f921373_1@corp.newsgroups.com>
Source record: 106291

Reg Edwards wrote:

> The inconsistency is that the power level changed, the load on the
> transmitter changed, but the SWR meter gave no indication of it.
>
> What's wrong ?

Nothing's wrong with the equipment. Something's wrong with the operator.
If you want to make the problem even worse, remove the coax entirely.
--
73, Cecil http://www.qsl.net/w5dxp

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2826. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 05:05:04 UTC
From: tdonaly@aol.com
Message-ID: <20031019010504.14985.00000472@mb-m02.aol.com>
Source record: 106292

Cecil wrote,
>
>
>Tdonaly wrote:
>> But, for the rest of us, all the books,
>> the research, the mathematics, and the thinking of people
>> from Faraday to Feynman, actually mean something.
>
>I don't recall Faraday or Feynman ever saying that the impedance
>of an antenna wire is constant up and down the wire.
>--
>73, Cecil http://www.qsl.net/w5dxp

Interesting. Still trying to divert the argument to your own
frame of reference. Nice try.
Hasta la vista, Cecil - at least until you write something else
I disagree with.
73,
Tom Donaly, KA6RUH

2827. Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 05:09:40 UTC
From: Ron <no.spam@please.99>
Message-ID: <p0pkb.460$iV3.11316@eagle.america.net>
Source record: 106293

My Tennadyne T12 'sings' in the wind, and it can be annoying. I think it's due to the ends of the elements being open, and they act like little organ pipes, creating a rather mournful sound.

I would not care about this, but unfortunately my neighbors can hear it, they say it does not bother them, but I think it would be a good idea if I could suppress this sound.

The ends of the elements are likely open so that they will drain any water than might get in, but I don't think it would be wise to cap them.

All that would seem to be needed was some material which could be placed in the ends, which would allow water to pass through, but be sufficient to suppress the organ pipe effect.

Any solution to this?

Ron, N5IN

2828. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 05:31:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9223e5$1_1@corp.newsgroups.com>
Source record: 106294

Tdonaly wrote:
> Interesting. Still trying to divert the argument to your own
> frame of reference.

Still trying to engineer solutions instead of murmuring
mantras about how impossibly difficult everything is.
--
73, Cecil http://www.qsl.net/w5dxp

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2829. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 05:35:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9224c8_1@corp.newsgroups.com>
Source record: 106295

Ron wrote:
> My Tennadyne T12 'sings' in the wind, and it can be annoying. I think it's
> due to the ends of the elements being open, and they act like little organ
> pipes, creating a rather mournful sound.

Gives a whole new meaning to the concept of tuning your antenna.

> Any solution to this?

My suggestion is tune it to whistle "Dixie".
--
73, Cecil http://www.qsl.net/w5dxp

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2830. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 08:40:32 UTC
From: Paul Landregan <plandregan@hotmail.com>
Message-ID: <bmtilv$qmvim$1@ID-198833.news.uni-berlin.de>
Source record: 106296

"Ron" <no.spam@please.99> wrote in message
news:p0pkb.460$iV3.11316@eagle.america.net...
> My Tennadyne T12 'sings' in the wind, and it can be annoying. I think
it's
> due to the ends of the elements being open, and they act like little organ
> pipes, creating a rather mournful sound.
>
> I would not care about this, but unfortunately my neighbors can hear it,
> they say it does not bother them, but I think it would be a good idea if I
> could suppress this sound.
>
> The ends of the elements are likely open so that they will drain any water
> than might get in, but I don't think it would be wise to cap them.
>
> All that would seem to be needed was some material which could be placed
in
> the ends, which would allow water to pass through, but be sufficient to
> suppress the organ pipe effect.
>
> Any solution to this?
>
> Ron, N5IN
>
>

Maybe sticking some pieces if Bath sponge in there will stop the air
getting in but allow water to seep out.

2831. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 08:41:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp4jhrm5kfpaa7@corp.supernews.com>
Source record: 106297

Here's an interesting quote from _Transmission Lines, Antennas, and Wave Guides_, by King, Mimno, and Wing:

"The amplitude of the current is not the same at different points along a conductor, because electric charge is deposited all along the surface of the conductor. Superficially it may appear that an antenna consisting of a straight conductor that is an appreciable fraction of a wavelength long and with a generator at its center may be looked upon simply as an open-end transmission line with the parallel conductors bent to lie along the same axis instead of being parallel to each other. Although there is considerable similarity between the two cases from the point of view of the approximate distribution of current, *they are nevertheless fundamentally different*. The transmission line may be analyzed to a good approximation in terms of ordinary electric-circuit theory, because equal and opposite currents are very close together. This is not true of the antenna and ordinary electric-circuit theory cannot be applied. *It is fundamentally incorrect to treat a center-driven antenna as though it were the bent-open ends of a two-wire line.*

Circuits that satisfy the condition for the near zone, either because they are sufficiently small or because they have equal and opposite currents everywhere so close together that the currents in widely separated parts of the circuit exert a negligible effect on one another, are analyzed correctly by the methods of ordinary electric-circuit theory. All other circuits must be investigated in terms of electromagnetism. This nearly always involves a study of the electromagnetic field as a useful intermediate step in determining distributions of current and charge."

The above text surrounded by asterisks is printed in italics. The quote begins on p. 85 of the paperback 1965 Dover reprint. I highly recommend reading Chapter II, of which the quote is a part.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Tdonaly wrote:
>
>> Universally recognized principles of electromagnetics are obfuscation?
>
>
> Complicating a simple measurement task beyond belief is obfuscation.
>
>> You changed the geometry. But even if you hadn't, you might be able to
>> say the changing electrical fields are greater at the ends of a
>> dipole, but not the voltages, because the voltages aren't uniquely

>> defined.
>
>
> When a dipole is bent into an open loop, the relative voltage between
> the ends is uniquely defined just like the voltage across a transmission
> line is uniquely defined. If I poke two wires through two holes in a
> faraday cage and ask you to measure the 10 MHz voltage between them
> with 10% accuracy, would you say it can't be done?
>
>> You'll give some people the impression that things are as simple as
>> you say they are when things are not simple
>> at all.
>
>
> The measurement may be extremely challenging, but the *concepts* are
> simple.
> All you need to do is note the similarity of the transmission line
> impedances
> on an SWR circle to a wire antenna. If the spacing on a transmission
> line is
> an appreciable percentage of a wavelength, the transmission line will
> radiate.
> That's all a center-fed wire antenna is - a transmission line with large
> spacing between the conductors and it radiates.

2832. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 10:45:01 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <qiqdnQ0jw7kT9g-iU-KYgA@crocker.com>
Source record: 106298

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f92098c_1@corp.newsgroups.com...
> Tdonaly wrote:
> > But, for the rest of us, all the books,
> > the research, the mathematics, and the thinking of people
> > from Faraday to Feynman, actually mean something.
>
> I don't recall Faraday or Feynman ever saying that the impedance
> of an antenna wire is constant up and down the wire.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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ARGH! another thread that will never die... time to 'ignore' this one also.
don't you guys realize you will never agree on anything on here? you talk
in circles around and around the same dogmatic circles never seeing that you
are all saying the same thing in different terms and arguing around nits
that don't matter in the real world.

2833. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 12:50:39 UTC
From: "Dan, danl, danny boy, Redbeard, actually Greybeard now" <danlx@execpc.com>
Message-ID: <d125pv4nv24ve5eabk5umv4rc5ufe2c742@4ax.com>
Source record: 106299

On 18 Oct 2003 20:32:45 GMT, w1rfi@aol.com (W1RFI) sent into the
ether:

>>I probably missed it, but will ask anyway, is there
>>a list of the areas that are being tested? Anything in the Northern
>>IL or Southern WI areas?
>
>Nothing in those areas, at least not for now. I have most of the locations
>pinned down, but I have not posted them on a "public" URL. A few of the
>utilities and one of the BPL manufacturers (Ambient) is being very cooperative.
>One of the promises I made is that ARRL will help them determine the
>interference potential of BPL systems, but that we will do it in a way that is
>minimally disruptive to them. Having hordes of hams showing up in these areas
>would probably not be a good idea, especially seeing as it would only take one
>of the ones who offered to use the couplers for target practice to undermine
>months of building good will.
>
>If you are willing to do a more quiet foray into the test areas, email me and
>let me know and I can provide some info, although it will be a good drive for
>you.
>
>I have posted the cities involved, and can repeat the list if it is needed.
>
>73,
>Ed Hare, W1RFI

I was just curious about the locations. I would be interested in
helping in my area, Mid to Southern WI or Northern IL. If anything
happens out this way, let me know if you need a hand.
Dan, N9JBF
Amateur radio - What a hobby!
Remove left x for direct reply

2834. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 13:00:02 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <VQcJpOLSrok$EA38@ifwtech.co.uk>
Source record: 106300

Reg Edwards wrote at 01:18:
>
>Dear Ian, please forgive me. The twists and contortions in your use of
>the English language are too involved for me unravel. No useful purpose
>would be served.

Try reading it again, preferably at the other one o'clock...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2835. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 13:11:50 UTC
From: fractenna@aol.com
Message-ID: <20031019091150.15913.00000836@mb-m13.aol.com>
Source record: 106301

One solution (I have seen work) is to squirt 'Great Stuff' into a foot or so of the open end, and let it form around a skewer. After it dries, pull the skewer out for the drip hole.

Great Stuff (comes in a can) is a foam insulation, much like styrofoam, used to seal window joints, and so on. It is transparent to RF below about 3 GHz

When you squirt it in it hardens up and suppress the driven oscillations.Bummer that you have to pull down the antenna though...

Also, some folks use nylon rope in the elements as a damper. Perhaps someone who has succeeded with that will respond.

Best of luck on this or other solutions.

73,
Chip N1IR

2836. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 14:35:44 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <1YKdnam7vZnLPA-iRVn-hQ@comcast.com>
Source record: 106302

Isn't the LMR400 rated for direct burial? Certainly there are varieties of RG8 that are. If you don't use a conduit type thing, you do not have to worry about water accumulation, because the cable and ground will eventually dry out between rain storms, unless you bury it deep.

Tam/WB2TT
"yea right" <spam@spam.spam> wrote in message
news:pan.2003.10.18.20.39.14.920467@spam.spam...
> I would like to bury my coax for a distance of about 20ft. The location
> consist of 6" of crushed decorative rocks over the top of very rocky soil.
>
> I intend to take the LMR-400 coax and push it through a garden hose to add
> a layer of protection. However, I am worried that condensation will
> quickly fill the airspace of the hose with water and it will either
> penetrate the coax outer jacket or interfere with the performance of it in
> some unknown negative way.
>
> I can not flood the garden hose with petroleum oil as it will soon eat
> through the PVC jacket of the coax or garden hose. Ideally, I would like
> to flood the hose with the same stuff they put into underground cables. It
> has a honey consistency and is not easily displaced by water. I was hoping
> for some type of silicon oil but am unable to find anything similar at the
> hardware store.
>
> Anybody have any suggestions?

2837. Re: FM Reception Static Problem

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 14:41:09 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <ffadnQzsqq4BPw-iRVn-jw@comcast.com>
Source record: 106303

Since your setup almost works, my guess is that a dipole in the attic, as high as possible, and broadside to the PBS station will do what you want. You might also find that moving the antenna a few feet laterally will make a difference.

Tam/WB2TT
"mBird" <no@spam.com> wrote in message
news:AtYjb.36199$Hs.22627@twister.nyroc.rr.com...
> Hi --
>
> Radio: Harman Kardon Home stereo AVR-125
> Location: on the edge of what the station shows is there signal area on
> their website -- about 40 miles from the station
>
> I get static (very slight but noticeable enough) when listening to Public
> Radio. I have the basic two-wire antenna that came with the stereo. I
> tried using an AM/FM Amplified Indoor Antenna (from Radio Shack) but that
> actually made the static worse no matter how I positioned or set. Please
> advice on what I could do. The static is so small you almost can't hear
it
> but it is just enough to make music programs less than the best they could
> be.
>
> Thank you
>
>
>

2838. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 14:44:58 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <cKCdnfUvRcQcPg-iRVn-tA@comcast.com>
Source record: 106304

The load on the SWR meter did NOT change. There is nothing wrong.

Tam/WB2TT
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bmst16oin1@hercules.btinternet.com...
> The inconsistency is that the power level changed, the load on the
> transmitter changed, but the SWR meter gave no indication of it.
>
> What's wrong ?
>
>

2839. 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 15:27:48 UTC
From: KB1IBE <dslesh@ttlc.net>
Message-ID: <vp5bbn599m1p8d@corp.supernews.com>
Source record: 106305

Hello folks,
I am experimenting with QRP-level antennas and wondered what the best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m dipole up)

Thnx in Advance!
73's Dave
WN1QIN / KB1IBE

2840. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 15:36:11 UTC
From: private-email@telus.net
Message-ID: <194da23a.0310190736.7f2cbfa4@posting.google.com>
Source record: 106306

I have done a fair amount of shortwave listening and would recommend
one of the following:

1) Run coax (58U) from the radio to the centre of the attic. String
up a wire dipole as long as practically possiable. (Average house
would allow for a 30-40ft total - two 20 ft pieces from centre) Raise
the centre if possiable, slopping down at the ends. Try to ground the
radio at the very least.

2) Try to get something outside. I know this means drilling and
perhaps something visiable to the eye, but belive me it is worth it.
I used a modified marconi for a while running along a fence and had
excellent results. A simple method is to run the coax outside and
ground the braid to a ground rod. The centre conductor is then
connected to your 125' piece of wire and run along a fence, rooftop or
from a homemade posts.

Keep in mind it sounds like you are looking for a simple installtion
so I will not go into the millions of other improvements you can make
to the above examples. These are just two I have used and pulled
stations from all over the world.

Homac

private <private@private.com> wrote in message news:<3F8F080B.FBB7CB20@private.com>...
> I have an old shortwave radio and want a decent wire antenna
> for it.
> Would connecting a single insulated wire up through the wall,
> through the attic and laid on the roof have a good chance of
> working decently?
> It will probably be about 125' from radio to the end of the
> antenna.
> I hope I don't need a ground at the radio.

2841. Re: need help-info on grounded antenna-Marconi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 15:44:11 UTC
From: private-email@telus.net
Message-ID: <194da23a.0310190744.442bd871@posting.google.com>
Source record: 106307

An MFJ-259B is very easy to use. As far as your design the matching
of your antenna will be the most difficult. You may be best served to
create your antenna independant of the pipe and mount it on top.

I know you are not "keen" on antennas but the Ringo (AR-2) can be
found used for next to nothing and work pretty good. They are also a
very low profile with no radials. The reason I suggest this one is I
have used it and get clear across our local with it at 15 ft in the
air.

Homac

"Phil Sisson, Litchfield Aerobatic Club" <sisson@consolidated.net> wrote in message
news:<3F892E9D.3825A92B@consolidated.net>...
> I need some help as I am not real kean on antenna's.
> If I were going on two meters, I would go buy a little vertical or
> something, but this is not the case.
>
> Hypothetical example.
>
> Suppose a metal pipe was stuck up in the air 50 feet. We want to operate
> on two meters. We measure from the top downward for 1/4 wave length and
> calculate and decided on this for a proper length.
>
> Can this 1/4 w.l. point downward from the top then be used as a terminal
> point for coax shield while tapping upward to the 52 ohm point for
> matching?
>
>
> Can the rest of the pipe or metal support running downward be ignored as
> for length, or must it be a given length? This is the part of the answer
> I am interested in.
>
> Can a MFJ-259B help with this? Does this instrument have a long learning
> curve?
>
> Thanks for any help on this.
>
> Phil.............. K9DNH (havent been on air for a long time)

2842. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 16:13:14 UTC
From: Bob <bob>
Message-ID: <3f92b866$0$261$cc9e4d1f@news.dial.pipex.com>
Source record: 106308

I have serious reservations about someone asking openly for a specific version of PolarPlot on this newsgroup without coming direct to me, which is very simply done from my web site.

Bob G4HFQ
www.g4hfq.co.uk

2843. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 16:16:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f92baf8$1_1@corp.newsgroups.com>
Source record: 106309

Roy Lewallen wrote:
> Here's an interesting quote from _Transmission Lines, Antennas, and Wave
> Guides_, by King, Mimno, and Wing: *It
> is fundamentally incorrect to treat a center-driven antenna as though it
> were the bent-open ends of a two-wire line.*

Funny, I thought Maxwell's equations worked for either case. Did you also
know that *It is fundamentally incorrect to treat a wolf like a dog.*

If you slowly increase the spacing and angle between the two conductors
of a transmission line, at exactly what spacing and angle does it magically
cease being a transmission line and become an antenna requiring a completely
different treatment? Please be specific as to the exact spacing and angle at
which it becomes "fundamentally incorrect" to treat the configuration as a
transmission line. Incidentally, I don't usually use circuit theory for
transmission lines.

Your current distribution curve displayed by EZNEC for a 1/2WL dipole
looks exactly like Fig 1, page 2-2, ARRL Antenna Book, 15th edition. I thought
you or Walt probably wrote that section. If you had displayed both the current
and the voltage distribution in EZNEC, what would it look like for a 1/2WL dipole?

We can easily measure the impedance at any point along a 1/2WL section of
transmission line with reflections or the feedpoint impedance at any point
along a 1/2WL dipole. As you know, those impedances are the ratio of net
voltage to net current. At the impedance minimum on a transmission line,
the voltage is minimum and the current is maximum. Same for a feedpoint
impedance minimum on an antenna. At the impedance maximum on a transmission
line, the voltage is maximum and the current is minimum. Same for a feedpoint
impedance maximum on an antenna. We can deduce the ratio of the voltage to
the current from the feedpoint impedance - or is that one of the rules of
physics that a transmission line obeys but an antenna disobeys?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2844. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 17:23:17 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <23i5pvc7prj051hnvfdpsaivpvgnu7m1f3@4ax.com>
Source record: 106310

On Sat, 18 Oct 2003 13:35:06 GMT, "Tom Wagner" <tfwagner@snet.net>
wrote:

>Most of this discussion on BPL focuses on the impact of
>BPL on HF reception. What would 1500w of continuous RTTY
>do to the users of BPL? How would a BPL modem, which is
>necessarily wideband cope with gross overload?

It'll turn a "deaf ear" to the RTTY...rather it'll just go deaf if you
are close enough.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Tom - N1MM
>Check out the N1MM Free Contest Logger at:
>http://www.n1mm.com
>http://groups.yahoo.com/group/N1MMLogger/
>

2845. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 17:24:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l1i5pv4bt8da7m1cuhrc7uohp2tli6l2so@4ax.com>
Source record: 106311

On Sat, 18 Oct 2003 22:40:57 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>The frequency discussed was 10 MHz. Shall I add my family tree
>to the context?
Odd that you feel it necessary, but if serves bounding then, yes,
perhaps you need to do that more often.

73's
Richard Clark, KB7QHC

2846. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 17:26:44 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310190926.28e8ef5d@posting.google.com>
Source record: 106312

Roy Lewallen <w7el@eznec.com> wrote in message news:<vp4jhrm5kfpaa7@corp.supernews.com>...
> Here's an interesting quote from _Transmission Lines, Antennas, and Wave
> Guides_, by King, Mimno, and Wing:
>
> "The amplitude of the current is not the same at different points along
> a conductor, because electric charge is deposited all along the surface
> of the conductor. Superficially it may appear ...

Here's another interesting quote from exactly the same source, page
71, the very first two paragraphs of King's "Antennas" chapter.

CHAPTER II
ANTENNAS

Electric Circuit Theory and Electromagnetic Theory. -- In order to
understand the behavior of antennas and of electric circuits at
ultra-high frequencies, it is essential to recognize that phenomena of
a vastly more general nature are involved than are encountered in
conventional electric networks. Attention is seldom called to the fact
that electric-circuit theory which proceeds from Kirchhoff's laws is a
highly specialized form of a more general theory. In some respects,
the situation is like that in mechanics, in which the simple law of
gravitation due to Newton may be looked upon as a special case of a
more general law formulated in the theory of relativity. Much as
Newtonian mechanics is adequate for the mechanical engineer, ordinary
electric-circuit theory is accurate for the requirements of electrical
power engineering and for many requirements in communications. But
even as Newton's laws of motion are inadequate in dealing with atomic
phenomena and some astronomical problems, so ordinary electric-circuit
theory fails when applied to antennas and to most circuits that are to
be used at ultra-high frequencies. The reason is that the conditions
that limit the generality of Newton's laws on the one hand, or the
theorems of electric-circuit theory on the other, are not satisfied.
For those who have assumed that Kirchhoff's laws are perfectly
general, a series of surprises is in store. They may, in fact, feel
like Alice when the Red Queen was annoyed by her reluctance to believe
"six impossible things before breakfast." But presently they may
return through the Looking Glass and discover that they have been
living in the one-dimensional Wonderland of electric-circuit theory
and that Nature is as simple as this suggests only in sufficiently
small spaces.

It is difficult to understand the structure of general
electromagnetism without first learning the appropriate symbolism,
that of mathematics. But if one is willing to accept some things on

faith and to meet others with an open, perhaps even an adventurous mind, a degree of familiarity with many electromagnetic phenomena can be acquired from a qualitative discussion.

2847. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 18:27:50 UTC
From: Topaz305RK <2smoore@nemontel.net>
Message-ID: <wXWdnXG9Hf1mRA-iU-KYhQ@vnet-inc.com>
Source record: 106313

You can also use fiberglass mesh (the stuff screens on screen doors use), which can be bought by the foot at most hardware stores. Just wad some up, stuff it in the end. Stops the wind from whistling through it but is plenty porous enough to let water run out.

2848. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 19:01:38 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <0pl5pv41c269s43snic05ndrk055b1voqa@4ax.com>
Source record: 106314

On Sat, 18 Oct 2003 21:18:02 GMT, helmsman
<helmsmandelete@mindspring.com> wrote:

>yea right <spam@spam.spam> wrote:
>
>>I would like to bury my coax for a distance of about 20ft. The location
>>consist of 6" of crushed decorative rocks over the top of very rocky soil.
><SNIP>
>>Anybody have any suggestions?
>
I can't find the original post, and going to Google to get it would be
starting another thread, soooo,,,, I'm just going to insert here.

The answer is one of those , "It all depends" on what you want for
reliability. It also depends on whether you will have any connections
underground. OTOH, connections underground are little different than
connections above ground. They should be treated the same.

Crushed rock and very rocky soil are about the worst location for
burying coax. PVC conduit is *cheap*, or at least relatively
inexpensive, particularly if you are only going to have one run of
coax. I have 7 coax cables 3 TV RG-6 cables, two rotor cables, a
power cable tot he 2-meter preamp and some other assorted *stuff* run
through mine. I use a 75 foot run of 4 inch PVC to a junction box on
the tower.. http://www.rogerhalstead.com/cablebox.htm

>Go to the hardware and get a tube of silicon sealant and seal the
>ends, if you don't think that's enough seal one end and shoot nitrogen
>gas in the hose to displace the air and then seal it quickly.

A point or two here...If you want to force N2 through the coax you
need *both* ends open. However it *will* breathe as pressure changes
with temperature. Do NOT seal both ends of a coax run. Do the best
possible job up on top and leave the end in the house unsealed.
IF you seal both ends the pressure will eventually equalize. Then with
each temperature change it will either pressurize, or draw a vacuum.
This will eventually draw in moisture. I use heat shrink tubing on
top of the tower and fill the connectors with DC-4 silicon grease.
This works at least up through 440 and for all legal amateur power
levels.

SPLICES: The easiest and surest way to seal a splice from the weather
is to go to your local electrical supply house and purchase a length
of 3M (TM) 0800 IMCSN .80/.22 20/5/6mm flooded heat shrink tube for
RG-8 size cables. The stuff is *about* $10 for a 40 inch length. It
is coated inside with something akin to hot melt glue. It not only

does a tremendous job of weatherproofing, but adds mechanical strength as well. Don't be cheap and expect to reuse the connectors although you might get lucky and be able to do so.

"Unshrunk" the tubing will easily fit *over* a PL250, or N connector. That .8 indicates the inside diameter prior to shrinking. It will shrink all the way to 0.22 inches. Make your splice using either a male to female connection, or two males with a barrel connector in between. Slip a length of the heat shrink tubing long enough cover the entire splice and extend at least 1 1/2 to 2 inches beyond the connectors onto the coax jacket.
When applying heat to shrink the tube onto the splice be sure and start in the middle and work outward. IF you start on the ends it will look like a snake that just swallowed a very big frog by the time you get any where near the center<:-))
This method does a far neater and better job than coax seal and tape. Less mess, adds strength, and is as waterproof as you are going to get. It has the drawback of requiring a heat gun to shrink the tubing (which sometimes means a very long extension cord, but I use them on top of a 97 foot tower), nor will it fill a hole where coax passes through like coax seal.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>Have a good day:')
>.
>Don't buy goods made in France or Germany and vacation somewhere else!

2849. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 19:32:51 UTC
From: Hoss <hoss200325@hotmail.com>
Message-ID: <DFBkb.17247$wj.10121@twister.austin.rr.com>
Source record: 106315

Unless it is not working for you, the best-cheapest-simplest antenna is the one that you have. It's is already paid for and installed!

Harold
WD5KCA
"KB1IBE" <dslesh@ttlc.net> wrote in message
news:vp5bbn599m1p8d@corp.supernews.com...
> Hello folks,
> I am experimenting with QRP-level antennas and wondered what the
> best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> dipole up)
>
> Thnx in Advance!
> 73's Dave
> WN1QIN / KB1IBE
>
>

2850. Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 21:19:48 UTC
From: Bill <ojisan0@mchsi.com>
Message-ID: <UdDkb.821139$YN5.830306@sccrnsc01>
Source record: 106316

I'm in need of a Rohn BPL45G to convert a standard 10 foot section of Rohn
45 to a flat top for installing a thrust bearing.
If anyone has one in good conditon or a new on laying around pleae let
me know what you would be asking for it.
73 Bill W4OM

2851. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 21:51:37 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <JHDkb.112991$qj6.6298006@news1.news.adelphia.net>
Source record: 106317

David Robbins wrote:

> ARGH! another thread that will never die... time to 'ignore' this one also.
> don't you guys realize you will never agree on anything on here? you talk
> in circles around and around the same dogmatic circles never seeing that you
> are all saying the same thing in different terms and arguing around nits
> that don't matter in the real world.

I think that's the point. Cecil and his buds are doing this for
entertainment.

- Mike KB3EIA -

2852. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 22:07:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp62oi4i4i5s99@corp.supernews.com>
Source record: 106318

The only "inconsistency" is that an SWR meter is obviously NOT a "TLI",
or transmitter loading indicator, as you've been so kind as to
graphically point out.

Roy Lewallen, W7EL

Reg Edwards wrote:
> To anybody interested.
>
> We have a HF Transmitter + 50-ohm coax + SWR meter + Tuner + Feedline of any
> Zo + Antenna.
>
>
> Suppose it is all tuned-up and ready to go. The transmitter is loaded with
> exactly 50-ohms resistive.
>
>
> Now change the 50-ohm coax to shorter length of 75-ohm Zo.
>
>
> As everybody agrees (after perhaps a little meter recalibration) the SWR
> meter indication will not change. BUT THE TRANSMITTER WILL NOW BE
> INCORRECTLY LOADED.
>
>
> Where does the inconistency lie ? Does it lie in the change in effective
> source impedance?
>
>

2853. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-19 23:49:23 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310191549.d4523d4@posting.google.com>
Source record: 106169

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<m0phov4fis5eqbdtou40fjhct35pr2fus3@4ax.com>...
> On 12 Oct 2003 03:24:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> wrote:
>
> >>Art Unwin, KB9MZ wrote:
> >>"The markings are 3600 - 5000 KC."
> >It was used in a radio or transmitter operating in that range. (German WW II
> >SK10?)
> >
> >Yuri
>
> Hi Yuri,
>
> More probable is Marine DF.
>
> 73's
> Richard Clark, KB7QHC

After digging into this subject so that I fully understand it I found
that this particular antenna did not work as it should have done. This
'dummy' assumed that I could obtain any Q that I wanted, however
actual inductor was very inefficient for top band use (very
broadbanded because of losses.)
I went from 4 inch diameter inductance windings to
a 12 inch o/a diameter with 0.6, O.D. copper tubing for a total length
for the inductor of 35 inches. My intention is to now flatten the
copper tubing so the edges to provide minimum interwinding
capacitance.
However I do want the maximum Q available so the antenna is narrow
banded and inductance change is made by lessening the inductance
length for moving around the band.(or possibly the insertion of a
brass rod)

What other options do I have for increasing Q other than silver
plating of the copper?
I opted away from LITZ wire as I figured that top band was too
high a frequency to benefit from its properties.
Any comments or discussion of the subject would be very apreciated
Best regards
Art

2854. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 00:32:37 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0310191632.79f5f77@posting.google.com>
Source record: 106170

"KB1IBE" <dslesh@ttlc.net> wrote in message news:<vp5bbn599m1p8d@corp.supernews.com>...
> Hello folks,
> I am experimenting with QRP-level antennas and wondered what the
> best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> dipole up)

You already have the best-simplest-cheapest QRP antenna.

> Thnx in Advance!
> 73's Dave
> WN1QIN / KB1IBE

w3rv

2855. Directional antenna wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 01:03:25 UTC
From: Peter Jason <paul@colonel.com.au>
Message-ID: <bmvc6c$22gc$1@otis.netspace.net.au>
Source record: 106171

I need some info on hand-held directional antenae.
Please help

2856. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 01:52:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bmvf5bahn1@sparta.btinternet.com>
Source record: 106172

> The only "inconsistency" is that an SWR meter is obviously NOT a "TLI",
> or transmitter loading indicator, as you've been so kind as to
> graphically point out.
==========

It would be more true if you had said the SWR meter is not being used as an SWR meter because there's no SWR for it to measure.

There's an inconsistency because the line between transmitter and meter is not 50 ohms. The Tx is incorrectly loaded but neither meter scale gives any indication of it to the user. It could be a serious matter but there's no warning. The operator is allowed to believe he has set up the equipment correctly.

A TLI suffers from the same disadvantage as an SWR meter - it gives the correct answers only when making measurements on 50-ohm lines. This should not be surprising. They have identical circuits.

But when there is no line of any impedance, just a few inches of wire, the TLI indicates correctly. Whereas the SWR meter requires at least a 1/4-wavelength of 50-ohm line before it stops being dishonest. And it doesn't stop telling white lies even on longer lengths.

2857. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 01:53:27 UTC
From: private-email@telus.net
Message-ID: <194da23a.0310191753.23c20135@posting.google.com>
Source record: 106173

Hello....

Yikes what a big production. 15 years ago I had had two antennas roughly 100ft away from the rig and I buried both coax cables with no issues. One was Radio Shack/Tandy 8U the other was made by Carol Cable Co (Again 8U).

The coax was average to low quality and it lasted with no change in SWR or performance until the day I moved out 10 years later. It probably is still there and would likely work! If you are still worried go to Revy or Totem and purchase some platic PVC conduit and run the cable through that. Stay away from goose greese or whatever else they are suggesting you spread on your coax, what a mess it would be......

Yuk...

Homac

Roger Halstead <newsgroup@rogerhalstead.com> wrote in message news:<0pl5pv41c269s43snic05ndrk055b1voqa@4ax.com>...
> On Sat, 18 Oct 2003 21:18:02 GMT, helmsman
> <helmsmandelete@mindspring.com> wrote:
>
> >yea right <spam@spam.spam> wrote:
> >
> >>I would like to bury my coax for a distance of about 20ft. The location
> >>consist of 6" of crushed decorative rocks over the top of very rocky soil.
> <SNIP>
> >>Anybody have any suggestions?
> >
> I can't find the original post, and going to Google to get it would be
> starting another thread, soooo,,,, I'm just going to insert here.
>
> The answer is one of those , "It all depends" on what you want for
> reliability. It also depends on whether you will have any connections
> underground. OTOH, connections underground are little different than
> connections above ground. They should be treated the same.
>
> Crushed rock and very rocky soil are about the worst location for
> burying coax. PVC conduit is *cheap*, or at least relatively
> inexpensive, particularly if you are only going to have one run of
> coax. I have 7 coax cables 3 TV RG-6 cables, two rotor cables, a
> power cable tot he 2-meter preamp and some other assorted *stuff* run
> through mine. I use a 75 foot run of 4 inch PVC to a junction box on
> the tower.. http://www.rogerhalstead.com/cablebox.htm

>
> >Go to the hardware and get a tube of silicon sealant and seal the
> >ends, if you don't think that's enough seal one end and shoot nitrogen
> >gas in the hose to displace the air and then seal it quickly.
>
> A point or two here...If you want to force N2 through the coax you
> need *both* ends open. However it *will* breathe as pressure changes
> with temperature. Do NOT seal both ends of a coax run. Do the best
> possible job up on top and leave the end in the house unsealed.
> IF you seal both ends the pressure will eventually equalize. Then with
> each temperature change it will either pressurize, or draw a vacuum.
> This will eventually draw in moisture. I use heat shrink tubing on
> top of the tower and fill the connectors with DC-4 silicon grease.
> This works at least up through 440 and for all legal amateur power
> levels.
>
> SPLICES: The easiest and surest way to seal a splice from the weather
> is to go to your local electrical supply house and purchase a length
> of 3M (TM) 0800 IMCSN .80/.22 20/5/6mm flooded heat shrink tube for
> RG-8 size cables. The stuff is *about* $10 for a 40 inch length. It
> is coated inside with something akin to hot melt glue. It not only
> does a tremendous job of weatherproofing, but adds mechanical strength
> as well. Don't be cheap and expect to reuse the connectors although
> you might get lucky and be able to do so.
>
> "Unshrunk" the tubing will easily fit *over* a PL250, or N connector.
> That .8 indicates the inside diameter prior to shrinking. It will
> shrink all the way to 0.22 inches. Make your splice using either a
> male to female connection, or two males with a barrel connector in
> between. Slip a length of the heat shrink tubing long enough cover
> the entire splice and extend at least 1 1/2 to 2 inches beyond the
> connectors onto the coax jacket.
> When applying heat to shrink the tube onto the splice be sure and
> start in the middle and work outward. IF you start on the ends it will
> look like a snake that just swallowed a very big frog by the time you
> get any where near the center<:-))
> This method does a far neater and better job than coax seal and tape.
> Less mess, adds strength, and is as waterproof as you are going to
> get. It has the drawback of requiring a heat gun to shrink the tubing
> (which sometimes means a very long extension cord, but I use them on
> top of a 97 foot tower), nor will it fill a hole where coax passes
> through like coax seal.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
>
> >Have a good day:')
> >.
> >Don't buy goods made in France or Germany and vacation somewhere else!

2858. Re: Opposing BPL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 02:24:00 UTC
From: brianburke@juno.com
Message-ID: <f45722ac.0310191824.1c24234f@posting.google.com>
Source record: 106174
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.policy

k4yz@aol.com (Steve Robeson, K4CAP) wrote in message
news:<5c01b95b.0310181806.72c3e588@posting.google.com>...
> brianburke@juno.com (Brian) wrote in message
news:<f45722ac.0310180656.4b0945af@posting.google.com>...
>
> > Its a complex issue. Thank goodness we have lawyers and engineers to
> > figure it all out for us.
>
> Heaven forbid that you'd ever take the initiative to think for yourself, Brain.
>
> Steve, K4YZ

Apparently you didn't see Phil's answer.

Pull your head out - "The "pop" heard around the world."

2859. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 02:37:55 UTC
From: k4yz@aol.com
Message-ID: <5c01b95b.0310191837.3dbd9e9@posting.google.com>
Source record: 106175
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

brianburke@juno.com (Brian) wrote in message
news:<f45722ac.0310151858.755a1d16@posting.google.com>...

> > > What does BPL sound like? Can someone post a wav file somewhere so it can
> > > be identified? Is it worse that the Pennsylvania QSO party?
> >
> > Did someone take over a frequency you owned?

> Mike, that was kinda rude.

Whoa....BRAIN suggesting to someone else what is rude!

Steve, K4YZ

2860. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 03:23:56 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310191923.30d942e@posting.google.com>
Source record: 106176

Mike Coslo <mcoslo@adelphia.net> wrote in message
news:<JHDkb.112991$qj6.6298006@news1.news.adelphia.net>...
> David Robbins wrote:
>
>
> > ARGH! another thread that will never die... time to 'ignore' this one also.
> > don't you guys realize you will never agree on anything on here? you talk
> > in circles around and around the same dogmatic circles never seeing that you
> > are all saying the same thing in different terms and arguing around nits
> > that don't matter in the real world.
>
> I think that's the point. Cecil and his buds are doing this for
> entertainment.

:-) Gee, I think Cecil is trying to carry this one by himself. I
don't see any of "his buds" on the list of contributors. Certainly
Tom, Ian, Roy and I are in very close agreement about this topic.

It is worth a step back from all this, though. If the lurkers can get
the single idea that it's the _current_ distribution on an antenna
structure that ultimately matters, not any voltages (whether we can
agree about them or not), then they'll have gained something of value.

If they also pick up some simple things like "electric fields are
always very nearly perpendicular to the surface of good conductors"
and "the potential between two points in general depends on the path
you take," that would be a nice plus. If they get curious and go
learn more about those things, that would be wonderful.

Cheers,
Tom

2861. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 03:36:57 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310191936.31744cbd@posting.google.com>
Source record: 106177

Stuff a wad of fiberglass insulation in each one? But if you make the plug too long and it gets wet, it will add some weight to the ends of the elements. Foam in insulation around a small tube instead of a rod, so you don't have to withdraw the rod? (That "Great Stuff" polyurethane foam is really sticky!)

If it's really an organ-pipe or whistle effect, that should do it. If the mode is a bending of the elements, you need some different damping for that. I know a company that specializes in vibration damping in all sorts of situations that could undoubtedly help you--for a price. But if you think about the modes, you can probably take care of it with something like Nylon twine between the elements at the right points. Expect to have to replace it occasionally because of UV exposure, or use UV-stabilized line.

Cheers,
Tom

fractenna@aol.com (Fractenna) wrote in message news:<20031019091150.15913.00000836@mb-m13.aol.com>...
> One solution (I have seen work) is to squirt 'Great Stuff' into a foot or so of
> the open end, and let it form around a skewer. After it dries, pull the skewer
> out for the drip hole.
>
> Great Stuff (comes in a can) is a foam insulation, much like styrofoam, used to
> seal window joints, and so on. It is transparent to RF below about 3 GHz
>
> When you squirt it in it hardens up and suppress the driven oscillations.Bummer
> that you have to pull down the antenna though...
>
> Also, some folks use nylon rope in the elements as a damper. Perhaps someone
> who has succeeded with that will respond.
>
> Best of luck on this or other solutions.
>
> 73,
> Chip N1IR

2862. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 04:25:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9365e5_1@corp.newsgroups.com>
Source record: 106178

Mike Coslo wrote:
> I think that's the point. Cecil and his buds are doing this for
> entertainment.

Sure beats mowing the yard. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2863. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 04:31:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f93673f_1@corp.newsgroups.com>
Source record: 106179

Reg Edwards wrote:
> Whereas the SWR meter requires at least a
> 1/4-wavelength of 50-ohm line before it stops being dishonest.

I asked that question over on sci.physics.electromag. A formula was
provided. Using the dimensions of RG-213, two feet is long enough
to establish the 50 ohm environment at 10 MHz.

SWR = [sqrt(Pfwd)+sqrt(Pref)]/[sqrt(Pfwd)-sqrt(Pref)]
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2864. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 04:59:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f936df1_1@corp.newsgroups.com>
Source record: 106180

Tom Bruhns wrote:
> :-) Gee, I think Cecil is trying to carry this one by himself. I
> don't see any of "his buds" on the list of contributors. Certainly
> Tom, Ian, Roy and I are in very close agreement about this topic.

I agree that *measuring* the voltage is a challenge.

> It is worth a step back from all this, though. If the lurkers can get
> the single idea that it's the _current_ distribution on an antenna
> structure that ultimately matters, ...

It's hard to develop that H-field without an E-field. The feedpoint
impedance of a standing wave antenna gives a deductive clue to the
magnitude of the E-field and it is not the same as a traveling wave
antenna. It also varies up and down the standing wave antenna.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2865. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 05:40:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp6tbe1mocjjee@corp.supernews.com>
Source record: 106181

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Here's an interesting quote from _Transmission Lines, Antennas, and
>> Wave Guides_, by King, Mimno, and Wing: *It is fundamentally incorrect
>> to treat a center-driven antenna as though it were the bent-open ends
>> of a two-wire line.*
>
>
> Funny, I thought Maxwell's equations worked for either case. Did you also
> know that *It is fundamentally incorrect to treat a wolf like a dog.*
>
> If you slowly increase the spacing and angle between the two conductors
> of a transmission line, at exactly what spacing and angle does it magically
> cease being a transmission line and become an antenna requiring a
> completely
> different treatment? Please be specific as to the exact spacing and
> angle at
> which it becomes "fundamentally incorrect" to treat the configuration as a
> transmission line. Incidentally, I don't usually use circuit theory for
> transmission lines.

That question is a lot like asking for the exact speed an object has to be moving before non-relativistic becomes invalid, or how small before quantum theory has to be used.

I maintain that the authors of that book know more than you do about the topic by at least an order of magnitude -- more likely about three. If you really want to know the answer to your silly question, you should study what they've written and try to understand it, rather than posting it as a question to me on this newsgroup.

> . . .

Roy Lewallen, W7EL

2866. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 08:02:51 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <CSisJVFra5k$EAE5@ifwtech.co.uk>
Source record: 106183

Reg Edwards wrote:
>
>> The only "inconsistency" is that an SWR meter is obviously NOT a "TLI",
>> or transmitter loading indicator, as you've been so kind as to
>> graphically point out.
>============================
>
>It would be more true if you had said the SWR meter is not being used as an
>SWR meter because there's no SWR for it to measure.
>
>There's an inconsistency because the line between transmitter and meter is
>not 50 ohms. The Tx is incorrectly loaded but neither meter scale gives any
>indication of it to the user. It could be a serious matter but there's no
>warning. The operator is allowed to believe he has set up the equipment
>correctly.
>
In that case, calling the meter a "Transmitter Loading Indicator" will
only *add* to the confusion!

The rho/SWR meter has only ever been claimed to measure conditions on
the *load* side of itself. It knows nothing about conditions on the
transmitter side; and until Reg came along, nobody ever claimed that it
could.

Now here comes Reg, saying "Let's all call it a Transmitter Loading
Indicator!" Later, he realises that his "TLI" will only work correctly
if the connecting line between the transmitter and the meter is (a) of
impedance Zo, or (b) vanishingly short.

And his reaction to that: blame the meter! Me, I'd go looking for that
bloke who invented "TLI"...

>A TLI suffers from the same disadvantage as an SWR meter - it gives the
>correct answers only when making measurements on 50-ohm lines. This should
>not be surprising. They have identical circuits.
>
>But when there is no line of any impedance, just a few inches of wire, the
>TLI indicates correctly. Whereas the SWR meter requires at least a
>1/4-wavelength of 50-ohm line before it stops being dishonest. And it
>doesn't stop telling white lies even on longer lengths.
>
>

What Reg refuses to accept is that there are two alternative definitions
and usages of the term "SWR":

Definition 1. Given an impedance Z at any single point in any circuit, and a system reference impedance Zo, then SWR is a *mathematical* function of Z and Zo that tells you how close together the two impedances are.

Definition 2. Given a transmission line that is terminated in an impedance Z that is different from the line's own characteristic impedance Z(line), then a standing wave of varying voltage and current will appear on the line. If the line is long enough to identify a voltage maximum and a voltage minimum (an electrical quarter-wavelength away) then SWR is defined as the ratio Vmax/Vmin.

That was the original definition of SWR, but it has severe limitations. For a lossless line with a characteristic impedance the same as Zo, the two definitions of SWR are related by a simple, fixed mathematical formula. But that's a special case; in all other cases, definition 2 has to be applied with care (or you may even judge that it isn't valid at all).

Definition 1 is by far the most common definition and usage of "SWR" - it's just one of several alternative measures of impedance match (others including rho, return loss, S11 etc). All these different alternatives are inter-related by defined conversion formulae. RF/microwave engineers move freely between all of them, using whichever term is most convenient at the time, or more normal in that particular area of electronics.

It's no big deal. Life is full of examples where the same word is used to mean many subtly different things. The whole of the electronics/RF/microwave engineering profession is very comfortable with "SWR" meaning more than one thing. Most amateurs never need to think about that difference; but if they do, they don't find it difficult.

AFAIK, Reg is the only person on the planet who understands all of this perfectly, but refuses point-blank to accept it.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2867. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 08:17:54 UTC
From: rfmscpa@earthlink.net
Message-ID: <b0ce6aad.0310200017.67358823@posting.google.com>
Source record: 106182

For 40 meters local (out to 300 miles during the day & 800 - 1000 @ night) the 40 meter dipole @ 20' up is a winner. For 40 meters DX, try the extended double zepp (http://www.sadona.com/news2/ant_dblzepp.html) up @ 60 feet (at least). If you own a tuner & want to work portable, try the MINIBAC (http://www.qsl.net/kq6xa/antenna/), very cheap & very versatile.

Many other ideas @

http://www.cebik.com/radio.html

"KB1IBE" <dslesh@ttlc.net> wrote in message news:<vp5bbn599m1p8d@corp.supernews.com>...
> Hello folks,
> I am experimenting with QRP-level antennas and wondered what the
> best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> dipole up)
>
> Thnx in Advance!
> 73's Dave
> WN1QIN / KB1IBE

2868. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 09:14:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp79sc2jbl4pa2@corp.supernews.com>
Source record: 106185

And for anyone doubting this dual definition of SWR, just take a look at Agilent, Narda, or similar web sites, and notice that their high priced and precision terminations all come with an SWR specification. You'll also find SWR specs for test equipment inputs and many other devices not containing transmission lines. These are clear examples of Definition 2.

Roy Lewallen, W7EL

Ian White, G3SEK wrote:
> Reg Edwards wrote:
>
>>
>>> The only "inconsistency" is that an SWR meter is obviously NOT a "TLI",
>>> or transmitter loading indicator, as you've been so kind as to
>>> graphically point out.
>>
>> ============================
>>
>> It would be more true if you had said the SWR meter is not being used
>> as an
>> SWR meter because there's no SWR for it to measure.
>>
>> There's an inconsistency because the line between transmitter and
>> meter is
>> not 50 ohms. The Tx is incorrectly loaded but neither meter scale
>> gives any
>> indication of it to the user. It could be a serious matter but
>> there's no
>> warning. The operator is allowed to believe he has set up the equipment
>> correctly.
>>
> In that case, calling the meter a "Transmitter Loading Indicator" will
> only *add* to the confusion!
>
> The rho/SWR meter has only ever been claimed to measure conditions on
> the *load* side of itself. It knows nothing about conditions on the
> transmitter side; and until Reg came along, nobody ever claimed that it
> could.
>
> Now here comes Reg, saying "Let's all call it a Transmitter Loading
> Indicator!" Later, he realises that his "TLI" will only work correctly
> if the connecting line between the transmitter and the meter is (a) of
> impedance Zo, or (b) vanishingly short.
>
> And his reaction to that: blame the meter! Me, I'd go looking for that

> bloke who invented "TLI"...
>
>
>> A TLI suffers from the same disadvantage as an SWR meter - it gives the
>> correct answers only when making measurements on 50-ohm lines. This
>> should
>> not be surprising. They have identical circuits.
>>
>> But when there is no line of any impedance, just a few inches of wire,
>> the
>> TLI indicates correctly. Whereas the SWR meter requires at least a
>> 1/4-wavelength of 50-ohm line before it stops being dishonest. And it
>> doesn't stop telling white lies even on longer lengths.
>>
>>
>
> What Reg refuses to accept is that there are two alternative definitions
> and usages of the term "SWR":
>
> Definition 1. Given an impedance Z at any single point in any circuit,
> and a system reference impedance Zo, then SWR is a *mathematical*
> function of Z and Zo that tells you how close together the two
> impedances are.
>
>
>
> Definition 2. Given a transmission line that is terminated in an
> impedance Z that is different from the line's own characteristic
> impedance Z(line), then a standing wave of varying voltage and current
> will appear on the line. If the line is long enough to identify a
> voltage maximum and a voltage minimum (an electrical quarter-wavelength
> away) then SWR is defined as the ratio Vmax/Vmin.
>
> That was the original definition of SWR, but it has severe limitations.
> For a lossless line with a characteristic impedance the same as Zo, the
> two definitions of SWR are related by a simple, fixed mathematical
> formula. But that's a special case; in all other cases, definition 2 has
> to be applied with care (or you may even judge that it isn't valid at all).
>
>
> Definition 1 is by far the most common definition and usage of "SWR" -
> it's just one of several alternative measures of impedance match (others
> including rho, return loss, S11 etc). All these different alternatives
> are inter-related by defined conversion formulae. RF/microwave engineers
> move freely between all of them, using whichever term is most convenient
> at the time, or more normal in that particular area of electronics.
>
> It's no big deal. Life is full of examples where the same word is used
> to mean many subtly different things. The whole of the
> electronics/RF/microwave engineering profession is very comfortable with

> "SWR" meaning more than one thing. Most amateurs never need to think
> about that difference; but if they do, they don't find it difficult.
>
> AFAIK, Reg is the only person on the planet who understands all of this
> perfectly, but refuses point-blank to accept it.
>
>

2869. Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 09:14:38 UTC
From: Don.Esteban@gmx.net
Message-ID: <1f578ae6.0310200114.125c264e@posting.google.com>
Source record: 106184

Hi there,

I am currently working on a project which leads to simulate EMC Field coupling to printed circuits. The Field couples into the circuitry through (unwanted) loops and di/monopoles.
I started with modeling a simple loop and a stub. I experienced no problems for the loop, but the stub is driving me crazy:
In order to calculate the output voltage of a PCB antenna for a given geometry and EM-Field at a desired frequency, I need to know the output impedance for this antenna. I didn't find anything on the web on calculating/extracting it.
This brings up the question, wether it is possible or not? If yes, how can i perform the calculation? Do you have any suggestions? If I am am totally wrong, please feel free to correct me.

Thanks in Advance

Greets

Daniel

2870. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 10:04:02 UTC
From: Bill <brianspam86@iquest.net>
Message-ID: <mqOkb.5081$W16.3530@newsread2.news.atl.earthlink.net>
Source record: 106186

I use 1/2 Wave 40m dipole in my attic...it's no DX magnet but I have earned WAS every year since 1999 by using it and my QRP rigs. I think in 4 years my DXCC count is now up to 41 countries.

I use a Ten Tec antenna tuner or the built in tuner in my K1 and I can get it to match this dipole on 15, 20, 30, and 40m...with 40m and 30m seeming to work the best.

"Hoss" <hoss200325@hotmail.com> wrote in message
news:DFBkb.17247$wj.10121@twister.austin.rr.com...
> Unless it is not working for you, the best-cheapest-simplest antenna is
the
> one that you have. It's is already paid for and installed!
>
> Harold
> WD5KCA
> "KB1IBE" <dslesh@ttlc.net> wrote in message
> news:vp5bbn599m1p8d@corp.supernews.com...
> > Hello folks,
> > I am experimenting with QRP-level antennas and wondered what the
> > best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> > dipole up)
> >
> > Thnx in Advance!
> > 73's Dave
> > WN1QIN / KB1IBE
> >
> >
>
>

2871. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 13:02:52 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F93DCFC.5A943160@cwis.net>
Source record: 106187

I'm not sure why people think a dipole, even a fairly low
one, isn't 'good' for DX. You may have to pick your times,
and those times won't always be convenient, but working DX
is certainly not impossible, or even very eceptional.
'Doc

2872. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 13:21:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn0nhd$t7e$1@hercules.btinternet.com>
Source record: 106188

"Roy Lewallen" wrote > And for anyone doubting this dual definition of SWR, just take a look at
> Agilent, Narda, or similar web sites, and notice that their high priced
> and precision terminations all come with an SWR specification. You'll
> also find SWR specs for test equipment inputs and many other devices not
> containing transmission lines. These are clear examples of Definition 2.

==========
Roy,

When trying to sell high-priced instruments, including those which are not associated with transmission lines, manufacturers would be stupid not to communicate with prospective customers in terms which customers imagine they understand.

Mention of SWR no doubt sounds highly technical, but is confusing, perhaps beyond comprehension, to people who have no connection with lines.

Manufacturers are not paid to educate their customers. They may claim it's a part of their job in the sales blurb but we are familiar with sales-blurb writers standards of education.

For example, only suckers accept antenna performance specifications as being definitions of anything.

Roy, you really are scraping the bottom of the barrel to find some support for the nonsense and confusing-to-learners waffle which fogs and enshrouds what goes on on that short length of wire between HF transmitter and so-called SWR meter.

Old habits die hard.

Reg, G4FGQ

2873. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 13:25:23 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F93E243.71D783C0@cwis.net>
Source record: 106189

Thierry,
Please remove me from your 'art' list.
'Doc

2874. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 14:05:14 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3F93EB9A.7040804@psu.edu>
Source record: 106190
Cross-posted to: alt.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.policy

Steve Robeson, K4CAP wrote:
> brianburke@juno.com (Brian) wrote in message
news:<f45722ac.0310151858.755a1d16@posting.google.com>...
>
>
>>>>What does BPL sound like? Can someone post a wav file somewhere so it can
>>>>be identified? Is it worse that the Pennsylvania QSO party?
>>>
>>> Did someone take over a frequency you owned?
>>
>
>>Mike, that was kinda rude.
>
>
> Whoa....BRAIN suggesting to someone else what is rude!

Whadid I doo? Heck just last weekend in a contest on 40 and 80 meters,
I went to some open frequencies and asked "is the frequency in use? And
several times a ham wouls reply and say "yes it is". Then nothing would
happen. Silence.

If those hams didn't own those frquencies they wouldn't lord over them
would they? No wonder they don't like us contesters. Those poor guys had
to sit by their radios all day to keep teletresspassers like me off
their frequencies!

- Mike KB3EIA -

2875. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 14:21:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f93f1b1_3@corp.newsgroups.com>
Source record: 106191

Roy Lewallen wrote:
> I maintain that the authors of that book know more than you do about the
> topic by at least an order of magnitude -- more likely about three.

That doesn't prove you understand what they said.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2876. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 14:49:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <DF3cckB+XkEAFv@ifwtech.co.uk>
Source record: 106193

Reg Edwards wrote:
>"Roy Lewallen" wrote > And for anyone doubting this dual definition of SWR,
>just take a look at
>> Agilent, Narda, or similar web sites, and notice that their high priced
>> and precision terminations all come with an SWR specification. You'll
>> also find SWR specs for test equipment inputs and many other devices not
>> containing transmission lines. These are clear examples of Definition 2.
>
>==========
>Roy,
>
>When trying to sell high-priced instruments, including those which are not
>associated with transmission lines, manufacturers would be stupid not to
>communicate with prospective customers in terms which customers imagine they
>understand.
>
>Mention of SWR no doubt sounds highly technical, but is confusing, perhaps
>beyond comprehension, to people who have no connection with lines.
>
>Manufacturers are not paid to educate their customers. They may claim it's a
>part of their job in the sales blurb but we are familiar with sales-blurb
>writers standards of education.
>
>For example, only suckers accept antenna performance specifications as being
>definitions of anything.
>
>Roy, you really are scraping the bottom of the barrel to find some support
>for the nonsense and confusing-to-learners waffle which fogs and enshrouds
>what goes on on that short length of wire between HF transmitter and
>so-called SWR meter.
>
>Old habits die hard.

If we could wipe the slate clean and start again, RF engineering could probably manage quite well without the term "SWR".

But we can't. In the real world of radio communication, "SWR" is used everywhere. Even absolute beginners have already heard about it. Nothing will change that.

Roy and I are starting from where people actually are: they've already heard about SWR, so now they need to know what it means. And in the end, it isn't all that hard to understand.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2877. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 15:00:51 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f93fa40_4@news1.prserv.net>
Source record: 106192

"Daniel" <Don.Esteban@gmx.net> wrote in message
news:1f578ae6.0310200114.125c264e@posting.google.com...
> Hi there,
>
> I am currently working on a project which leads to simulate EMC Field
> coupling to printed circuits.

Well, that sentence makes little sense, but let's plow onward:

The Field couples into the circuitry
> through (unwanted) loops and di/monopoles.
> I started with modeling a simple loop and a stub. I experienced no
> problems for the loop, but the stub is driving me crazy:
> In order to calculate the output voltage of a PCB antenna for a given
> geometry and EM-Field at a desired frequency, I need to know the
> output impedance for this antenna. I didn't find anything on the web
> on calculating/extracting it.

Most good antenna theory is contained in an old fashioned item called books.
Learn what they are and how to read them. Kraus, Johnson, Balanis, and many
others. Even Terman, whose forte was starting Silicon Valley, had lots of
good information.

> This brings up the question, wether it is possible or not? If yes, how
> can i perform the calculation? Do you have any suggestions?

Well, you should have paid attention in fields and waves class. If you
didn't have that class, you shouldn't be expected to work on the project you
tried to describe in the first sentence.

If I am am
> totally wrong, please feel free to correct me.
>
> Thanks in Advance
>
> Greets
>
> Daniel

--
Crazy George
Remove N O and S P A M imbedded in return address

2878. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 16:04:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r018pv4hakot4sn5gu2aoms2t7pql2aee5@4ax.com>
Source record: 106194

On 19 Oct 2003 16:49:23 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>What other options do I have for increasing Q other than silver
>plating of the copper?

Hi Art,

Make it as small as possible, with as large as possible conductors.
Look at any of the small, tunable, loop antennas on the market.

As a bonus, you also get to participate in the eternal debate about
the voltage found at the ends of a dipole when your own construction
begins arcing big time.

73's
Richard Clark, KB7QHC

2879. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 16:13:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i028pvsjaqsc292ejrd6i1bo7a44cos55t@4ax.com>
Source record: 106195

On 20 Oct 2003 02:14:38 -0700, Don.Esteban@gmx.net (Daniel) wrote:

>Hi there,
>
>I am currently working on a project which leads to simulate EMC Field
>coupling to printed circuits.

Without discussion of a frequency or band of frequencies, you are sure
to be either deeply disappointed or vastly rewarded in results.

> The Field couples into the circuitry
>through (unwanted) loops and di/monopoles.

Certainly, this is true at all scales. Your problem is not that so
much as it is a matter of degree. As this turns on the same issue of
what frequency, it also turns on the issue of what size? Beyond that,
it becomes a problem of how near (or how far). You may note that
there is a lot of dimensionality here that is wholly lacking in your
question.

>I started with modeling a simple loop and a stub. I experienced no
>problems for the loop, but the stub is driving me crazy:
>In order to calculate the output voltage of a PCB antenna for a given
>geometry and EM-Field at a desired frequency, I need to know the
>output impedance for this antenna. I didn't find anything on the web
>on calculating/extracting it.

This, in fact, is one of the easiest things to determine - if you know
the frequency and physical dimension.

>This brings up the question, wether it is possible or not? If yes, how
>can i perform the calculation? Do you have any suggestions? If I am am
>totally wrong, please feel free to correct me.
>
>Thanks in Advance
>
>Greets
>
>Daniel

Hi Daniel

How? The clues above give a significant indication.

73's
Richard Clark, KB7QHC

2880. Re: Directional antenna wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 17:10:35 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310200910.2c994f63@posting.google.com>
Source record: 106196

"Peter Jason" <paul@colonel.com.au> wrote in message
news:<bmvc6c$22gc$1@otis.netspace.net.au>...
> I need some info on hand-held directional antenae.
> Please help

To help, we need some info on your needs.

(Like frequency, bandwidth, desired directionality characteristics,
power levels if for transmitting, mechanical constraints (size,
weight, survivability, ...))

2881. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 17:15:42 UTC
From: Stef <vee_ee_too_oh_doubleyou_ell_@rac.ca>
Message-ID: <eo58pv8g7gp2p23rv18vst2cls4i6712f9@4ax.com>
Source record: 106197

>> The reason is: the impedance at the solder point is not 300 ohms and
>> with your balun, you're inserting more losses .
>
>True, but without a balun, one is introducing common mode effects.
>I, personally, would use a 1:1 choke at the balanced to unbalanced
>connection point.

There sure is RFI coming from the coax . I should try it. I'll
disconnect my coax and try 10 turns of coax as a balun. I'll know for
sure. Or would the "bead baluns" be better ?

2882. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 18:34:06 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <vp8al128qq9g7c@corp.supernews.com>
Source record: 106198

Does seem rather odd. :)

Regards,
Jim
--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.
"Bob" <bob> wrote in message
news:3f92b866$0$261$cc9e4d1f@news.dial.pipex.com...
> I have serious reservations about someone asking openly for a specific
> version of PolarPlot on this newsgroup without coming direct to me, which
is
> very simply done from my web site.
>
> Bob G4HFQ
> www.g4hfq.co.uk
>
>

2883. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 19:40:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn1dmm$1pm$1@sparta.btinternet.com>
Source record: 106199

Ian, misguiding learners, undermining the foundations of radio education, is my main objection to the ill-educated do-gooder discussions which take place on this newsgroup.

Although at first I really did suspect your typist had made a translation error between your dictation and her keyboard, I now see you insist you were right first time.

You said -

> >> No - I meant exactly what I said. The meter can only
> >> indicate the rho/SWR of whatever is connected
> >> downstream (load side) of the meter itself.
> >>

Ian, this statement will mislead and undermine students of radio for the remainder of their careers. (You were one yourself.)

For their (and your) benefit it must be stated the so-called SWR/Rho meter will indicate NOTHING about what lies on the antenna side of it EXCEPT, indirectly, the magnitude RELATIVE to 50 ohms of the INPUT IMPEDANCE the meter immediately sees looking towards the antenna.

Obviously, the impedance seen by the meter is that which, at HF, terminates the other length of line, if one exists, between the transmitter and meter.

If, AND ONLY IF, the transmitter-to-meter line is 50-ohms then the 50-ohm meter will indicate |Rho| relative to 50-ohms at the meter end of that line. If the line is not 50-ohms then, although the meter may indicate SWR =1 or Rho = TLI = 0, the transmitter will be loaded with something different from 50 ohms. Highly unsatisfactory!

The impedance of this line must NOT be neglected, as somebody said, on the grounds that it forms part of the source impedance as seen by the meter, and can be treated like the internal resistance of the transmitter as irrelevant.

Alternatively, if the 50-ohm Tx-to-Meter line is long enough then that's the line the meter indicates the SWR on. It is common knowledge SWR/Rho determinations MUST begin by determining the value of the reflection coefficient at the point where the reflection originates. ie., where the meter is located along the uniform length of line.

The G5RV demonstrates the meter is ignorant of what may be happening on the antenna side of the meter. Whatever the meter indicates it will NOT correspond to |Rho| or SWR on the antenna's high-Zo balanced feedline. But that's OK. Nobody wants to know anyway.

(Sooner or later someone will re-discover the special case that when the transmission system is 50 ohms all the way from Tx to antenna, the meter appears to measure |Rho| in both directions. This is because |Rho| is sensibly constant in magnitude along the whole line. Actually |Rho| is indicated looking back towards the transmitter and, by reversing the meter in the line, thru-power is indicated looking towards the antenna. This special case is the norm at UHF where line and connector dimensions are critical and engineering economics force simplifications, including simplification of underlying formulae. Chains of matrix algebra fit very nicely into number-crunching computer software.

Now expect sombody who is still missing the point to say "not if the line is 1/2-wavelength long." But who wants a half-wavelength of line on 1.9 MHz between the transmitter and swaarrr meter.

Reg, G4FGQ

2884. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 19:43:37 UTC
From: richardharrison@webtv.net
Message-ID: <21997-3F943AE9-162@storefull-2318.public.lawson.webtv.net>
Source record: 106200

Art Unwin, KB9MZ wrote:
"What other options do I have for increasing Q other than silver plating of the copper?"

Art has access to yhe 1955 edition of Terman`s "Electronics and Radio Engineering", I believe. On page 32 Terman writes:
"In designing single-layer coils, the highest Q in proportion to size is obtained when the length of the winding is somewhat less than the diameter of the coil."

It appears Art went in the right direction by increasing the coil diameter to 12 inches from 4 inches. Nonetheless, his coil is 35 inches long.

If Art doesn`t want to use a high permeability core, and his coil already has the required inductance, it seems fewer turns on a larger diameter form would have a higher Q, so the length of the coil can be less than the diameter of the coil for the same inductance.

It is good to space the turns by about the diameter of the conductor, or slightly less. Insulation can be lossy and tends to rise in loss by the cube of the frequency, so Terman warns about cotton or enamel covered wire and insulating material used in coil forms at high frequencies. See page 35 in his 1955 edition.

The existing coil can be measured for inductance, if it is right, and a coil calculator or program can be consulted to get a coil with better proportions.

To tune a circuit, a variable capacitor may maintain a better Q than a variable inductance, (variometer) but at 160 meters, permeability tuning of the coil should be practical if the power level isn`t too high.

Best regards, Richard Harrison, KB5WZI

2885. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 20:53:20 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn1i00$b3$1@titan.btinternet.com>
Source record: 106202

If both coil diameter and length are doubled, and number of turns are
reduced to 71% of the number you started with, then you will end-up with the
same inductance as before but the loss resistance will be 71% smaller.

You can continue to do this until radiation resistance becomes the
predominant loss.

Download program SOLNOID2 for coil design and to study these effects.
--
=======================
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
=======================

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0310191549.d4523d4@posting.google.com...
> Richard Clark <kb7qhc@comcast.net> wrote in message
news:<m0phov4fis5eqbdtou40fjhct35pr2fus3@4ax.com>...
> > On 12 Oct 2003 03:24:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> > wrote:
> >
> > >>Art Unwin, KB9MZ wrote:
> > >>"The markings are 3600 - 5000 KC."
> > > >It was used in a radio or transmitter operating in that range. (German
WW II
> > > >SK10?)
> > > >
> > > >Yuri
> >
> > Hi Yuri,
> >
> > More probable is Marine DF.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> After digging into this subject so that I fully understand it I found
> that this particular antenna did not work as it should have done. This
> 'dummy' assumed that I could obtain any Q that I wanted, however
> actual inductor was very inefficient for top band use (very
> broadbanded because of losses.)
> I went from 4 inch diameter inductance windings to
> a 12 inch o/a diameter with 0.6, O.D. copper tubing for a total length
> for the inductor of 35 inches. My intention is to now flatten the

> copper tubing so the edges to provide minimum interwinding
> capacitance.
> However I do want the maximum Q available so the antenna is narrow
> banded and inductance change is made by lessening the inductance
> length for moving around the band.(or possibly the insertion of a
> brass rod)
>
> What other options do I have for increasing Q other than silver
> plating of the copper?
> I opted away from LITZ wire as I figured that top band was too
> high a frequency to benefit from its properties.
> Any comments or discussion of the subject would be very apreciated
> Best regards
> Art

2886. Re: Need PolarPlot v1.6

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 20:53:28 UTC
From: Bob <bob>
Message-ID: <3f944aef$0$19395$cc9e4d1f@news.dial.pipex.com>
Source record: 106201

"J Tabor" <denews@taborsoft.com> wrote in message
news:vp8al128qq9g7c@corp.supernews.com...
> Does seem rather odd. :)
>
> Regards,
> Jim

Very odd indeed, especially when the upgrade to V2 is free for licensed users.

Bob, G4HFQ

2887. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 20:55:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn1i3n$o2g$1@hercules.btinternet.com>
Source record: 106203

```
> Make it as small as possible, with as large as possible conductors.
============================

Rubbish !
```

2888. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 21:25:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9454e5_6@corp.newsgroups.com>
Source record: 106204

Stef wrote:
> There sure is RFI coming from the coax . I should try it. I'll
> disconnect my coax and try 10 turns of coax as a balun. I'll know for
> sure. Or would the "bead baluns" be better ?

Bead baluns would be better but cost more. One could virtually
eliminate common-mode currents with $1000 of bead baluns. :-)

A good engineering rule of thumb is to install a balun whenever
the transmission line changes from unbalanced to balanced.
--
73, Cecil http://www.qsl.net/w5dxp

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2889. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 21:31:53 UTC
From: richardharrison@webtv.net
Message-ID: <15931-3F945449-48@storefull-2316.public.lawson.webtv.net>
Source record: 106206

Cecil, W5DXP wrote:
"We can deduce the ratio of the voltage to current from the feedpoint impedance."

What`s the difference between a 1/4-wave of transmission line and a 1/2-wave dipole?

The transmission line is designed for low radiation and the antenna is designed for high radiation.

Current will be turned around by the open-circuit at the end of the transmission line. At the end of the antenna, displacement current will flow between oppositely polarized parts of the antenna, the earth, and other surrounding objects, and some conduction current will be redirected in the opposite direction on the antenna.

Impedance of the transmission linee is uniform in its presentation to either one of the two traveling waves traversing the line, forward or reflected..

SWR changes along an antenna due to radiation, inefficiencies, irregularities, etc. An average characteristic (surge) impedance is used for antenna calculations.

SWR for the usual open-circuit 1/2-wave dipole:
SWR = Avg. Zo of the antenna / radiation resistance.
Avg. Zo = 276 log 1/periphery of antenna conductor
log is the base 10 unit
periphery is measured in the same units as length, usually in wavelengths.

Loaded antennas tend to be high Q resonant circuits and this limits their bandwidths. Low resistance allows a large current as reactance is cancelled at resonance. The large current causes large voltage drops across the antenna inductance and capacitance. I`ve seen mobile antennas which were ready to fire up coronas at their tips at the slightest excuse. This demonstrates high reactance (energy storage) and low resistance (radiation and loss).

There are several variables which determine the voltage and current at the end of the dipole. The current does not drop to zero simply because the conduction in the forward direction stops. Displacement current continues the flow to some extent. The dipole has a Q, and the wave traveling on the dipole generates a voltage to current ratio related to the size and configuration of the antenna.

You can predict that forward voltage on a transmission line will double at its open-circuit end, and you can predict the forward voltage. I think prediction of voltage at the open-circuit end of an antenna is harder.

Best regards, Richard Harrison, KB5WZI

2890. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 21:35:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f945759_6@corp.newsgroups.com>
Source record: 106205

Roy Lewallen wrote:
> I maintain that the authors of that book know more than you do about the
> topic by at least an order of magnitude -- more likely about three. If
> you really want to know the answer to your silly question, you should
> study what they've written and try to understand it, rather than posting
> it as a question to me on this newsgroup.

Hmmmmmm, perhaps you and your authors would understand the subject better by reading and understanding a good book on quantum electrodymanics. You will not fully understand fields until you accept the fact that photons can have four, not two, polarizations. I maintain that the developers of quantum electro-dynamics know more than you and your authors combined. You have earlier rejected the latest physics theories. I doubt that you will understand fields until you fully understand virtual photons.

(See, two can play your silly argumentum ad verecundiam game.) :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2891. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:13:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f946049_6@corp.newsgroups.com>
Source record: 106208

Richard Harrison wrote:
> The current does not drop to zero simply because
> the conduction in the forward direction stops. Displacement current
> continues the flow to some extent.

Many electrons do not flow through air unless the air is ionized.
"Displacement current" is not understood very well and is a sort
of virtual current. The actual electron flow is taking place in
the rest of the circuit. When a lot of electrons flow between the
plates of a capacitor, for instance, the voltage capability of the
capacitor has been exceeded and it is in failure mode.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2892. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:19:42 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310201419.7e4e2967@posting.google.com>
Source record: 106207

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<r018pv4hakot4sn5gu2aoms2t7pql2aee5@4ax.com>...
> On 19 Oct 2003 16:49:23 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >What other options do I have for increasing Q other than silver
> >plating of the copper?
>
> Hi Art,
>
> Make it as small as possible, with as large as possible conductors.
> Look at any of the small, tunable, loop antennas on the market.
>
> As a bonus, you also get to participate in the eternal debate about
> the voltage found at the ends of a dipole when your own construction
> begins arcing big time.
>
> 73's
> Richard Clark, KB7QHC

Richard,
In my case I need the field around the inductance for coupling
purposes.
To make it smaller a core material would have to be used.
I spoke of flattening the tubing but I am not sure if it would
be worth it to plate or should it be wound ribbon wise as
some of the old Collins inductors or edge wise wound per some
of the commercial inductances.
Going to the large copper winding really showed up as an
improvement in the antenna such that it has wet my appetite !
Regards
Art

2893. Re: Tuning Twinlead Fed G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:23:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn1n8b$4ap$1@hercules.btinternet.com>
Source record: 106209

Cec, do you own shares in Fairite or Amidon? ;o)

All the enquirer needs to do is buy an HF-grade ferrite ring, about 1.5" or 2" in diameter at a car-boot sale, and wind on about 8 distributed turns of 18 or 20 gauge twin, clear-plastic, stranded, speaker wire.

Insert this choke balun at the junction of the coax and the balanced feedline. If it is outdoors dunk it in some water-repelling goo.

For multi-band working make the coax as short as possible and make the balanced feedline long enough for the whole to extend from the antenna to the tuner, with perhaps a little extra.

Reg.

2894. Re: Here it is-BPL full rollout in Va (MANASSAS Va - BPL RED ALERT!!!)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:41:30 UTC
From: phatang <phatang@yahoo.com>
Message-ID: <1066690485.109640@newshost03.voicenet.com>
Source record: 106210
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmvsrr$79c$0@208.206.142.66...
> CHeck this out...
>
>
>
http://www.potomacnews.com/servlet/Satellite?pagename=WPN%2FMGArticle%2FWPN
_BasicArticle&c=MGArticle&cid=1031771619197&path=!frontpage
>

Innovative Web access to shock Manassas
SARI KREIGER
skreiger@potomacnews.com
Saturday, October 18, 2003

Manassas residents will soon be the first in the United States
to buy Internet access over city power lines.
The City Council voted unanimously on Thursday to
grant a franchise to Prospect Street Broadband, LLC.,
bringing a year-long preparation process to fruition.

Residents can purchase the service within 120 days of
the contract signing, which is expected to occur
next week, according to Energy Services Manager Brett Massey.
In May 2002, a small pilot group of city residents and
businesses began using the service. A modem is plugged into
the electrical outlet on one end, and the computer on the
other, to gain high-speed access to the Internet.
"They were very impressed by the speed, reliability
and flexibility," said Utilities Director Allen Todd.

Freda Wallace, an administrative assistant with Robert
Loveless Architecture in Old Town Manassas said the
company has been receiving the service since February.
"We've had good service with it," Wallace said. "The
only time it has been down is because of our
equipment, or because they're testing something on
the lines because it is a pilot program."

The Connecticut-based company that received the
franchise will be responsible for the equipment,
connection, monthly billing, advertising and
24-hour-a-day, seven-day-a-week customer
support. The city will expand the current fiber

network, which is almost complete, update optical
electronics and install and maintain equipment
external to the residents' homes.

"The grantee will be providing most of the capital
of this project and assume most of the risk," said
John Hewa, assistant electric director for the
City of Manassas. "There's very little financial
risk to the city."

John F. Berry, chairman and CEO of Prospect Street
Broadband, said the service is very easy to use and
no special training is necessary. Residents can purchase
the service and obtain access from any city outlet.
"You sign up once and you can sign on at home,
a friend's house, the ice skating rink, where ever," Berry said.

If residents opt for this Internet service provider, they will
pay approximately half of normal high-speed access, as
the tentative service price is $29.95 a month for
residents, and $69.95 for commercial access.
"It will be competitively priced and a quality service,"
said Vice Mayor Harry J. Parrish II.
Wallace said the service was comparable in speed to
any DSL program available. "It's very fast," she said.

And as a fringe benefit, the city can also monitor power
outages through this technology. Todd said the city has
been trying for years to achieve that capability.
Two bids were received on Sept. 8, and Todd said the
city spent a considerable amount of time examining
both proposals to ensure the best outcome for residents.
"We've never had a franchise quite like this before," Todd
said. "We wanted to make sure we had measures that
would protect the services we promise the citizens."

The contract that the council voted to approve calls for a
10-year term, with a five-year extension. A minimum
payment of $24,000 after the first year, and $124,000
after the second and third year is guaranteed to the city.
Initial figures project that Manassas could receive up
to $4.5 million in revenue after the 10-year period.
Councilman Ulysses X. White questioned city staff
about future price hikes, as he was reminiscent of
a similar situation with cable television in the city.
But Todd said with competition available, residents
wouldn't be stuck with high bills and no options.
Rather, this new offer gives residents exactly that -- options.

Councilman Eugene R. Rainville said residents will benefit
from an extra use of the electrical system their tax dollars already fund.
"Now they can get Internet at a low price," Rainville said.

"I would encourage all of our citizens to at least look at it as an alternative."
And according to Parrish, residents may receive an added bonus if enough people patronize this service. "It looks like the council might have the opportunity to look at tax reduction," Parrish said.

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Some Links:

City of Manassas Va: http://www.manassascity.org/

Manassas Town Commissioners and Board: http://www.manassascity.org/city_government/index.html

Prospect Street Broadband, LLC: http://www.prospectstreet.com/

Manassas Va ARC (Old Va Hams ARC): http://www.w4ovh.net/

2895. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:43:21 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn1oe9$6g9$1@hercules.btinternet.com>
Source record: 106211

Art, I should have added - you must take the opportunity to increase conductor diameter. You have twice the length of coil with only 70% of the number of turns to wind along it.

There is NO other way to increase Q of a coil while maintaining the same inductance.

If you think about it it's fairly obvious.

Reg

"Reg Edwards" wrote
> If both coil diameter and length are doubled, and number of turns are
> reduced to 71% of the number you started with, then you will end-up with
the
> same inductance as before but the loss resistance will be 71% smaller.
>
> You can continue to do this until radiation resistance becomes the
> predominant loss.
>
> Download program SOLNOID2 for coil design and to study these effects.
> --
> ========================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com
> ========================
>
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0310191549.d4523d4@posting.google.com...
> > Richard Clark <kb7qhc@comcast.net> wrote in message
> news:<m0phov4fis5eqbdtou40fjhct35pr2fus3@4ax.com>...
> > > On 12 Oct 2003 03:24:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> > > wrote:
> > >
> > > >>Art Unwin, KB9MZ wrote:
> > > >>"The markings are 3600 - 5000 KC."
> > > >It was used in a radio or transmitter operating in that range.
(German
> WW II
> > > >SK10?)
> > > >
> > > >Yuri
> > >

> > > Hi Yuri,
> > >
> > > More probable is Marine DF.
> > >
> > > 73's
> > > Richard Clark, KB7QHC
> >
> > After digging into this subject so that I fully understand it I found
> > that this particular antenna did not work as it should have done. This
> > 'dummy' assumed that I could obtain any Q that I wanted, however
> > actual inductor was very inefficient for top band use (very
> > broadbanded because of losses.)
> > I went from 4 inch diameter inductance windings to
> > a 12 inch o/a diameter with 0.6, O.D. copper tubing for a total length
> > for the inductor of 35 inches. My intention is to now flatten the
> > copper tubing so the edges to provide minimum interwinding
> > capacitance.
> > However I do want the maximum Q available so the antenna is narrow
> > banded and inductance change is made by lessening the inductance
> > length for moving around the band.(or possibly the insertion of a
> > brass rod)
> >
> > What other options do I have for increasing Q other than silver
> > plating of the copper?
> > I opted away from LITZ wire as I figured that top band was too
> > high a frequency to benefit from its properties.
> > Any comments or discussion of the subject would be very apreciated
> > Best regards
> > Art
>
>

2896. tm-411a

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 22:47:39 UTC
From: Dennis <dedey1@bigpond.net.au>
Message-ID: <fCZkb.159138$bo1.59514@news-server.bigpond.net.au>
Source record: 106212

Need KW TM-411A Mod to open up TX/RX under 438.000, currently 438.000
499.999 need 430.000- 440.000

tnxs

2897. Sommer Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 23:19:14 UTC
From: Ronald Walters <rwalters8@cfl.rr.com>
Message-ID: <S3_kb.268$RP2.51@twister.tampabay.rr.com>
Source record: 106213

Who is using a Sommer multi band antenna out there? What's the real scope on this antenna? Your comments

Using a TA33 now. Mosley rates their antennas in DBd while Sommer in DBi so it looks like the claimed gain is about equal.

Appreciate any comments

Ron - W4LDE

2898. Re: 5 Band 2 Element Cubex Quad Install - Pictures

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 23:24:05 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0310201524.8aad21a@posting.google.com>
Source record: 106214

Nice web page and step by step article.
73,
Terry, WK0F

JS <wd1v@removethisamsat.org> wrote in message
news:<171020030554020178%wd1v@removethisamsat.org>...
> http://www.qsl.net/wd1v/Quad/cubex.html

2899. UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-20 23:48:32 UTC
From: Alan <none@none.com>
Message-ID: <kv_kb.59727$3A6.53384@twister.austin.rr.com>
Source record: 106215

Can anyone explain to me why UHF links typically are not LOS while microwave a millimeter wave links typically
are. Does UHF propagate differently? Is it that UHF will scatter off buildings and stuff while microwaves
get absorbed or something? Are there any good books that explain this? Thanks.

Alan

2900. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:07:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8bt8pvk70s63lkvnnvoqafps6n9lpda7ld@4ax.com>
Source record: 106216

On 20 Oct 2003 15:19:42 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Richard,
>In my case I need the field around the inductance for coupling
>purposes.

The size of the field has nothing to do with Q.

>To make it smaller a core material would have to be used.

Only if you want the same inductance - you didn't ask that, you asked
for more Q.

> I spoke of flattening the tubing but I am not sure if it would
> be worth it to plate or should it be wound ribbon wise as
>some of the old Collins inductors or edge wise wound per some
> of the commercial inductances.

Flattening will only increase loss - not Q.

> Going to the large copper winding really showed up as an
>improvement in the antenna such that it has wet my appetite !
>Regards
>Art

Increasing copper for the same, or near same inductance is a waste of
time. You have to have started with a pitifully poor example wound on
a old wive's sewing spool to make any gain in that game.

Start with the basic dipole's Q and reckon how much your Q will be
improved = diddly squat. Turn that basic dipole into a small tuned
loop (AKA MFJ or whoever) and watch that Q go through the roof.

However, there is one hidden negative to your wish. Q is not, of and
in itself, a positive thing when optimized beyond all other
characteristics. The crystal in an electric circuit has an
exceptionally high Q and a dipole a mediocre-to-poor one. Which
transmits HF further? If you read your Terman, you will find that
even for a transmitter's tuned final, you DO NOT want the highest Q,
but instead a value between 8 and a dozen. If it were higher, power
would never come out the antenna port.

73's
Richard Clark, KB7QHC

2901. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:09:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g6u8pvsldpc4rd3l9ll8rraosku8sgfnd9@4ax.com>
Source record: 106217

>Rubbish !
RTMFQ!

2902. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:26:14 UTC
From: KB1IBE <dslesh@ttlc.net>
Message-ID: <vp8v9flo4jhobe@corp.supernews.com>
Source record: 106218

Thnx for responding!
I wanted some insight into other types of low-cost antennas and your
personal experiences with them. I have used folded dipoles made of 300ohm
ribbon with 300ohm feedline and tuner as an effective antenna on 40m and
found it to be reasonable cost.
My present antenna is a cross between a dipole, inverted V and V beam, but
loading it with different homebrew transmitters has produced very different
results.
I really want to lose the tuner altogether and just load up into a nice
1:1 match !

Regards,
ex WN1QIN / KB1IBE

----- Original Message -----
From: "Bill" <brianspam86@iquest.net>
Newsgroups: rec.radio.amateur.antenna
Sent: Monday, October 20, 2003 6:04 AM
Subject: Re: 40m QRP antenna - best choise?

> I use 1/2 Wave 40m dipole in my attic...it's no DX magnet but I have
earned
> WAS every year since 1999 by using it and my QRP rigs. I think in 4 years
> my DXCC count is now up to 41 countries.
>
> I use a Ten Tec antenna tuner or the built in tuner in my K1 and I can get
> it to match this dipole on 15, 20, 30, and 40m...with 40m and 30m seeming
to
> work the best.
>
>
>
>
> "Hoss" <hoss200325@hotmail.com> wrote in message
> news:DFBkb.17247$wj.10121@twister.austin.rr.com...
> > Unless it is not working for you, the best-cheapest-simplest antenna is
> the
> > one that you have. It's is already paid for and installed!
> >
> > Harold
> > WD5KCA
> > "KB1IBE" <dslesh@ttlc.net> wrote in message
> > news:vp5bbn599m1p8d@corp.supernews.com...
> > > Hello folks,
> > > I am experimenting with QRP-level antennas and wondered what the

> > > best-simplest-cheapest might be. Any suggestions? (so far, I have a
40m
> > > dipole up)
> > >
> > > Thnx in Advance!
> > > 73's Dave
> > > WN1QIN / KB1IBE
> > >
> > >
> >
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>
>

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> WN1QIN / KB1IBE
>
>

2903. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:40:28 UTC
From: KB1IBE <dslesh@ttlc.net>
Message-ID: <vp904a4hqmi6a3@corp.supernews.com>
Source record: 106219

Thnx for responding!
I wanted some insight into other types of low-cost antennas and your
personal experiences with them. I have used folded dipoles made of 300ohm
ribbon with 300ohm feedline and tuner as an effective antenna on 40m and
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>
>

2904. Re: Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:42:31 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <f2v8pv00songacdvvpmq1bcuejgl91f6kh@4ax.com>
Source record: 106220

On Sun, 19 Oct 2003 21:19:48 GMT, Bill <ojisan0@mchsi.com> wrote:

>I'm in need of a Rohn BPL45G to convert a standard 10 foot section of Rohn
>45 to a flat top for installing a thrust bearing.
>If anyone has one in good conditon or a new on laying around pleae let
>me know what you would be asking for it.
>73 Bill W4OM

If you have a standard top section, or just a straight section, just
get one of the heavy duty rotor plates and mount the thrust bearing on
that.

I do have one of the top sections with top plate and thrust bearing,
but I also use the heavy rotor plate for another thrust bearing down
in the tower.

Using a standard 10 foot section I'd use two rotor plates (both with
thrust bearings. One just below the first cross braces at the top and
the second about 4 feet down. The find something to cap the tower
legs.

On mine with the top plate, I use one thrust bearing there and another
just above the rotor about 25 feet down inside the tower.

It's easy enough to weld up (and bend) a top plate, but not so easy to
get it double hot dipped galvanized. That is one heavy piece of
steel. I think it's either 5/16ths or 3/8ths inch plate.
If you don't weld you could take the diagram of the top plate to a
metal shop, get it cut and drilled and have three legs welded on that
will just fit over the top of the tower legs. Then bolt together in
the usual fashion. Remembering that ROHN uses 2 bolts per leg with
one being 5/16ths and the other is either 3/8ths or 7/16ths. If I had
my catalog handy I'd look it up, but I don't know where I put the
thing.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2905. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 00:44:59 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <d909pv0maqmtic535s68jocs6lp6uv0nsj@4ax.com>
Source record: 106221

On Sun, 19 Oct 2003 19:01:38 GMT, Roger Halstead
<newsgroup@rogerhalstead.com> wrote:

>On Sat, 18 Oct 2003 21:18:02 GMT, helmsman
><helmsmandelete@mindspring.com> wrote:
>
>>yea right <spam@spam.spam> wrote:
>>
>>>I would like to bury my coax for a distance of about 20ft. The location
>>>consist of 6" of crushed decorative rocks over the top of very rocky soil.
BTW, in the case of sand, or clay with out stones, I just bury plain
old coax directly and have never had a problem doing that. Here that
just doesn't work. Particularly when the tower system usually gets
hit by lightening about 3 times a Summer.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

2906. Here it is - BPL full rollout in Manassas, VA

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 01:14:04 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-3A0B58.20140420102003@central.isp.giganews.com>
Source record: 106222

The following is a repost from from another newsgroup. Look like
Manassas will have internet via Power Lines. The amateurs in the
Manassas area must have been sleeping to let this pass.

Good luck in the Contest

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmvsrr$79c$0@208.206.142.66...
> CHeck this out...
>
>
>
http://www.potomacnews.com/servlet/Satellite?pagename=WPN%2FMGArticle%2FW
PN
_BasicArticle&c=MGArticle&cid=1031771619197&path=!frontpage
>

Innovative Web access to shock Manassas
SARI KREIGER
skreiger@potomacnews.com
Saturday, October 18, 2003

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Prospect Street Broadband, LLC: http://www.prospectstreet.com/

Manassas Va ARC (Old Va Hams ARC): http://www.w4ovh.net/

2907. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 02:19:28 UTC
From: Dick Carroll <dixie@NOSPAM.townsqr.com>
Message-ID: <bn253g$4dv$0@208.206.142.97>
Source record: 106223

Ron wrote:

> My Tennadyne T12 'sings' in the wind, and it can be annoying. I think it's
> due to the ends of the elements being open, and they act like little organ
> pipes, creating a rather mournful sound.
>
> I would not care about this, but unfortunately my neighbors can hear it,
> they say it does not bother them, but I think it would be a good idea if I
> could suppress this sound.
>
> The ends of the elements are likely open so that they will drain any water
> than might get in, but I don't think it would be wise to cap them.
>
>

I've never seen a tubular beam-style antenna that didn't use factory
installed end caps. I'd try to get some that fit, install them, and
drill a small weep hole in the end on the ground side of each if you're
worried about moistur buildup. If you don't think they'll stay on
longterm, drill a small hole in the side and fasten with a small screw.

Dick

2908. Re: Suggestions on rig/antenna installation/wiring in 2003 Ford Explorer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 03:04:06 UTC
From: Caveat <caveat@bogusaddy.com>
Message-ID: <4289pvserho8had41lsl4sules0t653tic@4ax.com>
Source record: 106224
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Thu, 16 Oct 2003 15:51:47 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>>How can I run Power and antennas out of vehicle to battery, antenna
>>mounts etc.?
>
>Answer: In my old Ranger [1985] just below the driver side left hip
>under the floor mat is a 3/4 inch drain hole with a grommet as a plug. I
>released the aluminum cover from the door/mat area and lifted the mat.
>Sure enough the plug was there!! I clipped out a 3/8 diameter section
>from the center of the grommet and sliced one end open. After running
>the necessary wires through the grommet it was reinstalled and sealed
>with Coax-Seal [$3.00 at HRO]. There was no need to punch holes,
>drill holes, etc.

Same with my 2000 Ranger. There are 1" holes under the floor mats on
both the driver and passenger side near the seat fronts. You can
easily find their locations by crawling under the vehicle. Remove the
grommets (or cut a hole in them) and then the path from the rig to the
battery and antenna is easy.

73,

Caveat

2909. Re: Comet B-10 VHF Antenna Question YKXWBSX7I6 01/03/2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 03:40:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp9al5fk15hb68@corp.supernews.com>
Source record: 106225

Thanks for the info.

There are really only two primary mechanisms that can cause connector loss, and they're the same as the ones causing transmission line loss -- conductor resistance and dielectric loss. The conductor loss won't be much more than for the same length of coax, since the conductor diameter is as large as for coax. Admittedly, nickel plating can be quite resistive, but the distance is very short. I've seen some UHF (PL-259/SO-239) connectors with phenolic insulation, which isn't the greatest, but again, it's there only for a very short distance, so the overall loss won't be much at all. As a connector insulation, Teflon is virtually lossless up through UHF.

A well-designed connector is just a piece of transmission line, with about the same loss characteristics. As for "impedance bumps", poorly designed connectors like UHF types will show a small impedance change over their length. Again, though, the distance is so short that the overall effect on SWR is negligible until you get very high in frequency -- the effect is just the same as a small shunt C or series L -- of good quality -- inserted at that point. And this has no effect on connector loss. I remember being surprised at finding UHF connectors used in a commercial 450 MHz radio I had. But whatever impedance change they presented was simply compensated for by the transmitter output and receiver input networks. Likewise, if they're at the antenna, a slight adjustment of the antenna matching system (e.g., gamma match) or antenna length will compensate. Good quality connectors like BNC, TNC, N, and so forth have a very nearly constant 50 ohm impedance through them if properly assembled. This isn't generally true of right angle connectors and adapters, but for most amateur purposes the impedance change they present isn't of any consequence, either.

I recall seeing a disassembled cheap UHF adapter -- female-female as I recall -- which contained a steel spring as the center conductor. Now, something like that might have measurable loss even at HF. So I can't say that all adapters, even the very junkiest ones, have negligible loss. But you don't need to be concerned about the loss of adapters having even a modicum of quality. And it's unlikely you'll be able to measure the loss of any connector through VHF at least, and above that only with sensitive equipment.

Finally, let me caution against interpreting "insertion loss" or "mismatch loss", often specified for connectors and adapters, as representing actual dissipative loss, like coax loss. It doesn't -- it's something else. People sometimes read or hear that a connector has a "mismatch loss" of such-and-such, then repeat that number as being the

dissipative loss you'd get by putting the connector into a system.
That's a mistake. I've posted quite a bit about this from time to time
in the past, so anyone who's interested should be able to find out more
by doing a Google search on this newsgroup for "mismatch loss".

Roy Lewallen, W7EL

Howard wrote:
> Roy,
> I don't have any "real" reference to the connector loss, just
> folklore. I took the cable loss from the same source as you - if
> there is error chalk it up to sloppy reading of the graph 8-} I do
> see that we both quoted the same 1 dB of cable loss, that tells me I'm
> on track. I did re-read my 'guesstimate' of power loss in the cable
> and it does look like my math is off a bit.
>
> I agree with what you say regarding the loss not being enough to
> notice and thanks for steering me straight on the connector loss.
> Personally, I've never tried to measure connector loss nor have I gone
> obsessive-compulsive about changing everything to BNC or N connetors,
> I just don't see any return on the effort for 2 meters. I use
> PL-259's with the exception of antenna's that have N connectors; have
> never fretted the "folklore" impedance bump issue either - just
> concentrate on making a solid connection and not melting the
> dielectric when soldering the braid to the shell, then follow with
> good weatherproofing.
>
> Howard
> On Thu, 16 Oct 2003 23:19:57 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>What kind of connector has 0.5 dB loss at 2 meters? And what's the loss
>>mechanism? Is there some kind of connector out there filled with carbon
>>or something? Who made the measurements and how?
>>
>>The ARRL Antenna Book shows RG-58/U and RG-58B/U (plain copper center
>>conductor) as having just under 6 dB/100' attenuation at 2 meters, and
>>RG-58A/U and RG-58C/U (tinned copper) as about 6.5 dB/100'. I checked a
>>100' piece of RG-58C/U in my junk box and found it to be 5.6 dB/100' at
>>146 MHz. So I'd expect 20 feet or so to have just over 1 dB of
>>attenuation, almost certainly not enough to notice except perhaps just
>>barely, if you were right at the noise level. Certainly it wouldn't be
>>noticeably improved by using some other kind of cable.
>>
>>Oh, and that measurement was made with BNC connectors on both ends. The
>>loss of those connectors shouldn't be measurable except with extremely
>>sensitive equipment.
>>
>>Roy Lewallen, W7EL
>>

>>Howard wrote:
>>
>>>How do you figure a 3 dB loss? A mobile installation 'typically' uses
>>>RG-58 which at 2 meters has about 4.5 dB loss per 100 feet and most
>>>mobile antenna's come with 15 - 20 feet of cable. As I see it, that's
>>>about 1 dB loss (or thereabouts) for the cable and I've seen connector
>>>loss figures hover around 0.5 dB. At a 1.5 dB loss roughly 1/4 of the
>>>signal is not unreasonable which would put it at the 40 watts you
>>>mention. I don't [totally] aruge your conclusion - just your 3 dB
>>>assertion.
>>>
>>>Am I missing something?
>>>Howard
>
>

2910. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 03:53:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vp9belqmbmq2b2@corp.supernews.com>
Source record: 106226

We should embrace your definitions and perceptions rather than "scraping the bottom of the barrel" by seeing how terms are used by manufacturers of professional test equipment? Sorry about the blow to your ego, Reg, but I do put more weight on how Agilent uses technical terms than how Reg does. I guess Agilent has their audience and you have yours. Each to his own.

And, um, Agilent (formerly HP) and Narda do sell products which are "associated with transmission lines".

Roy Lewallen, W7EL

Reg Edwards wrote:
> "Roy Lewallen" wrote > And for anyone doubting this dual definition of SWR,
> just take a look at
>
>>Agilent, Narda, or similar web sites, and notice that their high priced
>>and precision terminations all come with an SWR specification. You'll
>>also find SWR specs for test equipment inputs and many other devices not
>>containing transmission lines. These are clear examples of Definition 2.
>
>
> ==========
> Roy,
>
> When trying to sell high-priced instruments, including those which are not
> associated with transmission lines, manufacturers would be stupid not to
> communicate with prospective customers in terms which customers imagine they
> understand.
>
> Mention of SWR no doubt sounds highly technical, but is confusing, perhaps
> beyond comprehension, to people who have no connection with lines.
>
> Manufacturers are not paid to educate their customers. They may claim it's a
> part of their job in the sales blurb but we are familiar with sales-blurb
> writers standards of education.
>
> For example, only suckers accept antenna performance specifications as being
> definitions of anything.
>
> Roy, you really are scraping the bottom of the barrel to find some support
> for the nonsense and confusing-to-learners waffle which fogs and enshrouds
> what goes on on that short length of wire between HF transmitter and
> so-called SWR meter.
>

> Old habits die hard.
> ---
> Reg, G4FGQ
>
>

2911. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 04:24:13 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310202024.fb2f248@posting.google.com>
Source record: 106227

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<21997-3F943AE9-162@storefull-2318.public.lawson.webtv.net>...
> Art Unwin, KB9MZ wrote:
> "What other options do I have for increasing Q other than silver plating
> of the copper?"
>
> Art has access to yhe 1955 edition of Terman`s "Electronics and Radio
> Engineering", I believe. On page 32 Terman writes:
> "In designing single-layer coils, the highest Q in proportion to size is
> obtained when the length of the winding is somewhat less than the
> diameter of the coil."
>
> It appears Art went in the right direction by increasing the coil
> diameter to 12 inches from 4 inches. Nonetheless, his coil is 35 inches
> long.
>
> If Art doesn`t want to use a high permeability core, and his coil
> already has the required inductance, it seems fewer turns on a larger
> diameter form would have a higher Q, so the length of the coil can be
> less than the diameter of the coil for the same inductance.

I recognise the form factor could be better however the change I made
was a huge improvement which I hope to improve by flattening the pipe
in tape winding form.Aty the moment I have two peaks on top band so I
am not ready to change diameters which will come under consideration
when I advance to a lighter construction.
>
> It is good to space the turns by about the diameter of the conductor, or
> slightly less. Insulation can be lossy and tends to rise in loss by the
> cube of the frequency, so Terman warns about cotton or enamel covered
> wire and insulating material used in coil forms at high frequencies. See
> page 35 in his 1955 edition.
>
> The existing coil can be measured for inductance, if it is right, and a
> coil calculator or program can be consulted to get a coil with better
> proportions.
>
> To tune a circuit, a variable capacitor may maintain a better Q than a
> variable inductance, (variometer) but at 160 meters, permeability tuning
> of the coil should be practical if the power level isn`t too high.
A couple of points here the variometer is only inefficient when you
have a bucking effect, if designed for use in adding inductance I
would suggest that
it would be superior to the use of a capacitor. When you think more

about it the most efficient way is to use just a normal squeezing
action on the inductance length.
Permiability tuning is to be ruled out since the inductance provides
the means
for triple coupling one of which is moved to satisfy 50 ohm impedance
for all frequencies used. Tho I do not use the top band it presents
more of a challenge
than the other bands used with this antenna and it would appear that
one requirement of an antenna for top band is the use of high power
without having to mess with ground radials !

As an aside I seem to remember reading that form factor can exceed the
1:1 ratio
without to much of a problem !!!!
Regards
Art
>
> Best regards, Richard Harrison, KB5WZI

2912. Re: Smith Chart Quiz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 04:31:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f94b8bb$1_5@corp.newsgroups.com>
Source record: 106228

Roy Lewallen wrote:
> I guess Agilent has their audience and you have yours.

Agilent has some very good papers on s-parameters.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2913. Re: Understanding Variometer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 04:41:43 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310202041.7b8b8a38@posting.google.com>
Source record: 106229

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bn1oe9$6g9$1@hercules.btinternet.com>...
> Art, I should have added - you must take the opportunity to increase
> conductor diameter. You have twice the length of coil with only 70% of the
> number of turns to wind along it.
>
> There is NO other way to increase Q of a coil while maintaining the same
> inductance.
>
> If you think about it it's fairly obvious.

Reg
my mind is not as alert as yours, many times I will argue for what is
obvious at the time but after several days am forced to change my
mind.
This is a similar case where I am mindful of the bad effects of
capacitance
so I am heading towards keeping the same outside area but reducing
capacitance raising surfaces which by flattening the coil places
the turns closer together.
Since the coils are so large the design forces me to place one side of
the coil close to a fibre glass support which is not good either plus
if I make the turns larger and lighter it will become flimsy unless I
add dielectric loss type supports which may well overtake the losses
in the present design.
All most interesting which is forcing me to think about such a simple
thing such as inductance.
Cheers
Art

> ---
> Reg
>
> "Reg Edwards" wrote
> > If both coil diameter and length are doubled, and number of turns are
> > reduced to 71% of the number you started with, then you will end-up with
> the
> > same inductance as before but the loss resistance will be 71% smaller.
> >
> > You can continue to do this until radiation resistance becomes the
> > predominant loss.
> >
> > Download program SOLNOID2 for coil design and to study these effects.
> > --
> > ========================

> > Regards from Reg, G4FGQ
> > For Free Radio Design Software
> > go to http://www.g4fgq.com
> > ========================
> >
> >
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0310191549.d4523d4@posting.google.com...
> > > Richard Clark <kb7qhc@comcast.net> wrote in message
> news:<m0phov4fis5eqbdtou40fjhct35pr2fus3@4ax.com>...
> > > > On 12 Oct 2003 03:24:10 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> > > > wrote:
> > > >
> > > > >>Art Unwin, KB9MZ wrote:
> > > > >>"The markings are 3600 - 5000 KC."
> > > > >It was used in a radio or transmitter operating in that range.
> (German
> WW II
> > > > >SK10?)
> > > > >
> > > > >Yuri
> > > >
> > > > Hi Yuri,
> > > >
> > > > More probable is Marine DF.
> > > >
> > > > 73's
> > > > Richard Clark, KB7QHC
> > >
> > > After digging into this subject so that I fully understand it I found
> > > that this particular antenna did not work as it should have done. This
> > > 'dummy' assumed that I could obtain any Q that I wanted, however
> > > actual inductor was very inefficient for top band use (very
> > > broadbanded because of losses.)
> > > I went from 4 inch diameter inductance windings to
> > > a 12 inch o/a diameter with 0.6, O.D. copper tubing for a total length
> > > for the inductor of 35 inches. My intention is to now flatten the
> > > copper tubing so the edges to provide minimum interwinding
> > > capacitance.
> > > However I do want the maximum Q available so the antenna is narrow
> > > banded and inductance change is made by lessening the inductance
> > > length for moving around the band.(or possibly the insertion of a
> > > brass rod)
> > >
> > > What other options do I have for increasing Q other than silver
> > > plating of the copper?
> > > I opted away from LITZ wire as I figured that top band was too
> > > high a frequency to benefit from its properties.
> > > Any comments or discussion of the subject would be very apreciated
> > > Best regards

> > > Art
> >
> >

2914. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 06:45:00 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310202245.4c26f817@posting.google.com>
Source record: 106230

"KB1IBE" <dslesh@ttlc.net> wrote in message news:<vp904a4hqmi6a3@corp.supernews.com>...

> I really want to lose the tuner altogether and just load up into a nice
> 1:1 match !

Bingo! You've just passed GO, and are ready to have an efficient
antenna system. Lose all the unneeded devices. Feed a 40m dipole with
coax, and tune the antenna to give you a good match. Shouldn't have to
adjust much. Feeding a full wave loop with coax is also a good choice.
Either is very efficient. Even a 1.25 WL dipole would be efficient,
just a different pattern... I usually just use dipoles. Less supports,
work, and just as good for practical purposes on that band. You don't
want to waste power in tuner losses when you run QRP. The losses of
any decent coax on 40m are very low. MK

2915. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 08:59:07 UTC
From: Don.Esteban@gmx.net
Message-ID: <1f578ae6.0310210059.d2e32d5@posting.google.com>
Source record: 106231

Hi again,

thanks for the quick answers. First of all, I have to apologize for
bad explaination. As you would guess, I am not a natural english
speaker, and so have difficulties to explain exactly what I am looking
for.

> >Hi there,
> >
> >I am currently working on a project which leads to simulate EMC Field
> >coupling to printed circuits.
>
> Without discussion of a frequency or band of frequencies, you are sure
> to be either deeply disappointed or vastly rewarded in results.

What i want to simulate is a common EMC-Test. Put a PCB with the
circuitry in a shielded EMC-room (I dont know the english word) and
put a 10V/m E-Field around it in 3m distance from the sending antenna.
Frequency band is 80MHz to 1GHz

>
> > The Field couples into the circuitry
> >through (unwanted) loops and di/monopoles.
>
> Certainly, this is true at all scales. Your problem is not that so
> much as it is a matter of degree. As this turns on the same issue of
> what frequency, it also turns on the issue of what size? Beyond that,
> it becomes a problem of how near (or how far). You may note that
> there is a lot of dimensionality here that is wholly lacking in your
> question.

I know that, and i took in into account in my calculation. this was
not the question, its just to explain what i am doing.

> >I started with modeling a simple loop and a stub. I experienced no
> >problems for the loop, but the stub is driving me crazy:
> >In order to calculate the output voltage of a PCB antenna for a given
> >geometry and EM-Field at a desired frequency, I need to know the
> >output impedance for this antenna. I didn't find anything on the web
> >on calculating/extracting it.
>
> This, in fact, is one of the easiest things to determine - if you know
> the frequency and physical dimension.

This was the question! unfortunately
> This, in fact, is one of the easiest things to determine - if you know

> the frequency and physical dimension.
doesn't help me.... I know the physical dimension (PCB Layout, 93mm length, 2mm Strip width, 0.035mm hight) The freqeuncy band is given above.
The only thing antenna books are talking about (the ones i read) are wire antennas, where a radius is given for calculating the Waveresistance(? correct word ?)ZL. As i dont have a radius (stripline is rectangular) I am not sure what to do. Is it possible to say the area of the stripline is 0.035mm*2mm (crossection), and therefore build up the equation 0.035mm*2mm=2*pi*r^2 and then follow for the radius: r=sqrt((0.035mm*2mm)/(2*pi)). I think this is rather wrong, how else can I determine the waveresistance and with it the Impedance of the antenna?
I was thinking of a 2D FEM in order determine the unit per length parameters L' and C' and then i can calculate the waveresistance, too. What do you think?

thanks

Daniel

2916. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 09:05:50 UTC
From: Don.Esteban@gmx.net
Message-ID: <1f578ae6.0310210105.8fc106e@posting.google.com>
Source record: 106232

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:<3f93fa40_4@news1.prserv.net>...
> "Daniel" <Don.Esteban@gmx.net> wrote in message
> news:1f578ae6.0310200114.125c264e@posting.google.com...
> > Hi there,
> >
> > I am currently working on a project which leads to simulate EMC Field
> > coupling to printed circuits.
>
> Well, that sentence makes little sense, but let's plow onward:
>
> The Field couples into the circuitry
> > through (unwanted) loops and di/monopoles.
> > I started with modeling a simple loop and a stub. I experienced no
> > problems for the loop, but the stub is driving me crazy:
> > In order to calculate the output voltage of a PCB antenna for a given
> > geometry and EM-Field at a desired frequency, I need to know the
> > output impedance for this antenna. I didn't find anything on the web
> > on calculating/extracting it.
>
> Most good antenna theory is contained in an old fashioned item called books.
> Learn what they are and how to read them. Kraus, Johnson, Balanis, and many
> others. Even Terman, whose forte was starting Silicon Valley, had lots of
> good information.
>
> > This brings up the question, wether it is possible or not? If yes, how
> > can i perform the calculation? Do you have any suggestions?
>
> Well, you should have paid attention in fields and waves class. If you
> didn't have that class, you shouldn't be expected to work on the project you
> tried to describe in the first sentence.
>
> If I am am
> > totally wrong, please feel free to correct me.
> >
> > Thanks in Advance
> >
> > Greets
> >
> > Daniel

thanks for flaming... next time you have to say something dispensable - please don't

Bye

2917. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 11:16:43 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <sA8lb.62404$La.45388@fed1read02>
Source record: 106233

"Daniel" <Don.Esteban@gmx.net> wrote in message
news:1f578ae6.0310210059.d2e32d5@posting.google.com...
> Hi again,
>
> thanks for the quick answers. First of all, I have to apologize for
> bad explaination. As you would guess, I am not a natural english
> speaker, and so have difficulties to explain exactly what I am looking
> for.
>
> > >Hi there,
> > >
> > >I am currently working on a project which leads to simulate EMC Field
> > >coupling to printed circuits.
> >
> > Without discussion of a frequency or band of frequencies, you are sure
> > to be either deeply disappointed or vastly rewarded in results.
>
> What i want to simulate is a common EMC-Test. Put a PCB with the
> circuitry in a shielded EMC-room (I dont know the english word) and
> put a 10V/m E-Field around it in 3m distance from the sending antenna.
> Frequency band is 80MHz to 1GHz

Not wanting to dampen your enthusiasm, but I think you'll find that the modeling is quite limited in predicting what really happens in the above scenario.

First, a real circuit board usually has far too many variables for a model, and that's assuming you can even recognize all the variables. Second, the exposure within an RF semi-anechoic enclosure is never quite so clean as you posit. Support structures, such as tables (maybe not as RF invisible as you assume) and cables, all add to the general fuzz. And the shielded chamber's lining is SEMI anechoic, that is, not a perfect absorber. At 80 MHz, the typical 24" pyramidal loaded-foam absorber will yield a return loss of less than 10 dB, which is a significant reflection for your modeling effort.

Most board designers make some attempts at modeling EMC performance, but they usually run into the concept of diminishing returns quite soon. The pressure of costs and schedule usually limits the modeling effort anyway, and the board gets designed more by rules of motherhood and sin than precise modeling.

Finally, few electronic assemblies exist wholly unto themselves, life gets very messy once you factor in the IO, command & control, and power attachments. These externals are usually the path of more problems than responses directly attributable to board components, especially in very

low-level RF fields like 10 V/M.

Ed

2918. RHCP configuration for Tonna Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 12:12:13 UTC
From: alain@alain.it
Message-ID: <920aec23.0310210412.3753e0a7@posting.google.com>
Source record: 106234

Hello,

in the last weeks I have been fighting againts my two Tonna's crossed
Yagis: a 2x19 elements UHF and a 2x9 elements VHF.

I still cannot manage to have them up and running. Here are the
details of the story:

UHF
Both dipoles, when feeded separately, resonate perfectly between 420
and 426 MHz. Faston climps feed the diples (dont agree with this
solution but there must be a valid reason if they adopted them).
I have coupled them using two lamda/4 sections of RG-59. Each section
is 11.3 cm long... ### ((300/436) * 0.66) / 4 ###. They terminate on a
BNC wich goes on a Tee-BNC down to the RTX.
After the coupling the resonance is a little bit tighter, but still in
the range of 421-425 MHz. SWR for 436 MHz (the desired frequency), is
around 2.
RHCP coupling is done by the antenna itself. In facts, the H antenna
is 20 cm ahead the V antenna... this allowed me to opt for a simmetric
coupling solution: the quick and dirty lamda/4 75 ohm transformer.
The ideal distance would be 17 cm ### (300/436) / 4 ### but I dont
mind having a little elliptical polarization.

VHF
Both dipoles, when feeded separately, resonate perfectly between 144
and 145.5 MHz. Around 145.9 (the desired frequency) their SWR is
around 1.5.
The dipoles use two bazookas each about 50 cm long wich require RG-213
to be fittend in. N-Connectors (provided by Tonna) feed the dipoles.
Since the dipoles are only 10 cm distant from each other, this time I
had to phase the antennas using a delay line.
To implement such line I have fed the dipoles with two sections of
213, one 34 cm longer than the other ### ((300/145) * 0.66) / 4 ###.
So those two lines are 50 and 84 cm long.
On each line I connected PL-259 connectors and, trought double so-239
females, two sections of lamda/4 long RG-59. These 75 ohm sections are
intended to reuse the quick and dirty solution wich couples two 50 ohm
loads trought a triple female Tee-SO-239 connector.
Unfortunately after coupling SWR never drops below 3.

Now the questions:

How come that antennas intended for Satellite use resonate on
frequencies lower than satellite sections?
They dont have any kind of stub or other tuning device so will I have

to keep them just like they are?

I think my coupling solution for VHF is theorically correct. Isnt it?
Then why no resonance at all? Would the Tonna antenna coupler fix the
problem?

Is anybody else using same antennas? How did you couple the dipoles
for RHCP / LHCP and what is the SWR you obtained on satellite freqs?

Thanks for reading this.
Any kind of help would be highly appreciated.

Alain De Carolis
IZ6BYY, WW3WW

2919. rotor yaesu G-650A

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 12:37:18 UTC
From: Spiros Xanthopoulos <sxanthop@otenet.gr>
Message-ID: <bn399u$d2s$1@usenet.otenet.gr>
Source record: 106235

Hello everyone,

A friend (SV2GNC) needs to buy the 2 plugs that are connected on the yaesu rotor G-650A, one on the control box and the other one up on the antenna.

Can anyone helps us please ? We need to find a store that has them and can send them to us and we will pay on arrive....tnx,

73's de SV2EVS - Spiros - KN10KP

2920. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 13:38:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <_Ealb.324239$mp.264304@rwcrnsc51.ops.asp.att.net>
Source record: 106236

Alan wrote:
> Can anyone explain to me why UHF links typically are not LOS while microwave a millimeter wave links typically
> are. Does UHF propagate differently? Is it that UHF will scatter off buildings and stuff while microwaves
> get absorbed or something? Are there any good books that explain this? Thanks.
>
> Alan
>
This has been just sitting for a day with no responses so I'll offer an opinion.

Within the radio Line of Sight Horizon both types of signals are truly LOS. However, microwave signals generally have a much narrower beamwidth from the antenna and requires more effort in aligning the antennas at both ends.

UHF signals have several over the horizon propagation modes which include ducting, refraction, and weather front modes.

Microwave signals MAY have some atmospheric absorption. This is caused by self resonance of the nitrogen and oxygen molecules [I believe] in the atmosphere, and by water vapor absorption. There are major absorption peaks around 10 GHz and in the high 20s GHz.

Anyone else want to jump in? I'll stand to be corrected on the Physics issues because I'm an old [really old EE].

Deacon Dave, W1MCE

2921. Re: Here it is - BPL full rollout in Manassas, VA

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 13:42:04 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <MIalb.513384$2x.227216@rwcrnsc52.ops.asp.att.net>
Source record: 106237

Are all the Virginia hams asleep?? They should be burying the local
government with protests.

Or, a new strategy may emerge. Wait until the town licenses the service
and then haul them into court for causing interference to a licensed
radio service. Teach the town a lesson!!

Deacon Dave, W1MCE

Dick, AA5VU wrote:

> The following is a repost from from another newsgroup. Look like
> Manassas will have internet via Power Lines. The amateurs in the
> Manassas area must have been sleeping to let this pass.
>
> Good luck in the Contest
>
> "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> news:bmvsrr$79c$0@208.206.142.66...
>
>>CHeck this out...
>>
>>
>>
>
> http://www.potomacnews.com/servlet/Satellite?pagename=WPN%2FMGArticle%2FW
> PN
> _BasicArticle&c=MGArticle&cid=1031771619197&path=!frontpage
>
>
> Innovative Web access to shock Manassas
> SARI KREIGER
> skreiger@potomacnews.com
> Saturday, October 18, 2003
>
> Manassas residents will soon be the first in the United States
> to buy Internet access over city power lines.
> The City Council voted unanimously on Thursday to
> grant a franchise to Prospect Street Broadband, LLC.,
> bringing a year-long preparation process to fruition.
>
> Residents can purchase the service within 120 days of
> the contract signing, which is expected to occur
> next week, according to Energy Services Manager Brett Massey.
> In May 2002, a small pilot group of city residents and

> businesses began using the service. A modem is plugged into
> the electrical outlet on one end, and the computer on the
> other, to gain high-speed access to the Internet.
> "They were very impressed by the speed, reliability
> and flexibility," said Utilities Director Allen Todd.
>
> Freda Wallace, an administrative assistant with Robert
> Loveless Architecture in Old Town Manassas said the
> company has been receiving the service since February.
> "We've had good service with it," Wallace said. "The
> only time it has been down is because of our
> equipment, or because they're testing something on
> the lines because it is a pilot program."
>
> The Connecticut-based company that received the
> franchise will be responsible for the equipment,
> connection, monthly billing, advertising and
> 24-hour-a-day, seven-day-a-week customer
> support. The city will expand the current fiber
> network, which is almost complete, update optical
> electronics and install and maintain equipment
> external to the residents' homes.
>
> "The grantee will be providing most of the capital
> of this project and assume most of the risk," said
> John Hewa, assistant electric director for the
> City of Manassas. "There's very little financial
> risk to the city."
>
> John F. Berry, chairman and CEO of Prospect Street
> Broadband, said the service is very easy to use and
> no special training is necessary. Residents can purchase
> the service and obtain access from any city outlet.
> "You sign up once and you can sign on at home,
> a friend's house, the ice skating rink, where ever," Berry said.
>
> If residents opt for this Internet service provider, they will
> pay approximately half of normal high-speed access, as
> the tentative service price is $29.95 a month for
> residents, and $69.95 for commercial access.
> "It will be competitively priced and a quality service,"
> said Vice Mayor Harry J. Parrish II.
> Wallace said the service was comparable in speed to
> any DSL program available. "It's very fast," she said.
>
> And as a fringe benefit, the city can also monitor power
> outages through this technology. Todd said the city has
> been trying for years to achieve that capability.
> Two bids were received on Sept. 8, and Todd said the
> city spent a considerable amount of time examining

> both proposals to ensure the best outcome for residents.
> "We've never had a franchise quite like this before," Todd
> said. "We wanted to make sure we had measures that
> would protect the services we promise the citizens."
>
> The contract that the council voted to approve calls for a
> 10-year term, with a five-year extension. A minimum
> payment of $24,000 after the first year, and $124,000
> after the second and third year is guaranteed to the city.
> Initial figures project that Manassas could receive up
> to $4.5 million in revenue after the 10-year period.
> Councilman Ulysses X. White questioned city staff
> about future price hikes, as he was reminiscent of
> a similar situation with cable television in the city.
> But Todd said with competition available, residents
> wouldn't be stuck with high bills and no options.
> Rather, this new offer gives residents exactly that -- options.
>
> Councilman Eugene R. Rainville said residents will benefit
> from an extra use of the electrical system their tax dollars already
> fund.
> "Now they can get Internet at a low price," Rainville said.
> "I would encourage all of our citizens to at least look at it as an
> alternative."
> And according to Parrish, residents may receive an added
> bonus if enough people patronize this service. "It looks like the
> council might have the opportunity to look at tax reduction," Parrish
> said.
>
> --------------- cut ------------------
>
> Some Links:
>
> City of Manassas Va: http://www.manassascity.org/
>
> Manassas Town Commissioners and Board:
> http://www.manassascity.org/city_government/index.html
>
> Prospect Street Broadband, LLC: http://www.prospectstreet.com/
>
> Manassas Va ARC (Old Va Hams ARC): http://www.w4ovh.net/

2922. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 13:59:29 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <vqeapvopuu4ksekq6vg3rdg0487m9feklb@4ax.com>
Source record: 106238

On 21 Oct 2003 02:19:28 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com>
wrote:

>Ron wrote:
>
>> My Tennadyne T12 'sings' in the wind, and it can be annoying. I think it's
>> due to the ends of the elements being open, and they act like little organ
>> pipes, creating a rather mournful sound.
>>
>> I would not care about this, but unfortunately my neighbors can hear it,
>> they say it does not bother them, but I think it would be a good idea if I
>> could suppress this sound.
>>
>> The ends of the elements are likely open so that they will drain any water
>> than might get in, but I don't think it would be wise to cap them.
>>
>>
>
Ron:

I have a T-10 up in the wind at 75' and have not had this problem, but
do not doubt your situation.Have you tried contacting Chuck at
Tennadyne (http://www.tennadyne.com/)? He has always been extremely
helpful with tech support issues; maybe they have run into this before
and/or have hardware to help you resolve.
Good luck
73
Dan (K0DAN)

2923. cushcraft 17b2 information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 14:24:27 UTC
From: Manuel P&#65533;rez Rey <mprey@ing.uc3m.es>
Message-ID: <bn3fjm$n9n$1@hyrkania.uc3m.es>
Source record: 106239

Hello,
I'd like to know if the Cushcraft 17b2 antenna is a good choice. Is there
anybody who uses it? Has it any problem?
Thank you very much in advance.
73's

2924. Re: Here it is-BPL full rollout in Va (MANASSAS Va - BPL RED ALERT!!!)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 14:40:56 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031021104056.09377.00000376@mb-m27.aol.com>
Source record: 106240

It will be interesting to see how much interference will be coming out of this BPL. One thing might be significant interference to car radios. Seems that recent production of car radios have no front end selectivity and if you drive by BC station or power lines loaded with some RF carrying crap you can hear it all over the dial.

Yuri, K3BU

2925. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 14:47:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f954936_1@corp.newsgroups.com>
Source record: 106241

Mark Keith wrote:
> Feed a 40m dipole with
> coax, and tune the antenna to give you a good match.

Or feed a 40m dipole with 1/2WL of open-wire line and radiate even more
power. Then adjust the length of the feedline and also work 30m-10m with
no tuner. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2926. Re: Log Periodic 'singing' in the wind...need to suppress

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 15:56:58 UTC
From: Phil <philip.bradway@verizon.net>
Message-ID: <eHclb.7857$Vf7.6446@nwrdny02.gnilink.net>
Source record: 106242

Two suggestions: Cap the elements or glue a piece of clothes line inside the elements. Both work.

Phil, KB2HQ

"dt" <NOSPAM@nospam.net> wrote in message news:vqeapvopuu4ksekq6vg3rdg0487m9feklb@4ax.com...
> On 21 Oct 2003 02:19:28 GMT, Dick Carroll <dixie@NOSPAM.townsqr.com>
> wrote:
>
> >Ron wrote:
> >
> >> My Tennadyne T12 'sings' in the wind, and it can be annoying. I think it's
> >> due to the ends of the elements being open, and they act like little organ
> >> pipes, creating a rather mournful sound.
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> >> I would not care about this, but unfortunately my neighbors can hear it,
> >> they say it does not bother them, but I think it would be a good idea if I
> >> could suppress this sound.
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> >> The ends of the elements are likely open so that they will drain any water
> >> than might get in, but I don't think it would be wise to cap them.
> >>
> >>
> >
> Ron:
>
> I have a T-10 up in the wind at 75' and have not had this problem, but
> do not doubt your situation.Have you tried contacting Chuck at
> Tennadyne (http://www.tennadyne.com/)? He has always been extremely
> helpful with tech support issues; maybe they have run into this before
> and/or have hardware to help you resolve.
> Good luck
> 73
> Dan (K0DAN)

2927. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 16:28:04 UTC
From: Phil <philip.bradway@verizon.net>
Message-ID: <o8dlb.9319$Fc5.6869@nwrdny01.gnilink.net>
Source record: 106243

Every band has it's own propagation characteristics. At the lower frequencies they are similar to HF, like F layer propagation on 6 (if the cycle is a good one) and Es on 6-222. Ducting can often happen up to 1296. The upper bands mainly use the various scatter modes to push things past LOS (Both stations looking at the same piece of air). Over 300 miles is doable on 5GHZ if there's enough power on both ends and sites are carefully chosen for the least interfering geography and a clear "near field." (a bush at a yard is worse than a forest at a mile). Not a lot of science in these comments but a fair amount of experience.

Phil, KB2HQ

"Dave Shrader" <david.shrader@comcast.net> wrote in message news:_Ealb.324239$mp.264304@rwcrnsc51.ops.asp.att.net...
> Alan wrote:
> > Can anyone explain to me why UHF links typically are not LOS while microwave a millimeter wave links typically
> > are. Does UHF propagate differently? Is it that UHF will scatter off buildings and stuff while microwaves
> > get absorbed or something? Are there any good books that explain this? Thanks.
> >
> > Alan
> >
> This has been just sitting for a day with no responses so I'll offer an
> opinion.
>
> Within the radio Line of Sight Horizon both types of signals are truly
> LOS. However, microwave signals generally have a much narrower beamwidth
> from the antenna and requires more effort in aligning the antennas at
> both ends.
>
> UHF signals have several over the horizon propagation modes which
> include ducting, refraction, and weather front modes.
>
> Microwave signals MAY have some atmospheric absorption. This is caused
> by self resonance of the nitrogen and oxygen molecules [I believe] in
> the atmosphere, and by water vapor absorption. There are major
> absorption peaks around 10 GHz and in the high 20s GHz.
>
> Anyone else want to jump in? I'll stand to be corrected on the Physics
> issues because I'm an old [really old EE].
>
> Deacon Dave, W1MCE
>

2928. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 16:44:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2ulapvsv7mg0bf4jdr2pj6vmvjfldclv9q@4ax.com>
Source record: 106244

On 21 Oct 2003 01:59:07 -0700, Don.Esteban@gmx.net (Daniel) wrote:
>What i want to simulate is a common EMC-Test. Put a PCB with the
>circuitry in a shielded EMC-room (I dont know the english word) and
>put a 10V/m E-Field around it in 3m distance from the sending antenna.
>Frequency band is 80MHz to 1GHz

English is perfect. Specification is too.

>> >I started with modeling a simple loop and a stub. I experienced no
>> >problems for the loop, but the stub is driving me crazy:
>> >In order to calculate the output voltage of a PCB antenna for a given
>> >geometry and EM-Field at a desired frequency, I need to know the
>> >output impedance for this antenna. I didn't find anything on the web
>> >on calculating/extracting it.
>>
>> This, in fact, is one of the easiest things to determine - if you know
>> the frequency and physical dimension.
>
>This was the question! unfortunately
>> This, in fact, is one of the easiest things to determine - if you know
>> the frequency and physical dimension.
>doesn't help me.... I know the physical dimension (PCB Layout, 93mm
>length, 2mm Strip width, 0.035mm hight) The freqeuncy band is given
>above.
>The only thing antenna books are talking about (the ones i read) are
>wire antennas, where a radius is given for calculating the
>Waveresistance(? correct word ?)ZL. As i dont have a radius (stripline
>is rectangular) I am not sure what to do. Is it possible to say the
>area of the stripline is 0.035mm*2mm (crossection), and therefore
>build up the equation 0.035mm*2mm=2*pi*r^2 and then follow for the
>radius: r=sqrt((0.035mm*2mm)/(2*pi)). I think this is rather wrong,
>how else can I determine the waveresistance and with it the Impedance
>of the antenna?

You are working too hard. Round wire compared to flat stripline is
not that different. The difference, for the broad range of frequency,
will be overwhelmed by other things.

>I was thinking of a 2D FEM in order determine the unit per length
>parameters L' and C' and then i can calculate the waveresistance, too.
>What do you think?
>
>thanks
>
>Daniel

Hi Daniel,

Think of doing this by parts. The first approximation will be close.
The second approximation will improve it a little. Being perfect will
not matter.

For overall dimension of dipole/monopole/loop, wavelengths less than 1
and more than 0.1 can be found in many antenna reference books.

Let's look a some simple approximations for a loop:
Ra = 320 ï¿½ pi^6 ï¿½ (radius / wavelength)^4
for
radius = 0.046 M
wavelength = 3 M
then
Ra = 0.017 Ohm

for
radius =0.046 M
wavelength = 0.3M
then
Ra = 170 Ohm

Let's look a some simple approximations for a dipole:
Ra = 80 ï¿½ piï¿½ ï¿½ (length / wavelength)ï¿½
for
length = 0.186 M
wavelength = 3 M
then
Ra = 3 Ohm

for
length = 0.186 M
wavelength = 0.3M
then
Ra = 304 Ohm

Now, be warned. These formulas only work for length << wavelength and
for radius << wavelength. The last evaluation for a nearly halfwave
dipole reveals 304 Ohms for what is actually closer to 70 Ohms.

So for your range, for your largest dimension (93mm) the radiation
resistance will vary between roughly 1 Ohm and 100 Ohms (I am
discounting the loop too). This is for "free space." Your board will
limit that severely. This again suggests high evaluations will be
modified (and closer to my 1 - 100).

This is a first approximation. A second approximation will not alter
this more than 30%. Nearby components will significantly alter it
through proximity.

Trying to compute the reactances will meet similar issues.

73's
Richard Clark, KB7QHC

2929. WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 17:55:21 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-E2A424.12552121102003@central.isp.giganews.com>
Source record: 106245

This is not really antenna related but a sad PR day for amateur radion.
It looks like a slam dunk conviction which could cost him his Advance
class license plus other stuff

WZ3AR charged, released without bail

http://www.fredericksburg.com/News/apmethods/apstory?urlfeed=D7UA45T00.xm
l

2930. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 18:50:20 UTC
From: richardharrison@webtv.net
Message-ID: <14154-3F957FEC-323@storefull-2315.public.lawson.webtv.net>
Source record: 106246

Cecil, W5DXP wrote:
"When a lot of electrons flow between the plates of a capacitor, for instance, the voltage capability of the capacitor has been exceeded and it is in a failure mode."

Yes. Conduction current flows when electrons penetrate the dielectric. Capacitors consist of conductors separated by insulation. This dielectric bars conduction up to some voltage limit where the insulation breaks down. This insulation can be a high vacuum, but at some voltage, a spark can jump the gap even in a vacuum.

We have vacuum capacitors, both fixed and variable. We have vacuum tubes which have measured interelectrode capacitances. We have radio waves which propagate as the result of alternating magnetic and electric fields. These propagate in the high vacuum of deep space where corpuscular particles may be speeding through like infinitesimal bullets, but evidence is that no matter is required to allow influence by electric and magnetic fields. An alternating electric field, even in a vacuum where no electrons are in motion, produces an alternating magnetic field which generates an alternating electric field, and so on and so forth ad infinitum, ad nauseam.

We know this works as we use radio signals in deep space and view light from the sun and other cosmic sources. It was J.C. Maxwell who speculated that displacement current produces a magnetic field the same as conduction current does, to explain how radiation occurs.

Best regards, Richard Harrison, KB5WZI

2931. Re: Here it is - BPL full rollout in Manassas, VA

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 19:20:38 UTC
From: donutbandit <none@none.com>
Message-ID: <Xns941B7CA5D8E1Edonutbandit@216.102.43.227>
Source record: 106247

Dave Shrader <david.shrader@comcast.net> wrote in
news:MIalb.513384$2x.227216@rwcrnsc52.ops.asp.att.net:

> Or, a new strategy may emerge. Wait until the town licenses the service
> and then haul them into court for causing interference to a licensed
> radio service. Teach the town a lesson!!

I suspect that will be the process. It's kind of hard to file suit against
something for causing interference if it's not causing interference yet.

The first case will be the test. The FCC stands to come out really looking
stupid here - licensing a service that will cause interference to another
FCC licensed service.

2932. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 20:02:48 UTC
From: richardharrison@webtv.net
Message-ID: <20857-3F9590E8-288@storefull-2314.public.lawson.webtv.net>
Source record: 106248

Cecil, W5DXP wrote:
"We can deduce the ratio of voltage to current from the feedpoint impedance."

Kraus says:
"The current I1 at a distance from the nearest current maximum, as shown in Fig. 6-11 is given by

I1 = Io cos beta x

where I1 = terminal current,

Io = maximum current

When x=0, R1 = Ro; but when x=lambda/4, R1 = infinity if Ro is not zero. However, the radiation resistance measured at a current minimum (x=lambda/4) is not infinite as would be the calculated from:

R1 = Ro/ cos squared (beta x), since an actual antenna is not infinitesimally thin and the current at a minimum point is not zero. Nevertheless, the radiation resistance at a current minimum may in practice be very large, i.e., thousands of ohms.

I think the voltage may be measured at the end of a dipole using a diode probe spaced from the dipole by an insulator. The ground return can be provided by the exterior of a 1/2-wavelength coax which is well grounded.

For calibration, the easily determined voltage at the dipole feedpoint can be indicated by the diode probe.

The coupling can be kept small if there is sufficient antenna power. The antenna does not need to be reconfigured into a halo to measure its voltage at its open-circuit end.

Best regards, Richard Harrison, KB5WZI

2933. Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 21:38:59 UTC
From: Tiki <montazegue@hotmail.com>
Message-ID: <3f95a9d9$0$256$626a54ce@news.free.fr>
Source record: 106249

Hello,
I'm a french student and I search infos for build an Ultra Wide Band Antenna
(Frequency Band : 1 to 10GHz). Thank you.

--
Matteo Cianfarani
montazegue@hotmail.com
(+33) 6 76 22 91 25

2934. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 22:36:42 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com>
Source record: 106251

On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:

First, after all this thread, this, the original post, turned up on my server today Oct 21st, but dated the 18th.

>I would like to bury my coax for a distance of about 20ft. The location
>consist of 6" of crushed decorative rocks over the top of very rocky soil.
>
>I intend to take the LMR-400 coax and push it through a garden hose to add
>a layer of protection. However, I am worried that condensation will

Don't worry about it...LMR-400 hangs out in the rain, it'll survive inside a garden hose full of water.

>quickly fill the airspace of the hose with water and it will either
>penetrate the coax outer jacket or interfere with the performance of it in
>some unknown negative way.

Just don't have any unprotected connectors inside the hose. Probably the best would be to drill a number of holes at 90 degrees to each other along the length of the hose so it can drain. (before ins talling the coax <G>)The hose only serves as a mechanical protector.

>
>I can not flood the garden hose with petroleum oil as it will soon eat
>through the PVC jacket of the coax or garden hose. Ideally, I would like

Don't worry about it. It's not worth the effort and eventually the work to clean it up.

>to flood the hose with the same stuff they put into underground cables. It
>has a honey consistency and is not easily displaced by water. I was hoping
>for some type of silicon oil but am unable to find anything similar at the
>hardware store.

We used to use silicon oil, but you really shouldn't be worried about it.

You might need to use some wire pulling soap (the gooey yellow stuff) to push the LMR-400 through, but the stuff is stiff enough I would expect it to go through fine.

It t takes a good can to two cans to get a cable through my 4 inch conduit now that it has so many cables in it. The yellow stuff is easy to clean up

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com

N833R World's oldest Debonair? (S# CD-2)
>
>Anybody have any suggestions?

2935. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 22:39:35 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F95B5A7.193116C6@cwis.net>
Source record: 106250

Dick,
It says the story is no longer available. So
what did he do?
'Doc

2936. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 22:58:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpbeg7d587imeb@corp.supernews.com>
Source record: 106252

You do realize, of course, that the reading you get will depend on how
you've oriented the coax. Which orientation would provide the "correct"
answer? And why?

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> I think the voltage may be measured at the end of a dipole using a diode
> probe spaced from the dipole by an insulator. The ground return can be
> provided by the exterior of a 1/2-wavelength coax which is well
> grounded.
> . . .

2937. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 23:28:42 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <98gbpv09ntmecr1oit3rrfpp0n8h9gvtdk@4ax.com>
Source record: 106253

On Tue, 21 Oct 2003 17:39:35 -0500, 'Doc <w5lz@cwis.net> wrote:

>
>
>Dick,
> It says the story is no longer available. So
>what did he do?
> 'Doc

He looks to be the college student that put the stuff aboard the
Southwest aircraft.

Jack K8ZOA

2938. WTB: ROHN SECTIONS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 23:40:39 UTC
From: n2ion@aol.com
Message-ID: <20031021194039.14900.00000817@mb-m02.aol.com>
Source record: 106254

I'M LOOKING FOR SOME ROHN 45 SECTIONS AND ACCESSORIES. EMAIL ME WITH ANY INFO

2939. Re: Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 23:52:30 UTC
From: Thierry <"see my website">
Message-ID: <3f95c6be_2@news.vo.lu>
Source record: 106255

"Tiki" <montazegue@hotmail.com> wrote in message
news:3f95a9d9$0$256$626a54ce@news.free.fr...
> Hello,
> I'm a french student and I search infos for build an Ultra Wide Band
Antenna
> (Frequency Band : 1 to 10GHz). Thank you.
>

Maybe a short log-periodic could work.
There is a example at WinRADIO, a 230 Mhz-1.6 GHz, see picture at
http://www.astrosurf.com/lombry/Radio/winradio-ax31b-230-1600mhz.jpg
Otherwhise I am afraid you need one or more small disks (1m, 50cm) like
PROCOM models (see at UKW-Berichte.de).

Thierry
ON4SKY, LX3KSY

> --
> Matteo Cianfarani
> montazegue@hotmail.com
> (+33) 6 76 22 91 25
>
>

2940. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-21 23:56:07 UTC
From: Thierry <"see my website">
Message-ID: <3f95c797$1_2@news.vo.lu>
Source record: 106256

"KB1IBE" <dslesh@ttlc.net> wrote in message
news:vp5bbn599m1p8d@corp.supernews.com...
> Hello folks,
> I am experimenting with QRP-level antennas and wondered what the
> best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> dipole up)

Have also good results with a L/2 vertical (aluminum) erected quasi alone in
the field in pulling on the tendors.
quasi on par with a commercial model.

Thierry
ON4SKY
http://www.astrosurf.com/lombry

>
> Thnx in Advance!
> 73's Dave
> WN1QIN / KB1IBE
>
>

2941. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 01:14:06 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Z5mdnWkqmp5lRAiiRVn-vw@comcast.com>
Source record: 106257

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com...
> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
> You might need to use some wire pulling soap (the gooey yellow stuff)
> to push the LMR-400 through, but the stuff is stiff enough I would
> expect it to go through fine.
>
> It t takes a good can to two cans to get a cable through my 4 inch
> conduit now that it has so many cables in it. The yellow stuff is
> easy to clean up
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
> >
Roger,

If you are going to the trouble of using some kind of conduit, and assuming it comes in 10 foot lengths, why not just push it through one piece at a time? That is, push the coax through the pieces of pipe before you join the pipes together. Besides, LMR400 is pretty stiff.

Tam/WB2TT

2942. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 02:00:59 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f95e8e9_2@news1.prserv.net>
Source record: 106259

Kenneth Norton worked for the old Bureau of Standards back in the 30s through the 70s. He published many monographs on propagation, and eventually covered the entire RF spectrum. Many of his papers were also published in IRE Proceedings, or IRE Antenna and Propagation Society Transactions. Those papers are classics, and have all the information you seek. Unfortunately, short of a good technical library, I do not know where to send you to read them.

A simple start is to read the Propagation chapter in any recent edition of the ITT Handbook, and then look at as many of the end of chapter references you can access.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Alan" <none@none.com> wrote in message
news:kv_kb.59727$3A6.53384@twister.austin.rr.com...
> Can anyone explain to me why UHF links typically are not LOS while microwave a millimeter wave links typically
> are. Does UHF propagate differently? Is it that UHF will scatter off buildings and stuff while microwaves
> get absorbed or something? Are there any good books that explain this? Thanks.
>
> Alan
>
>

2943. WANT: Rohn 25

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 02:04:34 UTC
From: "William H. O'Hara, III" <whoohara@yahoo.com>
Message-ID: <Xns941BE0AB7681AX2A3DA5M1512AODKAMO@216.168.3.44>
Source record: 106258

Looking for Rohn 25 in Eastern Mass. Will pick up

781.857.0125

Bill

--
William H. O'Hara KB1IUB use QRZ.com for address lookup

2944. Re: RHCP configuration for Tonna Yagis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 02:15:49 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <zrWdnd45z4X6cAiiXTWJkQ@ctc.net>
Source record: 106260

> in the last weeks I have been fighting againts my two Tonna's crossed
> Yagis: a 2x19 elements UHF and a 2x9 elements VHF.
>
> I still cannot manage to have them up and running. Here are the
> details of the story:
>
> UHF
> Both dipoles, when feeded separately, resonate perfectly between 420
> and 426 MHz. Faston climps feed the diples (dont agree with this
> solution but there must be a valid reason if they adopted them).
> I have coupled them using two lamda/4 sections of RG-59. Each section
> is 11.3 cm long... ### ((300/436) * 0.66) / 4 ###. They terminate on a
> BNC wich goes on a Tee-BNC down to the RTX.

It has been a long time but I think when I put up a Tonna that 50 ohm coax was used between the elements and the T . I know this does not make for matching as normally 1/4 wave sections of 70 ohm coax is used in a 50 ohm system. Not sure what the lengths were seems that differant lengths were used for right or left hand circular but not very sure on that at all.

2945. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 03:07:45 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <aksbpvgq392ar3fn7kda88ngpoa38o36mb@4ax.com>
Source record: 106261

On Tue, 21 Oct 2003 21:14:06 -0400, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
>news:cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com...
>> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
>> You might need to use some wire pulling soap (the gooey yellow stuff)
>> to push the LMR-400 through, but the stuff is stiff enough I would
>> expect it to go through fine.
>>
>> It t takes a good can to two cans to get a cable through my 4 inch
>> conduit now that it has so many cables in it. The yellow stuff is
>> easy to clean up
>>
>> Roger Halstead (K8RI EN73 & ARRL Life Member)
>> www.rogerhalstead.com
>> N833R World's oldest Debonair? (S# CD-2)
>> >
>Roger,
>
>If you are going to the trouble of using some kind of conduit, and assuming
>it comes in 10 foot lengths, why not just push it through one piece at a
>time? That is, push the coax through the pieces of pipe before you join the
>pipes together. Besides, LMR400 is pretty stiff.
>
In my case I have 75 feet horizontal with two 45 bends at each end and
a 3 foot rise at the tower and 86 feet horizontal into the basement.
Getting more into that takes lots of soap and one hefty snake and it
still gets hung up at times.

http://www.rogerhalstead.com/cablebox.htm
There are (I'd have to go count to be sure now), 7 runs of LMR 400, 2
runs of RG-6 for the UHF TV antennas, One does everything cable to the
C/Ku band dish with rotor and polarization, two 3/8ths inch rotor
cable with one used for the rotor and the other for the remote antenna
switch.

With a single run of LMR 400 in 3/4 inch, I think pushing it through
one at a time would work fine. Although for no more than 20 or 30
feet...probably twice that you could easily push one run through the
full length. I'd guess you could push it through far longer runs than
that.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>Tam/WB2TT
>

2946. Re: Here it is - BPL full rollout in Manassas, VA

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 03:37:20 UTC
From: spam@spam.com
Message-ID: <3f95f9f5.905687@news.east.cox.net>
Source record: 106262

On 21 Oct 2003 19:20:38 GMT, donutbandit <none@none.com> wrote:

>Dave Shrader <david.shrader@comcast.net> wrote in
>news:MIalb.513384$2x.227216@rwcrnsc52.ops.asp.att.net:
>
>> Or, a new strategy may emerge. Wait until the town licenses the service
>> and then haul them into court for causing interference to a licensed
>> radio service. Teach the town a lesson!!
>
>I suspect that will be the process. It's kind of hard to file suit against
>something for causing interference if it's not causing interference yet.
>
>The first case will be the test. The FCC stands to come out really looking
>stupid here - licensing a service that will cause interference to another
>FCC licensed service.
Exactly! How can the FCC allow known interference to occur to LICENSED
radio services? I understand that BPL is also capable of interferring
with WWV transmissions; maybe you'll have one government agency
fighting another (grin).

The OVH in Manassas is aware of this situation. As with all court
cases, someone has to be "harmed" first before any legal action can
occur. I guess they could always resolve the dispute on the National
Park Service battlefield down the street (grin)...

Mark

2947. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 03:38:40 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F95FBC0.F80FE74A@cwis.net>
Source record: 106264

Dick,
I assume he had a drivers license, is it also a bad
'PR' day for drivers? Library card/library? If he had
a 'Visa' card should all 'Visa' card holders be ashamed?
'Doc

2948. Re: Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 03:38:54 UTC
From: spam@spam.com
Message-ID: <3f95fbbb.1360531@news.east.cox.net>
Source record: 106263

On Tue, 21 Oct 2003 23:38:59 +0200, "Tiki" <montazegue@hotmail.com>
wrote:

>Hello,
>I'm a french student and I search infos for build an Ultra Wide Band Antenna
>(Frequency Band : 1 to 10GHz). Thank you.
>
>--
>Matteo Cianfarani
>montazegue@hotmail.com
>(+33) 6 76 22 91 25
>
>
Do a search on Vivaldi Antennas.

Mark

2949. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 04:17:30 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <bn5sgp$tpkd5$1@ID-207580.news.uni-berlin.de>
Source record: 106124

This is the guy that let TSA know that he was smuggling (or had
smuggled) box cutters onto planes to show how lousy their security was.

They shot (arrested, anyway) the messenger because he embarrassed them.

-=-
Alan AB2OS

On 10/22/03 11:58 am Fractenna put fingers to keyboard and launched the
following message into cyberspace:

> Didn't he just win a FAR scholarship?
>
> What was he arrested for? Info not available on the link.

2950. Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 04:59:09 UTC
From: DeG <kg4fbg@onemain.com>
Message-ID: <x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net>
Source record: 106265

I'm wanting to keep peace within the family.. NO! Extra antennas on the vehicle..
I want to install a dual band 2m/440 mobile using the AM/FM antenna that is on the vehicle.. It will be mostly used for receive, BUT....
Other than a duplexer and tuner (s) What is needed to STOP the RF from damaging the AM/FM radio in case I want to transmit?...
Any help on this??

2951. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 06:39:31 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310212239.497cd765@posting.google.com>
Source record: 106266

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f954936_1@corp.newsgroups.com>...
> Mark Keith wrote:
> > Feed a 40m dipole with
> > coax, and tune the antenna to give you a good match.
>
> Or feed a 40m dipole with 1/2WL of open-wire line and radiate even more
> power. Then adjust the length of the feedline and also work 30m-10m with
> no tuner. :-)

Yep, Just as long as you ditch the tuner. I guess instead of 1.25
wave, I should have said 1.5 wave. 3/4 wl a side would be a good match
for coax. You could feed an EDZ ".64 wave per leg" with small loading
coils at the feedpoint, and the losses wouldn't be worth worrying
about. Very low...Or use the correct length of ladder line to get a
good match..Just a regular coax fed dipole on 40m will be very
efficient. What, maybe about 97-98 % for the average 50-100 ft length
of decent coax?? Very low losses anyway. MK

2952. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 07:33:20 UTC
From: mxduffie@axtxom.net
Message-ID: <4jccpvsf34pqm3pavamua8a7uc1db2ja06@4ax.com>
Source record: 106267

On Wed, 22 Oct 2003 04:59:09 GMT, "DeG" <kg4fbg@onemain.com> wrote:

> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..

Sounds like a pretty selfish request to me. Time to fire the
family. Wonder what they would say about an antenna for satellite
radio.

gm
--
Replace x in adr with c

2953. Re: Impedance of a printed circuit board antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 08:26:59 UTC
From: Don.Esteban@gmx.net
Message-ID: <1f578ae6.0310220026.1fbf9858@posting.google.com>
Source record: 106268

Thanks all for your help,

> English is perfect. Specification is too.

thanks :-D

> You are working too hard. Round wire compared to flat stripline is
> not that different. The difference, for the broad range of frequency,
> will be overwhelmed by other things.

I like to hear that - I hope my boss is reading it :)
This is exactly what I was looking for - Thanks for this advice. As I
just finished my studies, i don't have the experience to know what i
can neglect and what not - I am just uncertain. Trial and error is one
way - to ask experienced people another...

> Think of doing this by parts. The first approximation will be close.
> The second approximation will improve it a little. Being perfect will
> not matter.

I am aware of never beeing able to create perfect models. What I am
doing is a brief desciption of what to expect.
Thanks again

Bye

Daniel

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<2ulapvsv7mg0bf4jdr2pj6vmvjfldclv9q@4ax.com>...
> On 21 Oct 2003 01:59:07 -0700, Don.Esteban@gmx.net (Daniel) wrote:
> >What i want to simulate is a common EMC-Test. Put a PCB with the
> >circuitry in a shielded EMC-room (I dont know the english word) and
> >put a 10V/m E-Field around it in 3m distance from the sending antenna.
> >Frequency band is 80MHz to 1GHz
>
> English is perfect. Specification is too.
>
> >> >I started with modeling a simple loop and a stub. I experienced no
> >> >problems for the loop, but the stub is driving me crazy:
> >> >In order to calculate the output voltage of a PCB antenna for a given
> >> >geometry and EM-Field at a desired frequency, I need to know the
> >> >output impedance for this antenna. I didn't find anything on the web
> >> >on calculating/extracting it.
> >>
> >> This, in fact, is one of the easiest things to determine - if you know
> >> the frequency and physical dimension.

> >
> >This was the question! unfortunately
> >> This, in fact, is one of the easiest things to determine - if you know
> >> the frequency and physical dimension.
> >doesn't help me.... I know the physical dimension (PCB Layout, 93mm
> >length, 2mm Strip width, 0.035mm hight) The freqeuncy band is given
> >above.
> >The only thing antenna books are talking about (the ones i read) are
> >wire antennas, where a radius is given for calculating the
> >Waveresistance(? correct word ?)ZL. As i dont have a radius (stripline
> >is rectangular) I am not sure what to do. Is it possible to say the
> >area of the stripline is 0.035mm*2mm (crossection), and therefore
> >build up the equation 0.035mm*2mm=2*pi*r^2 and then follow for the
> >radius: r=sqrt((0.035mm*2mm)/(2*pi)). I think this is rather wrong,
> >how else can I determine the waveresistance and with it the Impedance
> >of the antenna?
>
> You are working too hard. Round wire compared to flat stripline is
> not that different. The difference, for the broad range of frequency,
> will be overwhelmed by other things.
>
> >I was thinking of a 2D FEM in order determine the unit per length
> >parameters L' and C' and then i can calculate the waveresistance, too.
> >What do you think?
> >
> >thanks
> >
> >Daniel
>
> Hi Daniel,
>
> Think of doing this by parts. The first approximation will be close.
> The second approximation will improve it a little. Being perfect will
> not matter.
>
> For overall dimension of dipole/monopole/loop, wavelengths less than 1
> and more than 0.1 can be found in many antenna reference books.
>
> Let's look a some simple approximations for a loop:
> Ra = 320 ï¿½ pi^6 ï¿½ (radius / wavelength)^4
> for
> radius = 0.046 M
> wavelength = 3 M
> then
> Ra = 0.017 Ohm
>
> for
> radius =0.046 M
> wavelength = 0.3M
> then

> Ra = 170 Ohm
>
> Let's look a some simple approximations for a dipole:
> Ra = 80 ï¿½ piï¿½ ï¿½ (length / wavelength)ï¿½
> for
> length = 0.186 M
> wavelength = 3 M
> then
> Ra = 3 Ohm
>
> for
> length = 0.186 M
> wavelength = 0.3M
> then
> Ra = 304 Ohm
>
> Now, be warned. These formulas only work for length << wavelength and
> for radius << wavelength. The last evaluation for a nearly halfwave
> dipole reveals 304 Ohms for what is actually closer to 70 Ohms.
>
> So for your range, for your largest dimension (93mm) the radiation
> resistance will vary between roughly 1 Ohm and 100 Ohms (I am
> discounting the loop too). This is for "free space." Your board will
> limit that severely. This again suggests high evaluations will be
> modified (and closer to my 1 - 100).
>
> This is a first approximation. A second approximation will not alter
> this more than 30%. Nearby components will significantly alter it
> through proximity.
>
> Trying to compute the reactances will meet similar issues.
>
> 73's
> Richard Clark, KB7QHC

2954. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 10:19:43 UTC
From: Marylou@city.net
Message-ID: <3F9659BF.9659CBEF@city.net>
Source record: 106119

Roger, just what is that white loamy stuff around the base of your tower aside from ALL the coax? You need to show us a photo of the tower and what you have hanging on it. It that sand that has blown up, opps, that not sand. Your call tells me your in the northeast. So it must be snnnnnow. I got COLD just looking at it. Have a nice warm day.
Marylou, N"5"XXX.

Roger Halstead wrote:
>
> On Tue, 21 Oct 2003 21:14:06 -0400, "Tarmo Tammaru"
> <t-tammaru@home.com> wrote:
>
> >
> >"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
> >news:cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com...
> >> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
> >> You might need to use some wire pulling soap (the gooey yellow stuff)
> >> to push the LMR-400 through, but the stuff is stiff enough I would
> >> expect it to go through fine.
> >>
> >> It t takes a good can to two cans to get a cable through my 4 inch
> >> conduit now that it has so many cables in it. The yellow stuff is
> >> easy to clean up
> >>
> >> Roger Halstead (K8RI EN73 & ARRL Life Member)
> >> www.rogerhalstead.com
> >> N833R World's oldest Debonair? (S# CD-2)
> >> >
> >Roger,
> >
> >If you are going to the trouble of using some kind of conduit, and assuming
> >it comes in 10 foot lengths, why not just push it through one piece at a
> >time? That is, push the coax through the pieces of pipe before you join the
> >pipes together. Besides, LMR400 is pretty stiff.
> >
> In my case I have 75 feet horizontal with two 45 bends at each end and
> a 3 foot rise at the tower and 86 feet horizontal into the basement.
> Getting more into that takes lots of soap and one hefty snake and it
> still gets hung up at times.
>
> http://www.rogerhalstead.com/cablebox.htm
> There are (I'd have to go count to be sure now), 7 runs of LMR 400, 2
> runs of RG-6 for the UHF TV antennas, One does everything cable to the
> C/Ku band dish with rotor and polarization, two 3/8ths inch rotor

> cable with one used for the rotor and the other for the remote antenna
> switch.
>
> With a single run of LMR 400 in 3/4 inch, I think pushing it through
> one at a time would work fine. Although for no more than 20 or 30
> feet...probably twice that you could easily push one run through the
> full length. I'd guess you could push it through far longer runs than
> that.
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> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
> >Tam/WB2TT
> >

2955. Re: cushcraft 17b2 information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 11:21:36 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <4Ltlb.11961$Go5.224476@twister.tampabay.rr.com>
Source record: 106120

its a fine SSB antenna for weak signal work
its a bit large for FM stuff
but it has all stainless steel hardware so it holds up nicely

2956. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 11:43:03 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <n2rcpvo85n7bjiqm2ehlhjehce2s260viv@4ax.com>
Source record: 106121

Remember that a right-angle bend is best served by 2, 45 degree bends
with a short straight section between them. This will make pulling
cable much easier. A "pull-box" at corners is a good idea as well but
environment-resistant (not "proof", that's not possible!) pull-boxes
aren't cheap or easy to find.

Russ, who is responsible for a lot of cable-pulling through conduit

On Wed, 22 Oct 2003 06:19:43 -0400, Marylou@city.net wrote:

>Roger, just what is that white loamy stuff around the base of your tower
>aside from ALL the coax? You need to show us a photo of the tower and
>what you have hanging on it. It that sand that has blown up, opps, that
>not sand. Your call tells me your in the northeast. So it must be
>snnnnnow. I got COLD just looking at it. Have a nice warm day.
>Marylou, N"5"XXX.
>
>Roger Halstead wrote:
>>
>> On Tue, 21 Oct 2003 21:14:06 -0400, "Tarmo Tammaru"
>> <t-tammaru@home.com> wrote:
>>
>> >
>> >"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
>> >news:cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com...
>> >> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
>> >> You might need to use some wire pulling soap (the gooey yellow stuff)
>> >> to push the LMR-400 through, but the stuff is stiff enough I would
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>> >> It t takes a good can to two cans to get a cable through my 4 inch
>> >> conduit now that it has so many cables in it. The yellow stuff is
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>> >>
>> >> Roger Halstead (K8RI EN73 & ARRL Life Member)
>> >> www.rogerhalstead.com
>> >> N833R World's oldest Debonair? (S# CD-2)
>> >> >
>> >Roger,
>> >
>> >If you are going to the trouble of using some kind of conduit, and assuming
>> >it comes in 10 foot lengths, why not just push it through one piece at a
>> >time? That is, push the coax through the pieces of pipe before you join the
>> >pipes together. Besides, LMR400 is pretty stiff.
>> >

>> In my case I have 75 feet horizontal with two 45 bends at each end and
>> a 3 foot rise at the tower and 86 feet horizontal into the basement.
>> Getting more into that takes lots of soap and one hefty snake and it
>> still gets hung up at times.
>>
>> http://www.rogerhalstead.com/cablebox.htm
>> There are (I'd have to go count to be sure now), 7 runs of LMR 400, 2
>> runs of RG-6 for the UHF TV antennas, One does everything cable to the
>> C/Ku band dish with rotor and polarization, two 3/8ths inch rotor
>> cable with one used for the rotor and the other for the remote antenna
>> switch.
>>
>> With a single run of LMR 400 in 3/4 inch, I think pushing it through
>> one at a time would work fine. Although for no more than 20 or 30
>> feet...probably twice that you could easily push one run through the
>> full length. I'd guess you could push it through far longer runs than
>> that.
>>
>> Roger Halstead (K8RI EN73 & ARRL Life Member)
>> www.rogerhalstead.com
>> N833R World's oldest Debonair? (S/N CD-2)
>> >Tam/WB2TT
>> >

2957. Re: Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 11:51:36 UTC
From: Daniel FY1FV <delete_fy1fv@wanadoo.fr>
Message-ID: <bn5r0i$2rp$1@news-reader5.wanadoo.fr>
Source record: 106122

May be an horn antenna with a patch feed?
It's working very well and inexpensive (cardbox covered with cooking
aluminium sheet...)
73's
Daniel FY1FV

Tiki <montazegue@hotmail.com> a crit dans le message :
3f95a9d9$0$256$626a54ce@news.free.fr...
> Hello,
> I'm a french student and I search infos for build an Ultra Wide Band
Antenna
> (Frequency Band : 1 to 10GHz). Thank you.
>
> --
> Matteo Cianfarani
> montazegue@hotmail.com
> (+33) 6 76 22 91 25
>
>

2958. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 11:58:22 UTC
From: fractenna@aol.com
Message-ID: <20031022075822.17268.00001361@mb-m16.aol.com>
Source record: 106123

Didn't he just win a FAR scholarship?

What was he arrested for? Info not available on the link.

73,
Chip N1IR

2959. Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 12:43:20 UTC
From: Ronald Walters <rwalters8@cfl.rr.com>
Message-ID: <IXulb.13697$Go5.235922@twister.tampabay.rr.com>
Source record: 106125

I have been using a MFJ-989C tuner for about (5) years without any problems. Just recently I have noticed that on the higher band, 24 MHz that the SWR occasionally would jump from an adjusted 1:1 SWR to infinity. A slight adjustment of the roller inductance appeared to solve the problem although I haven't ruled out a balum or antenna problem. I plan on investigating that this weekend, however, before I open the cabinet and look for problems I would ask the group for recommendations on cleaning the roller assembly and inductor to ensure good conductivity after I am done.

I still have some old cleaning solutions from the old TV tuner days, some electrical cleaner (Appears heavy duty stuff) but maybe there is some other solutions someone might recommend.

Your thoughts and recommendations are appreciated

Ron - W4LDE

2960. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 12:50:08 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031022085008.06910.00000622@mb-m28.aol.com>
Source record: 106126

Forget the AM/FM antenna. It might be ok for receive, but I wouldn't risk trying to transmit on it.

If they're gonna be like that, then maybe a thru-the-glass antenna is the solution? Looks a lot like a cell antenna and is rather unobtrusive, plus it'll be less work then trying to hook the radio up to the AM/FM antenna.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

2961. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 13:13:06 UTC
From: richardharrison@webtv.net
Message-ID: <19061-3F968262-11@storefull-2317.public.lawson.webtv.net>
Source record: 106127

Roy, W7EL wrote:
"Which orientation would provide the "correct" answer?"

Maybe none.

We know what the correct answer is at the feedpoint. By trial and error we can find the most stable and least critical placement for our test lead. We can calibrate our voltage indicator with a sample at the feedpoint under the conditions that prevail.

A test lead perpendicular to the balanced antenna suffers the least interference. It`s subject to imperfections and it`s subject to improvements to overcome the imperfections.

In AM broadcasting we get away with hanging a sampling loop on each tower of a directional array to monitor both tower current and phase. It works well enough.

Do you have a better idea than a diode probe to sample voltage at the end of a dipole?

Best regards, Richard Harrison, KB5WZI

2962. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 15:19:40 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F96A00C.90357178@cwis.net>
Source record: 106130

Ron,
Sounds like a dirty contact. Your cleaner should work.
So will soap and water, or 'Windex'. Just be sure to 'blow'
the dust out of it and dry it out.
'Doc

PS - In extreme cases, take it to the car wash (no wax).

2963. Re: RIG FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 15:29:01 UTC
From: Dave Bushong <dbushong@adelphia.net>
Message-ID: <1nxlb.124152$qj6.7305539@news1.news.adelphia.net>
Source record: 106131

Wow, that's quite an antenna!

N2ION wrote:

> FOR SALE-ICOM IC-735
> The Icom IC-735 covers all amateur frequencies from 1.8MHZ to 30MHz including
> 10MHZ,18MHZ,24MHZ +general coverage. It offers not only SSB but also CW,AM,and
> FM operating modes. All circuits in the IC-735 including the driver and final
> power stages are completely solid state and the transceiver provides full power
> output. Included is a hand mic, mounting bracket, & original box.
> $325.00 firm, shipped in the continental U.S.A.

2964. WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 15:49:11 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310220749.756d93b4@posting.google.com>
Source record: 106132

About a decade ago before Google took over this group I mentioned that
use of the water pump ideology would provide a unique form of
antennas.
Roy at that time pointed out that there was no correlation with
electron flow.
As most know this did not deter me and I have devoted the last ten
years
in following this path on antennas. Yes. I know it has never been
accepted as some may well remember the combination loop dipole that I
have spoken about plus the the home written amateur patents.
To cut the story short I heard thru the grapevine that a series of
patents have been applied for using the pump (coupling in electrical
parlance)
where instead of a dipole combination the pump is applied to the loop
antenna
such that they also are physically combined. (presumably the same
principle)
Obviously they did more than that since physical connection of two
radiators
is now well known. If anybody comes across the actual description
of this new family of antennas I would sure like to learn more about
it as my
as my many discussions amoung the experts of this group has created
nothing but mirth such that I abandond a couple of extra patents both
here and abroad in embarrasement. If I could get hold of the actual
patent numbers I would like to see the error of my ways and the vital
step that I missed before wasting time on my present efforts as they
are so time consuming.
Any info on this new family of antennas would surely be appreciated by
this
poster.
Best Regards
Art Unwin KB9MZ ...XG..RSGB member

2965. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 15:56:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f96aada$1_8@corp.newsgroups.com>
Source record: 106133

Richard Harrison wrote:
> Do you have a better idea than a diode probe to sample voltage at the
> end of a dipole?

I use a 4th dimension ground.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2966. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 15:59:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f96ab95_8@corp.newsgroups.com>
Source record: 106134

Bob Miller wrote:

> On Wed, 22 Oct 2003 04:59:09 GMT, "DeG" <kg4fbg@onemain.com> wrote:
>>I'm wanting to keep peace within the family.. NO! Extra antennas on the
>>vehicle..
>>
> Get a mag-mount dual bander. Throw it in the trunk when not in use.

Throw the XYL in the trunk when the antenna is being used.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2967. BPL!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 17:37:08 UTC
From: Gary Gaudette <garygaud@vgernet.net>
Message-ID: <3F96C044.2060901@vgernet.net>
Source record: 106137

Following is from rec.radio.amateur.antenna:

The following is a repost from from another newsgroup. Look like
Manassas will have internet via Power Lines. The amateurs in the
Manassas area must have been sleeping to let this pass.

Good luck in the Contest

"Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
news:bmvsrr$79c$0@208.206.142.66...

> CHeck this out...
>
>
>

http://www.potomacnews.com/servlet/Satellite?pagename=WPN%2FMGArticle%2FW
PN
_BasicArticle&c=MGArticle&cid=1031771619197&path=!frontpage

>

Innovative Web access to shock Manassas
SARI KREIGER
skreiger@potomacnews.com
Saturday, October 18, 2003

Manassas residents will soon be the first in the United States
to buy Internet access over city power lines.
The City Council voted unanimously on Thursday to
grant a franchise to Prospect Street Broadband, LLC.,
bringing a year-long preparation process to fruition.

Residents can purchase the service within 120 days of
the contract signing, which is expected to occur
next week, according to Energy Services Manager Brett Massey.
In May 2002, a small pilot group of city residents and
businesses began using the service. A modem is plugged into
the electrical outlet on one end, and the computer on the
other, to gain high-speed access to the Internet.
"They were very impressed by the speed, reliability
and flexibility," said Utilities Director Allen Todd.

Freda Wallace, an administrative assistant with Robert
Loveless Architecture in Old Town Manassas said the
company has been receiving the service since February.
"We've had good service with it," Wallace said. "The

only time it has been down is because of our equipment, or because they're testing something on the lines because it is a pilot program."

The Connecticut-based company that received the franchise will be responsible for the equipment, connection, monthly billing, advertising and 24-hour-a-day, seven-day-a-week customer support. The city will expand the current fiber network, which is almost complete, update optical electronics and install and maintain equipment external to the residents' homes.

"The grantee will be providing most of the capital of this project and assume most of the risk," said John Hewa, assistant electric director for the City of Manassas. "There's very little financial risk to the city."

John F. Berry, chairman and CEO of Prospect Street Broadband, said the service is very easy to use and no special training is necessary. Residents can purchase the service and obtain access from any city outlet. "You sign up once and you can sign on at home, a friend's house, the ice skating rink, where ever," Berry said.

If residents opt for this Internet service provider, they will pay approximately half of normal high-speed access, as the tentative service price is $29.95 a month for residents, and $69.95 for commercial access. "It will be competitively priced and a quality service," said Vice Mayor Harry J. Parrish II. Wallace said the service was comparable in speed to any DSL program available. "It's very fast," she said.

And as a fringe benefit, the city can also monitor power outages through this technology. Todd said the city has been trying for years to achieve that capability. Two bids were received on Sept. 8, and Todd said the city spent a considerable amount of time examining both proposals to ensure the best outcome for residents. "We've never had a franchise quite like this before," Todd said. "We wanted to make sure we had measures that would protect the services we promise the citizens."

The contract that the council voted to approve calls for a 10-year term, with a five-year extension. A minimum payment of $24,000 after the first year, and $124,000 after the second and third year is guaranteed to the city. Initial figures project that Manassas could receive up to $4.5 million in revenue after the 10-year period. Councilman Ulysses X. White questioned city staff

about future price hikes, as he was reminiscent of
a similar situation with cable television in the city.
But Todd said with competition available, residents
wouldn't be stuck with high bills and no options.
Rather, this new offer gives residents exactly that -- options.

Councilman Eugene R. Rainville said residents will benefit
from an extra use of the electrical system their tax dollars already
fund.
"Now they can get Internet at a low price," Rainville said.
"I would encourage all of our citizens to at least look at it as an
alternative."
And according to Parrish, residents may receive an added
bonus if enough people patronize this service. "It looks like the
council might have the opportunity to look at tax reduction," Parrish
said.

---------- cut ----------

Some Links:

City of Manassas Va: http://www.manassascity.org/

Manassas Town Commissioners and Board:
http://www.manassascity.org/city_government/index.html

Prospect Street Broadband, LLC: http://www.prospectstreet.com/

Manassas Va ARC (Old Va Hams ARC): http://www.w4ovh.net/

2968. Re: Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 17:39:48 UTC
From: richardharrison@webtv.net
Message-ID: <10733-3F96C0E4-18@storefull-2315.public.lawson.webtv.net>
Source record: 106136

Matteo Cianfarani wrote:
"(Frequency Band: 1 to 10GHz)"

By all means get a copy of Kraus` "Antennas For All Applications". Find his chapter on "Broadband and Frequency-Independent Antennas". At the end of the chapter is problem 11-5-1 "Log spiral. Design a planar log spiral of the type shown in Fig. 11-11 to operate at frequencies from 1 to 10 GHz."

Best regards, Richard Harrison, KB5WZI

2969. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 17:41:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v0gdpvc6n2b8e9505i5endud5iekeid1bj@4ax.com>
Source record: 106135

On Wed, 22 Oct 2003 12:43:20 GMT, "Ronald Walters"
<rwalters8@cfl.rr.com> wrote:

>I would ask the group for recommendations on cleaning the roller assembly and
>inductor to ensure good conductivity after I am done.

Hi Ron,

One contact cleaner that I used that was better than most was
Cramolin. This is a monomolecular layer solution that you would use
very sparingly. However, as your tuner did not arrive brand-new (or
brand-used) with it, your problem may be more mundane.

The simplest way to defeat corrosion is with pressure. The spring
tension of the roller may have slackened up over the years.

73's
Richard Clark, KB7QHC

2970. Re: cushcraft 17b2 information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 17:51:44 UTC
From: white rover <danda95@ntlworld.com>
Message-ID: <4tzlb.293$4B.617955@newsfep1-win.server.ntli.net>
Source record: 106138

I use a 13 ele cushcraft and it works very well

"Manuel P&#65533;rez Rey" <mprey@ing.uc3m.es> wrote in message
news:bn3fjm$n9n$1@hyrkania.uc3m.es...
> Hello,
> I'd like to know if the Cushcraft 17b2 antenna is a good choice. Is there
> anybody who uses it? Has it any problem?
> Thank you very much in advance.
> 73's
>
>

2971. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 17:55:56 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310220955.67b09242@posting.google.com>
Source record: 106139

"Ronald Walters" <rwalters8@cfl.rr.com> wrote in message
news:<IXulb.13697$Go5.235922@twister.tampabay.rr.com>...
> I have been using a MFJ-989C tuner for about (5) years without any problems.
> Just recently I have noticed that on the higher band, 24 MHz that the SWR
> occasionally would jump from an adjusted 1:1 SWR to infinity. A slight
> adjustment of the roller inductance appeared to solve the problem although I
> haven't ruled out a balum or antenna problem. I plan on investigating that
> this weekend, however, before I open the cabinet and look for problems I
> would ask the group for recommendations on cleaning the roller assembly and
> inductor to ensure good conductivity after I am done.
>
> I still have some old cleaning solutions from the old TV tuner days, some
> electrical cleaner (Appears heavy duty stuff) but maybe there is some other
> solutions someone might recommend.
>
> Your thoughts and recommendations are appreciated
>
> Ron - W4LDE

I use Muriatic acid for this and when working on coax e.t.c
Inexpensive to purchase at hardware or lumber yards ($4 a gallon)
I dilute it with an equal amount of water. This is also ideal
to clean copper prior to soldering
Cheers
Art

First came across this many years ago when I was in the Carribean on
one of many many business trips.
A local gave me a large sea shell with a beutiful pattern on it but it
was encrusted with all sorts of sea matter. Immersing it a short while
as per above
and all the crud was removed leaving a very shiny and elaborate
surface.
Ten years on the side board and still looks good and shiny. Passed on
the tip
to a vendor on the beach in San Juan so hopefully his business
improved.

2972. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 18:08:05 UTC
From: wn6bdb@hotmail.com
Message-ID: <fda4618.0310221008.380602de@posting.google.com>
Source record: 106140

There are disguised antennas used in the land mobile service that look like
AM/FM mobile antennas. (they're intended for undercover police work).
Try http://www.sti-co.com/index.php
Another, simpler, solution that you might get past the XYL is a 'cell look-alike'
antenna. There a number of manufacturers that produce those.
Steve

> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..
> I want to install a dual band 2m/440 mobile using the AM/FM antenna that is
> on the vehicle.. It will be mostly used for receive, BUT....
> Other than a duplexer and tuner (s) What is needed to STOP the RF from
> damaging the AM/FM radio in case I want to transmit?...
> Any help on this??

2973. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 19:11:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn6kp5efe1@hercules.btinternet.com>
Source record: 106141

> Do you have a better idea than a diode probe to sample voltage at the
> end of a dipole?
>
==========

The only people person who needs to know the volts at the ends of an antenna conductor such as a 1/2-wave dipole is the antenna designer. He has to concern himself with insulators, breakdown voltages, the effects of corona discharge and other such mundane (to other people) things.

Antenna designers, of which extremely few are needed in this small world, being practical, sensible people who are obliged by professional self-discipline to keep economy in time and materials foremost in their minds, do not waste valuable resources researching the 'end-voltage' question, purchasing latest space-age technology equipment just for a one-off job, and employing teams of incompetent but highly-paid assistants and workmen to make one solitary measurement.

Of course they don't !

In a few seconds they just do a little school arithmetic : -

Volts at end of dipole = Q * Vin / 2

Where Vin is centre-fed dipole feedline volts and Q is the dipole's resonant Q factor.

Q is dipole inductive reactance divided by radiation resistance.

According to the ARRL handbook, Heaviside, Terman, me and countless others, Q = Omega*L/R

Richard, you are familiar with these elementary notions. Do you not feel a little saddened, like me, that amateurs, even future professional engineers, are handicapped by having unnecessarily complicated, incorrect even, ideas knocked into their heads by do-gooders on this newsgroup, trying to appear knowledgeable, who should know better ?

I hasten to distinguish between accumulated PRACTICAL EXPERIENCE and TECHNICAL BAFFLEGAB. The latter is easily recognisable.
===
Reg, G4FGQ

2974. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 19:44:10 UTC
From: tdonaly@aol.com
Message-ID: <20031022154410.15037.00000665@mb-m02.aol.com>
Source record: 106142

Reg wrote,
>
>
>> Do you have a better idea than a diode probe to sample voltage at the
>> end of a dipole?
>>
>==========
>
>The only people person who needs to know the volts at the ends of an antenna
>conductor such as a 1/2-wave dipole is the antenna designer. He has to
>concern himself with insulators, breakdown voltages, the effects of corona
>discharge and other such mundane (to other people) things.
>
>Antenna designers, of which extremely few are needed in this small world,
>being practical, sensible people who are obliged by professional
>self-discipline to keep economy in time and materials foremost in their
>minds, do not waste valuable resources researching the 'end-voltage'
>question, purchasing latest space-age technology equipment just for a
>one-off job, and employing teams of incompetent but highly-paid assistants
>and workmen to make one solitary measurement.
>
>Of course they don't !
>
>In a few seconds they just do a little school arithmetic : -
>
>Volts at end of dipole = Q * Vin / 2
>
>Where Vin is centre-fed dipole feedline volts and Q is the dipole's resonant
>Q factor.
>
>Q is dipole inductive reactance divided by radiation resistance.
>
>According to the ARRL handbook, Heaviside, Terman, me and countless others,
>Q = Omega*L/R
>
>Richard, you are familiar with these elementary notions. Do you not feel a
>little saddened, like me, that amateurs, even future professional engineers,
>are handicapped by having unnecessarily complicated, incorrect even, ideas
>knocked into their heads by do-gooders on this newsgroup, trying to appear
>knowledgeable, who should know better ?
>
>I hasten to distinguish between accumulated PRACTICAL EXPERIENCE and
>TECHNICAL BAFFLEGAB. The latter is easily recognisable.
>===

>Reg, G4FGQ
>

All this post serves to do is confirm the suspicion in many minds, Reg, that
you
haven't ever taken the trouble to study electromagnetics. Might I suggest that,

the next time you read Heaviside's work, you put forth the effort necessary
to understand it. The simple approximations that you rely on so heavily for
your own programs may be good enough for the rough work you demand of them,
but, they are not a statement of reality, and they only work given the narrow
set of
conditions which, for some reason, you always leave unstated.

Tom Donaly, KA6RUH

2975. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 19:47:40 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310221147.13465286@posting.google.com>
Source record: 106143

"DeG" <kg4fbg@onemain.com> wrote in message
news:<x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net>...
> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..
> I want to install a dual band 2m/440 mobile using the AM/FM antenna that is
> on the vehicle.. It will be mostly used for receive, BUT....
> Other than a duplexer and tuner (s) What is needed to STOP the RF from
> damaging the AM/FM radio in case I want to transmit?...
> Any help on this??

Just keeping the RF out of the AM/FM radio isn't too difficult, but
you'll have other issues, too. A diplexer (triplexer?) can be made to
do the job of sorting out the RF, with enough attenuation to prevent
burning up the car radio. -50dB from 10W is 0.1milliwatt, for
example, and it's possible to get better than 50dB attenuation of
unwanted bands. I'm not aware of triplexers specifically for
0.5-108MHz/144-148MHz/440-450MHz, but then I'd just design and build
one anyway (assuming I had decided to do it that way).

I assume your car antenna is a cowl-mounted whip, and not an
on-the-glass one which you might destroy by putting power to it. But
even then, the coax used for car antennas is typically high impedance
(low capacitance) to work well on the AM band. You may have some fun
getting 144 and 440MHz power to the antenna through that stuff, and if
you replaced it with RG-58, the AM reception would suffer quite a bit.
Another possibility is a relay at the antenna feedpoint, but typical
car antennas may not make that very easy.

If I was intent on a "stealth" antenna for my car, for 144 and 440,
I'd consider feeding a window frame as a slot-type antenna. If I was
really rabid about it, I'd think of making a slot antenna in the
sheetmetal, filled with dielectric that could be painted to match the
car finish, but that's a bit extreme for me.

The dual-band mag mount sounds like a good idea to me, or if you don't
need coverage, just a rubber duckie on a handheld.

Cheers,
Tom

2976. Re: Help for Ultra Wide Band Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 20:05:16 UTC
From: FY1FV <remove_fy1fv@wanadoo.fr>
Message-ID: <bn6nu2ahk1@news-reader3.wanadoo.fr>
Source record: 106144

A log spiral feed may be better than patch feed for 1-10GHz :-)
"Daniel FY1FV" <delete_fy1fv@wanadoo.fr> a crit dans le message de
news:bn5r0i$2rp$1@news-reader5.wanadoo.fr...
> May be an horn antenna with a patch feed?
> It's working very well and inexpensive (cardbox covered with cooking
> aluminium sheet...)
> 73's
> Daniel FY1FV
>
> Tiki <montazegue@hotmail.com> a crit dans le message :
> 3f95a9d9$0$256$626a54ce@news.free.fr...
> > Hello,
> > I'm a french student and I search infos for build an Ultra Wide Band
> Antenna
> > (Frequency Band : 1 to 10GHz). Thank you.
> >
> > --
> > Matteo Cianfarani
> > montazegue@hotmail.com
> > (+33) 6 76 22 91 25
> >
> >
>
>

2977. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 20:35:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn6pmu$ca7$1@sparta.btinternet.com>
Source record: 106145

Dear Tom,

The proof of ANYTHING lies in the EATING.

Your appetite is lacking. As with the one million hoodwinked housewives who can't be wrong.

Reg.

2978. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 20:50:14 UTC
From: richardharrison@webtv.net
Message-ID: <19061-3F96ED86-58@storefull-2317.public.lawson.webtv.net>
Source record: 106146

Alan wrote:
"Can anyone explain to me why UHF links typically are not LOS---?"

UHF links are LOS, but there is LOS and there is LOS on steroids with which the atmospheric refraction blesses UHF and VHF.

Space waves which travel through the atmosphere just above the earth are best for terrestrial microwaves. The propagation mode is called line of sight or LOS.

The surface of a propagating wavefront effectively consists of an infinite number of tny radiators sending signals in various directions away from the wavefront. So, at any instant there are an infinite number of paths from a given wavefront to its receiving antenna. These can be represented by a "target" with its bull`s eye centered and impaled on the direct ray between the transmitting and receiving antennas.

The bull`s eye itself represents the first Fresnel zone. The ring adjacent to and surrounding the bull`s eye represents the 2nd Fesnel Zone.The second concentric ring reperesents the 3rd Fresnel zone and the third concentric ring represents the 4th Fresnel zone, etc.

At a grazing point for our LOS signal along the surface of the earth, a reflection from the surface of the earth may occur. The reflection itself shifts the signals phase by 180-degrees.

Back to our target figure. Within the bull`s eye, all of the waves are approximately in-phase. All of the waves in the first ring (2nd Fresnel zone) are approximately out-of-phase with those in the 1st Fresnel zone. The reason? Those in the 2nd zone have traveled approximately 180-degrees farther than those in the 1st zone.

The microwave path designer adds a Fresnel zone allowance to the geometrical grazing clearance of his signal where it is tangent to the earth. The area of the Fresnel zones here is determined by their distance from the transmitter and the receiver, and the operating frequency. The higher the frequency, the smaller the 1st Fresnel zone and the others around it.

There are an unlimited number of Fresnel zones, with each succeeding one contributing less energy than the one before.

Only the first few zones are significant. No matter what the Fresnel zone sizes are as a result of the scaling to a particullar frequency, the percentage of the total energy each may contribute to the energy transferred between antennas is the same.

Smaller Fresnel zones (at higher frequencies) cause obstacles in the radio path to obstruct a greater percentage of radiated energy. They also cause more severe and frequent cancellations of energy between the direct and reflected rays when these are bent by the earth`s atmosphere..

In the paths I designed, I chose 0.6 of the first Fresnel zone as an arbitrary addition to grazing clearance, as I now recall.

Fresnel zones have other effects. In periscope antenna systems which use a reflector up on a tower and a dish near ground level, the reflector may be sized to only accommodate the 1st Fresnel zone to avoid cancellation caused by the out-of-phase 2nd Fresnel zone. This gratuitous overflow of microwave energy into free space may be a cause of decreased popularity of periscope antenna systems.

The question of "Does UHF propagation propagate differently?" is yes. But, there is more to the difference than path loss.

Path loss is significantly different. Path loss is computed from:

Loss = 10 log f squared (d squared)

It`s seen that signal power not only follows the inverse square of the distance, but the inverse square of the frequency too.

Thanks to the Lenkurt Demodulator for the above information.

Best regards, Richard Harrison, KB5WZI

2979. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 22:05:58 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310221405.4800169d@posting.google.com>
Source record: 106147

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<v0gdpvc6n2b8e9505i5endud5iekeid1bj@4ax.com>...
> On Wed, 22 Oct 2003 12:43:20 GMT, "Ronald Walters"
> <rwalters8@cfl.rr.com> wrote:
>
> >I would ask the group for recommendations on cleaning the roller assembly and
> >inductor to ensure good conductivity after I am done.
>
> Hi Ron,
>
> One contact cleaner that I used that was better than most was
> Cramolin. This is a monomolecular layer solution that you would use
> very sparingly. However, as your tuner did not arrive brand-new (or
> brand-used) with it, your problem may be more mundane.
>
> The simplest way to defeat corrosion is with pressure.

Garbage
For continued use you must have a wipe or what is termed a
scrubbing action. Period. Even with silver or gold the lack
of scrubbing action will permit intermitent contact unless
the power is high enough to blow away the oxides.
Art

The spring
> tension of the roller may have slackened up over the years.
>
> 73's
> Richard Clark, KB7QHC

2980. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 22:52:33 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-A74A4F.17523322102003@central.isp.giganews.com>
Source record: 106148

This may be very un-Ham-like but mine has been buried in
Texas dirt and rocks for 20 years and keeps on trucking.

Works as good today as the day it was buried.

2981. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-22 23:55:12 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <vl5epv84gvlvve966nn8iuspu2uahe4mq6@4ax.com>
Source record: 106149

On Wed, 22 Oct 2003 06:19:43 -0400, Marylou@city.net wrote:

>Roger, just what is that white loamy stuff around the base of your tower
>aside from ALL the coax? You need to show us a photo of the tower and

That's Michigan rain! <:-)) in December. Although...it's usually a lot deeper, but nothing like my daughter gets out in the mountains of Colorado. They had 9 feet in two days last winter. The snow was drifting up against the sliding door to their deck...On the second story. Actually it was about 3 feet up on the windows in the door. The snow was above the tops of the first story windows all the way around.

Here's the link to the whole tower story...it's been posted a few times before. All put up by me...with the help of a few friends who pulled on the rope(s)

http://www.rogerhalstead.com/tower.htm

>what you have hanging on it. It that sand that has blown up, opps, that
>not sand. Your call tells me your in the northeast. So it must be

Great Lakes actually and Midland Michigan to be a bit more precise.

>snnnnnow. I got COLD just looking at it. Have a nice warm day.

Hey! It made it all the way to the 50s today. OTOH it's the 20s for tonight with more of that "Michigan Rain". The day that photo was shot *might* have made a high of 20 F.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>Marylou, N"5"XXX.
>
>Roger Halstead wrote:

2982. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 00:11:01 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ga6epv43vci4tqqtm9ogr3v22aimnuabph@4ax.com>
Source record: 106150

On Wed, 22 Oct 2003 11:43:03 GMT, Russ <carlzomer@hotmail.com> wrote:

>Remember that a right-angle bend is best served by 2, 45 degree bends
>with a short straight section between them. This will make pulling
>cable much easier. A "pull-box" at corners is a good idea as well but
>environment-resistant (not "proof", that's not possible!) pull-boxes
>aren't cheap or easy to find.

If you are using PVC it's fairly easy to make a pull box. Use a ' Y'
and a 45 to make each 90 degree bend. (They also make a straight
through with a 45 off one side.) Then use a cap and short piece of
pipe for the "blind side, or pull side". As you are pulling right
out of the 'Y' it is darn near a straight pull. Pull up into the 'Y'
. Then feed the "fish tape" in from the next pulling point and pull
on.

Once past a pull point you can have an assistant either pushing the
cables toward the inside radius of the bend, squirting in wire soap,
or both. If the bundle is pulling hard just a light tap with a rubber
mallet handle can work like magic.

When finished, take a pipe/conduit cap and glue it to a short length
of conduit of the proper size. Liberally grease the end that goes
into the 'Y' and push it in as far as it will easily go.

It may not be water proof, but it can be close to it.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Russ, who is responsible for a lot of cable-pulling through conduit
>
>On Wed, 22 Oct 2003 06:19:43 -0400, Marylou@city.net wrote:
>
>>Roger, just what is that white loamy stuff around the base of your tower
>>aside from ALL the coax? You need to show us a photo of the tower and
>>what you have hanging on it. It that sand that has blown up, opps, that
>>not sand. Your call tells me your in the northeast. So it must be
>>snnnnnow. I got COLD just looking at it. Have a nice warm day.
>>Marylou, N"5"XXX.
>>
>>Roger Halstead wrote:
>>>
>>> On Tue, 21 Oct 2003 21:14:06 -0400, "Tarmo Tammaru"
>>> <t-tammaru@home.com> wrote:

>>>
>>> >
>>> >"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
>>> >news:cncbpvojpfo320bfa6lvkur9ob0gnfiqe7@4ax.com...
>>> >> On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:
>>> >> You might need to use some wire pulling soap (the gooey yellow stuff)
>>> >> to push the LMR-400 through, but the stuff is stiff enough I would
>>> >> expect it to go through fine.
>>> >>
>>> >> It t takes a good can to two cans to get a cable through my 4 inch
>>> >> conduit now that it has so many cables in it. The yellow stuff is
>>> >> easy to clean up
>>> >>
>>> >> Roger Halstead (K8RI EN73 & ARRL Life Member)
>>> >> www.rogerhalstead.com
>>> >> N833R World's oldest Debonair? (S# CD-2)
>>> >> >
>>> >Roger,
>>> >
>>> >If you are going to the trouble of using some kind of conduit, and assuming
>>> >it comes in 10 foot lengths, why not just push it through one piece at a
>>> >time? That is, push the coax through the pieces of pipe before you join the
>>> >pipes together. Besides, LMR400 is pretty stiff.
>>> >
>>> In my case I have 75 feet horizontal with two 45 bends at each end and
>>> a 3 foot rise at the tower and 86 feet horizontal into the basement.
>>> Getting more into that takes lots of soap and one hefty snake and it
>>> still gets hung up at times.
>>>
>>> http://www.rogerhalstead.com/cablebox.htm
>>> There are (I'd have to go count to be sure now), 7 runs of LMR 400, 2
>>> runs of RG-6 for the UHF TV antennas, One does everything cable to the
>>> C/Ku band dish with rotor and polarization, two 3/8ths inch rotor
>>> cable with one used for the rotor and the other for the remote antenna
>>> switch.
>>>
>>> With a single run of LMR 400 in 3/4 inch, I think pushing it through
>>> one at a time would work fine. Although for no more than 20 or 30
>>> feet...probably twice that you could easily push one run through the
>>> full length. I'd guess you could push it through far longer runs than
>>> that.
>>>
>>> Roger Halstead (K8RI EN73 & ARRL Life Member)
>>> www.rogerhalstead.com
>>> N833R World's oldest Debonair? (S# CD-2)
>>> >Tam/WB2TT
>>> >

2983. Re: Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 00:29:12 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310221629.5dfeffb@posting.google.com>
Source record: 106151

Yes it is one heavy piece of steel. Since my tower is a fold over
I dispensed with the Rohn version and obtained an aluminum plate
to which I fastened three rods using a bolt thru the plate aproach.
These three rods push fit into the Rohn tower legs.
Once in place they stay there thus no water build up
in the tower legs. It sure escapes me why Rohn made the top
plate so heavy especialy when they limit the top loading for
fold over use.
Perhaps they were concerned that the tower would split
down the middle instead of buckling when guys were over tightened.
Grin
Art

Roger Halstead <newsgroup@rogerhalstead.com> wrote in message
news:<f2v8pv00songacdvvpmq1bcuejgl91f6kh@4ax.com>...
> On Sun, 19 Oct 2003 21:19:48 GMT, Bill <ojisan0@mchsi.com> wrote:
>
> >I'm in need of a Rohn BPL45G to convert a standard 10 foot section of Rohn
> >45 to a flat top for installing a thrust bearing.
> >If anyone has one in good conditon or a new on laying around pleae let
> >me know what you would be asking for it.
> >73 Bill W4OM
>
> If you have a standard top section, or just a straight section, just
> get one of the heavy duty rotor plates and mount the thrust bearing on
> that.
>
> I do have one of the top sections with top plate and thrust bearing,
> but I also use the heavy rotor plate for another thrust bearing down
> in the tower.
>
> Using a standard 10 foot section I'd use two rotor plates (both with
> thrust bearings. One just below the first cross braces at the top and
> the second about 4 feet down. The find something to cap the tower
> legs.
>
> On mine with the top plate, I use one thrust bearing there and another
> just above the rotor about 25 feet down inside the tower.
>
> It's easy enough to weld up (and bend) a top plate, but not so easy to
> get it double hot dipped galvanized. That is one heavy piece of
> steel. I think it's either 5/16ths or 3/8ths inch plate.
> If you don't weld you could take the diagram of the top plate to a
> metal shop, get it cut and drilled and have three legs welded on that

> will just fit over the top of the tower legs. Then bolt together in
> the usual fashion. Remembering that ROHN uses 2 bolts per leg with
> one being 5/16ths and the other is either 3/8ths or 7/16ths. If I had
> my catalog handy I'd look it up, but I don't know where I put the
> thing.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

2984. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 00:53:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpe9kvrl0f08b3@corp.supernews.com>
Source record: 106152

The point is that there's no "correct" answer. The voltage between two points separated in space with the presence of a varying magnetic field can be pretty much anything you'd like it to be -- the value depends, as others have pointed out, on the path taken between the points. Only Reg is able to suspend the principles of electromagnetics and confidently compute a single answer.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Roy, W7EL wrote:
> "Which orientation would provide the "correct" answer?"
>
> Maybe none.
>
> We know what the correct answer is at the feedpoint. By trial and error
> we can find the most stable and least critical placement for our test
> lead. We can calibrate our voltage indicator with a sample at the
> feedpoint under the conditions that prevail.
>
> A test lead perpendicular to the balanced antenna suffers the least
> interference. It`s subject to imperfections and it`s subject to
> improvements to overcome the imperfections.
>
> In AM broadcasting we get away with hanging a sampling loop on each
> tower of a directional array to monitor both tower current and phase. It
> works well enough.
>
> Do you have a better idea than a diode probe to sample voltage at the
> end of a dipole?
>
> Best regards, Richard Harrison, KB5WZI
>

2985. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 01:05:12 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F972948.BF320D92@cwis.net>
Source record: 106153

Hope he doesn't live in New Jersy...
'Doc

2986. dressler

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 01:08:16 UTC
From: blackcraven <clausca55@hotmail.com>
Message-ID: <4SFIb.334644$R32.11040282@news2.tin.it>
Source record: 106154

anyone could give to me comments about dressler active antennas for
shortwawe?
claudio
_____ claudio
scarpa ICQ#: 337008085 Current ICQ status: + More ways to contact me
_____

2987. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 01:51:56 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <itcepvgb3s5rtstv8g898l4pa6jbi434fo@4ax.com>
Source record: 106128

On Wed, 22 Oct 2003 04:59:09 GMT, "DeG" <kg4fbg@onemain.com> wrote:

>I'm wanting to keep peace within the family.. NO! Extra antennas on the
>vehicle..
> I want to install a dual band 2m/440 mobile using the AM/FM antenna that is
>on the vehicle.. It will be mostly used for receive, BUT....
> Other than a duplexer and tuner (s) What is needed to STOP the RF from
>damaging the AM/FM radio in case I want to transmit?...
> Any help on this??
>

Get a mag-mount dual bander. Throw it in the trunk when not in use.

Or check the mfj site. They have some little clip-on 2m/440 antennas
that attach to your window glass whenever the urge strikes.

Bob
k5qwg

2988. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 01:56:58 UTC
From: "H. Adam Stevens" <hstevens@totalaccessNOSPAM.net>
Message-ID: <vpedbufblmp1df@corp.supernews.com>
Source record: 106155

what?
there are multiple answers?
how many?

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vpe9kvrl0f08b3@corp.supernews.com...
> The point is that there's no "correct" answer. The voltage between two
> points separated in space with the presence of a varying magnetic field
> can be pretty much anything you'd like it to be -- the value depends, as
> others have pointed out, on the path taken between the points. Only Reg
> is able to suspend the principles of electromagnetics and confidently
> compute a single answer.
>
> Roy Lewallen, W7EL
>
> Richard Harrison wrote:
> > Roy, W7EL wrote:
> > "Which orientation would provide the "correct" answer?"
> >
> > Maybe none.
> >
> > We know what the correct answer is at the feedpoint. By trial and error
> > we can find the most stable and least critical placement for our test
> > lead. We can calibrate our voltage indicator with a sample at the
> > feedpoint under the conditions that prevail.
> >
> > A test lead perpendicular to the balanced antenna suffers the least
> > interference. It`s subject to imperfections and it`s subject to
> > improvements to overcome the imperfections.
> >
> > In AM broadcasting we get away with hanging a sampling loop on each
> > tower of a directional array to monitor both tower current and phase. It
> > works well enough.
> >
> > Do you have a better idea than a diode probe to sample voltage at the
> > end of a dipole?
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>

2989. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 02:05:52 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <67depv08c9kv272llfuijg463lhai86h9t@4ax.com>
Source record: 106129

On Wed, 22 Oct 2003 12:43:20 GMT, "Ronald Walters"
<rwalters8@cfl.rr.com> wrote:

>I have been using a MFJ-989C tuner for about (5) years without any problems.
>Just recently I have noticed that on the higher band, 24 MHz that the SWR
>occasionally would jump from an adjusted 1:1 SWR to infinity.

According to the downloadable manual, page 3, the roller inductor has
a self-resonance killer that is switched in and out of the circuit
automatically, and you may feel a slight bump when it happens. That
may be causing your swr jump. The manual says not to be alarmed.

My roller inductor has some black, moist stuff on it. I just assumed
it was lubricant and haven't tried to remove it.

My tuner, about 10 years old, seems to tune my dipole just fine on
multiple bands.

Bob
k5qwg

> A slight
>adjustment of the roller inductance appeared to solve the problem although I
>haven't ruled out a balum or antenna problem. I plan on investigating that
>this weekend, however, before I open the cabinet and look for problems I
>would ask the group for recommendations on cleaning the roller assembly and
>inductor to ensure good conductivity after I am done.
>
>I still have some old cleaning solutions from the old TV tuner days, some
>electrical cleaner (Appears heavy duty stuff) but maybe there is some other
>solutions someone might recommend.
>
>Your thoughts and recommendations are appreciated
>
>Ron - W4LDE
>

2990. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 02:16:20 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a00c36fd0128ed89896c1@news-60.giganews.com>
Source record: 106157

In article <3F8F080B.FBB7CB20@private.com>, private@private.com says...
> I have an old shortwave radio and want a decent wire antenna
> for it.
> Would connecting a single insulated wire up through the wall,
> through the attic and laid on the roof have a good chance of
> working decently?
> It will probably be about 125' from radio to the end of the
> antenna.
> I hope I don't need a ground at the radio.

I wouldn't lay the antenna right on the roof -- get it up a little ways,
at least, and the higher the better. And yes, by all means, disconnect
it from your equipment if there's a risk of a lightning strike!

As for grounding, it's a good idea if you can but it's not essential.

What kind of radio are you going to use?

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

2991. Re: 40m QRP antenna - best choise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 02:16:21 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a00c50c1705a28f9896c2@news-60.giganews.com>
Source record: 106156

In article <vp5bbn599m1p8d@corp.supernews.com>, dslesh@ttlc.net says...
> Hello folks,
> I am experimenting with QRP-level antennas and wondered what the
> best-simplest-cheapest might be. Any suggestions? (so far, I have a 40m
> dipole up)

Unless you have the option of putting a beam antenna up, you should be just fine with the dipole you have! (Assuming of course that what you have WORKS as it is now, that is.) A 40m dipole should also work well on 15m, and with a tuner you can probably get a good match on other bands. The problem with that is that you wind up with less of your power getting out when you have to tune the antenna than with one which is already resonant at your desired operating frequency.

In my particular case, I have a "shorty" G5RV antenna up about two stories over my patio. The standard G5RV is a bit long for my limited real estate, so I opted for the shorter version that only goes down to the 40m band. I've listened to some stuff on the 80m band here in the local area and it doesn't sound attractive enough for me to try to put the longer antenna up anyway. <g> With what I have up now, plus a tuner (necessary with the G5RV), my FT-817 has provided my logbook with plenty of entries over the past couple of years...!

Good luck to you! If you would, please drop me a note and let me know what you decide on.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

2992. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 03:20:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpei861n5ahbc0@corp.supernews.com>
Source record: 106158

For Reg, only one. For me, an infinite number.

Roy Lewallen, W7EL

H. Adam Stevens wrote:
> what?
> there are multiple answers?
> how many?
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vpe9kvrl0f08b3@corp.supernews.com...
>
>>The point is that there's no "correct" answer. The voltage between two
>>points separated in space with the presence of a varying magnetic field
>>can be pretty much anything you'd like it to be -- the value depends, as
>>others have pointed out, on the path taken between the points. Only Reg
>>is able to suspend the principles of electromagnetics and confidently
>>compute a single answer.
>>
>>Roy Lewallen, W7EL

2993. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 03:48:20 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2210032048200001@d64-180-236-30.bchsia.telus.net>
Source record: 106159

In article <vpei861n5ahbc0@corp.supernews.com>, Roy Lewallen
<w7el@eznec.com> wrote:

> For Reg, only one. For me, an infinite number.
>
> Roy Lewallen, W7EL
>
> H. Adam Stevens wrote:
> > what?
> > there are multiple answers?
> > how many?
> >
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:vpe9kvrl0f08b3@corp.supernews.com...
> >
> >>The point is that there's no "correct" answer. The voltage between two
> >>points separated in space with the presence of a varying magnetic field
> >>can be pretty much anything you'd like it to be -- the value depends, as
> >>others have pointed out, on the path taken between the points. Only Reg
> >>is able to suspend the principles of electromagnetics and confidently
> >>compute a single answer.
> >>
> >>Roy Lewallen, W7EL

Roy, the good point you are making is often hard to get across. I tried
for about forty years to teach multivariable calculus to EE students and
others. Sometimes I succeeded. But some students couldn't get over the
fact that in one dimension, integrals are independent of the path, and so
they expected that to be true in two dimensions, or in three.

It makes things a lot simpler if you believe that all line integrals are
independent of the path, since from that it follows that integrals around
loops are always zero. That makes things like Green's Theorem and Stokes'
Theorem simpler too, since (if you grant that surface integrals involved
are also zero) they simply say that 0 = 0.

Simple isn't always right. Maybe in some other universe, all fields are
conservative, but not in this one.

David, ex-W8EZE and retired math prof

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

2994. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 03:57:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9753c8_4@corp.newsgroups.com>
Source record: 106160

David or Jo Anne Ryeburn wrote:
> Simple isn't always right. Maybe in some other universe, all fields are
> conservative, but not in this one.

It might help if the language was made more understandable. Isn't the
problem in getting an absolute ground reference point at the end of
the dipole? It is possible to model a 3D antenna with a 4th dimension
ground "plane".
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2995. Re: Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 04:28:05 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <julepvce9co5p1qj21qg81hh0g8q8no32l@4ax.com>
Source record: 106161

On 22 Oct 2003 17:29:12 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Yes it is one heavy piece of steel. Since my tower is a fold over

The tower section with the top plate is 7 feet long instead of 10, yet
it weighs the same. That means the top plate weighs the same as 3 feet
of tower, or 30#. The standard 45 G is 90# per section.

I like the aluminum plate idea. On mine I'd have to use 3/8ths or 1/2
inch but it'd be one whale of a lot lighter than the steel plate.

Mine has the heavy side and bending load, hence I really do need a lot
of strength up there.

> I dispensed with the Rohn version and obtained an aluminum plate
>to which I fastened three rods using a bolt thru the plate aproach.
>These three rods push fit into the Rohn tower legs.
>Once in place they stay there thus no water build up
>in the tower legs. It sure escapes me why Rohn made the top
>plate so heavy especialy when they limit the top loading for
>fold over use.
>Perhaps they were concerned that the tower would split

Which would happen first? break the tower apart or pull the guy
anchors out of the ground? Mine weigh 17,000# each. I guess the tower
would fail first, but I'll bet the anchors would no longer be level.

<:-))

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>down the middle instead of buckling when guys were over tightened.
>Grin

2996. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 04:46:42 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2210032146420001@d64-180-236-30.bchsia.telus.net>
Source record: 106162

In article <3f9753c8_4@corp.newsgroups.com>, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

> David or Jo Anne Ryeburn wrote:
> > Simple isn't always right. Maybe in some other universe, all fields are
> > conservative, but not in this one.
>
> It might help if the language was made more understandable. Isn't the
> problem in getting an absolute ground reference point at the end of
> the dipole? It is possible to model a 3D antenna with a 4th dimension
> ground "plane".

Nope, that's not the problem. The language I am using is standard. To understand it, get out your multivariable calculus text, if you've kept it, or go to the library and borrow a good one. (Shameless plug: Howard Anton's Calculus book is a good one -- I helped debug it before publication.) Look up "independence of path" in the section on line integrals, and look up the related topic of "conservative vector fields". *That's* the problem, and not anything about ground references. What Roy is talking about is an important special case of lack of independence of path; there are many more examples.

David

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

2997. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 07:01:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpev5lm3oe7t89@corp.supernews.com>
Source record: 106163

No, that's not the problem. The problem is that you're looking for a single voltage between two points separated in space. There is no single value for that voltage. If you made some kind of "artificial ground" close to the antenna, then there are an infinite number of possible voltages between it and the Earth.

But I'm sure you can work it out as easily with virtual photons and 4 dimensional geometry as Reg does with grade school arithmetic. It's quite simple, really, if you don't need to have the right answer.

Roy Lewallen, W7EL

Cecil Moore wrote:
> David or Jo Anne Ryeburn wrote:
>
>> Simple isn't always right. Maybe in some other universe, all fields are
>> conservative, but not in this one.
>
>
> It might help if the language was made more understandable. Isn't the
> problem in getting an absolute ground reference point at the end of
> the dipole? It is possible to model a 3D antenna with a 4th dimension
> ground "plane".

2998. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 14:29:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f97e819$1_4@corp.newsgroups.com>
Source record: 106164

Roy Lewallen wrote:
> If you made some kind of "artificial ground"
> close to the antenna, then there are an infinite number of possible
> voltages between it and the Earth.

In four dimensions, the ground is not "artificial" and is
at the same potential as the Earth.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2999. OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 14:38:15 UTC
From: Deane Charlson <Deane.R.Charlson@nasa.gov>
Message-ID: <3F97E7D7.9000509@nasa.gov>
Source record: 106165

Hello,

I have been using single-band half-wave dipoles for years. I would like to try some multi-band wire antennas and compare performance. I am considering using an Off Center Fed Dipole or a G5RV or a Carolina Windom. Any thoughts or experiences with these antennas as compared to a half-wave dipole?

Thanks & 73s,
Deane
WB2DCF

3000. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 14:51:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f97ed44_2@corp.newsgroups.com>
Source record: 106166

David or Jo Anne Ryeburn wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>It might help if the language was made more understandable. Isn't the
>>problem in getting an absolute ground reference point at the end of
>>the dipole?
>
> Nope, that's not the problem. The language I am using is standard.

For you, maybe, but not for the average amateur radio operator. Instead
of trying to demonstrate how smart you are, how about trying to explain the
concept in words that the average amateur radio operator can understand?
Feynman took that approach in his book, _QED_.

Again, the problem goes away if you use a 4 dimensional model and define
the 4th dimensional path distance to ground as zero.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3001. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 15:30:41 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031023113041.00731.00000024@mb-m12.aol.com>
Source record: 106167

>Throw the XYL in the trunk when the antenna is being used.

The best suggestion yet! :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

3002. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 15:31:32 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031023113132.00731.00000025@mb-m12.aol.com>
Source record: 106168

> Hope he doesn't live in New Jersy...
> 'Doc

It's hard to understand what you're talking about if you don't quote the
previous message.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

3003. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 15:32:55 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031023113255.00731.00000026@mb-m12.aol.com>
Source record: 106069

Geez, why go through all that effort? AES has a fine selection of antennas
already invented! :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

3004. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 16:14:45 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F97FE74.EAF1F5D2@uci.edu>
Source record: 106070

Cecil Moore wrote:
> In four dimensions, the ground is not "artificial" and is
> at the same potential as the Earth.

What is that supposed to mean?

73, Jim AC6XG

3005. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 16:30:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7vufpv8er3pck5olms0j85uaeh450r0mlm@4ax.com>
Source record: 106071

On 22 Oct 2003 15:05:58 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard Clark <kb7qhc@comcast.net> wrote in message
news:<v0gdpvc6n2b8e9505i5endud5iekeid1bj@4ax.com>...
>> On Wed, 22 Oct 2003 12:43:20 GMT, "Ronald Walters"
>> <rwalters8@cfl.rr.com> wrote:
>>
>> >I would ask the group for recommendations on cleaning the roller assembly and
>> >inductor to ensure good conductivity after I am done.
>>
>> Hi Ron,
>>
>> One contact cleaner that I used that was better than most was
>> Cramolin. This is a monomolecular layer solution that you would use
>> very sparingly. However, as your tuner did not arrive brand-new (or
>> brand-used) with it, your problem may be more mundane.
>>
>> The simplest way to defeat corrosion is with pressure.
>
>Garbage
>For continued use you must have a wipe or what is termed a
>scrubbing action. Period. Even with silver or gold the lack
>of scrubbing action will permit intermitent contact unless
>the power is high enough to blow away the oxides.
>Art
>> The spring
>> tension of the roller may have slackened up over the years.
>>
>> 73's
>> Richard Clark, KB7QHC

Hi Art,

You are out of your turf. Pressure is the way all contacts work to
break the insulating barrier formed by oxides. Your typical abuse of
language here with "wipe" is another example that demonstrates
pressure. The indiscriminate use of chemicals to treat a mechanical
problem is one that I have demonstrated as being wholly unnecessary:
none of your new gear, nor any old gear just acquired that works fine
came with this chemical bath treatment.

Long before anyone here was born, precision contacts were tapered
plugs that fit into tapered sockets. The sockets were bifurcated
(split in two halves) such that the plug created the closure between

them with a simple insert and twist to break the layer of oxide. Note, there is no "wipe" as the twist translates the torque into pressure (wiping has nowhere to deposit what is "wiped" away in the tapered socket). No one needed sandpaper or a bottle of acid to erode the surface and corrode other parts through the solvent's vapor (a very insidious imposition). There is a very good reason why electronics manufacturers avoid acid core solder (unless they use a water wash down following board construction and faithfully use rosin core solder for touch up work - with extreme care not to mix the two solders).

For contacts that have little pressure, the voltage presented across them can penetrate the barrier; however, there are applications where those voltages are not sufficient, and when the contact pressure is not enough either, you get into these problems. Mechanical TV tuners back in the early days suffered this problem and a special grease surfactant was used to insulate the contact face from corrosion while the pressure was sufficient to displace it for electrical contact.

73's
Richard Clark, KB7QHC

3006. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 16:41:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ei0gpvsjfogqvjfp7ii31q31u5k9l7pflt@4ax.com>
Source record: 106072

On Thu, 23 Oct 2003 10:38:15 -0400, Deane Charlson
<Deane.R.Charlson@nasa.gov> wrote:

>Hello,
>
>I have been using single-band half-wave dipoles for years. I would like
>to try some multi-band wire antennas and compare performance. I am
>considering using an Off Center Fed Dipole or a G5RV or a Carolina
>Windom. Any thoughts or experiences with these antennas as compared to
>a half-wave dipole?
>
>Thanks & 73s,
>Deane
>WB2DCF

Hi Dean,

Keep your dipole and add a tuner.

There is nothing magical about other designs if their overall
dimension is roughly the same as what you have now. If you want to
work a lower band, try driving the shorted transmission line drop
against ground (that is, short the transmission line at ground level,
and drive that as a top loaded vertical, but make sure you have a
modest investment in radials at that drive point for ground).

There are only two things of interest with an antenna (beyond
aesthetics - if that isn't a contradiction in terms): drive point
impedance and launch characteristics. Impedance can often be taken
care of with a tuner (with care for Hi-Z issues at half wave
intervals) and launch characteristics are a function of physical size
and wavelength. When it comes to size, it won't much matter what name
the antenna is called (unless you are switching from vertical to
horizontal); hence the advice that if those antennas you are
considering are not significantly larger/smaller, then they will not
be significantly better/worse.

73's
Richard Clark, KB7QHC

3007. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 16:49:39 UTC
From: Robert <Robert@amm.com>
Message-ID: <3f99068f.500574@news.easynews.com>
Source record: 106073

On 23 Oct 2003 15:32:55 GMT, vhfradiobuff@aol.comspamme (VHFRadioBuff)
wrote:

>Geez, why go through all that effort? AES has a fine selection of antennas
>already invented! :)

It's hard to understand what you're talking about if you don't quote
the previous message.

3008. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 17:23:57 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310230923.4f36cd1b@posting.google.com>
Source record: 106074

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f97ed44_2@corp.newsgroups.com>...
> David or Jo Anne Ryeburn wrote:
>
> > <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>It might help if the language was made more understandable. Isn't the
> >>problem in getting an absolute ground reference point at the end of
> >>the dipole?
> >
> > Nope, that's not the problem. The language I am using is standard.
>
> For you, maybe, but not for the average amateur radio operator. Instead
> of trying to demonstrate how smart you are, how about trying to explain the
> concept in words that the average amateur radio operator can understand?

How about:
1. Kirchoff's Voltage Law: The sum of the EMFs around a closed loop
equals the sum of the voltage drops around a loop. (It's commonly
MISstated as the sum of voltage drops around a loop is zero; it's much
better to distinguish between EMFs and voltage drops, as there are
EMFs which CANNOT be localized to one point in the loop.)
2. Faraday's Law of Magnetic Induction: For any closed loop, there
is an EMF proportional to the rate of change of magnetic flux enclosed
by the loop. (This is one EMF which cannot be localized--it just
drives the whole loop.)
3. Ohm's Law: Voltage drop is proportional to current times
resistance (so in a good conductor with modest current, there is very
little voltage drop).

From those, it should be obvious that the voltage you measure between
any two points depends on the path you take, in the presence of a
time-varying magnetic field (and perhaps at other times as well).
Didn't you previously post that you understood that?

As David has suggested, that set of three laws isn't the only way to
think about it, but I think they should serve the typical ham fairly
well; no integrals needed.

Cheers,
Tom

3009. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 17:25:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f980fce_2@127.0.0.1>
Source record: 106075

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>In four dimensions, the ground is not "artificial" and is
>>at the same potential as the Earth.
>
> What is that supposed to mean?

Solve the problem using a 4D math model. The 3D variable
path problem goes away.
--
73, Cecil, W5DXP

3010. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 17:40:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpg4kki4fcdv2e@corp.supernews.com>
Source record: 106076

It's an "abuse of language" shared by many, including manufacturers of switches and relays of all kinds. A google search on "contact 'wiping action'" brought around 3000 hits. The few I glanced at dealt with just that topic, using those words.

The only contact-related document I have readily at hand is a 3M catalog of "Electronic Interconnection Systems". Just about every connector has a specification for "wipe area" or "wiping area".

Roy Lewallen, W7EL

Richard Clark wrote:
>
> Hi Art,
>
> You are out of your turf. Pressure is the way all contacts work to
> break the insulating barrier formed by oxides. Your typical abuse of
> language here with "wipe" is another example that demonstrates
> pressure. The indiscriminate use of chemicals to treat a mechanical
> problem is one that I have demonstrated as being wholly unnecessary:
> none of your new gear, nor any old gear just acquired that works fine
> came with this chemical bath treatment.
>
> Long before anyone here was born, precision contacts were tapered
> plugs that fit into tapered sockets. The sockets were bifurcated
> (split in two halves) such that the plug created the closure between
> them with a simple insert and twist to break the layer of oxide.
> Note, there is no "wipe" as the twist translates the torque into
> pressure (wiping has nowhere to deposit what is "wiped" away in the
> tapered socket). No one needed sandpaper or a bottle of acid to erode
> the surface and corrode other parts through the solvent's vapor (a
> very insidious imposition). There is a very good reason why
> electronics manufacturers avoid acid core solder (unless they use a
> water wash down following board construction and faithfully use rosin
> core solder for touch up work - with extreme care not to mix the two
> solders).
>
> For contacts that have little pressure, the voltage presented across
> them can penetrate the barrier; however, there are applications where
> those voltages are not sufficient, and when the contact pressure is
> not enough either, you get into these problems. Mechanical TV tuners
> back in the early days suffered this problem and a special grease
> surfactant was used to insulate the contact face from corrosion while
> the pressure was sufficient to displace it for electrical contact.
>

> 73's
> Richard Clark, KB7QHC

3011. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 17:45:21 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3F9813B1.ACA41FA7@uci.edu>
Source record: 106077

Cecil Moore wrote:
>
> Jim Kelley wrote:
> >
> > Cecil Moore wrote:
> >>In four dimensions, the ground is not "artificial" and is
> >>at the same potential as the Earth.
> >
> > What is that supposed to mean?
>
> Solve the problem using a 4D math model. The 3D variable
> path problem goes away.

If you've solved it, you should post the solution. (Otherwise, it's
just sounds like you're trying to impress somebody.)

73, Jim AC6XG

3012. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 18:00:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f45gpvk3iquejr6f11qn50er71nchfm80p@4ax.com>
Source record: 106078

On Thu, 23 Oct 2003 10:40:36 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>It's an "abuse of language" shared by many, including manufacturers of
>switches and relays of all kinds. A google search on "contact 'wiping
>action'" brought around 3000 hits. The few I glanced at dealt with just
>that topic, using those words.
>
>The only contact-related document I have readily at hand is a 3M catalog
>of "Electronic Interconnection Systems". Just about every connector has
>a specification for "wipe area" or "wiping area".
>
>Roy Lewallen, W7EL
>

Hi Roy,

And does that render the issue of pressure as "garbage" or negate any
comment offered by myself? Does it elevate the injudicious
application of chemicals? Does it replace common sense? Many of the
mythical lurkers might be lead down the primrose path of dunking their
'tronics into a vat of Coca Cola simply because of its Phosphoric Acid
content.

Is a google search the barometer of accuracy for
rec.radio.amateur.chemistry when supported by 3000 hits? If so,
"tits" would eclipse the charts. ;-)

73's
Richard Clark, KB7QHC

3013. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 18:04:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2u5gpv89an84u4rc42o20efm5ken2rk7cp@4ax.com>
Source record: 106079

On Thu, 23 Oct 2003 10:45:21 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:
>If you've solved it, you should post the solution.
The promise of that (following submission to a spectrum of vanity
publishers) could last two years alone!

73's
Richard Clark, KB7QHC

3014. Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 18:28:09 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <vpg7dsknlujh26@corp.supernews.com>
Source record: 106080
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Greetings,

Since the current larger sunspot group is making national news, it seemed like a good time to press this subject. In his ARLP040 Propagation de K7RA of Oct 3 Tad Cook said it far better than I could so will share his thoughts.

"
Grim news emerged recently concerning the NOAA Space Environment Center in Colorado, where most of the data for these bulletins originates. I suspect due to some misunderstanding about their work, the Senate Appropriations Committee wants to eliminate the Space Environment Center's budget for fiscal year 2004, which officially began October 1. The Senate Appropriations Committee said in a report that NOAA's work should only be terrestrial and not extend to space, so it's proposing to cut all funding for the SEC. The House appropriations bill proposes cutting funding by 40 percent, even in the wake of severe cuts during the fiscal year just ended.

The funny thing about the Senate report is that all of the effects of solar flares and sunspots that concern us are here on Earth. Claiming that NOAA should ignore the sun because it is in space seems silly, since the same standard doesn't apply to NOAA's conventional weather forecasting. The SEC is a small part of NOAA, with an annual budget of just 8 million dollars.

There's a story on this subject on the ARRL Web site (see ''Space Environment Center Funding in Jeopardy'' http://www.arrl.org/news/stories/2003/10/03/3/). The Seattle Post-Intelligencer ran a story in its October 2 editions http://seattlepi.nwsource.com/national/142217_space02.html, and there's an item on the September 20 SpaceWeather.com Web page, available in the archive for that date http://spaceweather.com/archive.php .

I've contacted my representatives in the Senate and House and found that, as expected, staff members really had no idea what the obscure sounding Space Environment Center does. The only hope is that when the House and Senate committees work out that portion of the budget, funding for the SEC will somehow be preserved. You might contact your representatives to inquire about this. Members of the Senate Appropriations Committee are listed on the committee's Web site http://appropriations.senate.gov/ .

"

I sincerely apologize for posting to 5 groups, but this subject is very
important and has not been seen, or I missed such, in any.

Regards,
Jim - KU5S
--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.

3015. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 18:31:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn96p5sii1@sparta.btinternet.com>
Source record: 106081

> It's an "abuse of language" shared by many, including manufacturers of
> switches and relays of all kinds.

==========

Yet you still insist on using manufacturers' sales blurbs and specifications
as engineering educational standards.

3016. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 18:46:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bn97me$a42$1@hercules.btinternet.com>
Source record: 106082

> but make sure you have a
> modest investment in radials at that drive point for ground.

==========

Good to see, along with other members of the Establishment, you've dropped
Marzipan the Magician's magic number of 120 each of 1/4-or 1/2 wavelength.

Stop adding radials when the added number of 1/8th or 1/10th wavelength
radials produces no further increase in receiving signal strength.

You're learning !

3017. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 19:16:03 UTC
From: fractenna@aol.com
Message-ID: <20031023151603.05939.00000026@mb-m11.aol.com>
Source record: 106083

Here is an unexpired link on WZ3AR (Mr. Heatwole):

http://www.cnn.com/2003/LAW/10/20/airline.scare/index.html

73,
Chip N1IR

3018. HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 20:12:53 UTC
From: Didier <dima@skynet.be>
Message-ID: <3f98364f$0$3656$ba620e4c@reader2.news.skynet.be>
Source record: 106084

Hi all,

I would like to use a vertical multi band antenna because of space restriction.
I have seen the butternut HF9V.
What do you think about this antenna ?

Is the conterpoise CPK effective when not using the radials ? (I will not be able to use radials, not enough space)

When the antenna is properly set, is an antenna tuner or automatic antenna tuner still needed ?

Thanks a lot for your help

73' de ON5KAD

3019. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 21:02:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpggfn3b0h3837@corp.supernews.com>
Source record: 106085

I just like to give the readers an option. For transmission line terms, they can choose between HP/Agilent's usages and definitions, or yours. For terminology regarding contacts, they have their choice between 3M's and Richard's. And for engineering educational standards, readers can choose among Ronold King, Terman, and Kraus, or Reg Edwards. I'm sure each will make the choice that he/she feels most confident with.

Roy Lewallen, W7EL

Reg Edwards wrote:
>>It's an "abuse of language" shared by many, including manufacturers of
>>switches and relays of all kinds.
>
>
> ==========
>
> Yet you still insist on using manufacturers' sales blurbs and specifications
> as engineering educational standards.
>
>

3020. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 21:49:17 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <x1Ylb.11313$Tr4.30051@attbi_s03>
Source record: 106086

It's quite good compared to other 80m -> 6m all band verticals. The higher the frequency, the better the performance -- I think this is true for all of this type of antenna. I have one of these and also a Gap Titan (which doesn't cover 6m). I've used a Hustler multi-band vertical also. The counterpoise will not work as well as a full set of radials. I started with the CPK kit but then added radials cut for the bands I use most often -- the difference was significant.

Tuning the 9V can be a bear. You will still need a tuner if you want full band coverage -- the lower the frequency, the narrower the frequency range at which the antenna will give you a SWR of 1.5:1 (or 2:1 or whatever makes you happy).

I find the GAP a bit better on 75m. Above that, I don't think it makes much difference (hardly a scientific comparison since they are mounted differently with different radial systems; so take this with a kilo of salt).

73

Paul AB0SI

"Didier" <dima@skynet.be> wrote in message
news:3f98364f$0$3656$ba620e4c@reader2.news.skynet.be...
> Hi all,
>
> I would like to use a vertical multi band antenna because of space
> restriction.
> I have seen the butternut HF9V.
> What do you think about this antenna ?
>
> Is the conterpoise CPK effective when not using the radials ? (I will not
be
> able to use radials, not enough space)
>
> When the antenna is properly set, is an antenna tuner or automatic antenna
> tuner still needed ?
>
> Thanks a lot for your help
>
> 73' de ON5KAD
>
>

3021. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 22:34:29 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net>
Source record: 106087
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"J Tabor" <denews@taborsoft.com> wrote in message
news:vpg7dsknlujh26@corp.supernews.com...
> Greetings,
>
> Since the current larger sunspot group is making national news, it seemed
> like a good time to press this subject. In his ARLP040 Propagation de K7RA
> of Oct 3 Tad Cook said it far better than I could so will share his
> thoughts.
>
> "
> Grim news emerged recently concerning the NOAA Space Environment
> Center in Colorado, where most of the data for these bulletins
> originates. I suspect due to some misunderstanding about their
> work, the Senate Appropriations Committee wants to eliminate the
> Space Environment Center's budget for fiscal year 2004, which
> officially began October 1. The Senate Appropriations Committee
> said in a report that NOAA's work should only be terrestrial and not
> extend to space, so it's proposing to cut all funding for the SEC.
> The House appropriations bill proposes cutting funding by 40
> percent, even in the wake of severe cuts during the fiscal year just
> ended.
>
> The funny thing about the Senate report is that all of the effects
> of solar flares and sunspots that concern us are here on Earth.
> Claiming that NOAA should ignore the sun because it is in space
> seems silly, since the same standard doesn't apply to NOAA's
> conventional weather forecasting. The SEC is a small part of NOAA,
> with an annual budget of just 8 million dollars.
>
> There's a story on this subject on the ARRL Web site (see ''Space
> Environment Center Funding in Jeopardy''
> http://www.arrl.org/news/stories/2003/10/03/3/). The Seattle
> Post-Intelligencer ran a story in its October 2 editions
> http://seattlepi.nwsource.com/national/142217_space02.html, and
> there's an item on the September 20 SpaceWeather.com Web page,
> available in the archive for that date
> http://spaceweather.com/archive.php .
>
> I've contacted my representatives in the Senate and House and found
> that, as expected, staff members really had no idea what the obscure
> sounding Space Environment Center does. The only hope is that when
> the House and Senate committees work out that portion of the budget,

> funding for the SEC will somehow be preserved. You might contact
> your representatives to inquire about this. Members of the Senate
> Appropriations Committee are listed on the committee's Web site
> http://appropriations.senate.gov/ .
> "
>
> I sincerely apologize for posting to 5 groups, but this subject is very
> important and has not been seen, or I missed such, in any.
>
> Regards,
> Jim - KU5S
> --
> email sent to: denews@taborsoft.com
> is discarded without being seen.
> Sorry for any inconvenience.
>
>

Why does this surprise you? Look at the way gobernment does bizness. Look at the FCC jumping up and down about PLC/BPL and too ignorant to understand the problem. Nuff said.

Dan/W4NTI

3022. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:06:02 UTC
From: jder8745@aol.com
Message-ID: <20031023190602.22392.00000010@mb-m02.aol.com>
Source record: 106088

I suggest another hobby, such as trap shooting. That way the "family" could hold the clay pigeons while you shoot them.

Seriously, the mag mount is a good idea. I have used the car antenna for receive only with a home made duplexer (diplexer?).

If you accidentally nuke the car radio, you're gonna be in BIG trouble.

Gud luk!,

Jack, K9CUN

3023. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:08:40 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vpgnp9evkb262b@corp.supernews.com>
Source record: 106089

I second what George has said about Norton's papers (and those of his associates). 1950s IRE is prob. where one should look.
At lower UHF, scattering can be an important mode. I did estimates of these modes to predict interference to a radio-quiet site long ago. As a general rule, lots of power needs to be involved.
At all of the frequencies, diffraction over the surface is significant. A standard scheme was to assume that the earth had a larger radius than is the case and them to plot LOS paths on that basis. Used to do that with topo maps by hand correcting the height of each contour (cutting the path) for how far away it was. The last time I did it - to help a college radio station - I used electronic topo maps - what progress!
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

3024. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:24:10 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f986319$1_1@news.vo.lu>
Source record: 106090

"Didier" <dima@skynet.be> wrote in message
news:3f98364f$0$3656$ba620e4c@reader2.news.skynet.be...
> Hi all,
>
> I would like to use a vertical multi band antenna because of space
> restriction.
> I have seen the butternut HF9V.
> What do you think about this antenna ?
>
> Is the conterpoise CPK effective when not using the radials ? (I will not
be
> able to use radials, not enough space)
>
> When the antenna is properly set, is an antenna tuner or automatic antenna
> tuner still needed ?

Hi,

Hi,
If your antenna is designed to use radials, they are mandatory in emission,
like on Fritzel GP404 vertical
About radials : http://www.astrosurf.com/lombry/qsl-radials.htm

If you do not use them your can emit and get a SWR 1:1 but your
correspondent will tell you that you have modulation problems, your signal
will be agressive, like metal if you remove radials.

73
Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry/qsl-portable.htm

>
> Thanks a lot for your help
>
> 73' de ON5KAD
>
>

3025. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:24:22 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bn9o07$3sh8$1@news3.infoave.net>
Source record: 106091

Isn't this the same Chip that once before sullied the name of an amateur by falsely accusing him of a crime in New England?

Off to google to see if my memory fails me in my advanced age...

"Fractenna" <fractenna@aol.com> wrote in message news:20031023151603.05939.00000026@mb-m11.aol.com...
> Here is an unexpired link on WZ3AR (Mr. Heatwole):
>
> http://www.cnn.com/2003/LAW/10/20/airline.scare/index.html
>
> 73,
> Chip N1IR

3026. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:28:03 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f986402$1_1@news.vo.lu>
Source record: 106092

"Deane Charlson" <Deane.R.Charlson@nasa.gov> wrote in message
news:3F97E7D7.9000509@nasa.gov...
> Hello,
>
> I have been using single-band half-wave dipoles for years. I would like
> to try some multi-band wire antennas and compare performance. I am
> considering using an Off Center Fed Dipole or a G5RV or a Carolina
> Windom. Any thoughts or experiences with these antennas as compared to
> a half-wave dipole?
>

Hi,

Multiband dipole like G5RV is fine, W3DZZ also. The only difference is the
feeder.
But both are wires antenna and will give similar results.

So think about the feeder
ABout G5RV, read this : http://www.astrosurf.com/lombry/qsl-g5rv.htm

73
Thierry
ON4SKY, LX3SKY

> Thanks & 73s,
> Deane
> WB2DCF
>

3027. Re: BPL!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:30:13 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f986483$1_2@news.vo.lu>
Source record: 106093

Many thanks.
That complete my article, still hot, and the message I post some days ago of uk.radio.amateur about ITU decision.
http://www.astrosurf.com/lombry/qsl-rfi-bpl.htm

73
Thierry
ON4SKY, LX3SKY

"Gary Gaudette" <garygaud@vgernet.net> wrote in message
news:3F96C044.2060901@vgernet.net...
> Following is from rec.radio.amateur.antenna:
>
>
>
> The following is a repost from from another newsgroup. Look like
> Manassas will have internet via Power Lines. The amateurs in the
> Manassas area must have been sleeping to let this pass.
>
> Good luck in the Contest
>
> "Dick Carroll" <dixie@NOSPAM.townsqr.com> wrote in message
> news:bmvsrr$79c$0@208.206.142.66...
>
> > CHeck this out...
> > >
> > >
> > >
>
> http://www.potomacnews.com/servlet/Satellite?pagename=WPN%2FMGArticle%2FW
> PN
> _BasicArticle&c=MGArticle&cid=1031771619197&path=!frontpage
>
> > >
>
>
>
> Innovative Web access to shock Manassas
> SARI KREIGER
> skreiger@potomacnews.com
> Saturday, October 18, 2003
>
> Manassas residents will soon be the first in the United States
> to buy Internet access over city power lines.
> The City Council voted unanimously on Thursday to
> grant a franchise to Prospect Street Broadband, LLC.,

> bringing a year-long preparation process to fruition.
>
> Residents can purchase the service within 120 days of
> the contract signing, which is expected to occur
> next week, according to Energy Services Manager Brett Massey.
> In May 2002, a small pilot group of city residents and
> businesses began using the service. A modem is plugged into
> the electrical outlet on one end, and the computer on the
> other, to gain high-speed access to the Internet.
> "They were very impressed by the speed, reliability
> and flexibility," said Utilities Director Allen Todd.
>
> Freda Wallace, an administrative assistant with Robert
> Loveless Architecture in Old Town Manassas said the
> company has been receiving the service since February.
> "We've had good service with it," Wallace said. "The
> only time it has been down is because of our
> equipment, or because they're testing something on
> the lines because it is a pilot program."
>
> The Connecticut-based company that received the
> franchise will be responsible for the equipment,
> connection, monthly billing, advertising and
> 24-hour-a-day, seven-day-a-week customer
> support. The city will expand the current fiber
> network, which is almost complete, update optical
> electronics and install and maintain equipment
> external to the residents' homes.
>
> "The grantee will be providing most of the capital
> of this project and assume most of the risk," said
> John Hewa, assistant electric director for the
> City of Manassas. "There's very little financial
> risk to the city."
>
> John F. Berry, chairman and CEO of Prospect Street
> Broadband, said the service is very easy to use and
> no special training is necessary. Residents can purchase
> the service and obtain access from any city outlet.
> "You sign up once and you can sign on at home,
> a friend's house, the ice skating rink, where ever," Berry said.
>
> If residents opt for this Internet service provider, they will
> pay approximately half of normal high-speed access, as
> the tentative service price is $29.95 a month for
> residents, and $69.95 for commercial access.
> "It will be competitively priced and a quality service,"
> said Vice Mayor Harry J. Parrish II.
> Wallace said the service was comparable in speed to
> any DSL program available. "It's very fast," she said.

>
> And as a fringe benefit, the city can also monitor power
> outages through this technology. Todd said the city has
> been trying for years to achieve that capability.
> Two bids were received on Sept. 8, and Todd said the
> city spent a considerable amount of time examining
> both proposals to ensure the best outcome for residents.
> "We've never had a franchise quite like this before," Todd
> said. "We wanted to make sure we had measures that
> would protect the services we promise the citizens."
>
> The contract that the council voted to approve calls for a
> 10-year term, with a five-year extension. A minimum
> payment of $24,000 after the first year, and $124,000
> after the second and third year is guaranteed to the city.
> Initial figures project that Manassas could receive up
> to $4.5 million in revenue after the 10-year period.
> Councilman Ulysses X. White questioned city staff
> about future price hikes, as he was reminiscent of
> a similar situation with cable television in the city.
> But Todd said with competition available, residents
> wouldn't be stuck with high bills and no options.
> Rather, this new offer gives residents exactly that -- options.
>
> Councilman Eugene R. Rainville said residents will benefit
> from an extra use of the electrical system their tax dollars already
> fund.
> "Now they can get Internet at a low price," Rainville said.
> "I would encourage all of our citizens to at least look at it as an
> alternative."
> And according to Parrish, residents may receive an added
> bonus if enough people patronize this service. "It looks like the
> council might have the opportunity to look at tax reduction," Parrish
> said.
>
> --------------- cut ------------------
>
> Some Links:
>
> City of Manassas Va: http://www.manassascity.org/
>
> Manassas Town Commissioners and Board:
> http://www.manassascity.org/city_government/index.html
>
> Prospect Street Broadband, LLC: http://www.prospectstreet.com/
>
> Manassas Va ARC (Old Va Hams ARC): http://www.w4ovh.net/
>

3028. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-23 23:38:16 UTC
From: J Tabor <denews@taborsoft.com>
Message-ID: <vpgpjbahqjtod5@corp.supernews.com>
Source record: 106094
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
> Why does this surprise you? Look at the way gobernment does bizness.
Look
> at the FCC jumping up and down about PLC/BPL and too ignorant to
understand
> the problem. Nuff said.
>

Totally unhelpful and irrelevant response. And you of course had to quoted
the entire message and also place your remarks at the bottom. :)

Jim
--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.

3029. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 01:26:26 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <6d%lb.5336$mZ5.27845@attbi_s54>
Source record: 106095

Can we charge TSA with incompetence??

Deacon Dave, W1MCE

Fractenna wrote:

> Here is an unexpired link on WZ3AR (Mr. Heatwole):
>
> http://www.cnn.com/2003/LAW/10/20/airline.scare/index.html
>
> 73,
> Chip N1IR

3030. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 02:49:29 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310231849.1e973bec@posting.google.com>
Source record: 106096

Thanks for that piece of reseach Roy. My career was in the engineering side of
Pilot devices at G.E. and thus the subject of contacts was very much my turf.
Anybody can obtain an unused pilot device, pushbutton or what ever and they can measure the resistance as being in the 100s of ohms area across the N.C. contacts because of oxide build up even tho under pressure.
If one was using one of the hand held instruments in a lot of cases it will show as being open since the battery voltage was less than 28 volts D.C
As far as books are concerned major users such as the auto inductry required a certain number of operations without failure where in the past operators would just push the button again until it finally makes.
This subject came up a few years back when computors came into the field and the natural reaction was to use gold plated contacts but these could not meet required criteria because gold plating is porous. G.E were benefitted with large contracts for contact blocks e.t.c. using reed switches and the like when the automotives decreed voltages of less than 28 volts D.C. where other contractors failed to meet required criteria of the customer. I could go on of course but there really isn't any need to.
The initial statement that pressure solves things is just not true even tho in the past when television repairmen had the opportunity of pressing a button several times to make it operate. In todays world buyers demand evidence of quality without the option of one or two second tries
I am surprised that "wipe" was the most common term that you saw in your brief search where as scrubbing action is more descriptive . Wipe alone describes distance of button operation after the initial contact is made which by rolling scraping action creates a side movement to push the oxides aside. If wipe alone is required without including a scrubbing action then wipe really only specifies available contact wear. But on the other hand we can admit that tho English is the common language there are differences. For your info at San Diego there is a college for American English no less
I certainly do not advocate the use of acids to clean contacts in the normal sense but used it as an illustration of how it could remove oxide created by copper leaching thru the silver plating which inevitably causes momentary failures especially with older equipment. The same problem is avoided with reostats where they have a sliding/scraping motion to ensure accuracy of measurement.
I have said enough since I am 'out of my turf' whereas on my own turf

the grass is growing and it needs to be cut
Regards
Art

crRoy Lewallen <w7el@eznec.com> wrote in message
news:<vpggfn3b0h3837@corp.supernews.com>...
> I just like to give the readers an option. For transmission line terms,
> they can choose between HP/Agilent's usages and definitions, or yours.
> For terminology regarding contacts, they have their choice between 3M's
> and Richard's. And for engineering educational standards, readers can
> choose among Ronold King, Terman, and Kraus, or Reg Edwards. I'm sure
> each will make the choice that he/she feels most confident with.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
> >>It's an "abuse of language" shared by many, including manufacturers of
> >>switches and relays of all kinds.
> >
> >
> > ==========
> >
> > Yet you still insist on using manufacturers' sales blurbs and specifications
> > as engineering educational standards.
> >
> >

3031. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 03:01:59 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <ir4hpv0q147vutrkcjbn517oauqrrrrl0t@4ax.com>
Source record: 106097

On Thu, 23 Oct 2003 22:12:53 +0200, "Didier" <dima@skynet.be> wrote:

>Hi all,
>
>I would like to use a vertical multi band antenna because of space
>restriction.

I chose the HyGain AV640 mainly because it doesn't use traps.
Unfortunately it doesn't cover the 75/80 meter band, but it's very
easy to tune. Basically I put it together, set it on an 8 foot pole
to check, I had to adjust the length slightly for 40 meters and take
an inch off one arm of the top hat for 20.
When raised to 33 feet there was a *slight* shift up in frequency, but
not enough to both retuning.

I've used 80 through 10 trap verticals and they were like a wet noodle
that required careful guying. Although the AV640 says it is rated to
80 or 90 MPH I still used a single set of nylon guys, mainly to
reduce the side loading on that little aluminum tower at the end of
the shop.

>I have seen the butternut HF9V.
>What do you think about this antenna ?
>
>Is the conterpoise CPK effective when not using the radials ? (I will not be
>able to use radials, not enough space)

The AV64 appears to work fine without radials. although it does have
some very short ones about 6 feet long... or so.

>
>When the antenna is properly set, is an antenna tuner or automatic antenna
>tuner still needed ?

I wouldn't worry if the antenna doesn't use traps. If it does use
traps AND you operate high power well off from resonance such as
having the antenna resonate near the top of 75 and then go down into
the CW band operating the legal limit Then there is a possibility of
the high voltage causing a problem. OTOH I've never heard of any one
having a problem.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Thanks a lot for your help
>

>73' de ON5KAD
>

3032. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 03:07:23 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3f989974_2@news1.prserv.net>
Source record: 106098

Ken Bullington's seminal 1947 paper in BSTJ and IRE also covers UHF
propagation pretty well, also, but doesn't extend to microwaves. There is a
later paper which does, but I do not have it handy.

--
Crazy George
Remove N O and S P A M imbedded in return address
"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vpgnp9evkb262b@corp.supernews.com...
> I second what George has said about Norton's papers (and those of his
> associates). 1950s IRE is prob. where one should look.
> At lower UHF, scattering can be an important mode. I did estimates
> of these modes to predict interference to a radio-quiet site long ago.
> As a general rule, lots of power needs to be involved.
> At all of the frequencies, diffraction over the surface is
> significant. A standard scheme was to assume that the earth had a
> larger radius than is the case and them to plot LOS paths on that basis.
> Used to do that with topo maps by hand correcting the height of each
> contour (cutting the path) for how far away it was. The last time I did
> it - to help a college radio station - I used electronic topo maps -
> what progress!
> 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
>
>

3033. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 05:12:16 UTC
From: K7JEB <k7jeb@qsl.remove.net>
Message-ID: <SA2mb.33492$Rd4.18764@fed1read07>
Source record: 106099

Roy Lewallen, W7EL, posted:

> No, that's not the problem. The problem is
> that you're looking for a single voltage
> between two points separated in space. There
> is no single value for that voltage. If you
> made some kind of "artificial ground" close
> to the antenna, then there are an infinite
> number of possible voltages between it and
> the Earth.

Well, I chose one particular configuration
and one particular integration path because
I was curious about the original question -
something about how much voltage would the
end insulator have to handle for 100 watts
of radiated power.

I chose a vertical, half-wave monopole fed
against perfect ground and looked at the
driving source data with EZNEC. The feed-
point impedance was 2188 +j66 ohms and a
driving current of .213 amps produced a
radiated power of 100 watts and a feedpoint
voltage of 466 volts. 1500 watts scales
that up to 1805 volts. Symmetry about the
ground would increase that to 3600 volts
for the free-space case. That is what I
would adopt as my design-to target for
end insulators.

I know it's crude, but I was just looking
for a ballpark figure.

Jim, K7JEB

3034. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 05:46:02 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bnjf2a$11bjgk$1@ID-189073.news.uni-berlin.de>
Source record: 105946

Hey folks, I live about 1.5 miles as the crow flies from Roger, and can
definitely attest to the "awesome-ness" of his setup there..... :)

--
Ryan, KC8PMX
FF1-FF2-MFR-(pending NREMT-B!)
--. --- -.. ... .- -. --. . .-.. ... .- .-. . ..-. .. .-. . ..-.
.. --. .... - . .-. ...
"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:vl5epv84gvlvve966nn8iuspu2uahe4mq6@4ax.com...
> On Wed, 22 Oct 2003 06:19:43 -0400, Marylou@city.net wrote:
>
> >Roger, just what is that white loamy stuff around the base of your tower
> >aside from ALL the coax? You need to show us a photo of the tower and
>
> That's Michigan rain! <:-)) in December. Although...it's usually a
> lot deeper, but nothing like my daughter gets out in the mountains of
> Colorado. They had 9 feet in two days last winter. The snow was
> drifting up against the sliding door to their deck...On the second
> story. Actually it was about 3 feet up on the windows in the door.
> The snow was above the tops of the first story windows all the way
> around.
>
> Here's the link to the whole tower story...it's been posted a few
> times before. All put up by me...with the help of a few friends who
> pulled on the rope(s)
>
> http://www.rogerhalstead.com/tower.htm
>
> >what you have hanging on it. It that sand that has blown up, opps, that
> >not sand. Your call tells me your in the northeast. So it must be
>
> Great Lakes actually and Midland Michigan to be a bit more precise.
>
> >snnnnnow. I got COLD just looking at it. Have a nice warm day.
>
> Hey! It made it all the way to the 50s today. OTOH it's the 20s for
> tonight with more of that "Michigan Rain". The day that photo was
> shot *might* have made a high of 20 F.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
>

> >Marylou, N"5"XXX.
> >
> >Roger Halstead wrote:
>

3035. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 07:12:39 UTC
From: Didier <dima@skynet.be>
Message-ID: <3f98d101$0$314$ba620e4c@reader3.news.skynet.be>
Source record: 106100

Hi all,

Already thanks a lot for all your reply.
I forgot to mention something that might be usefull.
I intend to work QRP; mainly 5 to 10 Watt or at the maximum 100 Watt when
using another rig.
I am not really willing to work 80 M but more 40 M, 20M and 10 M

May be this can change your reply ?

73' de ON5KAD

Didier

"Didier" <dima@skynet.be> a crit dans le message de
news:3f98364f$0$3656$ba620e4c@reader2.news.skynet.be...
> Hi all,
>
> I would like to use a vertical multi band antenna because of space
> restriction.
> I have seen the butternut HF9V.
> What do you think about this antenna ?
>
> Is the conterpoise CPK effective when not using the radials ? (I will not
be
> able to use radials, not enough space)
>
> When the antenna is properly set, is an antenna tuner or automatic antenna
> tuner still needed ?
>
> Thanks a lot for your help
>
> 73' de ON5KAD
>
>

3036. Re: Shortwave Listener antenna ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 07:56:40 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310232356.6e6ff32a@posting.google.com>
Source record: 106101

"David Robbins" <noone@nowhere.com> wrote in message
news:<YT6dnWbetOWwhBKiU-KYkA@crocker.com>...
> "private" <private@private.com> wrote in message
> news:3F8F080B.FBB7CB20@private.com...
> > I have an old shortwave radio and want a decent wire antenna
> > for it.
> > Would connecting a single insulated wire up through the wall,
> > through the attic and laid on the roof have a good chance of
> > working decently?
> > It will probably be about 125' from radio to the end of the
> > antenna.
> > I hope I don't need a ground at the radio.
> >
>
> it would be safer if you did ground the radio, exposing a wire outside is
> just asking for lightning to come visiting.

If lightning does decide to stop in for a visit, what good will
grounding the radio do?
None. Might even make things worse. If you have an exposed wire in
the air, grounding the wire itself *OUTSIDE* to a decent ground, when
not in use, is the only safe protection unless you take more expensive
and complex methods. IE: gas tubes, ground windows, etc, etc. If you
direct lightning into the house, having the radio grounded will not
help you much at all. Grounding a radio in itself, is NOT lightning
protection in any form or fashion. MK

3037. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 09:07:22 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310240107.4b20eaa8@posting.google.com>
Source record: 106102

"Ronald Walters" <rwalters8@cfl.rr.com> wrote in message
news:<IXulb.13697$Go5.235922@twister.tampabay.rr.com>...
> I have been using a MFJ-989C tuner for about (5) years without any problems.
> Just recently I have noticed that on the higher band, 24 MHz that the SWR
> occasionally would jump from an adjusted 1:1 SWR to infinity. A slight
> adjustment of the roller inductance appeared to solve the problem although I
> haven't ruled out a balum or antenna problem. I plan on investigating that
> this weekend, however, before I open the cabinet and look for problems I
> would ask the group for recommendations on cleaning the roller assembly and
> inductor to ensure good conductivity after I am done.
>
> I still have some old cleaning solutions from the old TV tuner days, some
> electrical cleaner (Appears heavy duty stuff) but maybe there is some other
> solutions someone might recommend.
>
> Your thoughts and recommendations are appreciated
>
> Ron - W4LDE

Theories on wiping, etc non withstanding, the usual cause of roller
problems on that tuner, " I have one" is due to gradual weakening of
the pressure of the roller on the coil due to the weak micky mouse
design of the coil. You can tighten it up by adjustng the little
things on the end, that are locked with a hex key. But be very careful
when you are doing this. It's easy to overtighten, and then it will
bind easier. A dirty coil could be the problem, but I bet it's that
coil starting to slightly loosen up from 5 years of turning back and
forth.
It then starts to "skip" at places, due to the lack of normal pressure
against the coil. I've had to adjust mine a couple of times. If you
coil feels overly easy to turn, compared to when new, that may well be
the problem. MK

3038. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 10:34:40 UTC
From: "M. J. Powell" <mike@pickmeremere.demon.co.uk>
Message-ID: <fGPgaYKABQm$EwXH@pickmere.demon.co.uk>
Source record: 106103

In message <vpgnp9evkb262b@corp.supernews.com>, J. McLaughlin
<JCM@Power-Net.Net> writes
>I second what George has said about Norton's papers (and those of his
>associates). 1950s IRE is prob. where one should look.
> At lower UHF, scattering can be an important mode. I did estimates
>of these modes to predict interference to a radio-quiet site long ago.
>As a general rule, lots of power needs to be involved.
> At all of the frequencies, diffraction over the surface is
>significant. A standard scheme was to assume that the earth had a
>larger radius than is the case and them to plot LOS paths on that basis.
>Used to do that with topo maps by hand correcting the height of each
>contour (cutting the path) for how far away it was. The last time I did
>it - to help a college radio station - I used electronic topo maps -
>what progress!

I used to do it for microwave links by plotting the path on '4/3' paper.
That is, a path curved by 4/3 the earth's radius.

Mike
--
M.J.Powell

3039. Re: WZ3AR charged, released without bail

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 12:43:40 UTC
From: fractenna@aol.com
Message-ID: <20031024084340.28264.00000064@mb-m10.aol.com>
Source record: 106104

>Can we charge TSA with incompetence??
>
>Deacon Dave, W1MCE
>

Any way tou look at it it isn't comforting.

73,
Chip N1IR

3040. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 13:24:02 UTC
From: K7JEB <k7jeb@qsl.remove.net>
Message-ID: <0O9mb.33513$Rd4.19789@fed1read07>
Source record: 106105

Roy Lewallen, W7EL, posted:

> No, that's not the problem. The problem is
> that you're looking for a single voltage
> between two points separated in space. There
> is no single value for that voltage. If you
> made some kind of "artificial ground" close
> to the antenna, then there are an infinite
> number of possible voltages between it and
> the Earth.

As another case study, I analyzed a half-wave, inverted-V antenna over perfect ground with the ends of the antenna close to the ground. I placed high-resistance (1e12-ohm) loads between these open ends and ground as voltmeters. The angle of the inverted-V was 90 degrees, placing the apex of the antenna 0.35 wavelength above ground.

The feedpoint impedance was trimmed up to be 19 + j0.4 ohms. Going right for the maximum, 1500 watts into this impedance requires an 8.9 amp current source.

The voltage to ground across the load on the antenna endpoint is 5300 volts for 1500 watts of radiated power.

This scales back to 1370 volts for 100 watts.

Again, this is just a special case of the general problem. But it has a configuration that is easy to implement in the EZNEC program and is quite relevant to typical ham-radio, low-band dipole installations.

If anyone wants to go over this data, or that for the vertical, half-wave monopole, drop me an e-mail at k7jeb (at) qsl.net and I will send over the .EZ files.

Jim, K7JEB

3041. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 13:40:01 UTC
From: richardharrison@webtv.net
Message-ID: <12200-3F992BB1-42@storefull-2311.public.lawson.webtv.net>
Source record: 106106

Roy Lewallen wrote:
"The problem is that you`re looking for a single voltage between two points in space. There is no single value for that voltage."

Keith Henney in his 1950 "Radio Engineering Handbook on page 638 wrote:
"A thin-wire dipole gives an end potential of about 3,900 volts for 1000 watts antenna input for a height of 1/4-wave. It will be higher for smaller heights, and falls to a minimum of about 1700 volts as height increases to 3/4-wave; beyond this point it settles down to the free-space value of about 3000 volts. Potentials vary as the square root of the power ratio and as the inverse square root of the capacitance per unit length. For a potential of 3900 volts on a wire 0.101 in. in diameter (No.10 B&S), the radial gradient is of the order of 31 kv per cm."

At frequencies where the antenna has high reactance and low resistance, a few watts of power produce very high potentials. At high altitudes, high potentials can easily produce corona and flashover. Apply more watts and produce corona and flashover at sea level.

One way to measure the voltage at the end of a dipole might be to increase input to the dipole until orona cccurs and then scale that to the power of interest.

Best regards, Richard Harrison, KB5WZI

3042. Re: UHF, Microwave Propagation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 14:09:22 UTC
From: richardharrison@webtv.net
Message-ID: <12200-3F993292-43@storefull-2311.public.lawson.webtv.net>
Source record: 106107

Mike Powell wrote:
"I used to do it for microwave links by plotting the paths on "4/3"
paper."

Shows that different folks use different strokes. I alwaws used K=2/3
paper. This is quite pessimistic, but my paths usually worked under
propagation conditions (early morning hours when the fog sets in) that
bent the lines of wave travel away from the earth.

I also tried hard to keep distance between repeaters closer to 20 miles
than to 30 miles. Also, when I had a choice, between 2 GHz and 6 GHz, I
chose 2 GHz.

Best regards, Richard Harrison, KB5WZI

3043. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 14:31:19 UTC
From: James <capjim300sa@nospam.yahoo.com>
Message-ID: <1067006696.376220@newshost03.voicenet.com>
Source record: 106108
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
>
> Why does this surprise you? Look at the way gobernment does bizness.
Look
> at the FCC jumping up and down about PLC/BPL and too ignorant to
understand
> the problem. Nuff said.
>
> Dan/W4NTI

Correct Dan. Bush has 87 BILLION to dump into
the re-building of Iraq (a country who's people would
stab us in the back the minute it's turned..) and yet cuts
the budgets of the VA Hospital, Medicare, Roads and
Public Works and other domestic programs.

No....He want's to give those oil rich sandniggers 87 Billion
at NO LOAN. (more like a bribe for them to behave)

Watch and see as Bush "Act II popcorn man" becomes
a one-term President. He's making the same mistakes
as his daddy did in 92 and the Democrats will eat him
and the GOP alive in 04. Clinton may have been a
pot smoking womanizer, but the checks still came thru
every Friday and more people were working when he
was running the show in the O. Office.

In the end Iraq will go the way of Iran, watch it in 5 Years.

More info: www.smirkingchimp.com

3044. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 15:31:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9946b9_2@127.0.0.1>
Source record: 106109

K7JEB wrote:
> I know it's crude, but I was just looking
> for a ballpark figure.

Hi Jim, all of the estimates have been in the same
ballpark except for the ones that indicate the voltage
doesn't appreciably change from the center feedpoint
of a 1/2WL dipole to the open ends.

Looks like antennas and transmission lines obey Maxwell's
equations after all. :-)
--
73, Cecil, W5DXP

3045. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 15:51:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f994b61_2@127.0.0.1>
Source record: 106111

Richard Harrison wrote:
> At high altitudes,
> high potentials can easily produce corona and flashover.

That's why the cubical quad was invented. The voltage at
the voltage maximum points is in the ballpark of half that
of a dipole and those points can be insulated.
--
73, Cecil, W5DXP

3046. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 15:54:31 UTC
From: luke <luke_use_the_force@nospam.com>
Message-ID: <3F994B35.187D9291@nospam.com>
Source record: 106110

Hi,

Deoxit by Caig Labs replaces the Cramolin product.

http://www.caig.com

The D5 is a 5 % concentration and normally cleans up most dirty contacts and surfaces.
Very little is needed.

73 luke

> Richard wrote...
>
> One contact cleaner that I used that was better than most was
> Cramolin. This is a monomolecular layer solution that you would use
> very sparingly. However, as your tuner did not arrive brand-new (or
> brand-used) with it, your problem may be more mundane.
>
> The simplest way to defeat corrosion is with pressure. The spring
> tension of the roller may have slackened up over the years.
>
> 73's
> Richard Clark, KB7QHC

3047. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 17:33:55 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <7odmb.485$X22.248@newsread2.news.atl.earthlink.net>
Source record: 106112
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"J Tabor" <denews@taborsoft.com> wrote in message
news:vpgpjbahqjtod5@corp.supernews.com...
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
> > Why does this surprise you? Look at the way gobernment does bizness.
> Look
> > at the FCC jumping up and down about PLC/BPL and too ignorant to
> understand
> > the problem. Nuff said.
> >
>
> Totally unhelpful and irrelevant response. And you of course had to quoted
> the entire message and also place your remarks at the bottom. :)
>
> Jim
> --
> email sent to: denews@taborsoft.com
> is discarded without being seen.
> Sorry for any inconvenience.
>
>
I know...did it tick you off? Good. You don't want to read what I say.
Killfile it. I could care less.

Dan/W4NTI

3048. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 17:37:12 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <crdmb.487$X22.248@newsread2.news.atl.earthlink.net>
Source record: 106113
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"James" <capjim300sa@nospam.yahoo.com> wrote in message
news:1067006696.376220@newshost03.voicenet.com...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
> >
> > Why does this surprise you? Look at the way gobernment does bizness.
> Look
> > at the FCC jumping up and down about PLC/BPL and too ignorant to
> understand
> > the problem. Nuff said.
> >
> > Dan/W4NTI
>
> Correct Dan. Bush has 87 BILLION to dump into
> the re-building of Iraq (a country who's people would
> stab us in the back the minute it's turned..) and yet cuts
> the budgets of the VA Hospital, Medicare, Roads and
> Public Works and other domestic programs.
>
> No....He want's to give those oil rich sandniggers 87 Billion
> at NO LOAN. (more like a bribe for them to behave)
>
> Watch and see as Bush "Act II popcorn man" becomes
> a one-term President. He's making the same mistakes
> as his daddy did in 92 and the Democrats will eat him
> and the GOP alive in 04. Clinton may have been a
> pot smoking womanizer, but the checks still came thru
> every Friday and more people were working when he
> was running the show in the O. Office.
>
> In the end Iraq will go the way of Iran, watch it in 5 Years.
>
> More info: www.smirkingchimp.com
>
>

Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
into a quagmire. Unfortunatly for those fighting the fight, it is serving a
purpose. It is keeping the ragheads 'occupied'. And its not in Boise
Idaho.

As for your political commentary. As far as I'm concerned the Democratic party left me when they turned it over to NOW and Phyliss.

That does NOT mean I support Baby Bush 100%. However lets see how things go.

Dan/W4NTI

3049. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 17:48:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t1oipv0legupes9cht8dldps644ga1qoq5@4ax.com>
Source record: 106114

On Fri, 24 Oct 2003 15:54:31 GMT, luke <luke_use_the_force@nospam.com>
wrote:

>Hi,
>
>Deoxit by Caig Labs replaces the Cramolin product.
>
>http://www.caig.com
>
>The D5 is a 5 % concentration and normally cleans up most dirty contacts and
>surfaces.
>Very little is needed.
>
>73 luke
>

Hi Luke,

Thanks for your update. The suggestion of using Hydrochloric Acid for
contact cleaning is one of the most outrageous suggestions I've seen
come down the pike. I read of one poster who had obtained a gallon to
accomplish a task, who then asked "what do I do with the 99.99% left
over?"

After I had just participated in the Washington Toxic Coalition's fund
raiser the night before, the posting of indiscriminate advice that
toxic chemicals are the best choice over and beyond what is a simple
fix with Mark's allen wrench was another nail in the environmental
coffin for our children.

I fielded a contact problem for a local here and offered an even
simpler suggestion: use clean water. Complete immersion followed by
air drying at an elevated temperature works far better than a vat of
chemicals.

For those plagued with static problems, visit:
www.aclstaticide.com/
which is one of the best and safest anti-static products on the
market. You can use it as a spray or a wash, and do your floors or
carpets with it without the fear of toxicity.

73's
Richard Clark, KB7QHC

3050. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 17:56:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9968b1$1_2@127.0.0.1>
Source record: 106115

Richard Clark wrote:
> For those plagued with static problems, visit:
> www.aclstaticide.com/
> which is one of the best and safest anti-static products on the
> market.

Is that the stuff to use on dirty pots?
--
73, Cecil, W5DXP

3051. W5GI "Mystery" Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 18:06:51 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bnbqbg$dp2$1@reader2.nmix.net>
Source record: 106116

I'm interested in knowing if anyone has modeled, built, and/or tested the W5GI multiband antenna described in July 2003 CQ magazine. I'm especially interested in any experience mounting the antenna in inverted-V fashion, rather than as a flat-top T.

For those who haven't seen the article, the W5GI is constructed using two physical 1/4-wave lengths of coax, center-to-braid shorted on the far ends, as the middle 1/4-wave segment in each leg of the antenna. These coax segments are supposed to provide the phase reversal necessary for the collinear design, and also act as part of the collinear radiator set. (The phasing stubs often used when building a wire collinear are not employed here.) Since the coax segments are not phase-reversing on other bands, the antenna is supposed to act as a G5RV on bands pther than 20M. I'm principally interested in its performance on 20M, since the G5RV's theory and characteristics of operation have been extensively discussed elsewhere.

Supposedly, people attempting to model this antenna using available software tools have come up with disparate results. The author claims that numerous people have built and used the antenna on 20M and have been impressed with its performance. The major lobes supposedly occur broadside to the wire, as one would expect with a collinear.

The "mystery" here, as I understand it, is whether the coax segments actually do act as 180-degree phase-reversing elements, and if so, why the antenna seems to work correctly only when the coax elements are cut to a physical quarter weavelength (16.5 ft) rather than to an electrical quarter wavelength. (It's easy to see why this is true when the antenna is operated as a G5RV on others bands -- but what about when operating as a 20M collinear?)

Bill / W5WVO

3052. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 18:31:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <45ripvc8s0a4ak92spepi976f1nv4htnf7@4ax.com>
Source record: 106117

On Fri, 24 Oct 2003 12:56:54 -0500, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> For those plagued with static problems, visit:
>> www.aclstaticide.com/
>> which is one of the best and safest anti-static products on the
>> market.
>
>Is that the stuff to use on dirty pots?

Hi Cecil,

No. It used to be Freon, a very heavy liquid solvent used as a wash for dirty pots. As I offered, I use water. If the problem is not amenable to that, replace the pot. If you gain relief from some other product, you might be lucky that it will have solved it; or if repetition is necessary, then you have become "hooked" on that chemical solution (which again suggests a contact pressure problem). One might want to investigate the logic of "wiping" in the context of bad pots. ;-)

[hint: HCL will not work.]

73's
Richard Clark, KB7QHC

3053. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 19:47:48 UTC
From: k7itm@aol.com
Message-ID: <20031024154748.06706.00000050@mb-m16.aol.com>
Source record: 106118

Looks perfectly reasonable to me, Jim. Another perfectly reasonable thing to ask is "what is the electric field strength near the antenna elements?" because if the field strength is too great, you can get corona. And EZNEC (NEC2, etc) will give you at least an estimate of that value. As you say, it can be interesting to know if an insulator will be adequate, and that's a question well worth asking.

Cheers,
Tom

Jim, K7JEB, wrote:

>Well, I chose one particular configuration
>and one particular integration path because
>I was curious about the original question -
>something about how much voltage would the
>end insulator have to handle for 100 watts
>of radiated power.
>
>I chose a vertical, half-wave monopole fed
>against perfect ground and looked at the
>driving source data with EZNEC. The feed-
>point impedance was 2188 +j66 ohms and a
>driving current of .213 amps produced a
>radiated power of 100 watts and a feedpoint
>voltage of 466 volts. 1500 watts scales
>that up to 1805 volts. Symmetry about the
>ground would increase that to 3600 volts
>for the free-space case. That is what I
>would adopt as my design-to target for
>end insulators.
>
>I know it's crude, but I was just looking
>for a ballpark figure.
>

3054. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 19:47:51 UTC
From: Max <ve3tmt@rac.ca>
Message-ID: <Jlfmb.8594$7t3.377495@news20.bellglobal.com>
Source record: 106020

"DeG" <kg4fbg@onemain.com> wrote in message
news:x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net...
> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..

Do what I did, bought my wife her own car.

3055. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 19:52:59 UTC
From: k7itm@aol.com
Message-ID: <20031024155259.06706.00000051@mb-m16.aol.com>
Source record: 106019

Jim, K7JEB, wrote:
...
>Again, this is just a special case of the general
>problem. But it has a configuration that is easy to
>implement in the EZNEC program and is quite
>relevant to typical ham-radio, low-band dipole
>installations.
>
It's also easy to get the electric field strength near the antenna from EZNEC.
I expect the field to be highest near wires, because of the shape the field
must take near the wires, so that's where I'd look first to get an idea about
possible breakdown of the air or insulators.

Cheers,
Tom

3056. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 21:19:39 UTC
From: jder8745@aol.com
Message-ID: <20031024171939.25508.00000055@mb-m22.aol.com>
Source record: 106021

Really???

K9CUN

3057. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-24 21:23:10 UTC
From: jder8745@aol.com
Message-ID: <20031024172310.25508.00000057@mb-m22.aol.com>
Source record: 106022

What we know as and call "voltage" is the potential difference between two points. Give me access to the two points and an ideal voltmeter (AC or DC) and I'll measure it for you. I am assuming sinusoidal steady state AC, isn't everyone?

73 de Jack, K9CUN

3058. Program PADMATCH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 02:01:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnclhn$479$1@titan.btinternet.com>
Source record: 106023

Program PADMATCH calculates component values for resistive attenuators and minimum loss pads between dissimilar resistances.. It also assists with selecting resistor from the standard values series.

It also calculates the percentage of input power dissipated in each of the resistors.

I've heard from someone who has been searching around it's the only program on the web which gives the correct answers for both T and Pi networks although this sounds a little far fetched.

But it seems it's the only program to design matching attenuators for a given loss between two dissimilar impedances.

Just a reminder PADMATCH is still available from the following website. The Pascal source code for this program can also be downloaded. It may be of interest to budding prorammers.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3059. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 02:14:01 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <J%kmb.9578$9E1.46141@attbi_s52>
Source record: 106024

"Didier" <dima@skynet.be> wrote in message
news:3f98364f$0$3656$ba620e4c@reader2.news.skynet.be...
> Hi all,
>
> I would like to use a vertical multi band antenna because of space
> restriction.
> I have seen the butternut HF9V.
> What do you think about this antenna ?
>
> Is the conterpoise CPK effective when not using the radials ? (I will not
be
> able to use radials, not enough space)
>
> When the antenna is properly set, is an antenna tuner or automatic antenna
> tuner still needed ?
>
> Thanks a lot for your help
>
> 73' de ON5KAD
>

Didier -

HF9V
http://www.bencher.com/hf9vx.html

http://www.bencher.com/antaccessory.html

You can download and review the HF9V instruction & assembly manual from the
Bencher web site.
http://www.bencher.com/pdf_download.html

Here is the Bencher HF9V manual - current model introduced in 1997 (Adobe
Acrobat):
http://www.bencher.com/pdfs/00408IZV.pdf

Ground Radial Systems are discussed in the HF9V manual

73 de W9GB

3060. Check my math please?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 05:21:23 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2003.10.25.05.21.22.270381@spam.spam>
Source record: 106025

Could someone check my math for me? It's been awhile since I used some of these math skills.

I need to construct a short segment of 450 ohm open air xmittion line between my antenna and a 9:1 balun mounted on a post. The formula given by the 2003 ARRL handbook on page 19.4 gives the formula for calculating line impedance as,
Z=276 Log(2S/d)

I had to re-arrange this to solve for S with Z and d as given.

Z = 450 desired xmission line imp.
d = 1.1mm the size in mm of the 18gauge wire I have.

Z/276 = Log(2S/d)
than
450/276 = Log2S - Log1.1

than
1.630 = log(2S) - .0414

than
1.630 = log 2 + log S - .0414

than
1.630 = .301 + log S - .0414

than
1.630 = .26 + log S

than
1.37 = log S

23.44 = S

23.44mm center to center

Does it check out?!
Thank You In Advance!

3061. Re: Check my math please?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 06:16:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpk5ac7bagodc1@corp.supernews.com>
Source record: 106026

The way to check it is to plug your result into the equation, that is,
solve:

276*log(2*23.44/1.1)

What do you get?

Roy Lewallen, W7EL

Incidentally, the log formula for Z is actually an approximation. It's
no good when the wire spacing is very close compared to the wire
diameter, but it's fine for typical transmission lines.

yea right wrote:
> Could someone check my math for me? It's been awhile since I used some of
> these math skills.
>
> I need to construct a short segment of 450 ohm open air xmittion line
> between my antenna and a 9:1 balun mounted on a post. The formula given by
> the 2003 ARRL handbook on page 19.4 gives the formula for calculating line
> impedance as,
> Z=276 Log(2S/d)
>
> I had to re-arrange this to solve for S with Z and d as given.
>
> Z = 450 desired xmission line imp.
> d = 1.1mm the size in mm of the 18gauge wire I have.
>
> Z/276 = Log(2S/d)
> than
> 450/276 = Log2S - Log1.1
>
> than
> 1.630 = log(2S) - .0414
>
> than
> 1.630 = log 2 + log S - .0414
>
> than
> 1.630 = .301 + log S - .0414
>
> than
> 1.630 = .26 + log S
>
> than
> 1.37 = log S

>
> 23.44 = S
>
> 23.44mm center to center
>
> Does it check out?!
> Thank You In Advance!
>

3062. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 12:31:19 UTC
From: "Dr. Artaud" <NoSuchThing@Invalid.com>
Message-ID: <Xns941F56B07D9DAnosuchthing@216.168.3.44>
Source record: 106027
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"J Tabor" <denews@taborsoft.com> wrote in
news:vpgpjbahqjtod5@corp.supernews.com:

How's this for irrelevant? You make a post urging a response from the readers, and then endeavor to alienate them by grading their posts. I can see you holding little cardboard signs, and with marker in hand, you write your score on the card then hold it up for the judges.

You wouldn't happen to be an Amateur Astronomer, would you? When I used to be into the hobby, I noticed that many of the Amateurs were quite dysfunctional personality wise. (I know that in my case it's kind of like the kettle calling the pot black, figuratively, of course).

Dr. Artaud

> Totally unhelpful and irrelevant response. And you of course had to
> quoted the entire message and also place your remarks at the bottom.
> :)
>
> Jim

> Totally unhelpful and irrelevant response. And you of course had to
> quoted the entire message and also place your remarks at the bottom.
> :)
>
> Jim

> Totally unhelpful and irrelevant response. And you of course had to
> quoted the entire message and also place your remarks at the bottom.
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> quoted the entire message and also place your remarks at the bottom.
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> Jim

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> quoted the entire message and also place your remarks at the bottom.
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>
> Jim

> Totally unhelpful and irrelevant response. And you of course had to
> quoted the entire message and also place your remarks at the bottom.
> :)
>
> Jim

> Totally unhelpful and irrelevant response. And you of course had to
> quoted the entire message and also place your remarks at the bottom.
> :)
>
> Jim

"

I sincerely apologize for posting to 5 groups, but this subject is very
important and has not been seen, or I missed such, in any.

Regards,
Jim - KU5S
--
email sent to: denews@taborsoft.com
is discarded without being seen.
Sorry for any inconvenience.

--
To know and to be, this is not even a question, there is no alternative.
You see it clearly in the loneliest little avenues between particles and
waves, shunned even by the gregarious quark and unknown by the various
strands of time, so big it cannot be seen, yet so little it is immovable,
lies the fabric of the ultimate reality gripped in the fist of the all or
nothing."

3063. Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 13:44:12 UTC
From: "Alan P. Biddle" <APBIDDLE@ATT.NET>
Message-ID: <t8vkpv8lblga94td4btjar8vdjthvhqrcp@4ax.com>
Source record: 106028

Hi,

Any recommendations on a good, or bad, tuner for use with balanced antennas? That is, one which does not use a balun? It doesn't need to be an auto-tuner. There are a few from small suppliers, and I see the MFJ in their latest catalog has what is touted as a modernized Johnson Matchbox.

--
Alan
WA4SCA

3064. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 13:45:52 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <k8vmb.128968$qj6.8335232@news1.news.adelphia.net>
Source record: 106029

I use one of the older butternut 5 band antennas and it works great for me. I have one radial cut for each band that I use. You will need a simple tuner to get complete coverage of each band with a low SWR. The top of my antenna is at 40 feet, I have mounted atop 14 foot of mast. The mast is lightly guyed. We get quite heavy winds here, at times they have been known blow down trees. I have had no problems to date, but, it has only been up about 10 years (I take it down every couple of years for maintenance, check the joints, etc.). The HF9V will have a bit more wind drag (more coils), but they are low and should have little effect. In short, Butternut verticals are well thought out and standup well, the materials used are excellent. I have used one for over 20 years now (different types) and am well pleased with them.

Jim

"Didier" <dima@skynet.be> wrote in message
news:3f98364f$0$3656$ba620e4c@reader2.news.skynet.be...
> Hi all,
>
> I would like to use a vertical multi band antenna because of space
> restriction.
> I have seen the butternut HF9V.
> What do you think about this antenna ?
>
> Is the conterpoise CPK effective when not using the radials ? (I will not
be
> able to use radials, not enough space)
>
> When the antenna is properly set, is an antenna tuner or automatic antenna
> tuner still needed ?
>
> Thanks a lot for your help
>
> 73' de ON5KAD
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.530 / Virus Database: 325 - Release Date: 10/22/03

3065. packet in south texas??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 14:24:37 UTC
From: kc5cqa@yahoo.com
Message-ID: <gs1lpvojnki3lt6b1pr8evit21kcv6t6hp@4ax.com>
Source record: 106030

I am looking for a 'group,or website' with input on packet in the
San Antonio tex area, ??? thanks in advance. cl 73

3066. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 17:31:12 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <Arymb.2208$X22.0@newsread2.news.atl.earthlink.net>
Source record: 106032

You'll need at least a choke type balun to get from the unbalanced tx output condition to the balanced antenna load unless you go with a link-coupled tuner. Link coupling removes the necessity of using a balun since there is no "direct" connection between the unbalanced tx output & the balanced antenna load.

"Alan P. Biddle" <APBIDDLE@ATT.NET> wrote in message news:t8vkpv8lblga94td4btjar8vdjthvhqrcp@4ax.com...
> Hi,
>
> Any recommendations on a good, or bad, tuner for use with balanced
> antennas? That is, one which does not use a balun? It doesn't need
> to be an auto-tuner. There are a few from small suppliers, and I see
> the MFJ in their latest catalog has what is touted as a modernized
> Johnson Matchbox.
>
>
>
> --
> Alan
> WA4SCA

3067. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 18:24:37 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vplfsgnp2mt454@corp.supernews.com>
Source record: 106033
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Dear "Dr. Artaud:"
You limit your defamation to Amateur Astronomers. I have known many astronomers, both radio and optical astronomers, and I observed virtually none who could possibly be classified as "quite dysfunctional personality wise." Those few may simply have been shy.
This anonymous bit of defamation should be disregarded. Mac
N8TT
--
J. Mc Laughlin - Michigan USA

"Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
<snip>
>
> You wouldn't happen to be an Amateur Astronomer, would you? When I used to
> be into the hobby, I noticed that many of the Amateurs were quite
> dysfunctional personality wise. (I know that in my case it's kind of like
> the kettle calling the pot black, figuratively, of course).
>
> Dr. Artaud
>

3068. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 18:29:09 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vplg51n6deo5d6@corp.supernews.com>
Source record: 106034

MFJ's description of their "balanced" tuner might be describing a conventional unbalanced tuner with an effective choke. Does anyone know what is inside? 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

3069. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 18:48:11 UTC
From: w3hy@aol.com
Message-ID: <20031025144811.12451.00000058@mb-m01.aol.com>
Source record: 106035

In 20031024172310.25508.00000057@mb-m22.aol.com, jder8745@aol.com (JDer8745) wrote:

>What we know as and call "voltage" is the potential difference between two
>points. Give me access to the two points and an ideal voltmeter (AC or DC)
>and
>I'll measure it for you. I am assuming sinusoidal steady state AC, isn't
>everyone?
>
>73 de Jack, K9CUN
>

I'll bet you can. So I have this piece of clear plastic with two terminals staked to it. Call them A and B, A about 2 inches above B as I look at it. I have a 10k resistor wired from A to B and dressed an inch or so off to the left. I also have a 1k resistor wired from A to B and dressed off to the right, so the two resistors are a couple inches apart. There aren't any other electrical connections to the two resistors. I have a pretty good AC voltmeter, and using my best techniques, I measure one volt RMS across the 10k resistor. Using a scope, I see it's a nice 100kHz sinewave, constant amplitude. So what's the voltage across the 1k resistor?

73 de w3hy@aol.com

3070. Re: packet in south texas??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 19:08:26 UTC
From: "Gregory L. Dome" <gldome@livingston.net>
Message-ID: <vplih29vbfg793@corp.supernews.com>
Source record: 106036

Check in at the Ham Store on Gulfdale in San Antonio. Those guys will be
glad to help.
<kc5cqa@yahoo.com> wrote in message
news:gs1lpvojnki3lt6b1pr8evit21kcv6t6hp@4ax.com...
> I am looking for a 'group,or website' with input on packet in the
> San Antonio tex area, ??? thanks in advance. cl 73

3071. Re: Check my math please?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 19:29:53 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2003.10.25.19.29.53.178737@spam.spam>
Source record: 106037

On Fri, 24 Oct 2003 23:16:45 -0700, Roy Lewallen wrote:

> The way to check it is to plug your result into the equation, that is,
> solve:
>
> 276*log(2*23.44/1.1)
>
> What do you get?

LOL! I can't believe I forgot that little test!

Yep 449.768 450!

Thank You!

3072. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 19:41:21 UTC
From: "Dr. Artaud" <NoSuchThing@Invalid.com>
Message-ID: <Xns941F9F991FD91nosuchthing@216.168.3.44>
Source record: 106038
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"J. McLaughlin" <JCM@Power-Net.Net> wrote in
news:vplfsgnp2mt454@corp.supernews.com:

On a planet of insane people, the sane man must appear insane. If you are intimate with the likes of amateur astronomers, you would hardly be in the position of being able to judge their character.

Not to mention that your post, once again as in the post I originally replied to, attempts to "rate or judge" the suitability for other readers. If I were you, I would quickly add me to your plonk file and not bother yourself with the need to protect others.

I have observed quite a few seriously dysfunctional amateur astronomers, they usually aren't the type that casually fit in with the masses. As Carl Jung would have explained, they honed their technical abilities at the expense of their personality. This he refers to as differentiation. He depicts this as a cross like structure, with thinking and feeling at opposite ends of one axis, and sensation and intuition at opposite ends of the other axis. He feels, as I do, that when you are differentiated into thinking, you progressively exclude feeling.

These amateur astronomers are emasculated, quite awkward at dealing with women, quite oblivious to the needs of others, save for others involved in similar endeavors. Though they ostensibly appear male (some are female, nothing to write home about), they respond towards attractive women visiting the observatory as if they (the astronomers) are about 12 years old.

I read your post to my wife, she broke out laughing. The idea that you feel that amateur astronomers aren't dysfunctional was too much for her to handle. She has likewise seen the dysfunction in these people. We used to belong to the AAAP, Amateur Astronomers Association of Pittsburgh, http://trfn.clpgh.org/aaap/

"With over 500 members, it is one of the larger astronomy clubs in the nation.."

http://trfn.clpgh.org/aaap/images/brashear.jpg

You take umbrage because I mentioned amateur astronomers as dysfunctional, but in your zeal to find fault, you made an improper assumption, i.e. that I find the dysfunction only with them. Quite the contrary, model railroaders, HAM radio operators, remote control model enthusiasts, computer geeks, these all have decent populations that are dysfunctional, as do other more technical hobbies that do not currently come to mind.

You also missed that my point of "the kettle calling the pot black". I mentioned this since I also believe that I fall into the dysfunctional category. So what?

"Use the plonk file Luke", let the NG fend for themselves.

Sincerely, a former dysfunctional amateur astronomer and a somewhat less (not very much less though) dysfunctional shortwave listener.

Dr. Artaud

> Dear "Dr. Artaud:"
> You limit your defamation to Amateur Astronomers. I have known
> many
> astronomers, both radio and optical astronomers, and I observed
> virtually none who could possibly be classified as "quite
> dysfunctional personality wise." Those few may simply have been shy.
> This anonymous bit of defamation should be disregarded. Mac
> N8TT
> --
> J. Mc Laughlin - Michigan USA
>
> "Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
> <snip>

To know and to be, this is not even a question, there is no alternative. You see it clearly in the loneliest little avenues between particles and waves, shunned even by the gregarious quark and unknown by the various strands of time, so big it cannot be seen, yet so little it is immovable, lies the fabric of the ultimate reality gripped in the fist of the all or nothing."

3073. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 20:43:17 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <a2olpvscmotctqvmtfqccsq3dtc76h2mmo@4ax.com>
Source record: 106040

On Sat, 25 Oct 2003 13:44:12 GMT, Alan P. Biddle <APBIDDLE@ATT.NET>
wrote:

>Hi,
>
>Any recommendations on a good, or bad, tuner for use with balanced
>antennas? That is, one which does not use a balun? It doesn't need
>to be an auto-tuner. There are a few from small suppliers, and I see
>the MFJ in their latest catalog has what is touted as a modernized
>Johnson Matchbox.

You can download the manual here:
http://www.mfjenterprises.com/man/pdf/MFJ-974H.pdf

Danny. K6MHE

3074. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 21:03:53 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <bneofreco1@news.datasync.com>
Source record: 106039
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Doc.

Take your Ritalin.

-- Stinger

"Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
news:Xns941F9F991FD91nosuchthing@216.168.3.44...
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in
> news:vplfsgnp2mt454@corp.supernews.com:
>
>
> On a planet of insane people, the sane man must appear insane. If you
> are intimate with the likes of amateur astronomers, you would hardly be
> in the position of being able to judge their character.
>
> Not to mention that your post, once again as in the post I originally
> replied to, attempts to "rate or judge" the suitability for other
> readers. If I were you, I would quickly add me to your plonk file and
> not bother yourself with the need to protect others.
>
> I have observed quite a few seriously dysfunctional amateur astronomers,
> they usually aren't the type that casually fit in with the masses. As
> Carl Jung would have explained, they honed their technical abilities at
> the expense of their personality. This he refers to as differentiation.
> He depicts this as a cross like structure, with thinking and feeling at
> opposite ends of one axis, and sensation and intuition at opposite ends
> of the other axis. He feels, as I do, that when you are differentiated
> into thinking, you progressively exclude feeling.
>
> These amateur astronomers are emasculated, quite awkward at dealing with
> women, quite oblivious to the needs of others, save for others involved
> in similar endeavors. Though they ostensibly appear male (some are
> female, nothing to write home about), they respond towards attractive
> women visiting the observatory as if they (the astronomers) are about 12
> years old.
>
> I read your post to my wife, she broke out laughing. The idea that you
> feel that amateur astronomers aren't dysfunctional was too much for her
> to handle. She has likewise seen the dysfunction in these people. We
> used to belong to the AAAP, Amateur Astronomers Association of
> Pittsburgh, http://trfn.clpgh.org/aaap/
>
> "With over 500 members, it is one of the larger astronomy clubs in the

> nation.."
>
> http://trfn.clpgh.org/aaap/images/brashear.jpg
>
> You take umbrage because I mentioned amateur astronomers as
> dysfunctional, but in your zeal to find fault, you made an improper
> assumption, i.e. that I find the dysfunction only with them. Quite the
> contrary, model railroaders, HAM radio operators, remote control model
> enthusiasts, computer geeks, these all have decent populations that are
> dysfunctional, as do other more technical hobbies that do not currently
> come to mind.
>
> You also missed that my point of "the kettle calling the pot black". I
> mentioned this since I also believe that I fall into the dysfunctional
> category. So what?
>
> "Use the plonk file Luke", let the NG fend for themselves.
>
> Sincerely, a former dysfunctional amateur astronomer and a somewhat less
> (not very much less though) dysfunctional shortwave listener.
>
> Dr. Artaud
>
>
>
>
> > Dear "Dr. Artaud:"
> > You limit your defamation to Amateur Astronomers. I have known
> > many
> > astronomers, both radio and optical astronomers, and I observed
> > virtually none who could possibly be classified as "quite
> > dysfunctional personality wise." Those few may simply have been shy.
> > This anonymous bit of defamation should be disregarded. Mac
> > N8TT
> > --
> > J. Mc Laughlin - Michigan USA
> >
> > "Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
> > <snip>
>
> To know and to be, this is not even a question, there is no alternative.
> You see it clearly in the loneliest little avenues between particles and
> waves, shunned even by the gregarious quark and unknown by the various
> strands of time, so big it cannot be seen, yet so little it is
> immovable, lies the fabric of the ultimate reality gripped in the fist
> of the all or nothing."

3075. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 21:30:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9aeda6$1_4@corp.newsgroups.com>
Source record: 106041

T.E.O wrote:
> These are fairly easy to build. Basically 2 homebrew coils, a variable
> capacitor & a choke balun made of coax.

FYI, this is an ASCII newsgroup - no binaries allowed.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3076. Re: Sommer Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 21:42:09 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <R6Cmb.4213$FI2.2751@newsread1.news.atl.earthlink.net>
Source record: 106042

Ron,

Mosley rates their antennas in DBi. Sommer rated their antennas against a dipole so I assume DBd. The big Sommer is a fine antenna in the XP70x and XP80x config. The smaller XP50x is much closer to the TA-33. Back in the early 90's Lew McCoy reviewed the small sommer in CQ Magazine. N4VZ (now W7UT) used his to work almost anyone he wanted until he moved to Utah. KM1E wrote a two part article in DX Magazine in 1995 on selected and installing the XP807 (big version). You might get reprints from N4AA who now publishes DX Magazine. I was on 17 when KM1E was testing his Sommer against a 4 el wide spaced beam at KA1PE. With FK8CP he was 56 compared to KA1PE 57 (FK8CP gives low reports HI). Later he was as strong on a European QSO. I would drop KM1E a note to see if he is still happy.

The Sommer is not a true Yagi but a log periodic or really a skip log using a combination of half wave, three quarters, and full wavelength elements phased on each band. If you get the 30 or 40 meter elements its a short loaded element with inefficient directors that seem to work as well or better than a full size dipole at the same height.

The Sommer is a difficult antenna to put together and install compared to the TA-33. It is extremely rugged and will last forever.

Good luck with any decision. Alternatives include the new 3 and 4 el SteppIR , the TH11, and perhaps the Big Bencher. If you like Mosley Van W4GIW in South Carolina may be selling his Pro 57 Mosley and going to big Monobaders.

73 Dave K4JRB
Ronald Walters <rwalters8@cfl.rr.com> wrote in message news:S3_kb.268$RP2.51@twister.tampabay.rr.com...
> Who is using a Sommer multi band antenna out there? What's the real scope
> on this antenna? Your comments
>
> Using a TA33 now. Mosley rates their antennas in DBd while Sommer in DBi
> so it looks like the claimed gain is about equal.
>
> Appreciate any comments
>
> Ron - W4LDE
>
>

3077. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 21:52:41 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <JgCmb.4233$FI2.52@newsread1.news.atl.earthlink.net>
Source record: 106043

Deane,

All are good antennas. I sold the Fritzel FD-4 80 to 10 OCF dipole in the mid 90's and used one with good results. I would recommend the Carolina Short 80 (previously called the Carolina Beam). This has a leg up on the others if you want both Dx and local skywave results.

The comment about keeping the dipole and adding a tuner is a good one too. I would suggest making the dipole 135 feet long and using ladderlime tho. Remember none of these will equal a beam or phased verticals. many of the locals have put up a big loop skywire (either 80 or 160 full wave loops) with good success. I have a 80 meter loop up at my Island second home and can work the world with 100 watts.
73 Dave K4JRB

Deane Charlson <Deane.R.Charlson@nasa.gov> wrote in message news:3F97E7D7.9000509@nasa.gov...
> Hello,
>
> I have been using single-band half-wave dipoles for years. I would like
> to try some multi-band wire antennas and compare performance. I am
> considering using an Off Center Fed Dipole or a G5RV or a Carolina
> Windom. Any thoughts or experiences with these antennas as compared to
> a half-wave dipole?
>
> Thanks & 73s,
> Deane
> WB2DCF
>

3078. Re: W5GI "Mystery" Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 21:58:26 UTC
From: David L Thompson <thompson@mindspring.com>
Message-ID: <6mCmb.4239$FI2.1923@newsread1.news.atl.earthlink.net>
Source record: 106044

Bill,

Its in the class with the double or double extended zepp with about 2 to 2.5 dbd gain. I think LB W4RNL is either adding it or plans to add it to his web page. Its a broadside antenna using two half waves to add gain to the figure 8 on the fundamental frequency (say 17 or 20). There is a null off the ends but mounted low its only a few DB at most. The efficiency his very high and the antenna is no mystery to antenna buffs. Just a novel way of generating the double zepp.
73 Dave K4JRB

Bill VanAlstyne <w5wvo@cybermesa.net> wrote in message news:bnbqbg$dp2$1@reader2.nmix.net...
> I'm interested in knowing if anyone has modeled, built, and/or tested the
> W5GI multiband antenna described in July 2003 CQ magazine. I'm especially
> interested in any experience mounting the antenna in inverted-V fashion,
> rather than as a flat-top T.
>
> For those who haven't seen the article, the W5GI is constructed using two
> physical 1/4-wave lengths of coax, center-to-braid shorted on the far ends,
> as the middle 1/4-wave segment in each leg of the antenna. These coax
> segments are supposed to provide the phase reversal necessary for the
> collinear design, and also act as part of the collinear radiator set. (The
> phasing stubs often used when building a wire collinear are not employed
> here.) Since the coax segments are not phase-reversing on other bands, the
> antenna is supposed to act as a G5RV on bands pther than 20M. I'm
> principally interested in its performance on 20M, since the G5RV's theory
> and characteristics of operation have been extensively discussed elsewhere.
>
> Supposedly, people attempting to model this antenna using available software
> tools have come up with disparate results. The author claims that numerous
> people have built and used the antenna on 20M and have been impressed with
> its performance. The major lobes supposedly occur broadside to the wire, as
> one would expect with a collinear.
>
> The "mystery" here, as I understand it, is whether the coax segments
> actually do act as 180-degree phase-reversing elements, and if so, why the
> antenna seems to work correctly only when the coax elements are cut to a
> physical quarter weavelength (16.5 ft) rather than to an electrical quarter
> wavelength. (It's easy to see why this is true when the antenna is

operated
> as a G5RV on others bands -- but what about when operating as a 20M
> collinear?)
>
> Bill / W5WVO
>
>

3079. Re: Program PADMATCH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:07:51 UTC
From: PieroIK2VTJ <ik2vtjnonvogliospam@ardf.it>
Message-ID: <bnes9s$10l2v6$1@ID-83989.news.uni-berlin.de>
Source record: 106045

> But it seems it's the only program to design matching attenuators for a
> given loss between two dissimilar impedances.
>
I'm sorry to say NO.
Maybe your program is better, but not the only!
I will try soon your PADMATCH, but you can try my Excel application that
does (I suppose) the same.
You will find it at site in signature. On main menu chose (sorry it's only
Italian):
Strumenti->Attenuatori->Passivi and then click on the first asterisk in the
page(*).
If you have problem with the language, and want to know something, ask me,
please.

--

73 de IK2VTJ, Piero.
http://www.ardf.it
Togli/Remove 'nonvogliospam' dall'indirizzo/from address

3080. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:21:22 UTC
From: "Dr. Artaud" <NoSuchThing@Invalid.com>
Message-ID: <Xns941FBABB0A641nosuchthing@216.168.3.44>
Source record: 106046
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in
news:bneofreco1@news.datasync.com:

Thank you for your response. As I recently had the misfortune to need to reload my newsreader program, I have been unsure about those that I previously killfiled (plonked). You would seem to fit admirably into that category. I had read several of your posts and had vacillated on whether or not to killfile you. I think I'll err on the conservative side (apropos) and do it anyway.

Take your Rilalin.

Ritalin is a drug commonly used for ADHD and narcolepsy. The ADHD indication is often used for adolescents (I guess many would place me in that category by my writings), and for adults with narcolepsy. Being that I am no longer clinically adolescent and that I do not suffer from narcolepsy, I'm afraid that there are no indications for me concerning this product.

I would like to thank you for expressing your concern about my health, this certainly puts you above many others on this NG.

Dr. Artaud

> Doc.
>
> Take your Ritalin.
>
> -- Stinger
>
To know and to be, this is not even a question, there is no alternative. You see it clearly in the loneliest little avenues between particles and waves, shunned even by the gregarious quark and unknown by the various strands of time, so big it cannot be seen, yet so little it is immovable, lies the fabric of the ultimate reality gripped in the fist of the all or nothing."

3081. Re: Program PADMATCH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:26:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <70ulpvs08f5hvohokghtvpoeb7qmg1gelf@4ax.com>
Source record: 106047

On Sun, 26 Oct 2003 00:07:51 +0200, "PieroIK2VTJ"
<ik2vtjnonvogliospam@ardf.it> wrote:

>If you have problem with the language, and want to know something, ask me,
>please.
>
>--
>
>73 de IK2VTJ, Piero.

Hi All,

Alta Vista has a tool called "Babelfish" that does translations of
short sections of text, or entire web sites at:
http://babelfish.altavista.com/

Alta Vista ha un attrezzo chiamato "Babelfish" che fa le traduzioni
delle sezioni corte di testo, o l'intero fotoricettore situa a:
http://babelfish.altavista.com/

73's
Richard Clark, KB7QHC

3082. Re: Program PADMATCH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:29:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <28ulpvc7k1fia89bvctuti648l5nupf7ro@4ax.com>
Source record: 106048

On Sat, 25 Oct 2003 22:26:39 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Alta Vista ha un attrezzo chiamato "Babelfish" che fa le traduzioni
>delle sezioni corte di testo, o l'intero fotoricettore situa a:
>http://babelfish.altavista.com/
>

Then again, Babelfish translates that to:
Alta Vista has a called tool "Babelfish" that ago the translations of
the short sections of text, or the entire fotoricettore situates to:

;-)

3083. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:30:11 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <TPCmb.129673$qj6.8476717@news1.news.adelphia.net>
Source record: 106049

Max wrote:
> "DeG" <kg4fbg@onemain.com> wrote in message
> news:x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net...
>
>>I'm wanting to keep peace within the family.. NO! Extra antennas on the
>>vehicle..

> Do what I did, bought my wife her own car.

Perhaps what I said to my wife might help.

I don't go to bars and set around getting drunk.

I don't beat you or demean you.

I don't seek out other women for dalliances.

Now what was that about the antenna I wanted to put up?

I can put up my antennas without a lot of crap now.

- Mike KB3EIA -

3084. Re: Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:40:35 UTC
From: Bill <ojisan0@mchsi.com>
Message-ID: <DZCmb.27893$HS4.109108@attbi_s01>
Source record: 106050

I may have to go and use one of the rotor plates for that function, I do
have access to a machine shop where I could have one fabricated but I
was looking for an original if I could find one.
Thanks.
Bill

Roger Halstead wrote:
> On Sun, 19 Oct 2003 21:19:48 GMT, Bill <ojisan0@mchsi.com> wrote:
>
>
>>I'm in need of a Rohn BPL45G to convert a standard 10 foot section of Rohn
>>45 to a flat top for installing a thrust bearing.
>>If anyone has one in good conditon or a new on laying around pleae let
>>me know what you would be asking for it.
>>73 Bill W4OM
>
>
> If you have a standard top section, or just a straight section, just
> get one of the heavy duty rotor plates and mount the thrust bearing on
> that.
>
> I do have one of the top sections with top plate and thrust bearing,
> but I also use the heavy rotor plate for another thrust bearing down
> in the tower.
>
> Using a standard 10 foot section I'd use two rotor plates (both with
> thrust bearings. One just below the first cross braces at the top and
> the second about 4 feet down. The find something to cap the tower
> legs.
>
> On mine with the top plate, I use one thrust bearing there and another
> just above the rotor about 25 feet down inside the tower.
>
> It's easy enough to weld up (and bend) a top plate, but not so easy to
> get it double hot dipped galvanized. That is one heavy piece of
> steel. I think it's either 5/16ths or 3/8ths inch plate.
> If you don't weld you could take the diagram of the top plate to a
> metal shop, get it cut and drilled and have three legs welded on that
> will just fit over the top of the tower legs. Then bolt together in
> the usual fashion. Remembering that ROHN uses 2 bolts per leg with
> one being 5/16ths and the other is either 3/8ths or 7/16ths. If I had
> my catalog handy I'd look it up, but I don't know where I put the
> thing.
>

> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

3085. Re: Program PADMATCH

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 22:56:35 UTC
From: PieroIK2VTJ <ik2vtjnonvogliospam@ardf.it>
Message-ID: <bnevm8$10b55m$1@ID-83989.news.uni-berlin.de>
Source record: 106052

"Richard Clark" <kb7qhc@comcast.net> ha scritto nel messaggio
news:28ulpvc7k1fia89bvctuti648l5nupf7ro@4ax.com...
> On Sat, 25 Oct 2003 22:26:39 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> >Alta Vista ha un attrezzo chiamato "Babelfish" che fa le traduzioni

Hi Richard,

I know and use, sometime that tools (from german to english).
It's a pity that the translations are only quite close, but with a lot of
phantasy! :-)
This is an example:
the piece "entire web sites at:" translated in :"l'intero fotoricettore
situa a:" has absolutely no meaning!
'Fotoricettore' could be a device that receive the light, like a CCD or a
photoresistor and 'situa' means 'locates'!
Thanks anyway! :-)

--

73 de IK2VTJ, Piero.
http://www.ardf.it
Togli/Remove 'nonvogliospam' dall'indirizzo/from address

3086. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 23:04:39 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <bnevi9$h91$1@news.datasync.com>
Source record: 106051
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Doc,

My comment was not meant to offend you. I enjoy reading your posts, and
I feel very badly that you took mine that way.

Please understand that my pals and I say that phrase when somebody is
making an intense effort to belabor the obvious (as a humorous way to let
them know they've made their point). I guess I thought it was more
universal ;^)

Please accept my sincerest apologies, and do know that I actually do
care about your health.

-- Stinger

"Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
news:Xns941FBABB0A641nosuchthing@216.168.3.44...
> "Stinger" <contact@newsserveronly.com> wrote in
> news:bneofreco1@news.datasync.com:
>
> Thank you for your response. As I recently had the misfortune to need to
> reload my newsreader program, I have been unsure about those that I
> previously killfiled (plonked). You would seem to fit admirably into
> that category. I had read several of your posts and had vacillated on
> whether or not to killfile you. I think I'll err on the conservative
> side (apropos) and do it anyway.
>
> Take your Rilalin.
>
> Ritalin is a drug commonly used for ADHD and narcolepsy. The ADHD
> indication is often used for adolescents (I guess many would place me
> in that category by my writings), and for adults with narcolepsy. Being
> that I am no longer clinically adolescent and that I do not suffer from
> narcolepsy, I'm afraid that there are no indications for me concerning
> this product.
>
> I would like to thank you for expressing your concern about my health,
> this certainly puts you above many others on this NG.
>
> Dr. Artaud
>
> > Doc.
> >
> > Take your Ritalin.
> >

> > -- Stinger
> >
> To know and to be, this is not even a question, there is no alternative.
> You see it clearly in the loneliest little avenues between particles and
> waves, shunned even by the gregarious quark and unknown by the various
> strands of time, so big it cannot be seen, yet so little it is
> immovable, lies the fabric of the ultimate reality gripped in the fist
> of the all or nothing."

3087. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 23:41:19 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <zSDmb.24557$ao4.33500@attbi_s51>
Source record: 106053

I suppose in your mind, everything useful has already been invented. All further development work should now cease as we no longer need anything new. Seems there was a member of congress during the 1800s that thought the same thing. He proposed eliminating the patent office as all things useful had already been invented.

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message news:20031023113255.00731.00000026@mb-m12.aol.com...
> Geez, why go through all that effort? AES has a fine selection of antennas
> already invented! :)
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

3088. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 23:58:43 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <T6Emb.4472$FI2.1640@newsread1.news.atl.earthlink.net>
Source record: 106054

His real 'name' is VHF radio Boob.

Dan/W4NTI

"CW" <clinton.magers@comcast.net> wrote in message
news:zSDmb.24557$ao4.33500@attbi_s51...
> I suppose in your mind, everything useful has already been invented. All
> further development work should now cease as we no longer need anything
new.
> Seems there was a member of congress during the 1800s that thought the
same
> thing. He proposed eliminating the patent office as all things useful had
> already been invented.
>
>
> "VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
> news:20031023113255.00731.00000026@mb-m12.aol.com...
> > Geez, why go through all that effort? AES has a fine selection of
antennas
> > already invented! :)
> > =-
> > 73! de Andy KC2SSB - WPYI880 (GMRS)
> > Beachwood, NJ USA! Grid FM29vw
> > http://vhfradiobuff.tripod.com
>
>

3089. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-25 23:59:17 UTC
From: wa8ulx@aol.com
Message-ID: <20031025195917.14077.00000168@mb-m29.aol.com>
Source record: 106055

>I suppose in your mind, everything useful has already been invented. All
>further development work should now cease as we no longer need anything new.
>Seems there was a member of congress during the 1800s that thought the same
>thing. He proposed eliminating the patent office as all things useful had
>already been invented.
>
>
>"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
>news:20031023113255.00731.00000026@mb-m12.aol.com...
>> Geez, why go through all that effort? AES has a fine selection of antennas
>> already invented! :)
>> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
>> 73! de Andy KC2SSB - WPYI880 (GMRS)
>> Beachwood, NJ USA! Grid FM29vw
>> http://vhfradiobuff.tripod.com

ANDY IS just a CBer with a so called Ham Ticket, he doesnt know any better,
and never will understand.

3090. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 00:30:13 UTC
From: "LA9EHA, Svein" <la9eha.nospam@online.no>
Message-ID: <wxEmb.1647$mf2.19987@news4.e.nsc.no>
Source record: 106056

"DeG" <kg4fbg@onemain.com> wrote in message
news:x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net...
> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..
> I want to install a dual band 2m/440 mobile using the AM/FM antenna that
is
> on the vehicle.. It will be mostly used for receive, BUT....
> Other than a duplexer and tuner (s) What is needed to STOP the RF from
> damaging the AM/FM radio in case I want to transmit?...
> Any help on this??
>

You may do as I did on my new car.
I did not fancy drilling hole in my new car and decided to go for the
MFJ-1734 (a glassfix dualband antenna).
It is 26 inches and handles 50W.
I run it together with my Icom IC-2725E (IC-2720H) and it works very well.

Good luck!

--
73 de LA9EHA, Svein
Kristiansand, Norway

3091. FREE Quad HF antenna Portland OR area

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 02:12:36 UTC
From: antswitch@tomochka.com
Message-ID: <47c89a30.0310251812.18a042ec@posting.google.com>
Source record: 106057

It's already on the ground, but you'll have to dismantle it to take it
away. This is a Lightning Bolt 2 el., originally 10-15 meters,
extended for 20 meters. 4 ft. boom, spreaders, wire, it's all there,
and I'll throw in the TV rotor and control, and pipe mast, u-haul.
Located in Hillsboro.

See pictures of it when still on the tower:
http://www.tomochka.com/ks7j/quad/index.html

E-mail to shack AT tomochka DOT com. 73, Casey

3092. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 02:39:12 UTC
From: w4udx@bellsouth.net
Message-ID: <MsGmb.47736$W77.14381@bignews6.bellsouth.net>
Source record: 106058
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

And what does all this have to do with amateur antennas?

3093. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 03:02:15 UTC
From: Wayne <wfaris@inebraska.com>
Message-ID: <3F9B3937.20BC4641@inebraska.com>
Source record: 106059
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

w4udx@bellsouth.net wrote:

> And what does all this have to do with amateur antennas?

It means that this will screw up propagation forcasting which many of us
depend on for dxing.

Wayne
KEï¿½BZ

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3094. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 03:36:04 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <dtfmpvo9l1cn4mfd9kirrhivkhuji9hg84@4ax.com>
Source record: 106031

On Sat, 25 Oct 2003 13:44:12 GMT, Alan P. Biddle <APBIDDLE@ATT.NET>
wrote:

>Hi,
>
>Any recommendations on a good, or bad, tuner for use with balanced
>antennas? That is, one which does not use a balun? It doesn't need
>to be an auto-tuner. There are a few from small suppliers, and I see
>the MFJ in their latest catalog has what is touted as a modernized
>Johnson Matchbox.

I'm having good luck using an unbalanced tuner, an mfj989c, with an
external choke balun (a few turns of coiled coax), to transition to a
dipole fed with 450 ohm line. I can tune my 44-ft. dipole on all
bands, 30 thru 10.

As far as balanced tuners go, Palstar and Bliss make real expensive
ones, in addition to the mjf model you just mentioned. Don't know of
any others currently being marketed.

Bob
k5qwg

3095. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 06:11:07 UTC
From: shortwave@telus.net
Message-ID: <6719551d.0310252211.5c3cbdba@posting.google.com>
Source record: 106060
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I cannot believe the racism and lack of intelligence shown by Dan L.
Jeswald and James whoever he is. Using words like ragheads &
sandniggers? Shame on you both!!

Grow-up, you giving all Americans a bad name. I am posting your
address below so the "ragheads" you are talking about can pay you a
visit....

Daniel L. Jeswald
89 Wildman Road
Anniston AL
36201

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<crdmb.487$X22.248@newsread2.news.atl.earthlink.net>...
> "James" <capjim300sa@nospam.yahoo.com> wrote in message
> news:1067006696.376220@newshost03.voicenet.com...
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
> > >
> > > Why does this surprise you? Look at the way gobernment does bizness.
> Look
> > > at the FCC jumping up and down about PLC/BPL and too ignorant to
> understand
> > > the problem. Nuff said.
> > >
> > > Dan/W4NTI
> >
> > Correct Dan. Bush has 87 BILLION to dump into
> > the re-building of Iraq (a country who's people would
> > stab us in the back the minute it's turned..) and yet cuts
> > the budgets of the VA Hospital, Medicare, Roads and
> > Public Works and other domestic programs.
> >
> > No....He want's to give those oil rich sandniggers 87 Billion
> > at NO LOAN. (more like a bribe for them to behave)
> >
> > Watch and see as Bush "Act II popcorn man" becomes
> > a one-term President. He's making the same mistakes
> > as his daddy did in 92 and the Democrats will eat him
> > and the GOP alive in 04. Clinton may have been a
> > pot smoking womanizer, but the checks still came thru

> > every Friday and more people were working when he
> > was running the show in the O. Office.
> >
> > In the end Iraq will go the way of Iran, watch it in 5 Years.
> >
> > More info: www.smirkingchimp.com
> >
> >
>
> Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
> into a quagmire. Unfortunatly for those fighting the fight, it is serving a
> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> Idaho.
>
> As for your political commentary. As far as I'm concerned the Democratic
> party left me when they turned it over to NOW and Phyliss.
>
> That does NOT mean I support Baby Bush 100%. However lets see how things
> go.
>
> Dan/W4NTI

3096. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 07:13:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpmt1gmhsuvaea@corp.supernews.com>
Source record: 106061

Just one caution about this. I don't think EZNEC or other NEC-based programs will give accurate field strength any closer to a wire than a few wire diameters. So it probably wouldn't be good for predicting the likelihood of corona discharge and the like. It might be possible, though, to model a wire as a number of very much smaller parallel wires arranged in a circle, to get good field strength values closer to the real wire. I wouldn't completely trust the results, though, until at least a few test cases were run which could be compared to theoretical values.

Roy Lewallen, W7EL

K7ITM wrote:
> Jim, K7JEB, wrote:
> ...
>
>>Again, this is just a special case of the general
>>problem. But it has a configuration that is easy to
>>implement in the EZNEC program and is quite
>>relevant to typical ham-radio, low-band dipole
>>installations.
>>
>
> It's also easy to get the electric field strength near the antenna from EZNEC.
> I expect the field to be highest near wires, because of the shape the field
> must take near the wires, so that's where I'd look first to get an idea about
> possible breakdown of the air or insulators.
>
> Cheers,
> Tom
>

3097. Re: Burying Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 08:12:51 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <cvvmpv45vhl40q8b8gtgi1f09qm661ji5k@4ax.com>
Source record: 106062

On Sat, 18 Oct 2003 20:39:15 GMT, yea right <spam@spam.spam> wrote:

>I would like to bury my coax for a distance of about 20ft. The location
>consist of 6" of crushed decorative rocks over the top of very rocky soil.
>
>I intend to take the LMR-400 coax and push it through a garden hose to add
>a layer of protection. However, I am worried that condensation will
>quickly fill the airspace of the hose with water and it will either
>penetrate the coax outer jacket or interfere with the performance of it in
>some unknown negative way.

Just an added note.
As you are going through crushed rock and rocky soil I'd use some form
of protection for the coax simply because it only takes someone
stepping on the crushed rock in the right place to cut the jacket.

Now the stuff will probably work for years even with the jacked holed.

The strange thing is: I just picked up a new 144/440 antenna to use
for the rig in the shop. I picked up a roof tripod, but got to
thinking the tower is only about 25 feet from the shop. So...I have
about a 25 foot buried run. I happened to have a bunch of 1/2 inch
PVC conduit. LMR-400 fits with lots of room to spare. Loose enough
that you could probably push it through 50 feet of the conduit. Just
be sure to bevel the inside of the ends so the coax doesn't catch on
them. You don't even have to use sealant on the conduit. It's sole
purpose is mechanical protection and it only costs a few dollars per
section. And you can push the coax around the sweeping 90s.

I now speak from experience using the 1/2 inch conduit on a slightly
longer run than you were talking about. I've also added another 100
feet of bare #2 ground wire and 4 8' ground rods CadWelded together.

I use a hydraulic drill I made which drills a hole deep enough to just
drop in the ground rod in about a minute (in clay).

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>I can not flood the garden hose with petroleum oil as it will soon eat
>through the PVC jacket of the coax or garden hose. Ideally, I would like
>to flood the hose with the same stuff they put into underground cables. It
>has a honey consistency and is not easily displaced by water. I was hoping
>for some type of silicon oil but am unable to find anything similar at the
>hardware store.

>
>Anybody have any suggestions?

3098. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 08:58:16 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <l0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>
Source record: 106064
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Private" <shortwave@telus.net> wrote in message
news:6719551d.0310252211.5c3cbdba@posting.google.com...
> I cannot believe the racism and lack of intelligence shown by Dan L.
> Jeswald and James whoever he is. Using words like ragheads &
> sandniggers? Shame on you both!!

Those names worked OK for me... I immediately knew exactly who he was
talking about. So did you.

You should be ashamed for being a PC pick-a-ninny.

> Grow-up, you giving all Americans a bad name.
>I am posting your
> address below so the "ragheads" you are talking about can pay you a
> visit....

Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D

That reminds me of an interview that occurred back in 1967, right after the
Israeli 6-day war. Israel had been attacked on all sides by a number of
raghead states, who were determined to murder every Israeli man, woman, and
child in Israel. (According to the raghead newspapers of the time.)

Of course we all know what happened. Despite having almost no outside
support, and with only a few obsolete old French aircraft, the Israelis
thoroughly kicked every one of those ragheads countries' asses, taking some
of their land from them instead, just to teach the uncivilized scum a little
lesson.

Asked about his astounding success in mowing down thousands of screaming
raghead fanatics with very few casualties (sound familiar?) , the Israeli
general agreed to give the reporter the exclusive secret to his
unprecedented military success...

"Fight Arabs." he said.

Charles Brabham, N5PVL

3099. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 08:58:16 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <I0Mmb.12433$%62.6996@newssvr29.news.prodigy.com>
Source record: 106065
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Private" <shortwave@telus.net> wrote in message
news:6719551d.0310252211.5c3cbdba@posting.google.com...
> I cannot believe the racism and lack of intelligence shown by Dan L.
> Jeswald and James whoever he is. Using words like ragheads &
> sandniggers? Shame on you both!!
>
> Grow-up, you giving all Americans a bad name. I am posting your
> address below so the "ragheads" you are talking about can pay you a
> visit....
>
> Daniel L. Jeswald
> 89 Wildman Road
> Anniston AL
> 36201

3100. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 09:57:51 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3F9B9A9F.3F73@wt.net>
Source record: 106063

Richard Clark wrote:
>
> On Thu, 23 Oct 2003 10:38:15 -0400, Deane Charlson
> <Deane.R.Charlson@nasa.gov> wrote:
>
> >Hello,
> >
> >I have been using single-band half-wave dipoles for years. I would like
> >to try some multi-band wire antennas and compare performance. I am
> >considering using an Off Center Fed Dipole or a G5RV or a Carolina
> >Windom. Any thoughts or experiences with these antennas as compared to
> >a half-wave dipole?

--
http://web.wt.net/~nm5k

If strictly comparing performance, all three are inferior when compared to the coax fed dipoles. To be honest, I've tried all of the antennas you mention, and I have no use for any of them. I thought overall, they were pathetic. I agree, if you want to run all bands, just feed a dipole of the lowest band you want to run with ladder line. If you use a tuner, use the very least inductance to get a usable match. That will greatly reduce tuner losses. Nothing you try will beat a coax fed dipole for pure efficiency, unless you use a no-tuner method like Cecils no tuner ladder line setup. But careful use if the tuner will leave losses low enough to not really worry about. Well, unless you are like me, and want every last drop....I stick with parallel dipoles fed with a single coax. At the moment I have 80/40/20 dipoles on one line. I can use the tuner on other bands if needed.
But those bands I get: no tuner needed, no tuner losses, the advantages of coax, and a normal dipole pattern on those bands. My total system losses are very low. I don't like using a tuner as you can probably tell. :/. I'll avoid it like the plague if possible.
The OCF is prone to common mode problems. Same with the windom which is basically the same thing. The average storebought windom and G5RV's suffer from excess feedline losses due to the micky mouse feedline design. IE: coax to balun to ladder line to antenna...Add tuner loss for all band use...What a micky mouse mess...:(I compared coax fed dipoles to both a storebought windom and a storebought G5RV at previous field days. Ate em for lunch. I mean absolutely tore em a new one...You could see a 2 S unit difference just in the efficiency difference. On theirs, everything would drop. Noise, signals, everything. Pattern was not an issue. Was a painful sight for the owners of those antennas. They had no clue they were that inferior until I A/B'ed those puppies using an antenna switch. :(You can improve the performance if you design a

better feed system. IE: dump all the garbage, and run ladder line the whole way. MK

3101. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 10:00:35 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3F9B9B43.286@wt.net>
Source record: 106066

Mark Keith wrote:
>
> Richard Clark wrote:

Oops, actually, this wasn't aimed at Richard, but the original poster...Sorry..I don't have the original post on the server, and missed the proper quote...MK

3102. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 10:32:34 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F9BA2C2.DA64D7C1@cwis.net>
Source record: 106067

Deane,
Give them a try! Don't throw away your present single
band antennas, though. You'll want to put them back up
after you make the comparisons, unless you're willing to
swap performance for simplicity (in some cases).
'Doc

3103. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 10:35:05 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <trNmb.26165$9E1.83485@attbi_s52>
Source record: 106068

He was right!! All USEFUL things had been invented!

What he ignored was all those non-useful things waiting to be invented.

:-)

CW wrote:

> I suppose in your mind, everything useful has already been invented. All
> further development work should now cease as we no longer need anything new.
> Seems there was a member of congress during the 1800s that thought the same
> thing. He proposed eliminating the patent office as all things useful had
> already been invented.
>
>
> "VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
> news:20031023113255.00731.00000026@mb-m12.aol.com...
>
>>Geez, why go through all that effort? AES has a fine selection of antennas
>>already invented! :)
>>=-
>>73! de Andy KC2SSB - WPYI880 (GMRS)
>>Beachwood, NJ USA! Grid FM29vw
>>http://vhfradiobuff.tripod.com
>
>
>

3104. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 11:39:20 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <FoOmb.15281$5c2.4785@okepread03>
Source record: 105969
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Being from Alabama, his mother was probably a negress, so he has
an inbred right to use such words.

"Private" <shortwave@telus.net> wrote
>
> I cannot believe the racism and lack of intelligence shown by Dan L.
> Jeswald and James whoever he is. Using words like ragheads &
> sandniggers? Shame on you both!!
>
> Grow-up, you giving all Americans a bad name. I am posting your
> address below so the "ragheads" you are talking about can pay you a
> visit....
>
> Daniel L. Jeswald
> 89 Wildman Road
> Anniston AL
> 36201

3105. Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 14:37:16 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <EZQmb.48750$h47.23665@bignews4.bellsouth.net>
Source record: 105970

Congratulations to Marc Tarplee N4UFP, SC Technical Coordinator for his article entitled "Two Bands from One Dipole" that was published in the November 2003 issue of QST on page 46!

Click here for a PowerPoint Presentation of his article hosted on the SC Section Website.
http://www.qsl.net/arrl-sc/Tech%20Presentations/A%20Simple%20Two-Band%20Dipole.ppt

Here is a listing of all his Articles posted on the SC ARRL Section Website
http://www.qsl.net/arrl-sc/tech_presentations_by_n4ufp_tc.htm

3106. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 14:47:08 UTC
From: "Dr. Artaud" <NoSuchThing@Invalid.com>
Message-ID: <Xns9420638AED9F0nosuchthing@216.168.3.44>
Source record: 105971
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in
news:I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com:

Oh, was that the very same year that Israel ruthlessly and without provocation attacked the U.S.S Liberty? This was done by the same people that still chase phantasms of Holocaust perpetrators nearly 55 years after it ended, while claiming that the U.S.S. Liberty issue has been "resolved" or "closed".

http://ussliberty.org/ excerpts follow:

"During the Six Day War between Israel and the Arab States, the American intelligence ship USS Liberty was attacked for 75 minutes in international waters by Israeli aircraft and motor torpedo boats. Thirty-four men died and 172 were wounded."

"Israel claims they mistook our ship for the out-of-service Egyptian horse carrier El Quseir and that we brought the attack upon ourselves by operating in a war zone without displaying a flag. Not so. We were in international waters, far from any fighting, and flew a bright, clean, new American flag. The flag we flew is on display at the National Cryptologic Museum, Fort Meade, Maryland and can be seen there, or in the USS Liberty Images Archive."

http://home.cfl.rr.com/gidusko/liberty/

http://www.washington-report.org/backissues/0693/9306019.htm

http://www.logogo.net/liberty.htm

http://www.yellowtimes.org/article.php?sid=399 excerpts follow:

"(YellowTimes.org) • June 8 marked 35 years since Israel attacked the USS Liberty without warning in international waters, killing 34 Americans and wounding 172 more. The Israelis lied about it and persuaded our Congress to look the other way, and they are still lying about it today. But the Liberty will not go away. Every attempt to hide this story seems to bring more attention.

This past year brought a 60-minute documentary produced by CBS News Productions that was broadcast by The History Channel on Aug. 9 - much to the dismay and over the heated objections of the Israeli Embassy and various spokesmen for Israel who did all in their power to block it."

http://www.lewrockwell.com/orig/margolis12.html excerpts follow:

"At 0800 hrs, 8 June, 1967, eight Israeli recon flights flew over 'Liberty,' which was flying a large American flag. At 1400 hrs, waves of low-flying Israeli Mystere and Mirage-III fighter-bombers repeatedly attacked the American vessel with rockets, napalm, and cannon. The air attacks lasted 20 minutes, concentrating on the ship's electronic antennas and dishes. The 'Liberty' was left afire, listing sharply. Eight of her crew lay dead, a hundred seriously wounded, including the captain, Commander William McGonagle.

At 1424 hrs, three Israeli torpedo boats attacked, raking the burning 'Liberty' with 20mm and 40mm shells. At 1431hrs an Israeli torpedo hit the 'Liberty' midship, precisely where the signals intelligence systems were located. Twenty-five more Americans died.

Israeli gunboats circled the wounded 'Liberty,' firing at crewmen trying to fight the fires. At 1515, the crew were ordered to abandon ship. The Israeli warships closed and poured machine gun fire into the crowded life rafts, sinking two. As American sailors were being massacred in cold blood, a rescue mission by US Sixth Fleet carrier aircraft was mysteriously aborted on orders from the White House."

http://zog.to/3/liberty/lib-ind.htm excerpt follows:

"In June 1967 jet aircraft and motor torpedo boats of Israel brutally assaulted the American naval intelligence gathering ship USS Liberty. The attack was preceded by more than six hours of intense low-level surveillance. The attack lasted more than two hours, killing 34 Americans and wounding 171 others, and inflicted over 821 rocket, cannon and machine-gun holes in the ship..."

http://www.counterpunch.org/stclair1126.html

"After more than two hours of unremitting assault, the Israelis finally halted their attack. One of the torpedo boats approached the Liberty. An officer asked in English over a bullhorn: "Do you need any help?"

The wounded commander of the Liberty, Lt. William McGonagle, instructed the quartermaster to respond emphatically: "Fuck you."

I believe that evidence of Israel's "at times" inhuman treatment of others in the pursuit of their own safety comes from the increasing numbers of individuals in their own military that refuse specific missions. Few would fault an officer of the law or soldier in the military that takes positive and at times fatal actions against individuals or groups actively seeking to kill others. But in missions designed for revenge purposes against the Palestinians for terror perpetrated by some of them, Israeli military personnel are now, and have been over the years, experiencing soldiers refusing to do as ordered.

Dr. Artaud.

> That reminds me of an interview that occurred back in 1967, right
> after the Israeli 6-day war. Israel had been attacked on all sides by

> a number of raghead states, who were determined to murder every
> Israeli man, woman, and child in Israel. (According to the raghead
> newspapers of the time.)
>
> Of course we all know what happened. Despite having almost no outside
> support, and with only a few obsolete old French aircraft, the
> Israelis thoroughly kicked every one of those ragheads countries'
> asses, taking some of their land from them instead, just to teach the
> uncivilized scum a little lesson.
>
> Asked about his astounding success in mowing down thousands of
> screaming raghead fanatics with very few casualties (sound familiar?
>) , the Israeli general agreed to give the reporter the exclusive
> secret to his unprecedented military success...
>
> "Fight Arabs." he said.
>
> Charles Brabham, N5PVL
>

--
To know and to be, this is not even a question, there is no alternative.
You see it clearly in the loneliest little avenues between particles and
waves, shunned even by the gregarious quark and unknown by the various
strands of time, so big it cannot be seen, yet so little it is
immovable, lies the fabric of the ultimate reality gripped in the fist
of the all or nothing."

3107. Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 15:39:05 UTC
From: groundwave@telus.net
Message-ID: <eb867ae8.0310260739.20e91357@posting.google.com>
Source record: 105972
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I cannot believe these two posts below. Charles D. Braham, you are worse then Dan L. Jeswald who started the thread making racist remarks. You guys just don't get it do you, where does it stop? Arabs? Black people? Both of you are discusting....

Did you know your racist remarks are illegal? How do you think a Black or Arab person feels about your remarks? Maybe one will visit you and explain how they feel.....

Charles D. Braham (N5PVL)
Rt 2 Box 46
Lyford TX
78569

"charlesb" <n5pvl@sbcglobal.net> wrote in message news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...

> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
>
> That reminds me of an interview that occurred back in 1967, right after the
> Israeli 6-day war. Israel had been attacked on all sides by a number of
> raghead states, who were determined to murder every Israeli man, woman, and
> child in Israel. (According to the raghead newspapers of the time.)
>
> Of course we all know what happened. Despite having almost no outside
> support, and with only a few obsolete old French aircraft, the Israelis
> thoroughly kicked every one of those ragheads countries' asses, taking some
> of their land from them instead, just to teach the uncivilized scum a little
> lesson.
>
> Asked about his astounding success in mowing down thousands of screaming
> raghead fanatics with very few casualties (sound familiar?) , the Israeli
> general agreed to give the reporter the exclusive secret to his
> unprecedented military success...
>
> "Fight Arabs." he said.
>
> Charles Brabham, N5PVL

****
Here the the quote from Dan L. Jeswald, again disgusting.....

Daniel L. Jeswald
89 Wildman Road
Anniston AL
36201

> Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
> into a quagmire. Unfortunatly for those fighting the fight, it is serving a
> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> Idaho.
>
> As for your political commentary. As far as I'm concerned the Democratic
> party left me when they turned it over to NOW and Phyliss.
>
> That does NOT mean I support Baby Bush 100%. However lets see how things
> go.
>
> Dan/W4NTI

3108. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 16:07:48 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bngrgi$8289$1@news3.infoave.net>
Source record: 105973
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

If your so proud of your politically correct stance, why the heck are you posting behind a screen name?

You are a low life bastard posting addresses of those you disagree with , while hiding in the dark.

"Private" <groundwave@telus.net> wrote in message news:eb867ae8.0310260739.20e91357@posting.google.com...
> I cannot believe these two posts below. Charles D. Braham, you are
> worse then Dan L. Jeswald who started the thread making racist
> remarks. You guys just don't get it do you, where does it stop?
> Arabs? Black people? Both of you are discusting....

3109. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 16:22:17 UTC
From: w4udx@bellsouth.net
Message-ID: <xwSmb.49230$h47.38242@bignews4.bellsouth.net>
Source record: 105974
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Like I said, what does it have to do with antennas?

"Wayne" <wfaris@inebraska.com> wrote in message
news:3F9B3937.20BC4641@inebraska.com...
> w4udx@bellsouth.net wrote:
>
> > And what does all this have to do with amateur antennas?
>
> It means that this will screw up propagation forcasting which many of us
> depend on for dxing.
>
> Wayne
> KEBZ
>
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3110. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 16:32:42 UTC
From: Luke <luke_use_the_force@nospam.com>
Message-ID: <3F9BF729.80457CC6@nospam.com>
Source record: 105975

Hi,

The Caig Labs products are also very effective on switches and pots.
Deoxit D5 works great on the older radio dirty or scratchy pots, makes
them work as new.

Again, only very little of the stuff is needed to do the job.

http://www.caig.com

73 luke

Cecil wrote:

> Richard Clark wrote:
> > For those plagued with static problems, visit:
> > www.aclstaticide.com/
> > which is one of the best and safest anti-static products on the
> > market.
>
> Is that the stuff to use on dirty pots?
> --
> 73, Cecil, W5DXP

3111. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 16:49:24 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vpnuq4c6f04gb9@corp.supernews.com>
Source record: 105976
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Most politically correct types are. They are a gutless, spineless
breed that hide behind everything possible and when it's safe
to come out of thier holes, they snipe and take pot shots at
everything that is good and decent, if not just anything
that doesn't fit thier sleazy, terrible, hate-filled agenda.

N.O.W., Earth First!, the ACLU and other yellow bellied
organizations like that are now quickly losing all clout and
political strength they have because they have gone to
the well of jealousy & race conflict just one time to many
to drink from, and now thier paying the price.

Good riddance to bad rubbish.

Clint

--

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bngrgi$8289$1@news3.infoave.net...
> If your so proud of your politically correct stance, why the heck are you
> posting behind a screen name?
>
> You are a low life bastard posting addresses of those you disagree with ,
> while hiding in the dark.
>
>
> "Private" <groundwave@telus.net> wrote in message
> news:eb867ae8.0310260739.20e91357@posting.google.com...
> > I cannot believe these two posts below. Charles D. Braham, you are
> > worse then Dan L. Jeswald who started the thread making racist
> > remarks. You guys just don't get it do you, where does it stop?
> > Arabs? Black people? Both of you are discusting....
>
>

3112. Re: Rohn 45

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 17:15:46 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <a50opv09970getbeke8haag7c06tgdeme7@4ax.com>
Source record: 105977

On Sat, 25 Oct 2003 22:40:35 GMT, Bill <ojisan0@mchsi.com> wrote:

>I may have to go and use one of the rotor plates for that function, I do
>have access to a machine shop where I could have one fabricated but I
>was looking for an original if I could find one.

Good luck on finding one. There should be some dealers who still have
some parts left.

If I had much wind load I'd certainly want to use the standard top
plate or have the equivalent made as it's at least 4 times as heavy
and wayyyy stronger than the rotor plate.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

3113. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 17:27:44 UTC
From: Clete <clete88@hotmail.com>
Message-ID: <vpo0vpgjimo568@corp.supernews.com>
Source record: 105978
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Homeland Uber Alles!!!!!!!!!!

Salute! my friend!

Private wrote in message ...
>I cannot believe these two posts below. Charles D. Braham, you are
>worse then Dan L. Jeswald who started the thread making racist
>remarks. You guys just don't get it do you, where does it stop?
>Arabs? Black people? Both of you are discusting....
>
>Did you know your racist remarks are illegal? How do you think a
>Black or Arab person feels about your remarks? Maybe one will visit
>you and explain how they feel.....
>
>Charles D. Braham (N5PVL)
>Rt 2 Box 46
>Lyford TX
>78569
>
>"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
>
>> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
>>
>> That reminds me of an interview that occurred back in 1967, right after
the
>> Israeli 6-day war. Israel had been attacked on all sides by a number of
>> raghead states, who were determined to murder every Israeli man, woman,
and
>> child in Israel. (According to the raghead newspapers of the time.)
>>
>> Of course we all know what happened. Despite having almost no outside
>> support, and with only a few obsolete old French aircraft, the Israelis
>> thoroughly kicked every one of those ragheads countries' asses, taking
some
>> of their land from them instead, just to teach the uncivilized scum a
little
>> lesson.
>>
>> Asked about his astounding success in mowing down thousands of screaming
>> raghead fanatics with very few casualties (sound familiar?) , the
Israeli

>> general agreed to give the reporter the exclusive secret to his
>> unprecedented military success...
>>
>> "Fight Arabs." he said.
>>
>> Charles Brabham, N5PVL
>
>**************************************
>Here the the quote from Dan L. Jeswald, again disgusting.....
>
>Daniel L. Jeswald
>89 Wildman Road
>Anniston AL
>36201
>
>> Wouldn't surprise me a bit. I thought from the git-go that Iraq would
turn
>> into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
>> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
>> Idaho.
>>
>> As for your political commentary. As far as I'm concerned the Democratic
>> party left me when they turned it over to NOW and Phyliss.
>>
>> That does NOT mean I support Baby Bush 100%. However lets see how things
>> go.
>>
>> Dan/W4NTI

3114. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:16:44 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <gcUmb.5632$FI2.1517@newsread1.news.atl.earthlink.net>
Source record: 105979
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Thanks....just remember I don't provide the body bags. I haven't shot at
anyone since 1968.

Dan/W4NTI

"Private" <shortwave@telus.net> wrote in message
news:6719551d.0310252211.5c3cbdba@posting.google.com...
> I cannot believe the racism and lack of intelligence shown by Dan L.
> Jeswald and James whoever he is. Using words like ragheads &
> sandniggers? Shame on you both!!
>
> Grow-up, you giving all Americans a bad name. I am posting your
> address below so the "ragheads" you are talking about can pay you a
> visit....
>
> Daniel L. Jeswald
> 89 Wildman Road
> Anniston AL
> 36201
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<crdmb.487$X22.248@newsread2.news.atl.earthlink.net>...
> > "James" <capjim300sa@nospam.yahoo.com> wrote in message
> > news:1067006696.376220@newshost03.voicenet.com...
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > news:VHYlb.14782$W16.8723@newsread2.news.atl.earthlink.net...
> > > >
> > > > Why does this surprise you? Look at the way gobernment does
bizness.
> > Look
> > > > at the FCC jumping up and down about PLC/BPL and too ignorant to
> > understand
> > > > the problem. Nuff said.
> > > >
> > > > Dan/W4NTI
> > >
> > > Correct Dan. Bush has 87 BILLION to dump into
> > > the re-building of Iraq (a country who's people would
> > > stab us in the back the minute it's turned..) and yet cuts
> > > the budgets of the VA Hospital, Medicare, Roads and
> > > Public Works and other domestic programs.

> > >
> > > No....He want's to give those oil rich sandniggers 87 Billion
> > > at NO LOAN. (more like a bribe for them to behave)
> > >
> > > Watch and see as Bush "Act II popcorn man" becomes
> > > a one-term President. He's making the same mistakes
> > > as his daddy did in 92 and the Democrats will eat him
> > > and the GOP alive in 04. Clinton may have been a
> > > pot smoking womanizer, but the checks still came thru
> > > every Friday and more people were working when he
> > > was running the show in the O. Office.
> > >
> > > In the end Iraq will go the way of Iran, watch it in 5 Years.
> > >
> > > More info: www.smirkingchimp.com
> > >
> > >
> >
> > Wouldn't surprise me a bit. I thought from the git-go that Iraq would
turn
> > into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
> > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > Idaho.
> >
> > As for your political commentary. As far as I'm concerned the
Democratic
> > party left me when they turned it over to NOW and Phyliss.
> >
> > That does NOT mean I support Baby Bush 100%. However lets see how
things
> > go.
> >
> > Dan/W4NTI

3115. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:18:15 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <HdUmb.5634$FI2.454@newsread1.news.atl.earthlink.net>
Source record: 105980
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Thats what I like about people that assume things. The first part of assume
says it all.

Dan/W4NTI

"Gene Storey" <nospam@cox.net> wrote in message
news:FoOmb.15281$5c2.4785@okepread03...
> Being from Alabama, his mother was probably a negress, so he has
> an inbred right to use such words.
>
> "Private" <shortwave@telus.net> wrote
> >
> > I cannot believe the racism and lack of intelligence shown by Dan L.
> > Jeswald and James whoever he is. Using words like ragheads &
> > sandniggers? Shame on you both!!
> >
> > Grow-up, you giving all Americans a bad name. I am posting your
> > address below so the "ragheads" you are talking about can pay you a
> > visit....
> >
> > Daniel L. Jeswald
> > 89 Wildman Road
> > Anniston AL
> > 36201
>
>

3116. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:20:09 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <tfUmb.5636$FI2.4978@newsread1.news.atl.earthlink.net>
Source record: 105981
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Well gutless "Private". Is that like 'Private Puke'. Oh Im sorry...was
that insulting? Good. You haven't heard anything yet. Take your sorry
troll and shove it. Don't know where? Sure you do.

Dan/W4NTI

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310260739.20e91357@posting.google.com...
> I cannot believe these two posts below. Charles D. Braham, you are
> worse then Dan L. Jeswald who started the thread making racist
> remarks. You guys just don't get it do you, where does it stop?
> Arabs? Black people? Both of you are discusting....
>
> Did you know your racist remarks are illegal? How do you think a
> Black or Arab person feels about your remarks? Maybe one will visit
> you and explain how they feel.....
>
> Charles D. Braham (N5PVL)
> Rt 2 Box 46
> Lyford TX
> 78569
>
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
>
> > Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
> >
> > That reminds me of an interview that occurred back in 1967, right after
the
> > Israeli 6-day war. Israel had been attacked on all sides by a number of
> > raghead states, who were determined to murder every Israeli man, woman,
and
> > child in Israel. (According to the raghead newspapers of the time.)
> >
> > Of course we all know what happened. Despite having almost no outside
> > support, and with only a few obsolete old French aircraft, the Israelis
> > thoroughly kicked every one of those ragheads countries' asses, taking
some
> > of their land from them instead, just to teach the uncivilized scum a
little
> > lesson.
> >

> > Asked about his astounding success in mowing down thousands of screaming
> > raghead fanatics with very few casualties (sound familiar?) , the
Israeli
> > general agreed to give the reporter the exclusive secret to his
> > unprecedented military success...
> >
> > "Fight Arabs." he said.
> >
> > Charles Brabham, N5PVL
>
> **
> Here the the quote from Dan L. Jeswald, again disgusting.....
>
> Daniel L. Jeswald
> 89 Wildman Road
> Anniston AL
> 36201
>
> > Wouldn't surprise me a bit. I thought from the git-go that Iraq would
turn
> > into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
> > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > Idaho.
> >
> > As for your political commentary. As far as I'm concerned the
Democratic
> > party left me when they turned it over to NOW and Phyliss.
> >
> > That does NOT mean I support Baby Bush 100%. However lets see how
things
> > go.
> >
> > Dan/W4NTI

3117. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:22:27 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net>
Source record: 105982
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

No surprise here. Thats how they all are. On the other hand, I don't hide. And I stand by what I said. And I could care less if that puke likes it or not.

Just in case you don't get it...Try this one. I have advocated from the git-go, before 9/11 which re-inforced my belief, that all the worlds ragheads need to be given a free ticket to Mecca, where we can test our newest tactical nuke.

Like that? Too bad.

Dan/W4NTI

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message news:bngrgi$8289$1@news3.infoave.net...
> If your so proud of your politically correct stance, why the heck are you
> posting behind a screen name?
>
> You are a low life bastard posting addresses of those you disagree with ,
> while hiding in the dark.
>
>
> "Private" <groundwave@telus.net> wrote in message
> news:eb867ae8.0310260739.20e91357@posting.google.com...
> > I cannot believe these two posts below. Charles D. Braham, you are
> > worse then Dan L. Jeswald who started the thread making racist
> > remarks. You guys just don't get it do you, where does it stop?
> > Arabs? Black people? Both of you are discusting....
>
>

3118. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:23:29 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <BiUmb.5642$FI2.887@newsread1.news.atl.earthlink.net>
Source record: 105983
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dang Clint....Im amazed...We actually agree on the important things.

Dan/W4NTI

"Clint" <rattlehead at computron dot net> wrote in message
news:vpnuq4c6f04gb9@corp.supernews.com...
> Most politically correct types are. They are a gutless, spineless
> breed that hide behind everything possible and when it's safe
> to come out of thier holes, they snipe and take pot shots at
> everything that is good and decent, if not just anything
> that doesn't fit thier sleazy, terrible, hate-filled agenda.
>
> N.O.W., Earth First!, the ACLU and other yellow bellied
> organizations like that are now quickly losing all clout and
> political strength they have because they have gone to
> the well of jealousy & race conflict just one time to many
> to drink from, and now thier paying the price.
>
> Good riddance to bad rubbish.
>
> Clint
>
> --
>
>
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bngrgi$8289$1@news3.infoave.net...
> > If your so proud of your politically correct stance, why the heck are
you
> > posting behind a screen name?
> >
> > You are a low life bastard posting addresses of those you disagree with
,
> > while hiding in the dark.
> >
> >
> > "Private" <groundwave@telus.net> wrote in message
> > news:eb867ae8.0310260739.20e91357@posting.google.com...
> > > I cannot believe these two posts below. Charles D. Braham, you are
> > > worse then Dan L. Jeswald who started the thread making racist
> > > remarks. You guys just don't get it do you, where does it stop?
> > > Arabs? Black people? Both of you are discusting....

> >
> >
>
>

3119. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:38:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9c1558_8@corp.newsgroups.com>
Source record: 105984

Lloyd Mitchell wrote:
> Congratulations to Marc Tarplee N4UFP, SC Technical Coordinator for his
> article entitled "Two Bands from One Dipole" that was published in the
> November 2003 issue of QST on page 46!

Maybe I should publish an article entitled
"ALL Eight HF Bands from One Dipole". :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3120. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:46:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9c172c_8@corp.newsgroups.com>
Source record: 105985
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Private wrote:
> Did you know your racist remarks are illegal? How do you think a
> Black or Arab person feels about your remarks? Maybe one will visit
> you and explain how they feel.....

And whoever it is, odds are good that both people may be carrying
the same mitochondrial DNA (adjusted for mutations) i.e. long lost
cousins. :-) 'Course, blood didn't stop Cain from killing Abel.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3121. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 18:50:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9c1825_8@corp.newsgroups.com>
Source record: 105986
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dan/W4NTI wrote:
> Just in case you don't get it...Try this one. I have advocated from the
> git-go, before 9/11 which re-inforced my belief, that all the worlds
> ragheads need to be given a free ticket to Mecca, where we can test our
> newest tactical nuke.

Does that include the "ragheads" in your family tree?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3122. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 19:15:34 UTC
From: uce@ftc.gov
Message-ID: <cf6dnf2EZJXKgAGiRVn-hA@comcast.com>
Source record: 105987
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

In article <eb867ae8.0310260739.20e91357@posting.google.com>,
groundwave@telus.net (Private) wrote:

Racist remarks are illegal? When did they veto the First Amendment? Racists
don't like certain people for their ethnicity, and apparently you don't like
certain people for their ideas. I fail to see the difference.

My main question, though, is how is this going to help me work more DX?

>I cannot believe these two posts below. Charles D. Braham, you are
>worse then Dan L. Jeswald who started the thread making racist
>remarks. You guys just don't get it do you, where does it stop?
>Arabs? Black people? Both of you are discusting....
>
>Did you know your racist remarks are illegal? How do you think a
>Black or Arab person feels about your remarks? Maybe one will visit
>you and explain how they feel.....
>
>Charles D. Braham (N5PVL)
>Rt 2 Box 46
>Lyford TX
>78569
>
>"charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
>
>> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
>>
>> That reminds me of an interview that occurred back in 1967, right after the
>> Israeli 6-day war. Israel had been attacked on all sides by a number of
>> raghead states, who were determined to murder every Israeli man, woman, and
>> child in Israel. (According to the raghead newspapers of the time.)
>>
>> Of course we all know what happened. Despite having almost no outside
>> support, and with only a few obsolete old French aircraft, the Israelis
>> thoroughly kicked every one of those ragheads countries' asses, taking some
>> of their land from them instead, just to teach the uncivilized scum a little
>> lesson.
>>
>> Asked about his astounding success in mowing down thousands of screaming
>> raghead fanatics with very few casualties (sound familiar?) , the Israeli
>> general agreed to give the reporter the exclusive secret to his

>> unprecedented military success...
>>
>> "Fight Arabs." he said.
>>
>> Charles Brabham, N5PVL
>
>**
>Here the the quote from Dan L. Jeswald, again disgusting.....
>
>Daniel L. Jeswald
>89 Wildman Road
>Anniston AL
>36201
>
>> Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
>> into a quagmire. Unfortunatly for those fighting the fight, it is serving a
>> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
>> Idaho.
>>
>> As for your political commentary. As far as I'm concerned the Democratic
>> party left me when they turned it over to NOW and Phyliss.
>>
>> That does NOT mean I support Baby Bush 100%. However lets see how things
>> go.
>>
>> Dan/W4NTI

Spammers - reply freely and often to my e-mail address
Everyone else - look me up on qrz.com

Peace - Those rare moments in history when everyone is rearming....

3123. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 19:24:02 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F9C1F52.941EF603@cwis.net>
Source record: 105988

Lloyd,
I don't get QST and don't 'do' PowerPoint presentations.
What dipole, and what bands?
'Doc

3124. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 20:19:09 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <hkaopvkc2gl8vg23fq14uluum07r6aklls@4ax.com>
Source record: 105989

On Sun, 26 Oct 2003 12:38:43 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Lloyd Mitchell wrote:
>> Congratulations to Marc Tarplee N4UFP, SC Technical Coordinator for his
>> article entitled "Two Bands from One Dipole" that was published in the
>> November 2003 issue of QST on page 46!
>
>Maybe I should publish an article entitled
>"ALL Eight HF Bands from One Dipole". :-)

Cecil,
Go for it! I can't see any reason why it would not be published.

Howard

3125. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 20:30:30 UTC
From: wa8ulx@aol.com
Message-ID: <20031026153030.26503.00000172@mb-m17.aol.com>
Source record: 105990

>You guys just don't get it do you, where does it stop?
>Arabs? Black people? Both of you are discusting....

Get real you wimp ASS LIEBERAL

>How do you think a
>Black or Arab person feels about your remarks?

Who cares

> Maybe one will visit
>you and explain how they feel.....
>
>Charles D. Braham (N5PVL)

If there stupid enough to do that, they may end up dead

3126. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 20:32:48 UTC
From: wa8ulx@aol.com
Message-ID: <20031026153248.26503.00000173@mb-m17.aol.com>
Source record: 105991

>I have advocated from the
>git-go, before 9/11 which re-inforced my belief, that all the worlds
>ragheads need to be given a free ticket to Mecca, where we can test our
>newest tactical nuke.
>

Now were talking Dan, maybe the Lieberal WIMPS would like to join them

3127. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 21:04:41 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vpodom4it3ca9@corp.supernews.com>
Source record: 105992

A look at the published schematic for the MFJ974H (Revision 7, dated 10/24/03) shows a balanced topology fed by a "choked" piece of coax (on the transmitter side).
One might call it a Capital I arrangement. The vertical is a step adjustable inductance. Two ganged capacitors (four sets of plates, each nominally 10-208 pF) are on each side of the inductor. (one gang on the left and the other on the right) Choked transmitter comes in on the left and antenna is connected on the right. No means for discharging accumulated charge appears to be provided. [I would place something like a 470 k ohm resistor to common from each of the antenna terminals.]
It will be interesting to learn how this unit performs in the field.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

>

3128. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 21:07:06 UTC
From: Niittymaa Family <niittyma@sympatico.ca>
Message-ID: <EHWmb.871$Tf.134440@news20.bellglobal.com>
Source record: 105993

Check out the following URL for lots of "candid" comments about Tuners and other amateur radio equipment:

http://www.eham.net/reviews/?ehamsid=4a6d637d746577edb54beaaa31ac6ce6

VA3KAI, Al

"Alan P. Biddle" <APBIDDLE@ATT.NET> wrote in message news:t8vkpv8lblga94td4btjar8vdjthvhqrcp@4ax.com...
> Hi,
>
> Any recommendations on a good, or bad, tuner for use with balanced
> antennas? That is, one which does not use a balun? It doesn't need
> to be an auto-tuner. There are a few from small suppliers, and I see
> the MFJ in their latest catalog has what is touted as a modernized
> Johnson Matchbox.
>
>
>
> --
> Alan
> WA4SCA

3129. Re: packet in south texas??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 21:46:42 UTC
From: Richard <rdavy30@earthlink.net>
Message-ID: <6hXmb.3142$Px2.345@newsread4.news.pas.earthlink.net>
Source record: 105994

Looks to me like packet has pretty much died at least in this region.
I'm in Del Rio and we 0%. The guys I talk to from San Angelo say the
same. LEt me know if you find something. N5YPJ

kc5cqa@yahoo.com wrote:
> I am looking for a 'group,or website' with input on packet in the
> San Antonio tex area, ??? thanks in advance. cl 73

3130. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 22:02:38 UTC
From: groundwave@telus.net
Message-ID: <eb867ae8.0310261402.381d75c1@posting.google.com>
Source record: 105995
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Sorry folks, making racist remarks is never cool or justified. I feel
sorry for people like you. Anyway, what does it have to do with
radio?

uce@ftc.gov (Phil - N1KI) wrote in message news:<cf6dnf2EZJXKgAGiRVn-hA@comcast.com>...
> In article <eb867ae8.0310260739.20e91357@posting.google.com>,
> groundwave@telus.net (Private) wrote:
>
> Racist remarks are illegal? When did they veto the First Amendment? Racists
> don't like certain people for their ethnicity, and apparently you don't like
> certain people for their ideas. I fail to see the difference.
>
> My main question, though, is how is this going to help me work more DX?
>
>
> >I cannot believe these two posts below. Charles D. Braham, you are
> >worse then Dan L. Jeswald who started the thread making racist
> >remarks. You guys just don't get it do you, where does it stop?
> >Arabs? Black people? Both of you are discusting....
> >
> >Did you know your racist remarks are illegal? How do you think a
> >Black or Arab person feels about your remarks? Maybe one will visit
> >you and explain how they feel.....
> >
> >Charles D. Braham (N5PVL)
> >Rt 2 Box 46
> >Lyford TX
> >78569
> >
> >"charlesb" <n5pvl@sbcglobal.net> wrote in message
> > news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> >
> >> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
> >>
> >> That reminds me of an interview that occurred back in 1967, right after the
> >> Israeli 6-day war. Israel had been attacked on all sides by a number of
> >> raghead states, who were determined to murder every Israeli man, woman, and
> >> child in Israel. (According to the raghead newspapers of the time.)
> >>
> >> Of course we all know what happened. Despite having almost no outside
> >> support, and with only a few obsolete old French aircraft, the Israelis

> >> thoroughly kicked every one of those ragheads countries' asses, taking some
> >> of their land from them instead, just to teach the uncivilized scum a little
> >> lesson.
> >>
> >> Asked about his astounding success in mowing down thousands of screaming
> >> raghead fanatics with very few casualties (sound familiar?) , the Israeli
> >> general agreed to give the reporter the exclusive secret to his
> >> unprecedented military success...
> >>
> >> "Fight Arabs." he said.
> >>
> >> Charles Brabham, N5PVL
> >
> >**************************************
> >Here the the quote from Dan L. Jeswald, again disgusting.....
> >
> >Daniel L. Jeswald
> >89 Wildman Road
> >Anniston AL
> >36201
> >
> >> Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
> >> into a quagmire. Unfortunatly for those fighting the fight, it is serving a
> >> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> >> Idaho.
> >>
> >> As for your political commentary. As far as I'm concerned the Democratic
> >> party left me when they turned it over to NOW and Phyliss.
> >>
> >> That does NOT mean I support Baby Bush 100%. However lets see how things
> >> go.
> >>
> >> Dan/W4NTI
>
> Spammers - reply freely and often to my e-mail address
> Everyone else - look me up on qrz.com
>
> Peace - Those rare moments in history when everyone is rearming....

3131. water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 22:07:50 UTC
From: Richard <rdavy30@earthlink.net>
Message-ID: <WAXmb.3165$Px2.2910@newsread4.news.pas.earthlink.net>
Source record: 105996

I have access to a 65' water well that I could install a radial in. This is sulfur water and the conductivity is quiet high (per the lab analysis). I was wondering if this would make a good ground system for a vertical on 160/75/40. I am sitting on 6' of sandy loam which is sitting on solid limestone bedrock. I've heard of people wanting to use the well casing or tubing, but I would like to install a copper wire. Any comments, suggestions or debate welcome

73's

Richard

3132. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 22:10:45 UTC
From: wa8ulx@aol.com
Message-ID: <20031026171045.03579.00000142@mb-m19.aol.com>
Source record: 105997

>Sorry folks, making racist remarks is never cool or justified.

Its always COOL and Justified.

> I feel
>sorry for people like you.

We feel just as sorry for WEENIES like you.

3133. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 22:18:51 UTC
From: Jim <NN7K@Reno.Rmci.Net>
Message-ID: <vpoi2r6s7vph44@corp.supernews.com>
Source record: 105998

As has been mentioned, several outfits make desquised antennas, but are expensive. Also, the BIG problem, in car radio antennas isn't the antenna, but the FEEDLINE (coax) for it- center conductor is about the diameter of #26- #30 wire! And to compuund it, todays vehicles are so stuffed under the dash, it is hard to get to the coax/motorola fitting. But, if (and have done this in the past), can get to it, and replace it with rg-58-u, little detrement was observed to am/fm reception, and then the antenna, if sized with a swr meter, for 1/4 or 3/4 wavelength , works well . also, think (at least for 2 meters, some outfits still make antenna tuners for vehicles)! or, build your own tuner/duplexer (about $20 in parts, max) (course, like the one about leaveing the XYL/kids in the trunk, especially if it soundproofed)! Jim NN7K

"DeG" <kg4fbg@onemain.com> wrote in message
news:x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net...
> I'm wanting to keep peace within the family.. NO! Extra antennas on the
> vehicle..
> I want to install a dual band 2m/440 mobile using the AM/FM antenna that
is
> on the vehicle.. It will be mostly used for receive, BUT....
> Other than a duplexer and tuner (s) What is needed to STOP the RF from
> damaging the AM/FM radio in case I want to transmit?...
> Any help on this??
>
>

3134. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 22:29:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9c4b58$1_3@corp.newsgroups.com>
Source record: 105999

WA8ULX wrote:
>>Sorry folks, making racist remarks is never cool or justified.
>
> Its always COOL and Justified.

What's COOL and Justified is the fact that you are genetically
related to the very race that you are putting down.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3135. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 23:03:21 UTC
From: tdonaly@aol.com
Message-ID: <20031026180321.04811.00000094@mb-m26.aol.com>
Source record: 106000

Cecil wrote,
>
>
>WA8ULX wrote:
>>>Sorry folks, making racist remarks is never cool or justified.
>>
>> Its always COOL and Justified.
>
>What's COOL and Justified is the fact that you are genetically
>related to the very race that you are putting down.
>--
>73, Cecil http://www.qsl.net/w5dxp

That's absolutely right, Cecil. Unfortunately, I think it may take
more than a 2nd grade education to fully understand that fact,
in which case some of these racist fellows are sunk.
73,
Tom Donaly, KA6RUH

3136. array of magnetic loops?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-26 23:57:02 UTC
From: John <john@NOSPAMPLEASEclavin.freeserve.co.uk>
Message-ID: <bnhout$gn9$1@newsg1.svr.pol.co.uk>
Source record: 106002

Hi there,

I want to make a receive loop for HF transatlantic flight monitering, Gander, Ascension and Shanwick around 5.5Mhz to 6.5-ish megs. That bits easy. But I have a lot of local QRN, dimmer switch/thermostat noise or something, that obliterates anything below 7Mhz. Using a single small loop, I can null out much of the noise, but what Id like to do is use a second loop, orientated 90degrees to my receive loop, firing straight into the noise, but phase shifted by 180degrees to cancel the noise out. Is this possible? Alternatively, but similarly, Is it possible to use two magnetic loops, somehow phase linked like a mini array, to have a system with greater gain and deeper nulls?

Thoughts please,

John G0WPA

3137. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 00:25:13 UTC
From: "Dr. Artaud" <NoSuchThing@Invalid.com>
Message-ID: <Xns9420C58F029E9nosuchthing@216.168.3.44>
Source record: 106001
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Clint" <rattlehead at computron dot net> wrote in news:vpnuq4c6f04gb9
@corp.supernews.com:

The truly ironic thing is that these very same groups and individuals are
the ones most likely to publicize the names and addresses of their
opponents. But they wish to have anonymity for themselves.

Dr. Artaud

> Most politically correct types are. They are a gutless, spineless
> breed that hide behind everything possible and when it's safe
> to come out of thier holes, they snipe and take pot shots at
> everything that is good and decent, if not just anything
> that doesn't fit thier sleazy, terrible, hate-filled agenda.
>
> N.O.W., Earth First!, the ACLU and other yellow bellied
> organizations like that are now quickly losing all clout and
> political strength they have because they have gone to
> the well of jealousy & race conflict just one time to many
> to drink from, and now thier paying the price.
>
> Good riddance to bad rubbish.
>
> Clint
>

3138. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 00:34:48 UTC
From: wa8ulx@aol.com
Message-ID: <20031026193448.25837.00000143@mb-m05.aol.com>
Source record: 106003

>What's COOL and Justified is the fact that you are genetically
>related to the very race that you are putting down.
>--
>73, Cecil http://www.qsl.net/w5dxp

And which RACE is that?

3139. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 00:36:13 UTC
From: wa8ulx@aol.com
Message-ID: <20031026193613.25837.00000144@mb-m05.aol.com>
Source record: 106004

>That's absolutely right, Cecil. Unfortunately, I think it may take
>more than a 2nd grade education to fully understand that fact,
>in which case some of these racist fellows are sunk.
>73,
>Tom Donaly, KA6RUH

Oh GOD a No-Coder speaks out, go back to 2 Meter Cb where you belong.

3140. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 01:36:00 UTC
From: wa8ulx@aol.com
Message-ID: <20031026203600.12291.00000264@mb-m01.aol.com>
Source record: 106005

>Why so upset? Are you a raghead and/or a nigger?
>
>

I think hes both.

>Who cares? Go shove your politically-correct nonsense up your whiny liberal
>ass, you crybaby.
>

Spoken like a real Man

3141. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 01:45:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F9C78B2.E7A9CA9A@cwis.net>
Source record: 106006

Never mind, I found a version of the article in 'Word'. You
might take a look on page 365 of the 1969 'Handbook'. UFP's
article may be the first that deals with 12 and 17 meters,
but it certainly isn't the first for that particular idea, or
using a 'parallel' feed line as an impedance matching tool.
'Doc

3142. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:27:37 UTC
From: groundwave@telus.net
Message-ID: <eb867ae8.0310261827.17f61111@posting.google.com>
Source record: 106007
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Again, I feel sorry for people like you. I am sure some day you will
see the error of your ways.

Hearing people like you it is no wonder so much of the world hates the
USA.

wa8ulx@aol.com (WA8ULX) wrote in message
news:<20031026153030.26503.00000172@mb-m17.aol.com>...
> >You guys just don't get it do you, where does it stop?
> >Arabs? Black people? Both of you are discusting....
>
> Get real you wimp ASS LIEBERAL
>
> >How do you think a
> >Black or Arab person feels about your remarks?
>
> Who cares
>
> > Maybe one will visit
> >you and explain how they feel.....
> >
> >Charles D. Braham (N5PVL)
>
> If there stupid enough to do that, they may end up dead

3143. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:42:40 UTC
From: Hank Oredson <horedson@att.net>
Message-ID: <AC%mb.195499$0v4.15154054@bgtnsc04-news.ops.worldnet.att.net>
Source record: 106008
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc

Of course.
They are cowards.

--

... Hank

Hank: http://horedson.home.att.net
W0RLI: http://w0rli.home.att.net

"Dr. Artaud" <NoSuchThing@Invalid.com> wrote in message
news:Xns9420C58F029E9nosuchthing@216.168.3.44...
> "Clint" <rattlehead at computron dot net> wrote in news:vpnuq4c6f04gb9
> @corp.supernews.com:
>
>
> The truly ironic thing is that these very same groups and individuals are
> the ones most likely to publicize the names and addresses of their
> opponents. But they wish to have anonymity for themselves.
>
> Dr. Artaud
>
> > Most politically correct types are. They are a gutless, spineless
> > breed that hide behind everything possible and when it's safe
> > to come out of thier holes, they snipe and take pot shots at
> > everything that is good and decent, if not just anything
> > that doesn't fit thier sleazy, terrible, hate-filled agenda.
> >
> > N.O.W., Earth First!, the ACLU and other yellow bellied
> > organizations like that are now quickly losing all clout and
> > political strength they have because they have gone to
> > the well of jealousy & race conflict just one time to many
> > to drink from, and now thier paying the price.
> >
> > Good riddance to bad rubbish.
> >
> > Clint
> >
>
>
>

3144. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:49:02 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <yI%mb.4442$X22.1003@newsread2.news.atl.earthlink.net>
Source record: 106009
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9c1825_8@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > Just in case you don't get it...Try this one. I have advocated from
the
> > git-go, before 9/11 which re-inforced my belief, that all the worlds
> > ragheads need to be given a free ticket to Mecca, where we can test our
> > newest tactical nuke.
>
> Does that include the "ragheads" in your family tree?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Yep....if they believe killing thousands of innocents on 9/11/01 was a good
thing, they need to be gone. Any other stupid questions?

Oh BTW.....I don't think folks from Italy, France and the Cheerokee nation
are ragheads.

Dan/W4NTI

3145. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:49:32 UTC
From: wa8ulx@aol.com
Message-ID: <20031026214932.14665.00000201@mb-m20.aol.com>
Source record: 106010

>Again, I feel sorry for people like you.

I dont, I feel sorry for Chumps like you.

> I am sure some day you will
>see the error of your ways.
>

Yea right, dont count on me seeing things your way, it will never happen.

>Hearing people like you it is no wonder so much of the world hates the
>USA.

Your so full of it. Why dont you call Bill and hillary and get some more good stuff to spread around. By the way what kind of CIGARS do you smoke.

3146. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:50:54 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <iK%mb.4444$X22.3629@newsread2.news.atl.earthlink.net>
Source record: 106011
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Who knows what dumb law applies in Canada. And come to think of it....who
cares.

Dan/W4NTI

"Phil - N1KI" <uce@ftc.gov> wrote in message
news:cf6dnf2EZJXKgAGiRVn-hA@comcast.com...
> In article <eb867ae8.0310260739.20e91357@posting.google.com>,
> groundwave@telus.net (Private) wrote:
>
> Racist remarks are illegal? When did they veto the First Amendment?
Racists
> don't like certain people for their ethnicity, and apparently you don't
like
> certain people for their ideas. I fail to see the difference.
>
> My main question, though, is how is this going to help me work more DX?
>
>
> >I cannot believe these two posts below. Charles D. Braham, you are
> >worse then Dan L. Jeswald who started the thread making racist
> >remarks. You guys just don't get it do you, where does it stop?
> >Arabs? Black people? Both of you are discusting....
> >
> >Did you know your racist remarks are illegal? How do you think a
> >Black or Arab person feels about your remarks? Maybe one will visit
> >you and explain how they feel.....
> >
> >Charles D. Braham (N5PVL)
> >Rt 2 Box 46
> >Lyford TX
> >78569
> >
> >"charlesb" <n5pvl@sbcglobal.net> wrote in message
> > news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> >
> >> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
> >>
> >> That reminds me of an interview that occurred back in 1967, right after
the
> >> Israeli 6-day war. Israel had been attacked on all sides by a number of
> >> raghead states, who were determined to murder every Israeli man, woman,

and
> >> child in Israel. (According to the raghead newspapers of the time.)
> >>
> >> Of course we all know what happened. Despite having almost no outside
> >> support, and with only a few obsolete old French aircraft, the Israelis
> >> thoroughly kicked every one of those ragheads countries' asses, taking
some
> >> of their land from them instead, just to teach the uncivilized scum a
little
> >> lesson.
> >>
> >> Asked about his astounding success in mowing down thousands of
screaming
> >> raghead fanatics with very few casualties (sound familiar?) , the
Israeli
> >> general agreed to give the reporter the exclusive secret to his
> >> unprecedented military success...
> >>
> >> "Fight Arabs." he said.
> >>
> >> Charles Brabham, N5PVL
> >
> >**
> >Here the the quote from Dan L. Jeswald, again disgusting.....
> >
> >Daniel L. Jeswald
> >89 Wildman Road
> >Anniston AL
> >36201
> >
> >> Wouldn't surprise me a bit. I thought from the git-go that Iraq would
turn
> >> into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
> >> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> >> Idaho.
> >>
> >> As for your political commentary. As far as I'm concerned the
Democratic
> >> party left me when they turned it over to NOW and Phyliss.
> >>
> >> That does NOT mean I support Baby Bush 100%. However lets see how
things
> >> go.
> >>
> >> Dan/W4NTI
>
> Spammers - reply freely and often to my e-mail address
> Everyone else - look me up on qrz.com
>

> Peace - Those rare moments in history when everyone is rearming....

3147. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:51:45 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <5L%mb.4445$X22.4111@newsread2.news.atl.earthlink.net>
Source record: 106012
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Why did you bring it up in the first place? Now that you have had your tail
wipped you can slink away.

Dan/W4NTI

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310261402.381d75c1@posting.google.com...
> Sorry folks, making racist remarks is never cool or justified. I feel
> sorry for people like you. Anyway, what does it have to do with
> radio?
>
> uce@ftc.gov (Phil - N1KI) wrote in message
news:<cf6dnf2EZJXKgAGiRVn-hA@comcast.com>...
> > In article <eb867ae8.0310260739.20e91357@posting.google.com>,
> > groundwave@telus.net (Private) wrote:
> >
> > Racist remarks are illegal? When did they veto the First Amendment?
Racists
> > don't like certain people for their ethnicity, and apparently you don't
like
> > certain people for their ideas. I fail to see the difference.
> >
> > My main question, though, is how is this going to help me work more DX?
> >
> >
> > >I cannot believe these two posts below. Charles D. Braham, you are
> > >worse then Dan L. Jeswald who started the thread making racist
> > >remarks. You guys just don't get it do you, where does it stop?
> > >Arabs? Black people? Both of you are discusting....
> > >
> > >Did you know your racist remarks are illegal? How do you think a
> > >Black or Arab person feels about your remarks? Maybe one will visit
> > >you and explain how they feel.....
> > >
> > >Charles D. Braham (N5PVL)
> > >Rt 2 Box 46
> > >Lyford TX
> > >78569
> > >
> > >"charlesb" <n5pvl@sbcglobal.net> wrote in message
> > > news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> > >

> > >> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D
> > >>
> > >> That reminds me of an interview that occurred back in 1967, right
after the
> > >> Israeli 6-day war. Israel had been attacked on all sides by a number
of
> > >> raghead states, who were determined to murder every Israeli man,
woman, and
> > >> child in Israel. (According to the raghead newspapers of the time.)
> > >>
> > >> Of course we all know what happened. Despite having almost no outside
> > >> support, and with only a few obsolete old French aircraft, the
Israelis
> > >> thoroughly kicked every one of those ragheads countries' asses,
taking some
> > >> of their land from them instead, just to teach the uncivilized scum a
little
> > >> lesson.
> > >>
> > >> Asked about his astounding success in mowing down thousands of
screaming
> > >> raghead fanatics with very few casualties (sound familiar?) , the
Israeli
> > >> general agreed to give the reporter the exclusive secret to his
> > >> unprecedented military success...
> > >>
> > >> "Fight Arabs." he said.
> > >>
> > >> Charles Brabham, N5PVL
> > >
> > >**
> > >Here the the quote from Dan L. Jeswald, again disgusting.....
> > >
> > >Daniel L. Jeswald
> > >89 Wildman Road
> > >Anniston AL
> > >36201
> > >
> > >> Wouldn't surprise me a bit. I thought from the git-go that Iraq
would turn
> > >> into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
> > >> purpose. It is keeping the ragheads 'occupied'. And its not in
Boise
> > >> Idaho.
> > >>
> > >> As for your political commentary. As far as I'm concerned the
Democratic
> > >> party left me when they turned it over to NOW and Phyliss.
> > >>

> > >> That does NOT mean I support Baby Bush 100%. However lets see how
things
> > >> go.
> > >>
> > >> Dan/W4NTI
> >
> > Spammers - reply freely and often to my e-mail address
> > Everyone else - look me up on qrz.com
> >
> > Peace - Those rare moments in history when everyone is rearming....

3148. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 02:55:02 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <aO%mb.4448$X22.3530@newsread2.news.atl.earthlink.net>
Source record: 106013
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

No socialist Canadian....the folks don't actually hate us. They just want what we have, and not pay for it. Your 'kind' showed its true colors recently when we asked for assistance in Iraq. If you think that won't have unhappy consequences for your nation, you are mistaken.

Think about it.....asshole liberal puke. Oh there I go again calling you names.

Tell ya what 'Private' call your local mountie and tell him to come get me.....looooooossssseeeerrrr.

Dan/W4NTI

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310261827.17f61111@posting.google.com...
> Again, I feel sorry for people like you. I am sure some day you will
> see the error of your ways.
>
> Hearing people like you it is no wonder so much of the world hates the
> USA.
>
> wa8ulx@aol.com (WA8ULX) wrote in message
news:<20031026153030.26503.00000172@mb-m17.aol.com>...
> > >You guys just don't get it do you, where does it stop?
> > >Arabs? Black people? Both of you are discusting....
> >
> > Get real you wimp ASS LIEBERAL
> >
> > >How do you think a
> > >Black or Arab person feels about your remarks?
> >
> > Who cares
> >
> > > Maybe one will visit
> > >you and explain how they feel.....
> > >
> > >Charles D. Braham (N5PVL)
> >
> > If there stupid enough to do that, they may end up dead

3149. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 03:47:53 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310261947.1dbb4ca1@posting.google.com>
Source record: 106014

Richard <rdavy30@earthlink.net> wrote in message
news:<WAXmb.3165$Px2.2910@newsread4.news.pas.earthlink.net>...
> I have access to a 65' water well that I could install a radial in. This
> is sulfur water and the conductivity is quiet high (per the lab
> analysis). I was wondering if this would make a good ground system for a
> vertical on 160/75/40. I am sitting on 6' of sandy loam which is sitting
> on solid limestone bedrock. I've heard of people wanting to use the well
> casing or tubing, but I would like to install a copper wire. Any
> comments, suggestions or debate welcome
>
> 73's
>
> Richard

I don't think it would work all that well. But I've never tried it.
Would be about the same as running a ground wire straight down into
the ground. Which is not very good. You still would have no radials on
the surface of that lossy ground. And thats where the radials really
count. A radial going straight down into the ground will be fairly
useless for rf purposes to my way of thinking. But maybe others will
throw in their opinions...You could use it as a center grounding
point, but I would still lay out radials on the surface of the ground.
It sounds like you are on fairly lossy earth. MK

3150. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 03:56:17 UTC
From: tdonaly@aol.com
Message-ID: <20031026225617.04022.00000192@mb-m23.aol.com>
Source record: 106015

Groundwave wrote,
>
>Again, I feel sorry for people like you. I am sure some day you will
>see the error of your ways.
>
>Hearing people like you it is no wonder so much of the world hates the
>USA.
>

Don't waste time feeling sorry for these fellows; they're social outcasts
by choice. Many societies have people like this: Jean Marie le Pen in
France, for instance. No one pays any attention to them. They're firmly
on the fringe, like Communists and Birchers. It must kill these guys to
see a black man as secretary of state, and his son as head of the
FCC.
I remember the good ol' boys complaining about the mongrelization of
the races. Now, interracial marriage is at an all time high. I also remember
when mosques were unheard of in large cities. Now, there are about 5 million
muslims in the U.S. They probably outnumber the racists.
I remember when people who thought they
were white were a majority in California. Now, there is no group that can
call itself a majority in California, and California, despite its setbacks, is
still
one of the richest places in the world.
As I said, don't waste time feeling sorry for these fellows. They've been
reduced to
whimpering, off-topic trolling, and name-calling, in a vain attempt to
get attention. Pay them no mind.
73,
Tom Donaly, KA6RUH
(P.S. I support our troops, black, white, yellow, and brown.)

3151. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 03:58:10 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3F9C97DF.40915204@bellatlantic.net>
Source record: 106016

Richard Clark wrote:
>
> On Wed, 22 Oct 2003 12:43:20 GMT, "Ronald Walters"
> <rwalters8@cfl.rr.com> wrote:
>
> >I would ask the group for recommendations on cleaning the roller assembly and
> >inductor to ensure good conductivity after I am done.
>
> Hi Ron,
>
> One contact cleaner that I used that was better than most was
> Cramolin. This is a monomolecular layer solution that you would use
> very sparingly. However, as your tuner did not arrive brand-new (or
> brand-used) with it, your problem may be more mundane.
>
> The simplest way to defeat corrosion is with pressure. The spring
> tension of the roller may have slackened up over the years.
>
> 73's
> Richard Clark, KB7QHC

How about silver polish - is that any good for this?
Someone told me it is - but I don't know.

3152. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 04:29:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9c9fc5_8@corp.newsgroups.com>
Source record: 106017

WA8ULX wrote:
>>What's COOL and Justified is the fact that you are genetically
>>related to the very race that you are putting down.
>
> And which RACE is that?

It doesn't matter which RACE. Whatever physical characteristics
you possess that you consider superior to your fellow man are
simple mutations for which you are not responsible.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3153. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 04:30:41 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3F9C9F7E.B52472D@bellatlantic.net>
Source record: 106018

W7TI wrote:
>
> On Sun, 26 Oct 2003 22:07:50 GMT, Richard <rdavy30@earthlink.net> wrote:
>
> >I have access to a 65' water well that I could install a radial in. This
> >is sulfur water and the conductivity is quiet high (per the lab
> >analysis). I was wondering if this would make a good ground system for a
> >vertical on 160/75/40. I am sitting on 6' of sandy loam which is sitting
> >on solid limestone bedrock. I've heard of people wanting to use the well
> >casing or tubing, but I would like to install a copper wire. Any
> >comments, suggestions or debate welcome
>
> ____
>
> This reminds me of the April article in QST years ago about digging a
> trench, filling it with water and using it as a yagi reflector.
>
> The spirit lives on!
>
> --
> Bill, W7TI

Yep. It worked really great, but it was an unholy bitch
getting that trench up 30' to the back of the boom.

3154. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 04:31:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9ca05d_8@corp.newsgroups.com>
Source record: 105919
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Somebody Somewhere wrote:
> My White
> ancestors didn't create this nation of free men so some fudgepacking
> liberal pervert could pass legislation to cancel our Constitutionally
> guaranteed right of free speech.

And, of course, you can prove that no "raghead" genes sneaked into
your White family tree during The Crusades.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3155. COPS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 04:46:57 UTC
From: kathyjs@iname.com
Message-ID: <c71539bf.0310262046.e4dc5c3@posting.google.com>
Source record: 105920

why did the cop that got killed not wait for backup
before he went up to the house because the backup
was out giving out tickets to people that drive with
their lights on instead of backing up their own cops.

VC 24405A
THE JUDGE DISMISSED THE TICKET FOR THE 2ND. TIME

A cop stopped me for the 2nd time with red lights when the cop was on his
way to krispy kreme donuts the cop told me that i could not drive
with my lights on and gave me ticket.

This is what the h.p. said

M e m o r a n d u m

To: Municipal Court Dist.
From: DEPARTMENT OF HIGHWAY PATROL

Subject: Maximum Number Of Lamps

I Checked Veh.#******* A 2003 Ford Pu.
I Obs. mounted On the Front 2 Headlights, 2 Parking Lights and
2 Fog Lights And All Lights Approved. If Above Lights Are Lighted
All At Once I Can Not Find A Violation Of The Veh. Code.

1. the cop said it was a big no, no to drive with my
lights on and gave me a ticket for the 2nd. time.

2. the judge dis. the ticket for the 2nd. time and the
dum cop was not in court for the 2nd. time.

5. i was going to sue but they settled out of court.

3156. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 04:53:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9ca560$1_8@corp.newsgroups.com>
Source record: 105921
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dan/W4NTI wrote:
> Oh BTW.....I don't think folks from Italy, France and the Cheerokee nation
> are ragheads.

Of course, the "ragheads" who raped and pillaged Italy and France
during The Crusades couldn't possibly be part of your family tree,
could they?

http://ccat.sas.upenn.edu/~rs143/mexpan.jpg
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3157. Re: COPS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:10:04 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031027001004.28274.00000159@mb-m27.aol.com>
Source record: 105925

Are you sure you weren't ticketed for illegal drug use?

3158. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:12:39 UTC
From: wa8ulx@aol.com
Message-ID: <20031027001239.07912.00000209@mb-m13.aol.com>
Source record: 105922

>It must kill these guys to
>see a black man as secretary of state, and his son as head of the
>FCC.

And thats why the FCC is so screwed up right now.

>Tom Donaly, KA6RUH

That explains it, another cook from California.

3159. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:14:20 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <0dappv8v098q9rmg2qolv20dqs61hiuj79@4ax.com>
Source record: 105924

On Sun, 26 Oct 2003 22:07:50 GMT, Richard <rdavy30@earthlink.net>
wrote:

>I have access to a 65' water well that I could install a radial in. This
>is sulfur water and the conductivity is quiet high (per the lab
>analysis). I was wondering if this would make a good ground system for a
>vertical on 160/75/40. I am sitting on 6' of sandy loam which is sitting
>on solid limestone bedrock. I've heard of people wanting to use the well
>casing or tubing, but I would like to install a copper wire. Any
>comments, suggestions or debate welcome

It makes an excellent *safety* ground. Not much in the way of a
radial though.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>73's
>
>Richard

3160. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:16:02 UTC
From: wa8ulx@aol.com
Message-ID: <20031027001602.07912.00000210@mb-m13.aol.com>
Source record: 105923

>It doesn't matter which RACE. Whatever physical characteristics
>you possess that you consider superior to your fellow man are
>simple mutations for which you are not responsible.
>--
>73, Cecil http://www.qsl.

Oh good Im not responsible

3161. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:23:32 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <1pappv0933h2vvru3a0ebgk9arpl4scah6@4ax.com>
Source record: 105929
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Sun, 26 Oct 2003 19:15:34 GMT, uce@ftc.gov (Phil - N1KI) wrote:

>In article <eb867ae8.0310260739.20e91357@posting.google.com>,
>groundwave@telus.net (Private) wrote:
>
>Racist remarks are illegal? When did they veto the First Amendment? Racists
>don't like certain people for their ethnicity, and apparently you don't like
>certain people for their ideas. I fail to see the difference.
>
>My main question, though, is how is this going to help me work more DX?
>
>
<snip>

Think of it this way...This thread helps you set the kill
files/filters so it cleans up the group and you are more likely to see
something worth while.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

3162. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:24:00 UTC
From: richardharrison@webtv.net
Message-ID: <7353-3F9CABF0-154@storefull-2318.public.lawson.webtv.net>
Source record: 105930

Roy, W7EL wrote:
"I don`t think EZNEC or other NEC-based programs will give accurate field strength any closer to a wire than a few wire diameters."

The Antenna Section in Keith Henney`s "Radio Engineering Handbook" was written by Edmund A. Laport, Chief Engineer of RCA`s International Division at the time (around 1950).

On page 637 Ed writes:
"Where high power is to be transmitted, or at high altitudes, antenna insulation and conductor designs require care to details. For h-f use, only radial potential gradients need to be considered. At high altitudes, pluming may occur with consequent damage to the system. Fortunately in practice, high power is generally used with directive antennas, and the power is divided among several dipole sections thus tending to minimize the problem. A thin-wire dipole gives an end potential of about 3,900 volts rms for 1000 watts input for a height of 0.25 wavelength. It will be higher for smaller heights, and falls to a minimum of about 1,700 volts as height increases to 0.75 wavelength; beyond this point it settles down to the free-space value of about 3,000 volts. Potentials vary as the square root of the power ratio and as the inverse square root of the capacitance per unit length. For a potential of 3,900 volts on a wire 0.101 in. in diameter (No, 10 B&S), the radial gradient is of the order of 31 kv per cm. As a rough approximation for a cage, the gradient for one wire is divided by the number of wires in the cage."

The multiwire observation is important because, if the potential gradient at any point in air becomes greater than 30,000 volts/cm., the air becomes ionized and sparking or corona discharge will occur.

On page 645, Ed writes:
"With 100-kw carrier input (to an 8-dipole array), the end potential on each dipole is 7,500 volts rms. A 3000-ft. 580-ohm two-wire balanced feeder used with this antenna had an efficiency of 67 per cent.

I am comfortable with Ed`s experience which can be scaled for the power and configuration of the antenna.

Best regards, Richard Harrison, KB5WZI

3163. Re: COPS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:24:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F9CAC05.3D0364F7@cwis.net>
Source record: 105926

I'll bet there's a 'message' in this, somewhere. Be
damned if I can find it though...
'Doc

kathy wrote:
>
> why did the cop that got killed not wait for backup
> before he went up to the house because the backup
> was out giving out tickets to people that drive with
> their lights on instead of backing up their own cops.
>
> VC 24405A
> THE JUDGE DISMISSED THE TICKET FOR THE 2ND. TIME
>
> A cop stopped me for the 2nd time with red lights when the cop was on his
> way to krispy kreme donuts the cop told me that i could not drive
> with my lights on and gave me ticket.
>
> This is what the h.p. said
>
> M e m o r a n d u m
>
> To: Municipal Court Dist.
> From: DEPARTMENT OF HIGHWAY PATROL
>
> Subject: Maximum Number Of Lamps
>
> I Checked Veh.#******* A 2003 Ford Pu.
> I Obs. mounted On the Front 2 Headlights, 2 Parking Lights and
> 2 Fog Lights And All Lights Approved. If Above Lights Are Lighted
> All At Once I Can Not Find A Violation Of The Veh. Code.
>
> 1. the cop said it was a big no, no to drive with my
> lights on and gave me a ticket for the 2nd. time.
>
> 2. the judge dis. the ticket for the 2nd. time and the
> dum cop was not in court for the 2nd. time.
>
> 5. i was going to sue but they settled out of court.

3164. Re: Distance to Link Coupling in a Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:25:40 UTC
From: ehsjr@bellatlantic.net
Message-ID: <3F9CAC5F.DD287225@bellatlantic.net>
Source record: 105927

Al wrote:
>
> I have used Reg's fine loop design program rjeloop3 to help me with building
> a couple of loops. It was a big help. Thank you Reg.
>
> The shielded three-foot diameter loop I built is for receive only. The
> primary loop is six turns paralleled by a variable capacitor, and the
> secondary (link loop) is one turn (same diameter) fed to a preamp or
> directly to the receiver. The band of operation of the loop is about 200kHz
> to 500kHz (NDB chaser).
>
> One question that is not answered in rjeloop3 is what should be the distance
> from the output (link) loop to the main loop? The antenna's I built used
> flat cable for the wiring and one of the turns was the link so the distance
> was 0.050 inches. In other articles I have read that the Q, gain, and S/N
> ratio can be varied by varying the distance between the two loops.
> Approximately what is the distance? Are we talking a small fraction of an
> inch or 2, 3, or perhaps six inches apart? I would just like a feeler
> distance to work with. If the distance is to be over one inch, I'm
> considering building the primary loop in one hoola-hoop form and the
> secondary loop in a second hoola-hoop then varying the distance between the
> hoops. Any thoughts on this or is this a waste of time and effort?
>
> All input will be greatly appreciated. Thank you.
>
> Al
> KA5JGV

I don't know if this will help, but perhaps you can adopt
the idea to your loop.

I built a receiving mag loop for 40 - 160 as follows:
Using hardline, I stripped the ends so the center conductor
stuck out about 1 inch on each end. I made the outer loop
out of it - it is ~4' in diameter. It is open at the top, and
a variable capacitor (900 pF) connects the two ends on the
shield of the hardline. (I switch in another 1650 pF for 160).
Inner loop is made from 52" of the inner conductor and
insulation of RG8 and is mounted at the bottom. The two ends
of the inner loop connect to the SO239. At the top of the
outer loop, the copper inner hardline conductor connects to
a 1N4148 with 1K in series and a 1 mA meter. When I excite
the inner loop with my MFJ 259B, I tune for minimum SWR with
the variable cap. The 1mA meter goes to maximum when the SWR
goes to minimum.

Ok, now to the coupling. The inner loop can be maneuvered for maximum reading on the 1 mA meter. I found I get the highest reading on the meter when I squash the inner loop into an oval, decreasing its vertical diameter to about 1/2 what it was when it was a circle. I taped the inner loop to the outer loop to hold the shape with the maximum coupling. Perhaps some variation of this technique can be used on your antenna.

I'm still experimenting with my loop. The tuning on 40 is difficult - I need a smaller variable cap. I plan to try switching out 450 pF of the variable (it is currently 2 450's in parallel), and switching in some series fixed C to see if I can cover 40 with a 180 degree rotation of the variable - right now a few degrees of rotation of the variable makes a very large change in the frequency.

3165. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:26:20 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3F9CAC7C.FB8A218B@cwis.net>
Source record: 105928

Richard,
Don't bother, wouldn't be worth the trouble. Use
the wire as radial instead.
'Doc

3166. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:39:43 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F9CAF9F.9060907@get.lost>
Source record: 105931
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dan/W4NTI wrote:
> No socialist Canadian....the folks don't actually hate us. They just want
> what we have, and not pay for it. Your 'kind' showed its true colors
> recently when we asked for assistance in Iraq. If you think that won't have
> unhappy consequences for your nation, you are mistaken.
>
> Think about it.....asshole liberal puke. Oh there I go again calling you
> names.
>
> Tell ya what 'Private' call your local mountie and tell him to come get
> me.....looooooossssseeeerrrr.

This is beyond stupid.

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

3167. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 05:57:54 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bni9n2$t03$1@news1.kornet.net>
Source record: 105932
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3F9CAF9F.9060907@get.lost...
> Dan/W4NTI wrote:
> > No socialist Canadian....the folks don't actually hate us. They just
want
> > what we have, and not pay for it. Your 'kind' showed its true colors
> > recently when we asked for assistance in Iraq. If you think that won't
have
> > unhappy consequences for your nation, you are mistaken.
> >
> > Think about it.....asshole liberal puke. Oh there I go again calling
you
> > names.
> >
> > Tell ya what 'Private' call your local mountie and tell him to come get
> > me.....looooooosssssseeeerrrr.
>
>
>
> This is beyond stupid.
>
> WA7AA

Personally, I thought most of the regs here were a little more adult than all this...

IMHO, all human beings deserve respect, unless they personally have done something to negate that right. However, I do believe also that anyone who has an opinion on any subject should have the intestinal fortitude to make themselves known. This, too, is part of respect.

Where I do not condone Dan's attitude toward some ethnic groups, he does have a right to voice it, and he does make known not only whom, but where he is by use of his ham call. I didn't read the complete thread, so I don't know what these others said, but it would seem that they, too, allowed it known to whom to attribute what was said. For this, despite their political views, they have my respect.

Please, though.. name calling is so juvenile, and unnecessary. This isn't PC, it's good, old fashioned, good manners.. something we could use a lot more of nowadays. (Funny thing, isn't it, how PC gets pushed, but things never get any better?)

3168. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 07:08:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l8gppvs91v44c44tqetgfgg1t3c11g5his@4ax.com>
Source record: 105933

On Mon, 27 Oct 2003 03:58:10 GMT, ehsjr@bellatlantic.net wrote:
>
>How about silver polish - is that any good for this?
>Someone told me it is - but I don't know.

Hi OM,

If silver polish worked, then you could as easily boil it in water in an aluminum pan - does the same thing.

You could also use a typing eraser to clean the mating surface. This is an old board cleaning tip that was NASA approved back when there were typewriters to need typing erasers. These erasers had the right amount of abrasive without having too much. The same goes for a dollar bill having just enough abrasive (useful for cleaning fouled relay contacts). But none of this really takes care of the problem. It simply puts you into the lock-step of a chemical dependency.

This all returns to the same lack of need when tightening up the contact spring would do the trick just as Mark described. The "good" chemicals that have been suggested are not cheap, and the "bad" chemicals (Hydrochloric Acid no less) are extremely cheap to get, but a pain to get rid of.

73's
Richard Clark, KB7QHC

3169. Re: Help Me Out On This!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 07:44:41 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <btippvoltbsri7j8e1nn5t4v06c43oh03r@4ax.com>
Source record: 105934

On Sun, 26 Oct 2003 14:18:51 -0800, "Jim" <NN7K@Reno.Rmci.Net> wrote:

>As has been mentioned, several outfits make desquised antennas, but are
>expensive. Also, the BIG problem, in car radio antennas isn't the antenna,
>but the FEEDLINE (coax) for it- center conductor is about the diameter of
>#26- #30 wire! And to compuund it, todays vehicles are so stuffed under
>the dash, it is hard to get to the coax/motorola fitting. But, if (and
>have done this in the past), can get to it, and replace it with rg-58-u,
>little detrement was observed to am/fm reception, and then the antenna, if
>sized with a swr meter, for 1/4 or 3/4 wavelength , works well . also, think
>(at least for 2 meters, some outfits still make antenna tuners for
>vehicles)! or, build your own tuner/duplexer (about $20 in parts, max)
>(course, like the one about leaveing the XYL/kids in the trunk, especially
>if it soundproofed)! Jim NN7K

I mount the rig under the seat, the control head on the console, the
dealer ran the power cable as part of the deal on purchasing the car,
and the antenna is a Diamond mag mount with a 5 foot plus collinear in
the middle of the roof.

My wife has one too, but as she puts her car in a regular size garage,
the antenna is only about 14 inches tall.

Generally on the modern cars there are a number of places where you
can run the power cables through a boot that houses an existing cable.
The mag mount I snake out a door, or window. On my SUV I use the door
behind the driver as it's almost never opened. The coax is snaked
into and under the weather seal about half way down and then follows
under the seal up to the top to the antenna.

Most cables fail within a year, but his one is over 7 years old.
Rig is a TM-D700.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>
>
>"DeG" <kg4fbg@onemain.com> wrote in message
>news:x8olb.12224$Uz6.9234@newsread1.news.atl.earthlink.net...
>> I'm wanting to keep peace within the family.. NO! Extra antennas on the
>> vehicle..
>> I want to install a dual band 2m/440 mobile using the AM/FM antenna that
>is
>> on the vehicle.. It will be mostly used for receive, BUT....

>> Other than a duplexer and tuner (s) What is needed to STOP the RF from
>> damaging the AM/FM radio in case I want to transmit?...
>> Any help on this??
>>
>>
>

3170. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 07:50:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vppn39p132md98@corp.supernews.com>
Source record: 105936

One test for a counterfeit (U.S.) bill is to rub it on a piece of paper. The ink on a genuine bill never dries, so you'll always get a slight smear. Somehow that doesn't seem like a good thing to leave behind on a relay contact you're trying to clean.

Roy Lewallen, W7EL

Richard Clark wrote:
> . . .
> You could also use a typing eraser to clean the mating surface. This
> is an old board cleaning tip that was NASA approved back when there
> were typewriters to need typing erasers. These erasers had the right
> amount of abrasive without having too much. The same goes for a
> dollar bill having just enough abrasive (useful for cleaning fouled
> relay contacts). But none of this really takes care of the problem.
> It simply puts you into the lock-step of a chemical dependency.
> . . .

3171. Strange message (Was: COPS)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 08:15:47 UTC
From: ryeburn@sfu.caz
Message-ID: <ryeburn-2710030015470001@d64-180-236-30.bchsia.telus.net>
Source record: 105935

In article <c71539bf.0310262046.e4dc5c3@posting.google.com>,
kathyjs@iname.com (kathy) wrote:

> why did the cop that got killed not wait for backup

(remaining OT material deleted)

An identical posting, except for different subject (mac & ibm), posting time (26 Oct 2003 18:06:00 -0800 instead of 26 Oct 2003 20:46:57 -0800), and message ID (c71539bf.0310261806.dd975ba@posting.google.com) was posted to the group comp.sys.mac.system. Another identical posting, except for different subject (Hike Tahoe), posting time (26 Oct 2003 18:23:25 -0800 instead of 26 Oct 2003 20:46:57 -0800), and message ID (c71539bf.0310261823.5aecd573@posting.google.com) was posted to the group rec.climbing. The posting has not as yet appeared in any of the other newsgroups I regularly read. Note that the comp.sys.mac.system and rec.climbing postings occurred within 18 minutes of each other, and more than 2 hours before the rec.radio.amateur.antenna posting. The posting has not as yet appeared in any of the other newsgroups I regularly read.

The IP address 198.81.26.103 translates to cache-ntc-ad02.proxy.aol.com.

Explanations for this nonsense are welcome. I hope they have nothing to do with politics, or prejudice, or climbing, or Macintosh system software, or antennas.

David, ex-W8EZE, waiting to see the post in alt.autos.subaru -- my (Canadian registration) Subaru's daytime running lights, like those of all recent cars in Canada, are always on if the engine is running and the emergency brake is released, and that's a good thing

--
David or Jo Anne Ryeburn
ryeburn@sfu.caz
To send e-mail, remove the letter "z" from this address.

3172. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 09:38:00 UTC
From: uce@ftc.gov
Message-ID: <No-dnUBqb5blegGiRVn-iw@comcast.com>
Source record: 105937
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Oh, well. One more jerk to ad to my twit filter. Problem solved....

In article <iK%mb.4444$X22.3629@newsread2.news.atl.earthlink.net>, "Dan/W4NTI"
<w4nti@get rid of this mindspring.com> wrote:
>Who knows what dumb law applies in Canada. And come to think of it....who
>cares.
>
>Dan/W4NTI
>
>"Phil - N1KI" <uce@ftc.gov> wrote in message
>news:cf6dnf2EZJXKgAGiRVn-hA@comcast.com...
>> In article <eb867ae8.0310260739.20e91357@posting.google.com>,
>> groundwave@telus.net (Private) wrote:
>>
>> Racist remarks are illegal? When did they veto the First Amendment?
>Racists
>> don't like certain people for their ethnicity, and apparently you don't
>like
>> certain people for their ideas. I fail to see the difference.
>>
>> My main question, though, is how is this going to help me work more DX?
>>
>>
>> >I cannot believe these two posts below. Charles D. Braham, you are
>> >worse then Dan L. Jeswald who started the thread making racist
>> >remarks. You guys just don't get it do you, where does it stop?
>> >Arabs? Black people? Both of you are discusting....
>> >
>> >Did you know your racist remarks are illegal? How do you think a
>> >Black or Arab person feels about your remarks? Maybe one will visit
>> >you and explain how they feel.....
>> >
>> >Charles D. Braham (N5PVL)
>> >Rt 2 Box 46
>> >Lyford TX
>> >78569
>> >
>> >"charlesb" <n5pvl@sbcglobal.net> wrote in message
>> > news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
>> >
>> >> Oh, he's gotta be shaking in his boots NOW! Haw Haw Hawr! :D

>> >>
>> >> That reminds me of an interview that occurred back in 1967, right after
>the
>> >> Israeli 6-day war. Israel had been attacked on all sides by a number of
>> >> raghead states, who were determined to murder every Israeli man, woman,
>and
>> >> child in Israel. (According to the raghead newspapers of the time.)
>> >>
>> >> Of course we all know what happened. Despite having almost no outside
>> >> support, and with only a few obsolete old French aircraft, the Israelis
>> >> thoroughly kicked every one of those ragheads countries' asses, taking
>some
>> >> of their land from them instead, just to teach the uncivilized scum a
>little
>> >> lesson.
>> >>
>> >> Asked about his astounding success in mowing down thousands of
>screaming
>> >> raghead fanatics with very few casualties (sound familiar?) , the
>Israeli
>> >> general agreed to give the reporter the exclusive secret to his
>> >> unprecedented military success...
>> >>
>> >> "Fight Arabs." he said.
>> >>
>> >> Charles Brabham, N5PVL
>> >
>> >**
>> >Here the the quote from Dan L. Jeswald, again disgusting.....
>> >
>> >Daniel L. Jeswald
>> >89 Wildman Road
>> >Anniston AL
>> >36201
>> >
>> >> Wouldn't surprise me a bit. I thought from the git-go that Iraq would
>turn
>> >> into a quagmire. Unfortunatly for those fighting the fight, it is
>serving a
>> >> purpose. It is keeping the ragheads 'occupied'. And its not in Boise
>> >> Idaho.
>> >>
>> >> As for your political commentary. As far as I'm concerned the
>Democratic
>> >> party left me when they turned it over to NOW and Phyliss.
>> >>
>> >> That does NOT mean I support Baby Bush 100%. However lets see how
>things
>> >> go.
>> >>

>> >> Dan/W4NTI
>>
>> Spammers - reply freely and often to my e-mail address
>> Everyone else - look me up on qrz.com
>>
>> Peace - Those rare moments in history when everyone is rearming....
>
>

Spammers - reply freely and often to my e-mail address
Everyone else - look me up on qrz.com

Peace - Those rare moments in history when everyone is rearming....

3173. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 10:18:16 UTC
From: K7JEB <k7jeb@qsl.remove.net>
Message-ID: <Hi6nb.35887$Rd4.30361@fed1read07>
Source record: 105938

>>> And what does all this have to do with amateur antennas?

>> It means that this will screw up propagation forcasting
>> which many of us depend on for dxing.

> Like I said, what does it have to do with antennas?

Perhaps the group should be renamed to "Antennas and Propagation",
just like the IEEE professional interest one? HF ionospheric
propagation has been a consistent topic of discussion in this
group over the years, particularly in regards to propagation-
prediction computer programs such as VOACAP. The demise of
of an organization that provides the input parameters (solar
flux, sunspot numbers) for these programs affects their
utility.

Jim, K7JEB

3174. Re: array of magnetic loops?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 10:38:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnisj5lab1@hercules.btinternet.com>
Source record: 105939

To use two or more very small loops in an array to produce a particular radiating/receiving pattern, the physical spacings between them cannot be less than the order 1/4 or 1/2 free-space wavelengths.

You may just as well use the well-known arrays of 1/2-wave dipoles.

This is because the radiation pattern of one small loop is identical to that of one small dipole except that is twice rotated in space by 90 degrees.

You can do no better than use a receiving magloop in conjunction with an elevated, well-distanced noise-cancelling length of wire, the two being combined at the receiver, the wire via a variable-phase and variable-amplitude network. If the wire picks up a smaller noise signal than the main antenna it will be necessary to include an amplifier in the phase-shifter.

Incidentally, the noise-cancelling wire + phase-shifter technique behaves identically to rotating the wire direction in space, the null in the combined receiving pattern also being rotated.

Of course, if the noise or interfering source is in the same direction as the wanted signal you will get nowhere.

Reg, G4FGQ

3175. Re: Distance to Link Coupling in a Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 10:46:50 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310270246.7b5de2c@posting.google.com>
Source record: 105940

ehsjr@bellatlantic.net wrote in message news:<3F9CAC5F.DD287225@bellatlantic.net>...

> >
> > All input will be greatly appreciated. Thank you.

I just varied the coupling loop around a bit , and noted the highest signal level. You can do some distance testing with just a small portable radio with a ferrite antenna, if this were for MW. For HF, I'd probably use a single turn loop for appx distance testing, and then when I found that, I would vary the number of turns to see which was best. I used two turns on mine, but even a single turn gave enough level to be perfectly usable. I found it was not overly critical, and I have plenty of signal strength even without a preamp. I think I actually had more signal going direct to the main loop, with no coupling, but I saw a better pattern using the coupling loop. I saw a little skewing of the nulls off the true direction of the loop when using a direct feed. But that could be partly a common mode problem also, I suppose. I use no impedance matching or even a balun. Just a short run of rg-58 to my radio. I still get very deep nulls. The use of the coupling loop seems to act as a sort of psuedo balun in my case. It corrected the skew.. Have plenty of signal for my radio, so see no need for further matching, or a preamp in my case. Mine is a 16 inch round loop, 12 turns, and the coupling loop is 2 turns about 1 inch away from the main loop wound on the same form. With the cap I use, it tunes 500-2000 kc. It's mainly for MW, but I can also use it for 160m. I can drop into LW, if I clip more fixed capacitance in parallel with the main one. MK

3176. Re: Strange message (Was: COPS)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 11:53:16 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <iv2dnVs0QfjvmgCiRVn-gQ@crocker.com>
Source record: 105941

"David or Jo Anne Ryeburn" <ryeburn@sfu.caz> wrote in message
news:ryeburn-2710030015470001@d64-180-236-30.bchsia.telus.net...
> In article <c71539bf.0310262046.e4dc5c3@posting.google.com>,
> kathyjs@iname.com (kathy) wrote:
>
> Explanations for this nonsense are welcome. I hope they have nothing to do
> with politics, or prejudice, or climbing, or Macintosh system software, or
> antennas.
>
this message falls into a class that i call 'unrelated political statements'
that some people just seem to randomly send to any group at any time. they
rarely if ever monitor those groups, and the reply address may or may not go
anywhere useful, and may possibly be a spam generator looking for active
addresses. they are best ignored.

3177. Re: packet in south texas??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 11:54:41 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <Va-dnXoH9oFbmgCiRVn-vA@crocker.com>
Source record: 105942

<kc5cqa@yahoo.com> wrote in message
news:gs1lpvojnki3lt6b1pr8evit21kcv6t6hp@4ax.com...
> I am looking for a 'group,or website' with input on packet in the
> San Antonio tex area, ??? thanks in advance. cl 73

what 'input' are you looking for on 'packet'?? and on what band(s)?

3178. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 13:22:44 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <D_8nb.94447$La.1500@fed1read02>
Source record: 105943
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> No surprise here. Thats how they all are. On the other hand, I don't
> hide. And I stand by what I said. And I could care less if that puke
likes
> it or not.
>
> Just in case you don't get it...Try this one. I have advocated from the
> git-go, before 9/11 which re-inforced my belief, that all the worlds
> ragheads need to be given a free ticket to Mecca, where we can test our
> newest tactical nuke.
>
> Like that? Too bad.
>
> Dan/W4NTI

Saw a great bumper sticker the other day:

How Did All Our Oil Get Under Their Sand?

Ed
wb6wsn

3179. cushcraft R7000 CT-1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 14:57:55 UTC
From: Kevin Gunther <beeltee@optonline.net>
Message-ID: <Tnanb.15052$ox.1574008@news4.srv.hcvlny.cv.net>
Source record: 105945

I have the CT-1 trap for an R7000 by cushcraft. This is the 10/12 meter
trap
. The aluminum tube is broken at the bottom. It is only about 2" long now.
The trap is still in good condx I would guess.

If anyone needs this trap, e-mail me direct and it is yours. I think $5
should cover shipping.

Kevin

beeltee@optonline.net

tnx

first come etc..

3180. Re: HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 15:54:59 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3f9d3f9a.333475906@news.galilei.com>
Source record: 105947

Hi Didier

I LOVE my HF9V!

TTUL - 73+ de Gary - KG&#65533;ZP

"Didier" <dima@skynet.be> verbositized:

>Hi all,
>
>I would like to use a vertical multi band antenna because of space
>restriction.
>I have seen the butternut HF9V.
>What do you think about this antenna ?
>
>Is the conterpoise CPK effective when not using the radials ? (I will not be
>able to use radials, not enough space)
>
>When the antenna is properly set, is an antenna tuner or automatic antenna
>tuner still needed ?
>
>Thanks a lot for your help
>
>73' de ON5KAD
>
>

3181. ECO-antenne...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 16:24:46 UTC
From: Torbj&#65533;rn Morka <spamkiller@online.no>
Message-ID: <6Fbnb.2010$mf2.25361@news4.e.nsc.no>
Source record: 105948

ECO in Italy has designed an antenna similar to Cushcrafts
R-6000/R6/R8-series, and now it is my turn to test it out :)
Has anyone here tested it and have some experience about it ?
They say an ideal height above "plane" from 1,3 - 2,6 meter, but i want it
on my roof !
Height from ground(plane ?) aprx 30' ! (8 meter)

73 de
la6wla,
Torbjorn.

3182. Re: cushcraft R7000 CT-1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 17:38:59 UTC
From: Kevin Gunther <beeltee@optonline.net>
Message-ID: <TKcnb.18915$ox.2042943@news4.srv.hcvlny.cv.net>
Source record: 105950

"Kevin Gunther" <beeltee@optonline.net> wrote in message
news:Tnanb.15052$ox.1574008@news4.srv.hcvlny.cv.net...
> I have the CT-1 trap for an R7000 by cushcraft. This is the 10/12 meter
> trap
> . The aluminum tube is broken at the bottom. It is only about 2" long
now.
> The trap is still in good condx I would guess.
>
> If anyone needs this trap, e-mail me direct and it is yours. I think $5
> should cover shipping.
>
> Kevin
>
> beeltee@optonline.net
>
> tnx
>
> first come etc..
>
>

the trap is gone, thanks

Kevin

W1FWB

3183. Re: array of magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 17:57:10 UTC
From: John <john@NOSPAMPLEASEclavin.freeserve.co.uk>
Message-ID: <bnjo88$721$1@news8.svr.pol.co.uk>
Source record: 105954

Thanks Reg,

I think you are right. I need a variable phase and variable amplitude system. The loop does a good job nulling out the noise, and "phasing out" any residual noise wrt a sense wire should just about kill it off. Why dont wellbrook or MFJ incorporate noise cancellers into their RX magnetic loops? It would make sense.

Thanks Reg,

73s John.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bnisj5lab1@hercules.btinternet.com...
> To use two or more very small loops in an array to produce a particular
> radiating/receiving pattern, the physical spacings between them cannot be
> less than the order 1/4 or 1/2 free-space wavelengths.
>
> You may just as well use the well-known arrays of 1/2-wave dipoles.
>
> This is because the radiation pattern of one small loop is identical to
that
> of one small dipole except that is twice rotated in space by 90 degrees.
>
> You can do no better than use a receiving magloop in conjunction with an
> elevated, well-distanced noise-cancelling length of wire, the two being
> combined at the receiver, the wire via a variable-phase and
> variable-amplitude network. If the wire picks up a smaller noise signal
than
> the main antenna it will be necessary to include an amplifier in the
> phase-shifter.
>
> Incidentally, the noise-cancelling wire + phase-shifter technique behaves
> identically to rotating the wire direction in space, the null in the
> combined receiving pattern also being rotated.
>
> Of course, if the noise or interfering source is in the same direction as
> the wanted signal you will get nowhere.
> ----
> Reg, G4FGQ
>
>

3184. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 17:57:55 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <D0dnb.42161$Tr4.86902@attbi_s03>
Source record: 105951

"W7TI" <noway@nohow.com> wrote in message
news:1boopvogvq9mu5rpa0oi1gegdqbho090eb@4ax.com...
> On Sun, 26 Oct 2003 22:07:50 GMT, Richard <rdavy30@earthlink.net> wrote:
>
> This reminds me of the April article in QST years ago about digging a
> trench, filling it with water and using it as a yagi reflector.
>
> The spirit lives on!
>
> --
> Bill, W7TI

I forgot about that April Fool's issue article ... great memory !

GB

3185. 1.2GHz Antena projects wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 18:05:22 UTC
From: ant <ct1flm@netvisao.pt>
Message-ID: <newscache$ksgfnh$qsn$1@newsfront4.netvisao.pt>
Source record: 105952

Elo I�m Antonio

And can some one send me some projects of antenas for 1.2Ghz (for ham-television) yaguis or verticals.
Or information about this subject.

Plse reply to my emal ct1flm@netvisao.pt

Good dx

Tnx from ct1flm
Antonio
Portugal

3186. Re: cushcraft R7000 CT-1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 18:23:12 UTC
From: PieroIK2VTJ <ik2vtjnonvogliospam@ardf.it>
Message-ID: <bnjnsk$ua0fr$1@ID-83989.news.uni-berlin.de>
Source record: 105953

"Kevin Gunther" <beeltee@optonline.net> ha scritto nel messaggio
news:Tnanb.15052$ox.1574008@news4.srv.hcvlny.cv.net...
> I have the CT-1 trap for an R7000 by cushcraft. This is the 10/12 meter
> trap
> . The aluminum tube is broken at the bottom. It is only about 2" long
now.
> The trap is still in good condx I would guess.
>
> If anyone needs this trap, e-mail me direct and it is yours. I think $5
> should cover shipping.
>

Open the trap, change the tube, close the trap and ask 15$ for it! :-)
(If only the tube is bent, the trap is still good.)
--

73 de IK2VTJ, Piero.
http://www.ardf.it
Togli/Remove 'nonvogliospam' dall'indirizzo/from address

3187. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 19:04:41 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <d%dnb.6358$X22.3465@newsread2.news.atl.earthlink.net>
Source record: 105956
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bni9n2$t03$1@news1.kornet.net...
>
> "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> news:3F9CAF9F.9060907@get.lost...
> > Dan/W4NTI wrote:
> > > No socialist Canadian....the folks don't actually hate us. They just
> want
> > > what we have, and not pay for it. Your 'kind' showed its true colors
> > > recently when we asked for assistance in Iraq. If you think that
won't
> have
> > > unhappy consequences for your nation, you are mistaken.
> > >
> > > Think about it.....asshole liberal puke. Oh there I go again calling
> you
> > > names.
> > >
> > > Tell ya what 'Private' call your local mountie and tell him to come
get
> > > me.....looooooossssseeeerrrr.
> >
> >
> >
> > This is beyond stupid.
> >
> > WA7AA
>
> Personally, I thought most of the regs here were a little more adult than
> all this...
>
> IMHO, all human beings deserve respect, unless they personally have done
> something to negate that right. However, I do believe also that anyone
who
> has an opinion on any subject should have the intestinal fortitude to make
> themselves known. This, too, is part of respect.
>
> Where I do not condone Dan's attitude toward some ethnic groups, he does
> have a right to voice it, and he does make known not only whom, but where
he
> is by use of his ham call. I didn't read the complete thread, so I don't

> know what these others said, but it would seem that they, too, allowed it
> known to whom to attribute what was said. For this, despite their
political
> views, they have my respect.
>
> Please, though.. name calling is so juvenile, and unnecessary. This isn't
> PC, it's good, old fashioned, good manners.. something we could use a lot
> more of nowadays. (Funny thing, isn't it, how PC gets pushed, but things
> never get any better?)
>
>
>

Well, Brenda Ann, and all the rest that can't stand it when I say what I think. Why don't you jump on 'Private' ??? The jerk that called me a racist and put my address on the internet, soliciting 'ragheads' to come here and attack me.

Is that allright? Does that fit well with your American standards?

Tell ya what , I'll make it real simple. When attacked...I attack back.

Dan/W4NTI

3188. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 19:07:13 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <B1enb.6361$X22.1983@newsread2.news.atl.earthlink.net>
Source record: 105957
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:D_8nb.94447$La.1500@fed1read02...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> > No surprise here. Thats how they all are. On the other hand, I don't
> > hide. And I stand by what I said. And I could care less if that puke
> likes
> > it or not.
> >
> > Just in case you don't get it...Try this one. I have advocated from
the
> > git-go, before 9/11 which re-inforced my belief, that all the worlds
> > ragheads need to be given a free ticket to Mecca, where we can test our
> > newest tactical nuke.
> >
> > Like that? Too bad.
> >
> > Dan/W4NTI
>
>
> Saw a great bumper sticker the other day:
>
> How Did All Our Oil Get Under Their Sand?
>
>
> Ed
> wb6wsn
>

He he he he he.......Talk loudly and carry a big stick. Bout time the USA
started kicking some ass.

Dan/W4NTI

3189. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 20:19:37 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bnjs6pmci1@news1.kornet.net>
Source record: 105959
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:d%dnb.6358$X22.3465@newsread2.news.atl.earthlink.net...
>
> "Brenda Ann" <brendad@shinbiro.com> wrote in message
> news:bni9n2$t03$1@news1.kornet.net...
> >
> > "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> > news:3F9CAF9F.9060907@get.lost...
> > > Dan/W4NTI wrote:
> > > > No socialist Canadian....the folks don't actually hate us. They
just
> > want
> > > > what we have, and not pay for it. Your 'kind' showed its true
colors
> > > > recently when we asked for assistance in Iraq. If you think that
> won't
> > have
> > > > unhappy consequences for your nation, you are mistaken.
> > > >
> > > > Think about it.....asshole liberal puke. Oh there I go again
calling
> > you
> > > > names.
> > > >
> > > > Tell ya what 'Private' call your local mountie and tell him to come
> get
> > > > me.....looooooossssseeeerrrr.
> > >
> > >
> > >
> > > This is beyond stupid.
> > >
> > > WA7AA
> >
> > Personally, I thought most of the regs here were a little more adult
than
> > all this...
> >
> > IMHO, all human beings deserve respect, unless they personally have done
> > something to negate that right. However, I do believe also that anyone
> who
```

> > has an opinion on any subject should have the intestinal fortitude to
make
> > themselves known. This, too, is part of respect.
> >
> > Where I do not condone Dan's attitude toward some ethnic groups, he does
> > have a right to voice it, and he does make known not only whom, but
where
> he
> > is by use of his ham call. I didn't read the complete thread, so I
don't
> > know what these others said, but it would seem that they, too, allowed
it
> > known to whom to attribute what was said. For this, despite their
> political
> > views, they have my respect.
> >
> > Please, though.. name calling is so juvenile, and unnecessary. This
isn't
> > PC, it's good, old fashioned, good manners.. something we could use a
lot
> > more of nowadays. (Funny thing, isn't it, how PC gets pushed, but
things
> > never get any better?)
> >
> >
> >
>
> Well, Brenda Ann, and all the rest that can't stand it when I say what I
> think. Why don't you jump on 'Private' ??? The jerk that called me a
racist
> and put my address on the internet, soliciting 'ragheads' to come here
and
> attack me.
>
> Is that allright? Does that fit well with your American standards?
>
> Tell ya what , I'll make it real simple. When attacked...I attack back.
>
> Dan/W4NTI
>

Ummm... Dan.... actually, I was much more 'jumping on' "Private" than you.

Try re-reading my post, and then make your comment (or apology?). What I very succintly said was that though I do not agree with your politics, I support your right to voice them, and respect the fact that you do so without anonymity...

3190. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 20:39:04 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <Infnb.132714$qj6.9133585@news1.news.adelphia.net>
Source record: 105960

Richard Clark wrote:

> This all returns to the same lack of need when tightening up the
> contact spring would do the trick just as Mark described. The "good"
> chemicals that have been suggested are not cheap, and the "bad"
> chemicals (Hydrochloric Acid no less) are extremely cheap to get, but
> a pain to get rid of.

Not that I'd ever use Hydrochloric acid, but aren't we talking about a simple acid/basic reaction to turn it into something benign? I used to use an acidic Cibachrome photo developing solution which we used some magnesium hydroxide to neutralize.

- Mike KB3EIA -

3191. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 20:50:06 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <zuOdnf_Apq5jGQCiRVn-gQ@comcast.com>
Source record: 105961
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On 27-Oct-2003, "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote:

> >
>
> Well, Brenda Ann, and all the rest that can't stand it when I say what I
> think. Why don't you jump on 'Private' ??? The jerk that called me a racist
> and put my address on the internet, soliciting 'ragheads' to come here and
> attack me.
>
> Is that allright? Does that fit well with your American standards?
>
> Tell ya what , I'll make it real simple. When attacked...I attack back.
>
> Dan/W4NTI

+1 point for speaking your mind.
-10 points for being off-topic.

<plonk>

3192. Re: array of magnetic loops?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 21:08:19 UTC
From: richardharrison@webtv.net
Message-ID: <966-3F9D8943-146@storefull-2312.public.lawson.webtv.net>
Source record: 105963

Reg Edwards wrote:
"You may just as well use the well-known arrays of 1/2-wave dipoles."

In most instances Reg is right and this is probably no exception.

There is an April 1986 artivcle in "CQ" magazine by Richard Fenwick, K5RR on using two small rectangular loops, 85 in. on a side, and spaced 30 to 60 feet apart for 160-mtr. reception.

The loops are tuned to 1812 KHz using 620 pF capacitors. High voltage capacitors are used for transmitting. K5RR says that "ten watts into the loop will produce about 450 volts RMS across the capacitor."

This may be the place to use Reg Edward`s observation about the voltage across reactances in a series resonant circuit; the ratio of reactive voltage to applied voltage is equal to Q.

Page 2-27 of the 1987 ARRL Handbook agrees with Reg: "The voltage across either the inductor or capacitor is QE, where E is the voltage applied to the series circuit."

My ARRL L/C/F Calculator says 12 microhenries resonates with 620 pF, the capacitance used to resonate the loops at 1812 KHz. The reactance is only about 137 milliohms.

The author, K5RR writes: "The loops nave a very narrow impedance bandwidth - only about 13 kHz for a 2:1 VSWR.

The author shows a unidirectional pattern for his two-loop array and it was intended to replace a 400-ft. Beverage antenna in a distance of less than 60 feet. A delay line of 180-degrees minus the physical degrees of spacing beteen the loops is switched into the feed of one or the other of the loops to reverse the sense of the array. Equal currents are fed to the loops using a "Wilkinson power divider".

This two-loop array is an inefficient antenna meant only to compete with a Beverage. It is fine for reception but better used with a more efficient antenna for transmission.

Best regards, Richard Harrison, KB5WZI

3193. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 21:11:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <431rpv090f6phbiqv0o0s4turlplh483ef@4ax.com>
Source record: 105962

On Mon, 27 Oct 2003 20:39:04 GMT, Mike Coslo <mcoslo@adelphia.net>
wrote:

>Richard Clark wrote:
>
>
>> This all returns to the same lack of need when tightening up the
>> contact spring would do the trick just as Mark described. The "good"
>> chemicals that have been suggested are not cheap, and the "bad"
>> chemicals (Hydrochloric Acid no less) are extremely cheap to get, but
>> a pain to get rid of.
>
>Not that I'd ever use Hydrochloric acid, but aren't we talking about a
>simple acid/basic reaction to turn it into something benign? I used to
>use an acidic Cibachrome photo developing solution which we used some
>magnesium hydroxide to neutralize.
>
> - Mike KB3EIA -

Hi Mike,

Yes, I've done darkroom work too and I have worked professionally with
acids in chemistry analysis (Titration and back-titrations). The
difference there is that I could always measure my reaction products
with indicators or probes or test strips. None of that has been
offered as part of the regimen for fixing what an allen wrench can do
quite well with none of the risk of uncontrolled exposure. If you
have to buffer and wash the coil, you may as well skip the acid anyway
and do it right.

73's
Richard Clark, KB7QHC

3194. G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 22:05:23 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9d96a3$1_1@news.vo.lu>
Source record: 105964

Hi,

I used a multiband dipole G5RV 31M (100') with balun 4:1 during the last CQ WW.
I also wrote a text about its uses so I understand quite well how it works, excepting when it doesn t work...

I.e. For tests I tried to use it on the 160m band where the dipole is not cut for with the hope to be able to work at least some near stations (over the skip distance). Thay worked well with a longwire 30m long, so I suspected that that could work with this one too. Negative.

At the output of my RTX the signal was strong, 100W PEP, but at first sight no signal was emitting by the antenna.
I have found nowhere an information about this, no diagram or whatever.

What becomes all the energy sent by my TX on 160m ? What become de standing waves and reactive load ? Is it possible than all 100W are lost in the coax or the feeder without be emitted ?

Who could explain me this ?

Thanks

Thierry
ON4SKY

3195. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 22:35:19 UTC
From: dplatt@radagast.org
Message-ID: <vpr7d7kq87ogf1@corp.supernews.com>
Source record: 105965

>What becomes all the energy sent by my TX on 160m ? What become de standing
>waves and reactive load ? Is it possible than all 100W are lost in the coax
>or the feeder without be emitted ?

As I understand it, this is a very common problem if you try to feed a doublet antenna which is quite a lot shorter than 1/2 wavelength. The antenna presents a highly capacitive load to your tuner. If your tuner does manage to match it, you'll end up with extremely high SWR on the feedline, and very high currents flowing in the tuner's inductive component(s). Most of your transmitter's power is being dissipated as heat, due to the resistive losses in the feedline and in the tuner inductor(s).

Trying to drive a too-short doublet has been the cause of more than one thoroughly-destroyed antenna tuner - the heat dissipation can crack toroid cores, melt the plastic forms in roller inductors, etc.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

3196. Re: Sommer Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 22:35:40 UTC
From: richardharrison@webtv.net
Message-ID: <6509-3F9D9DBC-40@storefull-2317.public.lawson.webtv.net>
Source record: 105966

David Thompson wrote:
"Back in the early 90`s Lew McCoy reveiwed the small Sommer in CQ Magazine."

I found a Lew McCoy review of the Sommer XP506 in the April 1986 edition of CQ starting on page 42. Lew cobcludes with: "If I sound enthusiastic about the XP506, I am, and I will really be surprised if this system doesn`t revolutionize multiband beam systems.

Here are the introductory prices for the various models: the XP406 is $514, the XP506 is $642, and the XP706 is $778. I didn`t mention the gain of the XP706, but it is rated at close to 9 dB on 20 meters (over a dipole reference).

The manufacturer is Sommer GMBH, DJ2UT, Kandelstrasse 35, D-7809 Denzlingen, West Germany, and the beams are distributed in this country by H.J. Theiler Corp., P.O. Box 5369, Spartenburg, SC 29304 (803-576-5566)."

The revolution may have been too dear.

Best regards, Richard Harrison, KB5WZI

3197. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 22:47:36 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <cghnb.104$NI6.17774790@newssvr21.news.prodigy.com>
Source record: 105967
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:d%dnb.6358$X22.3465@newsread2.news.atl.earthlink.net...
>
The jerk that called me a racist and put my address on the internet,
soliciting 'ragheads' to come here and attack me.
>
> Is that allright?

I thought it was cool when he "did it" to me. I sign all my posts with my call, and there are callbooks everywhere, so the only thing he really allegedly "did" was to threaten to send some angry raghead my way. Gee, I'm scared about that... (Not!)

As for being called a "bigot" by an apologist for ragheads, I couldn't work up too much concern over that.

Historical note: Almost every african who was ever captured and sold in the americas to slavery was captured by arab slavers who had been infesting the congo basin for more than five hundred years. They were there centuries before the brief opening of the market for slaves in america, and were there long after it closed.

The arab slavers would typically take an entire village at a time, murdering anybody who was either strong enough to resist, or too weak to make the long walk on a long, heavy chain to market. Pregnant women and small children were typically murdered because they did not travel well. There is documented evidence of arab slave-raids in the congo basin going on as late as the mid-1950's. The great majority of the african natives captured over those centuries were of course used by the arabs themselves.

The progeny of the africans who were sent to the americas are living free lives in a free country today. As far as can be seen, there are no surviving progeny from the much greater number of africans who did not go to the americas but instead were used by the arabs. Perhaps this is so because castration of slaves has always been a common practice among the arabs.

... So when an apologist for this uncivilized, backward and violent tribal culture calls me a "bigot", I can't help but smile at the irony there.

Overall, I guess this doesn't bother me because I expect anybody who sticks up for the raghead set to be some kind of an uncivilized jerk anyway, so I wasn't surprised by his behavior. He didn't say or do anything interesting or unusual. He acted pretty much as you would expect an uncilized jerk to

act.

(Yawn)

Charles Brabham, N5PVL

3198. Re: Clean Roller Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 22:53:32 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310271453.70792669@posting.google.com>
Source record: 105968

Richard, When you are wrong then why not admit it instead of digging a hole for yourself
Yes, you can clean a contact by drawing a clean piece of paper thru it but never anything as abrasive as a file or sandpaper as the deposit left is offtimes worse than the original contact contaminate.
Look back at Roy's comment with respect to wipe. It is probably for a circuyit board insertion and where wipe is the one and the same as a scrubbing
dimension, It says nothing about pressure. You also referred to bifircated contacts in one of your wrigglings, a bifocated contact can help in a life or reliability test only because the odds of closure are enhanced because you have a backup contact. Unfortunaley if the wipe or scrubbing action is not sufficient for closure it will not help.....two bad apples does not trump
one single good apple. The fact is that you will do anything to knock me and are now reducing yourself to 'on the fly' thoughts, thus Reg said "garbage to another post contact by yourself as I also did with your pressure statement.
Straighten yourself up. You are a very knoweledgable person even though you do not have a technical degree but your studies in Literature and Shakespere should not hold you to the of the voice of Punchinello when you decide to dig a hole for somebody else.
Why not put hate thoughts aside and get back to sharing your considerable
knoweledge in the electrical field
Regards
Art

Richard Clark <kb7qhc@comcast.net> wrote in message news:<l8gppvs91v44c44tqetgfgg1t3c11g5his@4ax.com>...
> On Mon, 27 Oct 2003 03:58:10 GMT, ehsjr@bellatlantic.net wrote:
> >
> >How about silver polish - is that any good for this?
> >Someone told me it is - but I don't know.
>
> Hi OM,
>
> If silver polish worked, then you could as easily boil it in water in
> an aluminum pan - does the same thing.
>
> You could also use a typing eraser to clean the mating surface. This
> is an old board cleaning tip that was NASA approved back when there
> were typewriters to need typing erasers. These erasers had the right
> amount of abrasive without having too much. The same goes for a

> dollar bill having just enough abrasive (useful for cleaning fouled
> relay contacts). But none of this really takes care of the problem.
> It simply puts you into the lock-step of a chemical dependency.
>
> This all returns to the same lack of need when tightening up the
> contact spring would do the trick just as Mark described. The "good"
> chemicals that have been suggested are not cheap, and the "bad"
> chemicals (Hydrochloric Acid no less) are extremely cheap to get, but
> a pain to get rid of.
>
> 73's
> Richard Clark, KB7QHC

3199. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 23:34:37 UTC
From: tdonaly@aol.com
Message-ID: <20031027183437.20996.00000323@mb-m07.aol.com>
Source record: 105869

Charles D. Braham wrote,
>
>
>Historical note: Almost every african who was ever captured and sold in the
>americas to slavery was captured by arab slavers who had been infesting the
>congo basin for more than five hundred years. They were there centuries
>before the brief opening of the market for slaves in america, and were there
>long after it closed.
>
>The arab slavers would typically take an entire village at a time, murdering
>anybody who was either strong enough to resist, or too weak to make the long
>walk on a long, heavy chain to market. Pregnant women and small children
>were typically murdered because they did not travel well. There is
>documented evidence of arab slave-raids in the congo basin going on as late
>as the mid-1950's. The great majority of the african natives captured over
>those centuries were of course used by the arabs themselves.
>
>The progeny of the africans who were sent to the americas are living free
>lives in a free country today. As far as can be seen, there are no surviving
>progeny from the much greater number of africans who did not go to the
>americas but instead were used by the arabs. Perhaps this is so because
>castration of slaves has always been a common practice among the arabs.

Very good. You must have learned all this in church. Didn't they tell you
that the Greeks had slaves, the Romans had slaves, the British had
slaves, the Vikings had slaves, the Grits had slaves? British colonists
used to burn the legs off of runaway slaves as a warning to the rest. As for
Arab cruelty, they could never match King Leopold of Belgium who was just
as much a Christian as you are. A Southerner complaining about Arab cruelty to
slaves is the pot calling the kettle black. Good for a laugh, though.
73,
Tom Donaly, KA6RUH

3200. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-27 23:41:24 UTC
From: jgboyles@aol.com
Message-ID: <20031027184124.28132.00000178@mb-m27.aol.com>
Source record: 105870

>Maybe I should publish an article entitled
>"ALL Eight HF Bands from One Dipole". :-)

You already published an article on this in Antennex. Did you get paid? Or do they, as I suspect, just publish stuff. It was W6RCA's multiband dipole, or something similar.
73 Gary N4AST

3201. Re: Distance to Link Coupling in a Loop Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:02:31 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310271602.75d90689@posting.google.com>
Source record: 105871

Sounds like you have made your own variometer
In the case of a loop antenna it is a coupling of two circuits each
having resistance, capacitive and inductance .Each of these values
have two forms,
reactive whuch means that it is a combination of two reactive
components and in the case of resistance there is real resistance and
radiative resistance.
You can insert distributed loads for each of these components or vice
versa
so that these two circuits can be made into one circuit by capacitive
or inductive coupling means.(read up on solving complex circuits)
Obviously the inductive coupling values will change along with the
other loads so the use of a variometer helps to not tie one in
absolute terms of inductance coupling to the thickness and length of
material used which is representitive of distributed loads as well as
losses.
If one chooses compatable material thicknesses for a 50 ohm impedance
one can physical connect both circuits which is a inductive coupling (
you can also do capacitive coupling) and thus use only the variable
capacitance for what will be a limited total band spread.
Remember that when designing any antenna it is to get maximum current
flow
So the introduction of TWO radiating circuits gives you extra leverage
to obtain this. If you are sufficiently skilled then you can add a
series of circuits and thus obtain efficient radiators with a
controlled input impedance while choosing what circuit has the high
current flow as well as selection of any individual bandwith.This
should explain why physically coupling two loop circuits can restrict
choice to determine what is required as opposed to your choice to be
able to change the coupling mode which gives you more choice for
better options.Increased variations and design changes for ultimate
rotational design of antennas for any frequency without being bound to
wavelength which will soon be available via the PTO.
Good luck and please keep us informed of your progress
Art Unwin KB9MZ...XG

ehsjr@bellatlantic.net wrote in message news:<3F9CAC5F.DD287225@bellatlantic.net>...
> Al wrote:
> >
> > I have used Reg's fine loop design program rjeloop3 to help me with building
> > a couple of loops. It was a big help. Thank you Reg.
> >
> > The shielded three-foot diameter loop I built is for receive only. The
> > primary loop is six turns paralleled by a variable capacitor, and the

> > secondary (link loop) is one turn (same diameter) fed to a preamp or
> > directly to the receiver. The band of operation of the loop is about 200kHz
> > to 500kHz (NDB chaser).
> >
> > One question that is not answered in rjeloop3 is what should be the distance
> > from the output (link) loop to the main loop? The antenna's I built used
> > flat cable for the wiring and one of the turns was the link so the distance
> > was 0.050 inches. In other articles I have read that the Q, gain, and S/N
> > ratio can be varied by varying the distance between the two loops.
> > Approximately what is the distance? Are we talking a small fraction of an
> > inch or 2, 3, or perhaps six inches apart? I would just like a feeler
> > distance to work with. If the distance is to be over one inch, I'm
> > considering building the primary loop in one hoola-hoop form and the
> > secondary loop in a second hoola-hoop then varying the distance between the
> > hoops. Any thoughts on this or is this a waste of time and effort?
> >
> > All input will be greatly appreciated. Thank you.
> >
> > Al
> > KA5JGV
>
> I don't know if this will help, but perhaps you can adopt
> the idea to your loop.
>
> I built a receiving mag loop for 40 - 160 as follows:
> Using hardline, I stripped the ends so the center conductor
> stuck out about 1 inch on each end. I made the outer loop
> out of it - it is ~4' in diameter. It is open at the top, and
> a variable capacitor (900 pF) connects the two ends on the
> shield of the hardline. (I switch in another 1650 pF for 160).
> Inner loop is made from 52" of the inner conductor and
> insulation of RG8 and is mounted at the bottom. The two ends
> of the inner loop connect to the SO239. At the top of the
> outer loop, the copper inner hardline conductor connects to
> a 1N4148 with 1K in series and a 1 mA meter. When I excite
> the inner loop with my MFJ 259B, I tune for minimum SWR with
> the variable cap. The 1mA meter goes to maximum when the SWR
> goes to minimum.
>
> Ok, now to the coupling. The inner loop can be maneuvered
> for maximum reading on the 1 mA meter. I found I get the
> highest reading on the meter when I squash the inner loop
> into an oval, decreasing its vertical diameter to about
> 1/2 what it was when it was a circle. I taped the inner
> loop to the outer loop to hold the shape with the maximum
> coupling. Perhaps some variation of this technique can
> be used on your antenna.
>
> I'm still experimenting with my loop. The tuning on 40
> is difficult - I need a smaller variable cap. I plan to

> try switching out 450 pF of the variable (it is currently
> 2 450's in parallel), and switching in some series fixed C
> to see if I can cover 40 with a 180 degree rotation of the
> variable - right now a few degrees of rotation of the
> variable makes a very large change in the frequency.

3202. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:04:34 UTC
From: Jer <abuse@supernews.com>
Message-ID: <moinb.54037$ZH4.25855@twister.socal.rr.com>
Source record: 105872

However, all the below is true!! Both sets of comments...Makes me wonder why the decendents of african slaves aren't beating on the arab decendents for payments of past wrongs? Think maybe they would either get shot or at the very least told to go to hell! har!

de jer

"Tdonaly" <tdonaly@aol.com> wrote in message news:20031027183437.20996.00000323@mb-m07.aol.com...
> Charles D. Braham wrote,
> >
> >
> >Historical note: Almost every african who was ever captured and sold in the
> >americas to slavery was captured by arab slavers who had been infesting the
> >congo basin for more than five hundred years. They were there centuries
> >before the brief opening of the market for slaves in america, and were there
> >long after it closed.
> >
> >The arab slavers would typically take an entire village at a time, murdering
> >anybody who was either strong enough to resist, or too weak to make the long
> >walk on a long, heavy chain to market. Pregnant women and small children
> >were typically murdered because they did not travel well. There is
> >documented evidence of arab slave-raids in the congo basin going on as late
> >as the mid-1950's. The great majority of the african natives captured over
> >those centuries were of course used by the arabs themselves.
> >
> >The progeny of the africans who were sent to the americas are living free
> >lives in a free country today. As far as can be seen, there are no surviving
> >progeny from the much greater number of africans who did not go to the
> >americas but instead were used by the arabs. Perhaps this is so because
> >castration of slaves has always been a common practice among the arabs.
>
> Very good. You must have learned all this in church. Didn't they tell you
> that the Greeks had slaves, the Romans had slaves, the British had

> slaves, the Vikings had slaves, the Grits had slaves? British colonists
> used to burn the legs off of runaway slaves as a warning to the rest. As
for
> Arab cruelty, they could never match King Leopold of Belgium who was just
> as much a Christian as you are. A Southerner complaining about Arab
cruelty to
> slaves is the pot calling the kettle black. Good for a laugh, though.
> 73,
> Tom Donaly, KA6RUH
>
>

3203. Re: Space Weather - Dan L. Jeswald (W4NTI) is a racist

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:10:23 UTC
From: Anonymous via the Cypherpunks Tonga Remailer <nobody@cypherpunks.to>
Message-ID: <9db20fd8c9a783dd433607fad8e95b50@cypherpunks.to>
Source record: 105873
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

In article <HdUmb.5634$FI2.454@newsread1.news.atl.earthlink.net>
"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote:
>
>
> Thats what I like about people that assume things. The first part of assume
> says it all.
>
> Dan/W4NTI

Hmmm, indeed, since when did OHIO become part of Alabama?

Gene Storey must've went to the same school as Mark "Stagger Lee" Waldron.
Or at least has the same Geography class... must've been a special ed class.

And when did your skin change color, when you moved back to Alabama?

>
> "Gene Storey" <nospam@cox.net> wrote in message
> news:FoOmb.15281$5c2.4785@okepread03...
> > Being from Alabama, his mother was probably a negress, so he has
> > an inbred right to use such words.
> >
> > "Private" <shortwave@telus.net> wrote
> > >
> > > I cannot believe the racism and lack of intelligence shown by Dan L.
> > > Jeswald and James whoever he is. Using words like ragheads &
> > > sandniggers? Shame on you both!!
> > >
> > > Grow-up, you giving all Americans a bad name. I am posting your
> > > address below so the "ragheads" you are talking about can pay you a
> > > visit....
> > >
> > > Daniel L. Jeswald
> > > 89 Wildman Road
> > > Anniston AL
> > > 36201

And Private, you should not disrespect your Non-Commissioned betters like that.

3204. Re: array of magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:11:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnkc72$508$1@titan.btinternet.com>
Source record: 105874

John asked -

> Why dont Wellbrook or MFJ incorporate noise cancellers into their RX magnetic loops?
> It would make sense.
>
==========

Because it wouldn't make sense.

The noise-collecting wire MUST be spaced an appreciable distance from the loop. Otherwise the noise picked up by both antennas would either be in phase, or would appear to be coming from the same direction.

More economical to put the noise cancelling arrangements in a separate box as may be purchased commercially.

If there is only ONE dominent noise source the magloop does a very good job all by itself. Its pair of 180-degrees apart nulls are extremely sharp whereas its wanted signal pick-up lobes are very broad. The solitary magloop fails only when the noise and wanted signal come from very nearly the same directions. The extra noise cancelling wire would be seldom needed.

If there are TWO noise sources, to simultaneously cancel BOTH of them out is well nigh impossible. It would require a well-distanced (1/2-wavelength) noise-pick-up wire to distort the overall radiation pattern such that the two magloop-nulls are no longer at 180 degrees to each other.

For perfection you would need TWO well-spaced noise-cancelling wires, each with its own phase and amplitude controls, all of which would interact with each other and with the rotation of the magloop.

By the time you had twiddled the phasing and amplitude knobs to your satisfaction you would be half way into the next sun-spot cycle.

Back to the drawing board ? ;o)

Reg, G4FGQ

3205. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:21:21 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <5Einb.44894$e01.106323@attbi_s02>
Source record: 105875

Bob Miller wrote:
> On Sun, 26 Oct 2003 19:58:27 -0500 (EST), "Somebody Somewhere"
> <Me@My.Computer> wrote:
[SNIP]
> I guess you've never read the constitution. It does not in any way
> guarantee you free speech. It only says, "The Congress shall enact no
> laws abridging a citizen's freedom of speech." There's nothing in
> there that says fellow-citizens cannot criticize you, and even punish
> you, for what you say. (Try telling your boss to go jump, and see how
> much your constitution protects you.)
>
> Bob
> k5qwg

Bob, it goes even further than what you claim. The "Right of Free Speech" is not an absolute right! It is based on "Reasonable usage"

For someone to falsely cry out "FIRE" in a crowded theater is against the law and Free Speech will not protect them.

Deacon Dave, W1MCE

3206. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:38:52 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <wUinb.8674$FI2.959@newsread1.news.atl.earthlink.net>
Source record: 105876
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bnjs6p$mci$1@news1.kornet.net...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:d%dnb.6358$X22.3465@newsread2.news.atl.earthlink.net...
> >
> > "Brenda Ann" <brendad@shinbiro.com> wrote in message
> > news:bni9n2$t03$1@news1.kornet.net...
> > >
> > > "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> > > news:3F9CAF9F.9060907@get.lost...
> > > > Dan/W4NTI wrote:
> > > > > No socialist Canadian....the folks don't actually hate us. They
> just
> > > want
> > > > > what we have, and not pay for it. Your 'kind' showed its true
> colors
> > > > > recently when we asked for assistance in Iraq. If you think that
> > won't
> > > have
> > > > > unhappy consequences for your nation, you are mistaken.
> > > > >
> > > > > Think about it.....asshole liberal puke. Oh there I go again
> calling
> > > you
> > > > > names.
> > > > >
> > > > > Tell ya what 'Private' call your local mountie and tell him to
come
> > get
> > > > > me.....looooooosssssseeeerrrr.
> > > >
> > > >
> > > >
> > > > This is beyond stupid.
> > > >
> > > > WA7AA
> > >
> > > Personally, I thought most of the regs here were a little more adult
> than
> > > all this...
```

> > >
> > > IMHO, all human beings deserve respect, unless they personally have
done
> > > something to negate that right. However, I do believe also that
anyone
> > who
> > > has an opinion on any subject should have the intestinal fortitude to
> make
> > > themselves known. This, too, is part of respect.
> > >
> > > Where I do not condone Dan's attitude toward some ethnic groups, he
does
> > > have a right to voice it, and he does make known not only whom, but
> where
> > he
> > > is by use of his ham call. I didn't read the complete thread, so I
> don't
> > > know what these others said, but it would seem that they, too, allowed
> it
> > > known to whom to attribute what was said. For this, despite their
> > political
> > > views, they have my respect.
> > >
> > > Please, though.. name calling is so juvenile, and unnecessary. This
> isn't
> > > PC, it's good, old fashioned, good manners.. something we could use a
> lot
> > > more of nowadays. (Funny thing, isn't it, how PC gets pushed, but
> things
> > > never get any better?)
> > >
> > >
> > >
> >
> > Well, Brenda Ann, and all the rest that can't stand it when I say what
I
> > think. Why don't you jump on 'Private' ??? The jerk that called me a
> racist
> > and put my address on the internet, soliciting 'ragheads' to come here
> and
> > attack me.
> >
> > Is that allright? Does that fit well with your American standards?
> >
> > Tell ya what , I'll make it real simple. When attacked...I attack
back.
> >
> > Dan/W4NTI
> >
>

> Ummm... Dan.... actually, I was much more 'jumping on' "Private" than you.
>
> Try re-reading my post, and then make your comment (or apology?). What I
> very succintly said was that though I do not agree with your politics, I
> support your right to voice them, and respect the fact that you do so
> without anonymity...
>
>

Yes indeed. I was in a rush. Having re-read YOUR post I tender my apology.
For the rest.....I stand by my statements. And I don't hide from anyone
later....eh "Private" ???

Dan/W4NTI

3207. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:39:56 UTC
From: tdonaly@aol.com
Message-ID: <20031027193956.21045.00000297@mb-m07.aol.com>
Source record: 105877

Jer wrote,
>
>
>However, all the below is true!! Both sets of comments...Makes me wonder
>why the decendents of african slaves aren't beating on the arab decendents
>for payments of past wrongs? Think maybe they would either get shot or at
>the very least told to go to hell! har!
>
>de jer
>

The part about there being no descendants of slaves in arab countries isn't true. The Mamelukes, who chased out the last of the Crusaders and defeated a Mongol invasion of Syria, started out as slaves and ended up running much of the middle-East for several hundred years. Up until the latter part of the 18th Century, most Christians and Muslims had nothing against slavery at all, with the exception, probably, of St. Patrick who had been a slave, himself, and knew what it was like.
This post is off-topic and I apologize for making it, but there's no point in letting false history in the service of religious bigotry perpetuate itself on this newsgroup. People with weak minds might believe it.
73,
Tom Donaly, KA6RUH

3208. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:42:13 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <FXinb.8678$FI2.2171@newsread1.news.atl.earthlink.net>
Source record: 105878
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:cghnb.104$NI6.17774790@newssvr21.news.prodigy.com...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:d%dnb.6358$X22.3465@newsread2.news.atl.earthlink.net...
> >
> The jerk that called me a racist and put my address on the internet,
> soliciting 'ragheads' to come here and attack me.
> >
> > Is that allright?
>
> I thought it was cool when he "did it" to me. I sign all my posts with my
> call, and there are callbooks everywhere, so the only thing he really
> allegedly "did" was to threaten to send some angry raghead my way. Gee,
I'm
> scared about that... (Not!)
>
> As for being called a "bigot" by an apologist for ragheads, I couldn't
work
> up too much concern over that.
>
> Historical note: Almost every african who was ever captured and sold in
the
> americas to slavery was captured by arab slavers who had been infesting
the
> congo basin for more than five hundred years. They were there centuries
> before the brief opening of the market for slaves in america, and were
there
> long after it closed.
>
> The arab slavers would typically take an entire village at a time,
murdering
> anybody who was either strong enough to resist, or too weak to make the
long
> walk on a long, heavy chain to market. Pregnant women and small children
> were typically murdered because they did not travel well. There is
> documented evidence of arab slave-raids in the congo basin going on as
late
> as the mid-1950's. The great majority of the african natives captured over
> those centuries were of course used by the arabs themselves.
>

> The progeny of the africans who were sent to the americas are living free
> lives in a free country today. As far as can be seen, there are no
surviving
> progeny from the much greater number of africans who did not go to the
> americas but instead were used by the arabs. Perhaps this is so because
> castration of slaves has always been a common practice among the arabs.
>
> ... So when an apologist for this uncivilized, backward and violent tribal
> culture calls me a "bigot", I can't help but smile at the irony there.
>
> Overall, I guess this doesn't bother me because I expect anybody who
sticks
> up for the raghead set to be some kind of an uncivilized jerk anyway, so I
> wasn't surprised by his behavior. He didn't say or do anything interesting
> or unusual. He acted pretty much as you would expect an uncilized jerk to
> act.
>
> (Yawn)
>
> Charles Brabham, N5PVL
>
>
>
>
>
>

Well put.....I notice 'Private' has quit responding.

Dan/W4NTI

3209. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:46:33 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <J%inb.8683$FI2.6143@newsread1.news.atl.earthlink.net>
Source record: 105879

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031026153248.26503.00000173@mb-m17.aol.com...
> >I have advocated from the
> >git-go, before 9/11 which re-inforced my belief, that all the worlds
> >ragheads need to be given a free ticket to Mecca, where we can test our
> >newest tactical nuke.
> >
>
> Now were talking Dan, maybe the Lieberal WIMPS would like to join them

Now thats something to think about.

Dan/W4NTI

3210. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:48:55 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <X1jnb.8693$FI2.8449@newsread1.news.atl.earthlink.net>
Source record: 105880

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031026193448.25837.00000143@mb-m05.aol.com...
> >What's COOL and Justified is the fact that you are genetically
> >related to the very race that you are putting down.
> >--
> >73, Cecil http://www.qsl.net/w5dxp
>
> And which RACE is that?

Let it go Bruce. The liberals say this crap all the time. The reality is that EVERYONE is related to EVERYONE on the planet. That is true whether one believes in the biblical account or the scientific one. So, forget it. Its just one more game they enjoy playing.

Dan/W4NTI

3211. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:50:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnkeg7$703$1@hercules.btinternet.com>
Source record: 105881

The moral is - DON'T USE A G5RV.

Specially one with any coax in the feedline.

If you've bought one, you've been robbed.

Use a random length dipole, longer than about 1/3 of the wavelength at the lowest frequency of interest. Choose a length which makes best use of the size of your backyard. Take the 450 or 600-ohm balanced line all the way back to the shack. You will need a tuner and a choke balun at the tuner. For multi-band operation you will need a tuner whatever you do.

If you find it inconvenient to feed the dipole in the middle, and you have a relatively low local noise level, then feed it at one end and make an Inverted-L of it. It will then very likely work very well also on 160 metres.

And you will never think of using a G5RV again !

By the way - Louis Varney, G5RV, a real genuine English gentleman, now no longer with us, designed his antenna to work most efficiently ONLY on 14.15 MHz, perhaps the best day-or-night, all-year-round, any part of the sun-spot cycle, DX frequency. It's very good. And you may not need tuner even with the coax. Works great with the old fashioned TS-520 with its built-in tuner !

Reg, G4FGQ

3212. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 00:58:52 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3F9DBF4E.5050305@get.lost>
Source record: 105882
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

charlesb wrote:

[snip by far the stupidest shit I've seen in a while]

> Overall, I guess this doesn't bother me because I expect anybody who sticks
> up for the raghead set to be some kind of an uncivilized jerk anyway

Our coalition is helping the Iraqi people to build a secure, hopeful and
self-governing nation which will stand as an example of freedom to all
the Middle East,'' George W.Bush said [in his radio address].

G.W.Bush's father also sent the army to Kuwait to liberate the Kuwaitis
from the same dictator they had helped prop up against Iran. Then there
was a man called Oliver North...

Reagan's administration was heavily involved in helping the Afghani
mujahedeen against the Soviets. Yes, that same Bin Laden.

Holy shit, you're right! They are uncivilized jerks!

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

3213. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:10:25 UTC
From: tdonaly@aol.com
Message-ID: <20031027201025.20996.00000325@mb-m07.aol.com>
Source record: 105883

Dan wrote,
>
>
>"WA8ULX" <wa8ulx@aol.com> wrote in message
>news:20031026193448.25837.00000143@mb-m05.aol.com...
>> >What's COOL and Justified is the fact that you are genetically
>> >related to the very race that you are putting down.
>> >--
>> >73, Cecil http://www.qsl.net/w5dxp
>>
>> And which RACE is that?
>
>Let it go Bruce. The liberals say this crap all the time. The reality is
>that EVERYONE is related to EVERYONE on the planet. That is true whether
>one believes in the biblical account or the scientific one. So, forget it.
>Its just one more game they enjoy playing.
>
>Dan/W4NTI
>

Cecil is a Liberal? Just because he doesn't come from that Muslim
state, Al Abama, and doesn't agree with you doesn't make him a
Liberal.
73,
Tom Donaly, KA6RUH

3214. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:12:51 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310271712.1dc25fbc@posting.google.com>
Source record: 105884
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

What ever happened to the American ideal
Freedom of Religeon?
IF you are American and rebel against what we stand for
what religeon is it that you advocate that all must adhere to
so that they are not to be killed ?
Are there any other citizens of this country that you disagree
which you advocate their demise?
Art Unwin

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<B1enb.6361$X22.1983@newsread2.news.atl.earthlink.net>...
> "Ed Price" <edprice@cox.net> wrote in message
> news:D_8nb.94447$La.1500@fed1read02...
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> > > No surprise here. Thats how they all are. On the other hand, I don't
> > > hide. And I stand by what I said. And I could care less if that puke
> likes
> > > it or not.
> > >
> > > Just in case you don't get it...Try this one. I have advocated from
> the
> > > git-go, before 9/11 which re-inforced my belief, that all the worlds
> > > ragheads need to be given a free ticket to Mecca, where we can test our
> > > newest tactical nuke.
> > >
> > > Like that? Too bad.
> > >
> > > Dan/W4NTI
> >
> >
> > Saw a great bumper sticker the other day:
> >
> > How Did All Our Oil Get Under Their Sand?
> >
> >
> > Ed
> > wb6wsn
> >
>

> He he he he he.......Talk loudly and carry a big stick. Bout time the USA
> started kicking some ass.
>
> Dan/W4NTI

3215. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:41:08 UTC
From: groundwave@telus.net
Message-ID: <eb867ae8.0310271741.4e9399c9@posting.google.com>
Source record: 105885
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
will think twice before making racist remarks on these groups. I
still can't believe they wrote it and may actually think that way.

In any case, DANIEL! you are in your late fifties for crying out loud.
Grow up! What would your 4 children and 5 grandchildren think.
There must be more than a couple black or arab people in Anniston
Alabama, think of how they would feel if they knew what you wrote.
You have done some nice work in Anniston, don't pee it all away over
some racist remarks. Applogize or at the very least keep it to
yourself.

Bob Miller <bxmiller@texas.netNOSPAM> wrote in message
news:<bosrpv4mf43g1avgi3bfp0i5cl38aqorhq@4ax.com>...
> On Sun, 26 Oct 2003 19:58:27 -0500 (EST), "Somebody Somewhere"
> <Me@My.Computer> wrote:
>
> > My White
> >ancestors didn't create this nation of free men so some fudgepacking
> >liberal pervert could pass legislation to cancel our Constitutionally
> >guaranteed right of free speech.
>
> I guess you've never read the constitution. It does not in any way
> guarantee you free speech. It only says, "The Congress shall enact no
> laws abridging a citizen's freedom of speech." There's nothing in
> there that says fellow-citizens cannot criticize you, and even punish
> you, for what you say. (Try telling your boss to go jump, and see how
> much your constitution protects you.)
>
> Bob
> k5qwg

3216. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:44:22 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bnkf7j$2tr$1@news1.kornet.net>
Source record: 105886
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:wUinb.8674$FI2.959@newsread1.news.atl.earthlink.net...
> Yes indeed. I was in a rush. Having re-read YOUR post I tender my
apology.
> For the rest.....I stand by my statements. And I don't hide from anyone
> later....eh "Private" ???
>
> Dan/W4NTI

Thank you. Apology graciously accepted.

Take care, and stay well.

Lighten up, life is short. :)

3217. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:55:04 UTC
From: wa8ulx@aol.com
Message-ID: <20031027205504.27494.00000169@mb-m04.aol.com>
Source record: 105887

>Let it go Bruce. The liberals say this crap all the time.

I know Dan, I was just trying to catch one of them so I could Piss him off more.

3218. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 01:58:37 UTC
From: wa8ulx@aol.com
Message-ID: <20031027205837.27494.00000170@mb-m04.aol.com>
Source record: 105888

>Cecil is a Liberal? Just because he doesn't come from that Muslim
>state, Al Abama, and doesn't agree with you doesn't make him a
>Liberal.
>73,
>Tom Donaly, KA6RUH
>

There you go Dan, another west coast fruit cake going to explain things to you.
Hey Tom, the only thing that comes out of California is Fruits and Nuts, which
one are you?

3219. Re: packet in south texas??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 02:21:57 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <rgkrpvsl8aiqa6uh3ra69hcivc30a4tu4v@4ax.com>
Source record: 105944

On Sat, 25 Oct 2003 09:24:37 -0500, kc5cqa@yahoo.com wrote:

> I am looking for a 'group,or website' with input on packet in the
>San Antonio tex area, ??? thanks in advance. cl 73

I've heard some on the San Antonio repeaters mention there's a group
of packet folks on, I believe, 145.01 mhz. Not sure how active they
are, but you might try monitoring that frequency.

Bob
k5qwg

3220. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 02:22:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnkjsg$e8l$1@titan.btinternet.com>
Source record: 105889
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
> Lighten up, life is short. :)
>
==========================

Specially if you're a suicide bomber! ;o)
```

3221. Antenna Design Programs

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 02:37:55 UTC
From: R P Haviland <bobh@iag.net>
Message-ID: <7Eknb.6916$X22.5635@newsread2.news.atl.earthlink.net>
Source record: 105890

I hav posted a number ofantenna design programs on http://home.iag.net/~bobh
Comments welcome to bobh@iag.net
W4MB

3222. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 02:39:54 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bnkifn$793$1@news1.kornet.net>
Source record: 105891
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnkjsg$e8l$1@titan.btinternet.com...
> > Lighten up, life is short. :)
> >
> ==========
>
> Specially if you're a suicide bomber! ;o)
>
>

Now THOSE GUYS really need to lighten up.. :)

3223. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 02:45:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnkl90$f6f$1@hercules.btinternet.com>
Source record: 105892
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Without the slightest doubt, the remainder of the world's population views USA citizens as being the most God-fearing, law-abiding, civilised, generous, democratised citizens sharing this tiny, over-populated Globe of ours.

3224. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 03:08:12 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bnkk4o$979$1@news1.kornet.net>
Source record: 105893
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnkl90$f6f$1@hercules.btinternet.com...
> Without the slightest doubt, the remainder of the world's population views
> USA citizens as being the most God-fearing, law-abiding, civilised,
> generous, democratised citizens sharing this tiny, over-populated Globe of
> ours.
>

That statement IS tongue-in-cheek, right? By far the largest part of the world's population no doubt doesn't view us at all, doesn't even (or barely does) know we exist (billions in India and China). Of those that do know we exist, most see us as decadent, Godless, and hedonistic. And, thanks to the press at large, that we live in fear of criminals taking our lives and property (and that our guns only make this worse).

Some (those that are allowed to know from whence comes their aid) see us as generous. Those that know our basic political system (without the embelishment of their local government propaganda) see us as democratized, though most poor countries see us otherwise.

Just my observation of the world press.. YMMV

3225. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 03:51:32 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <8JInb.144$qL1.29557896@newssvr21.news.prodigy.com>
Source record: 105894
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310271741.4e9399c9@posting.google.com...
> Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
> will think twice before making racist remarks on these groups.

I haven't made any racist remarks. What I have done is to characterize arabs as "rag-heads"... That is not a racial slur and could not be, as there is no "arab race". There are a number of arab tribes though, characterized by the habit of wearing a rag on their heads. You can call it anything you like, but it's still a rag to me. Get the picture?

You are right about one thing. If I were ever tempted to make a racist remark, I would most certainly think twice. The situation never comes up though, so I guess its a moot point, isn't it?

If arabs wish to be respected, they'll just have to do like everybody else and start acting respectably. The best, most accurate description I have heard of the various arab "governments" today characterizes them as "crapulent kleptocracies".... Between that, the insistence upon anti-american propaganda in the arabs schools (where they exist), the mistreatment of arab and enslaved foriegn women by cowardly, vile arab men, and the refusal to stop supporting civilization's terrorist enemies, there's just not a lot to respect in arab culture. It stinks from top to bottom.

That's my opinion. If you don't like it, come up with one of your own. But please - stop whining and snapping like a cur when confronted with opinions that you do not like to hear. Try to pick up a little manhood, somewhere.

Charles Brabham, N5PVL

3226. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:04:02 UTC
From: tdonaly@aol.com
Message-ID: <20031027230402.07974.00000259@mb-m13.aol.com>
Source record: 105895

wa8ulx wrote,
>
>
>>Cecil is a Liberal? Just because he doesn't come from that Muslim
>>state, Al Abama, and doesn't agree with you doesn't make him a
>>Liberal.
>>73,
>>Tom Donaly, KA6RUH
>>
>
>There you go Dan, another west coast fruit cake going to explain things to
>you.
> Hey Tom, the only thing that comes out of California is Fruits and Nuts,
>which
>one are you?
>

Boy! That's an old one. Haven't heard it in years. Oh, well, one of these
days we'll have to send Arnold down South to teach y'all how to: drink
triple lattes, practice yoga, eat healthy (give up them grits), quit chewin'
Red Man chewin' tobacco (how can you grope the ladies with tobacco
juice streamin' down your chin?), apply neck whitener, get good grades,
live in $800,000.00 tract houses, scrape by on $100,000.00 a year
(after you've been laid off your $300,000.00 a year job),
drive a Mercedes Benz, and practice New Age Religion.
That'll teach you.
73,
Tom Donaly, KA6RUH

3227. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:08:29 UTC
From: tdonaly@aol.com
Message-ID: <20031027230829.07974.00000260@mb-m13.aol.com>
Source record: 105896

Groundwave wrote,
>
>
>Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
>will think twice before making racist remarks on these groups. I
>still can't believe they wrote it and may actually think that way.
>
>In any case, DANIEL! you are in your late fifties for crying out loud.
> Grow up! What would your 4 children and 5 grandchildren think.
>There must be more than a couple black or arab people in Anniston
>Alabama, think of how they would feel if they knew what you wrote.
>You have done some nice work in Anniston, don't pee it all away over
>some racist remarks. Applogize or at the very least keep it to
>yourself.

No, no, no! Don't ask them to change. They won't, anyway, and
besides, they're among the last of their kind.
73,
Tom Donaly, KA6RUH

3228. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:16:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9dee37$1_2@corp.newsgroups.com>
Source record: 105897

JGBOYLES wrote:
>>Maybe I should publish an article entitled
>>"ALL Eight HF Bands from One Dipole". :-)
>
> You already published an article on this in Antennex. Did you get paid? Or do
> they, as I suspect, just publish stuff. It was W6RCA's multiband dipole, or
> something similar.

Hi Gary, I gave my permission to use anything on my web page.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3229. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:21:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9def5a_2@corp.newsgroups.com>
Source record: 105898

Dan/W4NTI wrote:
> The reality is
> that EVERYONE is related to EVERYONE on the planet.

That's why you are so much like your cousins. You and they
are still fighting The Crusades. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3230. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:23:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9deff3$1_2@corp.newsgroups.com>
Source record: 105899

Reg Edwards wrote:

> The moral is - DON'T USE A G5RV.
>
> Specially one with any coax in the feedline.
>
> If you've bought one, you've been robbed.

It's a pretty good antenna for 80m, 40m, & 20m. My web page shows how the "matching section" gives a pretty good match to coax on 80m and 40m. Mine also worked well on 12m.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3231. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:39:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9df39d$1_2@corp.newsgroups.com>
Source record: 105900

Tdonaly wrote:
> Cecil is a Liberal? Just because he doesn't come from that Muslim
> state, Al Abama, and doesn't agree with you doesn't make him a
> Liberal.

Cecil is a Libertarian - a social liberal and economic conservative,
who realizes that Christians, Jews, and Moslems all worship the
same God-head (the Supreme Being) i.e. Jehovah, Yahweh, and Allah are
the same God-head. Jesus probably publicly prayed to God in Aramaic
and if so, he no doubt addressed God by the name of "Allah".
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3232. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:44:23 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <bosrpv4mf43g1avgi3bfp0i5cl38aqorhq@4ax.com>
Source record: 105949

On Sun, 26 Oct 2003 19:58:27 -0500 (EST), "Somebody Somewhere"
<Me@My.Computer> wrote:

> My White
>ancestors didn't create this nation of free men so some fudgepacking
>liberal pervert could pass legislation to cancel our Constitutionally
>guaranteed right of free speech.

I guess you've never read the constitution. It does not in any way
guarantee you free speech. It only says, "The Congress shall enact no
laws abridging a citizen's freedom of speech." There's nothing in
there that says fellow-citizens cannot criticize you, and even punish
you, for what you say. (Try telling your boss to go jump, and see how
much your constitution protects you.)

Bob
k5qwg

3233. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 04:59:10 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bnlq3k$12jjnj$2@ID-189073.news.uni-berlin.de>
Source record: 105907
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Scary, isn't it???

Ryan KC8PMX

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:BiUmb.5642$FI2.887@newsread1.news.atl.earthlink.net...
> Dang Clint....Im amazed...We actually agree on the important things.
>
> Dan/W4NTI
>
> "Clint" <rattlehead at computron dot net> wrote in message
> news:vpnuq4c6f04gb9@corp.supernews.com...
> > Most politically correct types are. They are a gutless, spineless
> > breed that hide behind everything possible and when it's safe
> > to come out of thier holes, they snipe and take pot shots at
> > everything that is good and decent, if not just anything
> > that doesn't fit thier sleazy, terrible, hate-filled agenda.
> >
> > N.O.W., Earth First!, the ACLU and other yellow bellied
> > organizations like that are now quickly losing all clout and
> > political strength they have because they have gone to
> > the well of jealousy & race conflict just one time to many
> > to drink from, and now thier paying the price.
> >
> > Good riddance to bad rubbish.
> >
> > Clint
> >
> > --
> >
> >
> > "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> > news:bngrgi$8289$1@news3.infoave.net...
> > > If your so proud of your politically correct stance, why the heck are
> you
> > > posting behind a screen name?
> > >
> > > You are a low life bastard posting addresses of those you disagree
with
> ,
> > > while hiding in the dark.
> > >

> > >
> > > "Private" <groundwave@telus.net> wrote in message
> > > news:eb867ae8.0310260739.20e91357@posting.google.com...
> > > > I cannot believe these two posts below. Charles D. Braham, you are
> > > > worse then Dan L. Jeswald who started the thread making racist
> > > > remarks. You guys just don't get it do you, where does it stop?
> > > > Arabs? Black people? Both of you are discusting....
> > >
> > >
> >
> >
>
>

3234. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 06:15:03 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0310272215.1dbf91ef@posting.google.com>
Source record: 105901
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bnkl90$f6f$1@hercules.btinternet.com>...
> Without the slightest doubt, the remainder of the world's population views
> USA citizens as being the most God-fearing, law-abiding, civilised,
> generous, democratised citizens sharing this tiny, over-populated Globe of
> ours.

RE,

In 'reality' TROTW's view is much simpler.
- - - They (USofA) Got It.
- - - We Want It !

~ RHF

3235. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 06:33:07 UTC
From: tdonaly@aol.com
Message-ID: <20031028013307.22548.00000158@mb-m25.aol.com>
Source record: 105902

Charles wrote,
>
>I haven't made any racist remarks. What I have done is to characterize arabs
>as "rag-heads"... That is not a racial slur and could not be, as there is no
>"arab race". There are a number of arab tribes though, characterized by the
>habit of wearing a rag on their heads. You can call it anything you like,
>but it's still a rag to me. Get the picture?
>

That's right, how can calling a large subset of the human race by a
derogatory name possibly be racist? You sure take the cake, Charles.
Nobody expects you to be a T.E. Lawrence, but you're going to have to
try harder than that. Arabs are already respected all over the globe.
If you don't know why, you haven't been paying attention.
73,
Tom Donaly, KA6RUH

3236. Re: WHAT GOES AROUND COMES AROUND

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 06:57:24 UTC
From: artunwin <aunwin1934@tahoo.com>
Message-ID: <vUdnb.43503$gi2.12969@fed1read01>
Source record: 105955

I have read the antennex articles on antennas. What they are describing is
the attachment of a loop with a variable capacitor to a radiator.This I
discussed in my patent writings as well as an example of such with the
combination loop/dipole on this newsgroup some years ago.
The experts on THIS newsgroup attacked this concept vehamatly but you will
see that Antennex is insinuating that the concept is new plus they are
forming liasons with antenna manufacturers. This is a darn sight worse than
what QST did in that any review by the antennex group can well be seen as
self serving. I would rather stay with this newsgroup even tho I do not
agree with the experts all the time because in the main they ay are honestly
felt comments. In San Diego and ashes are now falling on the house so who
knows what is going to happen
Art Unwin KB9MZ XG
"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:trNmb.26165$9E1.83485@attbi_s52...
> He was right!! All USEFUL things had been invented!
>
> What he ignored was all those non-useful things waiting to be invented.
>
> :-)
>
> CW wrote:
>
> > I suppose in your mind, everything useful has already been invented. All
> > further development work should now cease as we no longer need anything
new.
> > Seems there was a member of congress during the 1800s that thought the
same
> > thing. He proposed eliminating the patent office as all things useful
had
> > already been invented.
> >
> >
> > "VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
> > news:20031023113255.00731.00000026@mb-m12.aol.com...
> >
> >>Geez, why go through all that effort? AES has a fine selection of
antennas
> >>already invented! :)
> >>=-
> >>73! de Andy KC2SSB - WPYI880 (GMRS)
> >>Beachwood, NJ USA! Grid FM29vw
> >>http://vhfradiobuff.tripod.com
> >

> >
> >
>

3237. Re: Two Bands from One Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 07:18:38 UTC
From: artunwin <aunwin1934@tahoo.com>
Message-ID: <ncenb.43631$gi2.17012@fed1read01>
Source record: 105958

Good idea ! I could then follow up with an article for

ROTATABLE all band antennas.

But Alas, both Cecil and I are not members of the antenna article/ printers cartel which leaves us only the Internet and 73 Magazine which antenna experts are vehemantely against.
So you will have to be content with Cecil's page or wait for ANTENNEX when 'things that go around comes around'
(Read that thread as well)
Regards
Art Unwin
In Poway San Diego and sitting tight!

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f9c1558_8@corp.newsgroups.com...
> Lloyd Mitchell wrote:
> > Congratulations to Marc Tarplee N4UFP, SC Technical Coordinator for his
> > article entitled "Two Bands from One Dipole" that was published in the
> > November 2003 issue of QST on page 46!
>
> Maybe I should publish an article entitled
> "ALL Eight HF Bands from One Dipole". :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3238. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 12:11:38 UTC
From: Tim <tim.mcc@tesco.net>
Message-ID: <3f9e5c88$1_1@mk-nntp-2.news.uk.tiscali.com>
Source record: 105903
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Carl R. Stevenson" <wk3cqth@wk3c.com> wrote in message
news:mqN4b.212$vj4.34148@nnrp1.ptd.net...
> BS .. you ARE a curmudgeon, as evidenced by your attitude.
>
> You are CERTAINLY not representative of ME ... and from
> my experience you are only representative of the WORST
> side (the "dark side of the force," if you will) of ham radio.
>
> You truly deserve the Wouff Hong.
>
> Carl - wk3c
>
> >
> > Carl R. Stevenson <wk3cqth@wk3c.com> wrote in message
> > news:SSI4b.169$vj4.28751@nnrp1.ptd.net...
> > > Don't let the curmudgeons here dissuade you. They are NOT
> representative
> > > of ALL hams ... there are many of us who welcome newcomers and want
> > > to help them become active, productive hams.
> > >
> > > Carl - wk3c
> >
> >
> >
>

Just an update I am now M3EYP and hope to be taking my intermediate in the
next month or so.

73's

Tim M3EYP

3239. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 12:24:35 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <bnln2g$11lgh3$1@ID-140397.news.uni-berlin.de>
Source record: 105904
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

"Tim" <tim.mcc@tesco.net> wrote in message
news:3f9e5c88$1_1@mk-nntp-2.news.uk.tiscali.com...
> >
>
> Just an update I am now M3EYP and hope to be taking my intermediate in the
> next month or so.
>

Well done Tim and welcome to the hobby. You may find some useful material
for your IL studies at: www.amateurradiotraining.org.uk

Eight more local M3s passed their Intermediate Exam at the Phoenix Radio
Club yesterday and most start studying next week for the new RAE- along with
a previous 'batch' of 2Es- next week.

The club is also running a another FL course, provisional date early
December.

Good luck with the IL!
--
73
Brian
G8OSN
www.g8osn.org.uk
www.amateurradiotraining.org.uk for FREE training material for the UK
Foundation and Intermediate Licences
www.phoenixradioclub.org.uk - a RADIO club specifically for those wishing
to learn more about amateur radio

3240. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 12:37:49 UTC
From: "MattD.." <mattd@despammed.com>
Message-ID: <bnlnut$12tm6c$3@ID-117672.news.uni-berlin.de>
Source record: 105905
Cross-posted to: alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur

Deep in the forest in the dark of night on Tuesday 28 October 2003 12:24 pm,
with a cackle and an evil grin, Brian Reay cast another eye of newt into
the brew and chanted:

> Well done Tim and welcome to the hobby. You may find some useful material
> for your IL studies at: www.amateurradiotraining.org.uk

Ah, that's where you've hidden it. I'll update the web pages now!

--
MattD..

3241. Re: 1.2GHz Antena projects wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 12:53:28 UTC
From: Atlas <shf@pandora.eb>
Message-ID: <cFtnb.1134$vv3.101824570@hebe.telenet-ops.be>
Source record: 105906

just look at this site

http://f5ad.free.fr/ANT-QSP_Menu.htm

3242. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 14:17:00 UTC
From: "Airy.R.Bean." <me@privacy.net>
Message-ID: <3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 105908
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

uk.rec.radio.cb is where you need to be. A licence that is
obtainable from scratch after only two days' effort is not a
Ham Licence.

You have been examined on your ability to operate a rig.
CBers are not stupid such that they need to pass an exam before
operating their rigs.

Tim <tim.mcc@tesco.net> wrote in message
news:3f9e5c88$1_1@mk-nntp-2.news.uk.tiscali.com...
> Just an update I am now M3EYP and hope to be taking my intermediate in the
> next month or so.

3243. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 14:47:35 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bnlvi9$17aq$1@f04n12.cac.psu.edu>
Source record: 105910

Hi:
That could be DON'T USE A 80M DIPOLE ON 160. I put up some dipoles for the PAQSO party and I wanted something better than a 80m dipole and a tuner on 160m. So I put up a fan dipole with one of the dipoles a loaded dipole (shortened to 200') for 160m.
Before I did that I had one of my local friends look at my signal strength on my 80m dipole and tuner.
The new antenna was resonate with low SWR in the part of the band used by the PAQSO party and when we did the same check, the new antenna was 25db stronger. Why was that? Modeling the 80m dipole on 160m, it showed a Z of 9.2-J1127 Ohms at 1.85MHz. Using the program TL with a 9913 type feedline at a length of 135' showed an excess loss due to the high SWR of 14.5db. Then going to the tuner part of the TL program it calculated a loss of 6.8db through the tuner for a total loss of 21.3db through the system. This is very close to what we measured, completely in the within the margin of error of the simple measurement like we did. More importantly I could hear band noise that I could never hear before. Feeding it with open wire line would have worked much better as the excess loss in the feed line would have be 1.8db with 5.2db loss in the tuner for a total loss of 7.01db. But with my loaded dipole I need no tuner in the part of the band I operated in. The losses in the loading coil are about 1db so my total system loss is less than 2db, which is better than a 80m dipole and tuner, or even one feed with open wire line and a tuner. It just shows there are no free lunches in antennas and every chouse comes with a cost, in my case it's bandwidth and loss in loading coils. I looked at the various kinds of antennas I could use, picked what would work best for me.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9deff3$1_2@corp.newsgroups.com...
> Reg Edwards wrote:
>
> > The moral is - DON'T USE A G5RV.
> >
> > Specially one with any coax in the feedline.
> >
> > If you've bought one, you've been robbed.
>
> It's a pretty good antenna for 80m, 40m, & 20m. My web page shows
> how the "matching section" gives a pretty good match to coax on
> 80m and 40m. Mine also worked well on 12m.

> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3244. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 14:48:41 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <bnlvk8$12tnau$1@ID-201868.news.uni-berlin.de>
Source record: 105909
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Airy.R.Bean." <me@privacy.net> wrote in message
news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com...
> uk.rec.radio.cb is where you need to be. A licence that is
> obtainable from scratch after only two days' effort is not a
> Ham Licence.
>
> You have been examined on your ability to operate a rig.
> CBers are not stupid such that they need to pass an exam before
> operating their rigs.
>
What's the matter now, Airy? Couldn't you even qualify for a CB licence? I'm
told you're expected to know your name, that must have given you a problem.
(_!_)

3245. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 14:52:26 UTC
From: Martin <mabmrtn.delete.this@icqmail.com>
Message-ID: <3f9e82bb$0$112$65c69314@mercury.nildram.net>
Source record: 105911
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Airy.R.Bean." <me@privacy.net> wrote in message
news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com...
> uk.rec.radio.cb is where you need to be. A licence that is
> obtainable from scratch after only two days' effort is not a
> Ham Licence.
>
> You have been examined on your ability to operate a rig.
> CBers are not stupid such that they need to pass an exam before
> operating their rigs.

"I have consistently encouraged all comers, irrespective of their previous
pastime, be it playing football, supporting football, needlework, fishing,
M3/CB Radio, or whatever, to take an interest in the technical pursuit that
is Ham Radio and to apply themselves by self-training to take and pass the
RAE."

>
> Tim <tim.mcc@tesco.net> wrote in message
> news:3f9e5c88$1_1@mk-nntp-2.news.uk.tiscali.com...
> > Just an update I am now M3EYP and hope to be taking my intermediate in
the
> > next month or so.
>

Martin (G8FXC)

3246. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 15:36:53 UTC
From: richardharrison@webtv.net
Message-ID: <3559-3F9E8D15-54@storefull-2316.public.lawson.webtv.net>
Source record: 105913

Richard wrote:
"I have access to a 65 ft. water well that I could install a radial in."

A radio wave traveling along the surface of the earth has its electric lines of force tilted slightly forward so that the direction of propagation is tilted slightly downward. The earth is a poor conductor as compared with copper. The earth absorbs and dissipates some of the wave`s energy.

Skin effect is the phenomenon of high-frequency current concentration on a conductor`s surface. Skin effect applies to earth as it applies to copper, butthe

3247. Re: Voltage/Current at the end of a dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 15:39:12 UTC
From: jder8745@aol.com
Message-ID: <20031028103912.22414.00000242@mb-m18.aol.com>
Source record: 105912

"So what's the voltage across the 1k resistor?"

It's whatever my ideal voltmeter reads when it's connected across the ends of the 1-kOhm resistor.

Jack

3248. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 16:15:50 UTC
From: richardharrison@webtv.net
Message-ID: <3558-3F9E9636-188@storefull-2316.public.lawson.webtv.net>
Source record: 105914

Richard wrote:
"I have access to a 65 ft. water well that I could install a radial in."

A radio wave traveling along the surface of the earth has its electric lines of force tilted slightly forward so that the direction of propagation is slightly tilted downward. The earth is a poor conductor as compared with copper. The earth absorbs and dissipates some of the wave`s energy.

Skin effect is the phenomenon of high-frequency current concentration on a conductor`s surface. Skin effect applies to earth as it applies to copper, but the penetration depth depends on wavelength and resistivity of the conductor. At 1 MHz, r-f penetrates copper to an effective depth of only 0.0026 in.. The effective skin thiclkness (penetration depth) in the earth depends on its dielectric constant. In ordinary soil the dielectric constant may be 15 and may vary with moisture in the soil. Water has a dielectric constant of about 80. Very dry soil may have a dielectric constant of only 2 to 5. Soil conductivity varies from 1 mmho to 40 mmhos.

At I MHz, the effective skin thickness of the earth, with good soil conductivity of 36 mmhos per meter, is about 8.5 feet. At a soil conductivity of 6 mmhos per meter it is 20 feet. For a poor conductivity of 1 mmho per meter the skin thickness of the earth is about 50 feet at 1 MHz.

Sea water has a dielectric constant of 80, and has an effective skin thickness at 1 MHz of 0.738 feet.

Skin effect thickness varies inversely with the square root of frequency.

Point is that contact with the soil at a 65-foot well depth is not important at h-f, as r-f current flow at h-f is mostly confined to the surface of the earth. Skin effect will confine the r-f path from the water surface at the bottom of the well to the surface of the well bore back out of the well to the surface of the earth around the well, if the r-f can be caused to go down the well at all. Highly conductive radials at the surface are the key to an effective ground for h-f unless you are lucky enough to be in close contact with water in the sea..

Best regards, Richard Harrison, KB5WZI

3249. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 16:29:06 UTC
From: richardharrison@webtv.net
Message-ID: <3557-3F9E9952-414@storefull-2316.public.lawson.webtv.net>
Source record: 105915

Sorry I fat fingered the wrong button sending off an incomplete post.

I read the "Organic Reflective Elements for the Simple Dipole" in April 1973 "OST" It`s the issue with M. Walter Maxwell`s picture on page 35. There is no connection between these stories in "QST".

The place for a story such as the reflecting water-filled trenchs would have been in "Radio-Craft".

Best regards, Richard Harrison, KB5WZI

3250. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:32:18 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <CKxnb.9902$FI2.4894@newsread1.news.atl.earthlink.net>
Source record: 105916
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

It ended when the Muslims of this world decided to attack and kill
Westerners, just because they were Westerners.

It was further solidified by 9/11.

Mr. Bush is not correct on this issue. It is a war against Muslims. And,
guess what? we will win it. They will not be allowed to infiltrate this
country and destroy it from within. It was tried by the Communists, and
they failed.

The Muslims started it. We will end it.

Have a nice day

Dan/W4NTI

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0310271712.1dc25fbc@posting.google.com...
> What ever happened to the American ideal
> Freedom of Religeon?
> IF you are American and rebel against what we stand for
> what religeon is it that you advocate that all must adhere to
> so that they are not to be killed ?
> Are there any other citizens of this country that you disagree
> which you advocate their demise?
> Art Unwin
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<B1enb.6361$X22.1983@newsread2.news.atl.earthlink.net>...
> > "Ed Price" <edprice@cox.net> wrote in message
> > news:D_8nb.94447$La.1500@fed1read02...
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> > > > No surprise here. Thats how they all are. On the other hand, I
don't
> > > > hide. And I stand by what I said. And I could care less if that
puke
> > likes
> > > > it or not.
> > > >
> > > Just in case you don't get it...Try this one. I have advocated
from

> > the
> > > > git-go, before 9/11 which re-inforced my belief, that all the
worlds
> > > > ragheads need to be given a free ticket to Mecca, where we can test
our
> > > > newest tactical nuke.
> > > >
> > > > Like that? Too bad.
> > > >
> > > > Dan/W4NTI
> > >
> > >
> > > Saw a great bumper sticker the other day:
> > >
> > > How Did All Our Oil Get Under Their Sand?
> > >
> > >
> > > Ed
> > > wb6wsn
> > >
> >
> > He he he he he.......Talk loudly and carry a big stick. Bout time the
USA
> > started kicking some ass.
> >
> > Dan/W4NTI

3251. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:33:34 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <OLxnb.9903$FI2.7361@newsread1.news.atl.earthlink.net>
Source record: 105917
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

NO ONE tells me what to think, and damn sure don't tell me what to say. I
stand by what I said, and will say.

Dan/W4NTI

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310271741.4e9399c9@posting.google.com...
> Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
> will think twice before making racist remarks on these groups. I
> still can't believe they wrote it and may actually think that way.
>
> In any case, DANIEL! you are in your late fifties for crying out loud.
> Grow up! What would your 4 children and 5 grandchildren think.
> There must be more than a couple black or arab people in Anniston
> Alabama, think of how they would feel if they knew what you wrote.
> You have done some nice work in Anniston, don't pee it all away over
> some racist remarks. Applogize or at the very least keep it to
> yourself.
>
> Bob Miller <bxmiller@texas.netNOSPAM> wrote in message
news:<bosrpv4mf43g1avgi3bfp0i5cl38aqorhq@4ax.com>...
> > On Sun, 26 Oct 2003 19:58:27 -0500 (EST), "Somebody Somewhere"
> > <Me@My.Computer> wrote:
> >
> > > My White
> > >ancestors didn't create this nation of free men so some fudgepacking
> > >liberal pervert could pass legislation to cancel our Constitutionally
> > >guaranteed right of free speech.
> >
> > I guess you've never read the constitution. It does not in any way
> > guarantee you free speech. It only says, "The Congress shall enact no
> > laws abridging a citizen's freedom of speech." There's nothing in
> > there that says fellow-citizens cannot criticize you, and even punish
> > you, for what you say. (Try telling your boss to go jump, and see how
> > much your constitution protects you.)
> >
> > Bob
> > k5qwg

3252. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:35:40 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <MNxnb.9906$FI2.7127@newsread1.news.atl.earthlink.net>
Source record: 105918
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:8Jlnb.144$qL1.29557896@newssvr21.news.prodigy.com...
>
> "Private" <groundwave@telus.net> wrote in message
> news:eb867ae8.0310271741.4e9399c9@posting.google.com...
> > Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
> > will think twice before making racist remarks on these groups.
>
> I haven't made any racist remarks. What I have done is to characterize
arabs
> as "rag-heads"... That is not a racial slur and could not be, as there is
no
> "arab race". There are a number of arab tribes though, characterized by
the
> habit of wearing a rag on their heads. You can call it anything you like,
> but it's still a rag to me. Get the picture?
>
> You are right about one thing. If I were ever tempted to make a racist
> remark, I would most certainly think twice. The situation never comes up
> though, so I guess its a moot point, isn't it?
>
> If arabs wish to be respected, they'll just have to do like everybody else
> and start acting respectably. The best, most accurate description I have
> heard of the various arab "governments" today characterizes them as
> "crapulent kleptocracies".... Between that, the insistence upon
> anti-american propaganda in the arabs schools (where they exist), the
> mistreatment of arab and enslaved foriegn women by cowardly, vile arab
men,
> and the refusal to stop supporting civilization's terrorist enemies,
there's
> just not a lot to respect in arab culture. It stinks from top to bottom.
>
> That's my opinion. If you don't like it, come up with one of your own. But
> please - stop whining and snapping like a cur when confronted with
opinions
> that you do not like to hear. Try to pick up a little manhood, somewhere.
>
> Charles Brabham, N5PVL
>
>

Very good Charles, I am proud of you.

Dan/W4NTI

3253. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:38:24 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <kQxnb.9908$FI2.1929@newsread1.news.atl.earthlink.net>
Source record: 105819
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Yes it is Ryan....I'm still discombodulated.

Dan/W4NTI

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:bnlq3k$12jjnj$2@ID-189073.news.uni-berlin.de...
> Scary, isn't it???
>
> Ryan KC8PMX
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:BiUmb.5642$FI2.887@newsread1.news.atl.earthlink.net...
> > Dang Clint....Im amazed...We actually agree on the important things.
> >
> > Dan/W4NTI
> >
> > "Clint" <rattlehead at computron dot net> wrote in message
> > news:vpnuq4c6f04gb9@corp.supernews.com...
> > > Most politically correct types are. They are a gutless, spineless
> > > breed that hide behind everything possible and when it's safe
> > > to come out of thier holes, they snipe and take pot shots at
> > > everything that is good and decent, if not just anything
> > > that doesn't fit thier sleazy, terrible, hate-filled agenda.
> > >
> > > N.O.W., Earth First!, the ACLU and other yellow bellied
> > > organizations like that are now quickly losing all clout and
> > > political strength they have because they have gone to
> > > the well of jealousy & race conflict just one time to many
> > > to drink from, and now thier paying the price.
> > >
> > > Good riddance to bad rubbish.
> > >
> > > Clint
> > >
> > > --
> > >
> > >
> > > "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> > > news:bngrgi$8289$1@news3.infoave.net...
> > > > If your so proud of your politically correct stance, why the heck
are
> > you

> > > > posting behind a screen name?
> > > >
> > > > You are a low life bastard posting addresses of those you disagree
> with
> > ,
> > > > while hiding in the dark.
> > > >
> > > >
> > > > "Private" <groundwave@telus.net> wrote in message
> > > > news:eb867ae8.0310260739.20e91357@posting.google.com...
> > > > > I cannot believe these two posts below. Charles D. Braham, you
are
> > > > > worse then Dan L. Jeswald who started the thread making racist
> > > > > remarks. You guys just don't get it do you, where does it stop?
> > > > > Arabs? Black people? Both of you are discusting....
> > > >
> > > >
> > >
> > >
> >
> >
>
>

3254. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:43:19 UTC
From: F1LBY <phil>
Message-ID: <3f9eaa3e$0$106$65c69314@mercury.nildram.net>
Source record: 105820
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:bnlvk8$12tnau$1@ID-201868.news.uni-berlin.de...

> What's the matter now, Airy? Couldn't you even qualify for a CB licence?
I'm
> told you're expected to know your name, that must have given you a
problem.
> (_!_)

Of course he qualifies for a CB licence Frank. Doh! You don't need to pass a
test to use 27MHz!! All you have to do is fill in a form..... ah - a flaw in
my argument - to do that, reading and writing are a pre-requisite......

Incidentally, the RLC have no record of anyone named Airy R. Bean which
means he must be a pirate.

Rgds

M0PSH

3255. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:45:16 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <MWxnb.29876$IA2.1088977@twister.southeast.rr.com>
Source record: 105821
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Too bad that, by attacking Iraq, he attacked one of the most secular of
Arabic countries. There are now more Al Qaida in Iraq than before.

What Iraq had to do with 9/11 I'll never understand.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:CKxnb.9902$FI2.4894@newsread1.news.atl.earthlink.net...
> It ended when the Muslims of this world decided to attack and kill
> Westerners, just because they were Westerners.
>
> It was further solidified by 9/11.
>
> Mr. Bush is not correct on this issue. It is a war against Muslims. And,
> guess what? we will win it. They will not be allowed to infiltrate this
> country and destroy it from within. It was tried by the Communists, and
> they failed.
>
> The Muslims started it. We will end it.
>
> Have a nice day
>
> Dan/W4NTI
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0310271712.1dc25fbc@posting.google.com...
> > What ever happened to the American ideal
> > Freedom of Religeon?
> > IF you are American and rebel against what we stand for
> > what religeon is it that you advocate that all must adhere to
> > so that they are not to be killed ?
> > Are there any other citizens of this country that you disagree
> > which you advocate their demise?
> > Art Unwin
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<B1enb.6361$X22.1983@newsread2.news.atl.earthlink.net>...

> > > "Ed Price" <edprice@cox.net> wrote in message
> > > news:D_8nb.94447$La.1500@fed1read02...
> > > >
> > > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > > news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> > > > > No surprise here. Thats how they all are. On the other hand, I
> don't
> > > > > hide. And I stand by what I said. And I could care less if that
> puke
> > > likes
> > > > > it or not.
> > > > >
> > > > > Just in case you don't get it...Try this one. I have advocated
> from
> > > the
> > > > > git-go, before 9/11 which re-inforced my belief, that all the
> worlds
> > > > > ragheads need to be given a free ticket to Mecca, where we can
test
> our
> > > > > newest tactical nuke.
> > > > >
> > > > > Like that? Too bad.
> > > > >
> > > > > Dan/W4NTI
> > > > >
> > > > >
> > > > Saw a great bumper sticker the other day:
> > > > >
> > > > How Did All Our Oil Get Under Their Sand?
> > > > >
> > > > >
> > > > Ed
> > > > wb6wsn
> > > > >
> > > >
> > > He he he he he.......Talk loudly and carry a big stick. Bout time
the
> USA
> > > started kicking some ass.
> > >
> > > Dan/W4NTI
> >
>

3256. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:45:56 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <oXxnb.9916$FI2.1272@newsread1.news.atl.earthlink.net>
Source record: 105822

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031027230829.07974.00000260@mb-m13.aol.com...
> Groundwave wrote,
> >
> >
> >Looks like Daniel L. Jeswald (W4NTI) and Charles D. Braham (N5PVL)
> >will think twice before making racist remarks on these groups. I
> >still can't believe they wrote it and may actually think that way.
> >
> >In any case, DANIEL! you are in your late fifties for crying out loud.
> > Grow up! What would your 4 children and 5 grandchildren think.
> >There must be more than a couple black or arab people in Anniston
> >Alabama, think of how they would feel if they knew what you wrote.
> >You have done some nice work in Anniston, don't pee it all away over
> >some racist remarks. Applogize or at the very least keep it to
> >yourself.
>
> No, no, no! Don't ask them to change. They won't, anyway, and
> besides, they're among the last of their kind.
> 73,
> Tom Donaly, KA6RUH
>
>
Not so, liberal puke. Your on your last legs. Look out your window. See
that smoke ? Its gods way of telling you to straighten out.

Dan/W4NTI

3257. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:48:08 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <sZxnb.9919$FI2.5731@newsread1.news.atl.earthlink.net>
Source record: 105823

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031028013307.22548.00000158@mb-m25.aol.com...
> Charles wrote,
> >
> >I haven't made any racist remarks. What I have done is to characterize
arabs
> >as "rag-heads"... That is not a racial slur and could not be, as there is
no
> >"arab race". There are a number of arab tribes though, characterized by
the
> >habit of wearing a rag on their heads. You can call it anything you like,
> >but it's still a rag to me. Get the picture?
> >
>
> That's right, how can calling a large subset of the human race by a
> derogatory name possibly be racist? You sure take the cake, Charles.
> Nobody expects you to be a T.E. Lawrence, but you're going to have to
> try harder than that. Arabs are already respected all over the globe.
> If you don't know why, you haven't been paying attention.
> 73,
> Tom Donaly, KA6RUH
>
>

Yes indeed 'Arabs are respected all over the earth'. By who Bin Laden,
Arafat, So Damn Insane? The Isralies? I hate to tell you Tom, but if the
'world' had its way the so called respected Arabs would all go hunt for
their virgins in their afterlife.

And if the so called respected Arabs keep screwing around they will get
their wish.

Dan/W4NTI

3258. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:51:14 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <m0ynb.9923$FI2.1241@newsread1.news.atl.earthlink.net>
Source record: 105824

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031027201025.20996.00000325@mb-m07.aol.com...
> Dan wrote,
> >
> >
> >"WA8ULX" <wa8ulx@aol.com> wrote in message
> >news:20031026193448.25837.00000143@mb-m05.aol.com...
> >> >What's COOL and Justified is the fact that you are genetically
> >> >related to the very race that you are putting down.
> >> >--
> >> >73, Cecil http://www.qsl.net/w5dxp
> >>
> >> And which RACE is that?
> >
> >Let it go Bruce. The liberals say this crap all the time. The reality
is
> >that EVERYONE is related to EVERYONE on the planet. That is true whether
> >one believes in the biblical account or the scientific one. So, forget
it.
> >Its just one more game they enjoy playing.
> >
> >Dan/W4NTI
> >
>
> Cecil is a Liberal? Just because he doesn't come from that Muslim
> state, Al Abama, and doesn't agree with you doesn't make him a
> Liberal.
> 73,
> Tom Donaly, KA6RUH
>
>

Hey Tom,

You wouldn't last ten minutes in Alabama. We know how to deal with fruit
and nuts folks.

Dan/W4NTI

3259. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:52:44 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <M1ynb.9926$FI2.9048@newsread1.news.atl.earthlink.net>
Source record: 105825

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031027230402.07974.00000259@mb-m13.aol.com...
> wa8ulx wrote,
> >
> >
> >>Cecil is a Liberal? Just because he doesn't come from that Muslim
> >>state, Al Abama, and doesn't agree with you doesn't make him a
> >>Liberal.
> >>73,
> >>Tom Donaly, KA6RUH
> >>
> >
> >There you go Dan, another west coast fruit cake going to explain things
to
> >you.
> > Hey Tom, the only thing that comes out of California is Fruits and Nuts,
> >which
> >one are you?
> >
>
> Boy! That's an old one. Haven't heard it in years. Oh, well, one of these
> days we'll have to send Arnold down South to teach y'all how to: drink
> triple lattes, practice yoga, eat healthy (give up them grits), quit
chewin'
> Red Man chewin' tobacco (how can you grope the ladies with tobacco
> juice streamin' down your chin?), apply neck whitener, get good grades,
> live in $800,000.00 tract houses, scrape by on $100,000.00 a year
> (after you've been laid off your $300,000.00 a year job),
> drive a Mercedes Benz, and practice New Age Religion.
> That'll teach you.
> 73,
> Tom Donaly, KA6RUH
>
>

Just bring it on down here Tom. We will be happy to 'educate' you.

Dan/W4NTI

3260. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:53:50 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <O2ynb.9928$FI2.8110@newsread1.news.atl.earthlink.net>
Source record: 105826

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031027205504.27494.00000169@mb-m04.aol.com...
> >Let it go Bruce. The liberals say this crap all the time.
>
> I know Dan, I was just trying to catch one of them so I could Piss him off
> more.

This is more fun than the cbplussers.

Dan/W4NTI

3261. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 17:55:02 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <W3ynb.9930$FI2.1678@newsread1.news.atl.earthlink.net>
Source record: 105827

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9def5a_2@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > The reality is
> > that EVERYONE is related to EVERYONE on the planet.
>
> That's why you are so much like your cousins. You and they
> are still fighting The Crusades. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

No Cecil, I am not fighting the crusades. I could care less about man made religions. What I am fighting for is the survival of my and your country. And I'll do whatever is needed to help.

Dan/W4NTI

3262. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 18:12:42 UTC
From: tdonaly@aol.com
Message-ID: <20031028131242.22368.00000288@mb-m02.aol.com>
Source record: 105828

Dan wrote,
>
>The Muslims started it. We will end it.
>
>Have a nice day
>
>Dan/W4NTI

"We?" You mean a bunch of rural Southern boys like you? If that's the case, my money is on the Muslims. You fellows lost the Civil War, the race war, and you'll lose the religious war. You can't even keep a statue of the ten commandments in the Alabama statehouse because everyone's against you. Give up. You can't win. You're wrong. You've already lost. It's over. Quit.
73,
Tom Donaly, KA6RUH

3263. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 18:14:21 UTC
From: wa8ulx@aol.com
Message-ID: <20031028131421.14254.00000303@mb-m29.aol.com>
Source record: 105829

>Just bring it on down here Tom. We will be happy to 'educate' you.
>
>Dan/W4NTI

Have him stop in Louisanna first Dan, will take him out in the swamps, and send whats left over to you.

3264. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 18:19:01 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <pqynb.107$Qa4.87@newssvr14.news.prodigy.com>
Source record: 105830
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:MWxnb.29876$IA2.1088977@twister.southeast.rr.com...
> Too bad that, by attacking Iraq, he attacked one of the most secular of
> Arabic countries. There are now more Al Qaida in Iraq than before.
>
> What Iraq had to do with 9/11 I'll never understand.
>

Having gone through one 9-11, we went took steps designed to forestall us having to go through another. Of course it is much more complicated than that, but you'll find that this basic motivation is always there.

If you are having trouble understanding these issues, then you are probably reading the wrong news sources. Shop around and look for better sources of information. Round-file the ones you are using now. They're not doing the job.

Charles Brabham, N5PVL

3265. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 18:26:34 UTC
From: tdonaly@aol.com
Message-ID: <20031028132634.22368.00000289@mb-m02.aol.com>
Source record: 105831

Ol' Dan wrote,
>
>Not so, liberal puke. Your on your last legs. Look out your window. See
>that smoke ? Its gods way of telling you to straighten out.
>
>Dan/W4NTI

If it is, He's doing it in His usual strange way. The areas that are going up in smoke include some of the most conservative Republican strongholds in the nation. I expect there are a lot of conservative Hams who are down there right now doing everything they can to help people while you're sitting around your Alabama dodo's nest croaking about God's will.
73,
Tom Donaly, KA6RUH

3266. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 18:28:27 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <fzynb.19587$v82.1324862@twister.southeast.rr.com>
Source record: 105832
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Just think, had we focused on Bin Laden, the one actually responsibly for
9/11, instead of running off on some wild war based on a perceived threat,
we might already have the true culprit.

I swore to myself I wouldn't get involved in this thread, but, being
attracted to Ham Radio because of the supposed international handshakes, I'm
a sucker for trying to get along with the rest of the world.

Alan
WN4HOG
--
Windsurfing Club: http://www.ibscc.org

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:pqynb.107$Qa4.87@newssvr14.news.prodigy.com...
>
> "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> news:MWxnb.29876$IA2.1088977@twister.southeast.rr.com...
> > Too bad that, by attacking Iraq, he attacked one of the most secular of
> > Arabic countries. There are now more Al Qaida in Iraq than before.
> >
> > What Iraq had to do with 9/11 I'll never understand.
> >
>
> Having gone through one 9-11, we went took steps designed to forestall us
> having to go through another. Of course it is much more complicated than
> that, but you'll find that this basic motivation is always there.
>
> If you are having trouble understanding these issues, then you are
probably
> reading the wrong news sources. Shop around and look for better sources of
> information. Round-file the ones you are using now. They're not doing the
> job.
>
> Charles Brabham, N5PVL
>
>

3267. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 20:06:35 UTC
From: Geoff <somebody@nospam.demon.co.uk>
Message-ID: <bnmi8b$j0b$1$8300dec7@news.demon.co.uk>
Source record: 105833
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Airy.R.Bean." <me@privacy.net> wrote in
news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com:

> uk.rec.radio.cb is where you need to be. A licence that is
> obtainable from scratch after only two days' effort is not a
> Ham Licence.

Excuse me, I spent one evening swotting up on licencing regulations and passed the C & G RAE the next evening. This was at my first attempt, "from scratch" as you describe it. Thus I have a proper amateur licence, and have held it for 30+ years. If you are saying my licence is not a "Ham Licence", I would agree, but not in the sense that I believe you to mean.

Geoff

3268. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:00:12 UTC
From: tdonaly@aol.com
Message-ID: <20031028160012.23966.00000136@mb-m21.aol.com>
Source record: 105834

Dan wrote,
>
>
>Hey Tom,
>
>You wouldn't last ten minutes in Alabama. We know how to deal with fruit
>and nuts folks.
>
>Dan/W4NTI
>
>

Yep, when logic fails, which it always does with your kind, you resort to threats, and bluster. Well, I'll quit pickin' on you boys. I'll leave you to your Red Man, your shotguns, and the sheets you fellas like to dress up in at night. It's almost, but not quite, too bad you're a disappearing breed; you've formed a colorful, if dismal, part of American history.
Take care, and 73,
Tom Donaly, KA6RUH

3269. Re: array of magnetic loops

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:01:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <O9edneFW5vSNRAOiRVn-ig@comcast.com>
Source record: 105835

"John" <john@NOSPAMPLEASEclavin.freeserve.co.uk> wrote in message
news:bnjo88$721$1@news8.svr.pol.co.uk...
....
Why dont
> wellbrook or MFJ incorporate noise cancellers into their RX magnetic
loops?
> It would make sense.
>
> Thanks Reg,
>
> 73s John.
That's an extra cost option! Both MFJ and Timewave sell noise cancellers
that let you vary the amplitude and phase of the second (noise) antenna.
Priced at around U$200.

Tam/WB2TT

3270. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:31:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9ee0e1_1@corp.newsgroups.com>
Source record: 105836

Dan/W4NTI wrote:
> Yes indeed 'Arabs are respected all over the earth'. By who Bin Laden,
> Arafat, So Damn Insane? The Isralies? I hate to tell you Tom, but if the
> 'world' had its way the so called respected Arabs would all go hunt for
> their virgins in their afterlife.

Some of Intel's best engineers are "ragheads" and very nice guys
to boot.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3271. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:35:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9ee1c4_1@corp.newsgroups.com>
Source record: 105837

Dan/W4NTI wrote:
> What I am fighting for is the survival of my and your country.
> And I'll do whatever is needed to help.

Well, you can start by condemning criminals, not religions or
ethnic groups. Did you know most of the people in prison in
the US are Christians?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3272. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:42:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9ee35f_1@corp.newsgroups.com>
Source record: 105838

WA8ULX wrote:
> Have him stop in Louisanna first Dan, will take him out in the swamps, and send
> whats left over to you.

"Wonder where the Louisiana sheriff went to,"
"You can sure get lost in the Louisiana Bayou."

What was the one-armed guy's name in that song?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3273. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:46:17 UTC
From: Michalkun <buranko2000@yahoo.com>
Message-ID: <Xns9422A0BD53F60michalkunyahoocom@130.133.1.4>
Source record: 105839

Alan P. Biddle <APBIDDLE@ATT.NET> wrote in
news:t8vkpv8lblga94td4btjar8vdjthvhqrcp@4ax.com:

> Any recommendations on a good, or bad, tuner for use with balanced
> antennas? That is, one which does not use a balun? It doesn't need
> to be an auto-tuner. There are a few from small suppliers, and I see
> the MFJ in their latest catalog has what is touted as a modernized
> Johnson Matchbox.
>

I thought if your antenna is balanced then you don't need a tuner or balun.

3274. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:56:25 UTC
From: tdonaly@aol.com
Message-ID: <20031028165625.28301.00000267@mb-m10.aol.com>
Source record: 105840

Cecil wrote,
>
>
>Some of Intel's best engineers are "ragheads" and very nice guys
>to boot.
>--
>73, Cecil http://www.qsl.net/w5dxp

Yep. Same at Lockheed.
73,
Tom Donaly, KA6RUH

3275. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 21:59:59 UTC
From: wa8ulx@aol.com
Message-ID: <20031028165959.05939.00000269@mb-m11.aol.com>
Source record: 105841

>Some of Intel's best engineers are "ragheads" and very nice guys
>to boot.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

Whats so great about Intel

3276. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 22:42:49 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnmrd7$bh3b$1@news3.infoave.net>
Source record: 105842

Cecil, with all do respect, I do nor see Christians or members of other groups on the nightly news exhorting the death of all Americans.

We have become so sensitized to the feeling of others, that we are now doing it to our detriment.

My son is a helicopter pilot with the MFO in Sharm El Sheik Egypt . He daily flys medivac missions to hospitals in Israel, carrying the mangled bodies of Arab children and adults that are injured by a fanatic trying to kill at least one Jew. They are oblivious to the collateral damage they are causing.

How, with out unjustly being called a racist, would you refer to these folks?

The word terrorist, describes only an action, not the derivation of the perpetrator. Today, any finer definition than terrorist brings the politically correct out of the woodwork and springing to the keyboards like the Pharisees of old.

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3f9ee1c4_1@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > What I am fighting for is the survival of my and your country.
> > And I'll do whatever is needed to help.
>
> Well, you can start by condemning criminals, not religions or
> ethnic groups. Did you know most of the people in prison in
> the US are Christians?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3277. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 22:55:11 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <krCnb.87760$5n.61996@bignews5.bellsouth.net>
Source record: 105843

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnkeg7$703$1@hercules.btinternet.com...
> The moral is - DON'T USE A G5RV.

Yup! I bought one in the late 80s and found that it was the craziest acting
thing I had ever used! It most often
drove my Yaesu tuner bonkers; other times it would
settle down to an "acceptable" SWR. I fiddled with it
for a summer, and finally threw it out. I then made me a
75 M doublet fed with ladder line. ....it's still up there.

Jerry
K4KWH
>
> Specially one with any coax in the feedline.
>
> If you've bought one, you've been robbed.
>
> Use a random length dipole, longer than about 1/3 of the wavelength at the
> lowest frequency of interest. Choose a length which makes best use of the
> size of your backyard. Take the 450 or 600-ohm balanced line all the way
> back to the shack. You will need a tuner and a choke balun at the tuner.
> For multi-band operation you will need a tuner whatever you do.
>
> If you find it inconvenient to feed the dipole in the middle, and you have
a
> relatively low local noise level, then feed it at one end and make an
> Inverted-L of it. It will then very likely work very well also on 160
> metres.
>
> And you will never think of using a G5RV again !
>
> By the way - Louis Varney, G5RV, a real genuine English gentleman, now
no
> longer with us, designed his antenna to work most efficiently ONLY on
14.15
> MHz, perhaps the best day-or-night, all-year-round, any part of the
sun-spot
> cycle, DX frequency. It's very good. And you may not need tuner even with
> the coax. Works great with the old fashioned TS-520 with its built-in
tuner
> !
> ----
> Reg, G4FGQ
>

>
>

3278. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:05:43 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net>
Source record: 105844
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

You could search the entire world and not find a better place to fight terrorists. A major sandbox surrounded by ragheads that need their ass kicked.

Bush is a genius. Rummy is a genius. You will see.

Let me ask you this; Would you rather have these ragheads blowing up Boston?

Dan/W4NTI

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message news:MWxnb.29876$IA2.1088977@twister.southeast.rr.com...
> Too bad that, by attacking Iraq, he attacked one of the most secular of
> Arabic countries. There are now more Al Qaida in Iraq than before.
>
> What Iraq had to do with 9/11 I'll never understand.
>
> Alan
> WN4HOG
>
> --
> Windsurfing Club: http://www.ibscc.org
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:CKxnb.9902$FI2.4894@newsread1.news.atl.earthlink.net...
> > It ended when the Muslims of this world decided to attack and kill
> > Westerners, just because they were Westerners.
> >
> > It was further solidified by 9/11.
> >
> > Mr. Bush is not correct on this issue. It is a war against Muslims. And,
> > guess what? we will win it. They will not be allowed to infiltrate this
> > country and destroy it from within. It was tried by the Communists, and
> > they failed.
> >
> > The Muslims started it. We will end it.
> >
> > Have a nice day

> >
> > Dan/W4NTI
> >
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0310271712.1dc25fbc@posting.google.com...
> > > What ever happened to the American ideal
> > > Freedom of Religeon?
> > > IF you are American and rebel against what we stand for
> > > what religeon is it that you advocate that all must adhere to
> > > so that they are not to be killed ?
> > > Are there any other citizens of this country that you disagree
> > > which you advocate their demise?
> > > Art Unwin
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:<B1enb.6361$X22.1983@newsread2.news.atl.earthlink.net>...
> > > > "Ed Price" <edprice@cox.net> wrote in message
> > > > news:D_8nb.94447$La.1500@fed1read02...
> > > > >
> > > > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in
message
> > > > > news:DhUmb.5641$FI2.3249@newsread1.news.atl.earthlink.net...
> > > > > > No surprise here. Thats how they all are. On the other hand,
I
> > don't
> > > > > > hide. And I stand by what I said. And I could care less if
that
> > puke
> > > > > likes
> > > > > > it or not.
> > > > > >
> > > > > > Just in case you don't get it...Try this one. I have advocated
> > from
> > > > > the
> > > > > > git-go, before 9/11 which re-inforced my belief, that all the
> > worlds
> > > > > > ragheads need to be given a free ticket to Mecca, where we can
> test
> > our
> > > > > > newest tactical nuke.
> > > > > >
> > > > > > Like that? Too bad.
> > > > > >
> > > > > > Dan/W4NTI
> > > > > >
> > > > > >
> > > > > > Saw a great bumper sticker the other day:
> > > > > >
> > > > > > How Did All Our Oil Get Under Their Sand?
> > > > > >

> > > > >
> > > > > Ed
> > > > > wb6wsn
> > > > > >
> > > > >
> > > > > He he he he he.......Talk loudly and carry a big stick. Bout time
> the
> > USA
> > > > > started kicking some ass.
> > > > >
> > > > > Dan/W4NTI
> >
> >
>
>

3279. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:07:27 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <PECnb.7915$X22.172@newsread2.news.atl.earthlink.net>
Source record: 105845
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

In todays climate many countries are not worth getting too friendly with.
We are at war. Govern yourself accordingly. Know your enemy.

Dan/W4NTI

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:fzynb.19587$v82.1324862@twister.southeast.rr.com...
> Just think, had we focused on Bin Laden, the one actually responsibly for
> 9/11, instead of running off on some wild war based on a perceived threat,
> we might already have the true culprit.
>
> I swore to myself I wouldn't get involved in this thread, but, being
> attracted to Ham Radio because of the supposed international handshakes,
I'm
> a sucker for trying to get along with the rest of the world.
>
> Alan
> WN4HOG
> --
> Windsurfing Club: http://www.ibscc.org
>
>
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:pqynb.107$Qa4.87@newssvr14.news.prodigy.com...
> >
> > "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> > news:MWxnb.29876$IA2.1088977@twister.southeast.rr.com...
> > > Too bad that, by attacking Iraq, he attacked one of the most secular
of
> > > Arabic countries. There are now more Al Qaida in Iraq than before.
> > >
> > > What Iraq had to do with 9/11 I'll never understand.
> > >
> >
> > Having gone through one 9-11, we went took steps designed to forestall
us
> > having to go through another. Of course it is much more complicated than
> > that, but you'll find that this basic motivation is always there.
> >
> > If you are having trouble understanding these issues, then you are
> probably
> > reading the wrong news sources. Shop around and look for better sources

of
> > information. Round-file the ones you are using now. They're not doing
the
> > job.
> >
> > Charles Brabham, N5PVL
> >
> >
>
>

3280. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:13:04 UTC
From: wa8ulx@aol.com
Message-ID: <20031028181304.22447.00000195@mb-m25.aol.com>
Source record: 105846

>You could search the entire world and not find a better place to fight
>terrorists. A major sandbox surrounded by ragheads that need their ass
>kicked.
>
>Bush is a genius. Rummy is a genius. You will see.
>
>Let me ask you this; Would you rather have these ragheads blowing up
>Boston?
>
>Dan/W4NTI
>

Dan these Clowns on here whinning would rather "KISS a TREE" then do whats right.

3281. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:19:53 UTC
From: Dan Richardson <ChangeThisToCallSign@mendolink.com>
Message-ID: <0autpvk7ptf5jdt3ldm91g2a1hedotu4ma@4ax.com>
Source record: 105849

On 28 Oct 2003 21:46:17 GMT, Michalkun <buranko2000@yahoo.com> wrote:

>I thought if your antenna is balanced then you don't need a tuner or balun.

How do you suggest to connect your transmitter's unbalance output to a
balanced antenna system?

Danny
K6MHE

3282. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:24:24 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310281524.2ae0958c@posting.google.com>
Source record: 105847
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<yI%mb.4442$X22.1003@newsread2.news.atl.earthlink.net>...
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3f9c1825_8@corp.newsgroups.com...
> > Dan/W4NTI wrote:
> > > Just in case you don't get it...Try this one. I have advocated from
> the
> > > git-go, before 9/11 which re-inforced my belief, that all the worlds
> > > ragheads need to be given a free ticket to Mecca, where we can test our
> > > newest tactical nuke.
> >
> > Does that include the "ragheads" in your family tree?
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
> >
> >
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
>
> Yep....if they believe killing thousands of innocents on 9/11/01 was a good
> thing, they need to be gone. Any other stupid questions?
>
> Oh BTW.....I don't think folks from Italy, France and the Cheerokee nation
> are ragheads.
>
> Dan/W4NTI

Interesting that you mentioned the Indian Nations
The tactics that America is supporting against Islam is the same
tactics that we used to take Indian land away and killing all
"savages" I.E. the only good Indian is a dead Indian and delay
retribution by smoking so called peace pipes.
This is exactly what we are doing in the MidEast. We are supplying
missles and weapons of death as we erase villages from the maps, herd
what is left into refugee camps formerly reservations, build on their
land under cover of peace talks (we have doubled the houses and
population in the West Bank in the last ten years) and we condone the
killing of all those who object to the land stealing or the
confiscation of the holy places. These so called savages pray three

times a day where we are schooled to pray once per week and thus are superior.
The one thing that we havent thought thru (The rest of the world has but we have easily prevented any interference in our plans by virtue of a U.N. veto.)
We in America has still not recognised that we are outnumbered with respect to Islam and yet ask for assistance from those who we continualy push aside.
We will continue to see non conventianal fighting by those we tread on and continue to take the stance that they must stop resisting take over of their posessions so that then and only then we can talk about things not withstanding that we will continue to steal while we engage in stalling talks.
Since these people refuse to lie down stay still and be quiet while we do our thing some of our christian brothers advocate the use of nuclear weapons to finish off all that show resistance. We have done it before while we said we are a christian country so if the foundations of christianity have not changed
we have the same excuse to do it again. Bush has stated " bring them on " and he is more than willing to hold on to the coats of those are willing to fight
for him instead of our Country. How many years will it take for us to realise
that we cannot kill off all those that disagree with us without receiving retribution of some sort that will destroy our own way of life and thus kill off our own beginnings.

Remember we have many who follow the faith of Islam thru out our country.
To prove that they are loyal Americans can we ask them to give up their faith
without retribution ? What will the modern christian do if the tables are eventualy reversed ?
How sad it is to see the return of body bags because of our crushing of other religeons for our own material gain.
Art Unwin KB9MZ...XG

An American by choice which is quite different to the loudmouths who prefer violence and yet are only Americans by the accident of birth with no allegiance to true Americas ideals

to

3283. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-28 23:34:31 UTC
From: wa8ulx@aol.com
Message-ID: <20031028183431.14077.00000364@mb-m29.aol.com>
Source record: 105848

>Interesting that you mentioned the Indian Nations
>The tactics that America is supporting against Islam is the same
>tactics that we used to take Indian land away and killing all
>"savages" I.E. the only good Indian is a dead Indian and delay
>retribution by smoking so called peace pipes.

Get Real, I have lived and worked on the RES, for 7 Years in the past, you have no IDEA what your talking about.

3284. What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 00:18:17 UTC
From: wizard12342002@yahoo.com
Message-ID: <a3232cc0.0310281618.1c226f88@posting.google.com>
Source record: 105850

This may at first sound like a stupid question. But after some years as a radio enthusiast, I don't know what a radio wave is - what it really is. Supposedly, modern physics does not believe there is such a thing as "action at a distance". In other words, if you launch a radio wave and I intercept it, there must be a transfer of "stuff" between you and me. You can't just say that if I wiggle an electron at point A, I can cause a wiggle at the same wiggle rate at point B. I mean you can say it, but it doesn't explain anything.

OK, so the latest science says that electromagnetic energy is really particle-waves. I guess this means that when I transmit, my antenna is firing particles in the form of low-energy photons (energy packets), and that these photons do not really exist anywhere but exist only as probability waves - until, of course, someone intercepts the wave. Then, magically, the photons appear at the receiving antenna, in which they manage to produce oscillating electrons.

So, the best I can ascertain is that radio waves are really probability waves. I'm not sure that really helps with an intuitive understanding. Does anyone have a good description for what a radio wave really is?

- JJ

3285. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 00:40:00 UTC
From: tdonaly@aol.com
Message-ID: <20031028194000.28301.00000272@mb-m10.aol.com>
Source record: 105851

JJ wrote,
>
>So, the best I can ascertain is that radio waves are really
>probability waves. I'm not sure that really helps with an intuitive
>understanding. Does anyone have a good description for what a radio
>wave really is?
>
>- JJ
>

Yes, go ask your question on sci.physics.electromag and you'll get
some answers, although I can't guarantee they'll be of any use to you.
73,
Tom Donaly, KA6RUH

3286. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 00:44:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpu3ddn7r7oqd0@corp.supernews.com>
Source record: 105852

The assumption that the skin depth varies inversely as the square root of frequency is valid only for good conductors. Most types of soil fit this category only at low frequencies, with the transition falling on or near the HF range. For example, average soil (conductivity of 5 mS/m, dielectric constant of 13) behaves like a conductor only below about 7 MHz. Above that, it's more like an insulator, where the skin depth stays constant with frequency. Here are the skin depths in feet for average soil at various frequencies:

0.25 MHz 47.6
0.5 MHz 34.2
1 MHz 25.0
2 MHz 19.0
4 MHz 15.4
7 MHz 13.8
10 MHz 13.2
100 MHz 12.6
1 GHz 12.6

There's a very good discussion of this in Kraus' _Electromagnetics_.

This doesn't alter Richard's conclusion that radials near the surface make a much better ground than a single vertical conductor or "connection" to ground.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Richard wrote:
> "I have access to a 65 ft. water well that I could install a radial in."
>
> A radio wave traveling along the surface of the earth has its electric
> lines of force tilted slightly forward so that the direction of
> propagation is slightly tilted downward. The earth is a poor conductor
> as compared with copper. The earth absorbs and dissipates some of the
> wave`s energy.
>
> Skin effect is the phenomenon of high-frequency current concentration on
> a conductor`s surface. Skin effect applies to earth as it applies to
> copper, but the penetration depth depends on wavelength and resistivity
> of the conductor. At 1 MHz, r-f penetrates copper to an effective depth
> of only 0.0026 in.. The effective skin thiclkness (penetration depth) in
> the earth depends on its dielectric constant. In ordinary soil the
> dielectric constant may be 15 and may vary with moisture in the soil.
> Water has a dielectric constant of about 80. Very dry soil may have a
> dielectric constant of only 2 to 5. Soil conductivity varies from 1 mmho

> to 40 mmhos.
>
> At I MHz, the effective skin thickness of the earth, with good soil
> conductivity of 36 mmhos per meter, is about 8.5 feet. At a soil
> conductivity of 6 mmhos per meter it is 20 feet. For a poor conductivity
> of 1 mmho per meter the skin thickness of the earth is about 50 feet at
> 1 MHz.
>
> Sea water has a dielectric constant of 80, and has an effective skin
> thickness at 1 MHz of 0.738 feet.
>
> Skin effect thickness varies inversely with the square root of
> frequency.
>
> Point is that contact with the soil at a 65-foot well depth is not
> important at h-f, as r-f current flow at h-f is mostly confined to the
> surface of the earth. Skin effect will confine the r-f path from the
> water surface at the bottom of the well to the surface of the well bore
> back out of the well to the surface of the earth around the well, if the
> r-f can be caused to go down the well at all. Highly conductive radials
> at the surface are the key to an effective ground for h-f unless you are
> lucky enough to be in close contact with water in the sea..
>
> Best regards, Richard Harrison, KB5WZI
>

3287. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 01:04:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpu4hm1r8qmice@corp.supernews.com>
Source record: 105853

A radio wave is an electromagnetic field. On my first day of fields class, I asked the professor what an electromagnetic field was. His reply: "An electromagnetic field is a mathematical model that enables us to explain certain phenomena which we can measure." The professor was Carl T. A. Johnk. I have in front of me his text, _Engineering Electromagnetic Fields and Waves_. On page 1, it says, "A field is taken to mean a mathematical function of space and time."

"Stuff" isn't transferred from one place to another by electromagnetic fields, but energy most definitely is. Force can be applied through space from one place to another by means of an electromagnetic field, and energy can be transferred by means of a field. Since the energy contained in a field can be calculated, I'll go out on a limb and say that a radio wave can be regarded as a form of energy, like heat or falling water. Perhaps a purist or physicist can find grounds to argue with that statement, it's certainly a valid concept for engineering purposes.

As far as photons and waves go, be really, really careful in extending your everyday experience to quantum mechanical objects. Feynman very nicely illustrates in "Quantum Behavior" in his book _Six Easy Pieces_ that neither particles nor waves is adequate to describe such things:

"Things on a very small scale behave like nothing that you have any direct experience about. They do not behave like waves, they do not behave like particles, they do not behave like clouds, or billiard balls, or weights on springs, or like anything that you have ever seen. . . Historically, the electron, for example, was thought to behave like a particle, and then it was found that in many resepects it behaved like a wave. So it really behaves like neither. Now we have given up. We say: 'It is like *neither*'"

I highly recommend this book, and other of his writings, if you're interested in understanding these phenomena on a more basic level.

Roy Lewallen, W7EL

jj wrote:
> This may at first sound like a stupid question. But after some years
> as a radio enthusiast, I don't know what a radio wave is - what it
> really is. Supposedly, modern physics does not believe there is such
> a thing as "action at a distance". In other words, if you launch a
> radio wave and I intercept it, there must be a transfer of "stuff"
> between you and me. You can't just say that if I wiggle an electron
> at point A, I can cause a wiggle at the same wiggle rate at point B.
> I mean you can say it, but it doesn't explain anything.

>
> OK, so the latest science says that electromagnetic energy is really
> particle-waves. I guess this means that when I transmit, my antenna
> is firing particles in the form of low-energy photons (energy
> packets), and that these photons do not really exist anywhere but
> exist only as probability waves - until, of course, someone intercepts
> the wave. Then, magically, the photons appear at the receiving
> antenna, in which they manage to produce oscillating electrons.
>
> So, the best I can ascertain is that radio waves are really
> probability waves. I'm not sure that really helps with an intuitive
> understanding. Does anyone have a good description for what a radio
> wave really is?
>
> - JJ

3288. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 02:03:40 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <16-dnaFXLI91ggKiRVn-iQ@comcast.com>
Source record: 105854

> "Things on a very small scale behave like nothing that you have any
> direct experience about. They do not behave like waves, they do not
> behave like particles, they do not behave like clouds, or billiard
> balls, or weights on springs, or like anything that you have ever seen.

I love that part, and I always picture Ed Norton of the Honeymooners.. :)

I picture it more or less, as sort of a tide in the wheeler foam, changing
the probabilities.

Works for me..

3289. Re: Balanced Tuner for Balanced Antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 02:08:56 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <wK2dnfBEPf65vAKiRVn-uw@comcast.com>
Source record: 105855

>
> I thought if your antenna is balanced then you don't need a tuner or
balun.

Why would you think that?

3290. Re: Sommer Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 02:49:45 UTC
From: Ronald Walters <rwalters8@cfl.rr.com>
Message-ID: <dVFnb.52164$RP2.16373@twister.tampabay.rr.com>
Source record: 105856

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:6509-3F9D9DBC-40@storefull-2317.public.lawson.webtv.net...
> David Thompson wrote:
> "Back in the early 90`s Lew McCoy reveiwed the small Sommer in CQ
> Magazine."
>
> I found a Lew McCoy review of the Sommer XP506 in the April 1986 edition
> of CQ starting on page 42. Lew cobcludes with: "If I sound enthusiastic
> about the XP506, I am, and I will really be surprised if this system
> doesn`t revolutionize multiband beam systems.
>
> Here are the introductory prices for the various models: the XP406 is
> $514, the XP506 is $642, and the XP706 is $778. I didn`t mention the
> gain of the XP706, but it is rated at close to 9 dB on 20 meters (over a
> dipole reference).
>
> The manufacturer is Sommer GMBH, DJ2UT, Kandelstrasse 35, D-7809
> Denzlingen, West Germany, and the beams are distributed in this country
> by H.J. Theiler Corp., P.O. Box 5369, Spartenburg, SC 29304
> (803-576-5566)."
>
> The revolution may have been too dear.
>
> Best regards, Richard Harrison, KB5WZI
>
>
Richard,
Thanks for your input.

I think that the distributor has changed to:

Sommer Antennas
P.O. Box 710
Geneva, FL 32732
Phone:(407) 349-9114 | Fax: (407) 349-2485
http://www.sommerantennas.com/

Was hoping for more reports on the beam but at least we had some comments.

Thanks for everyone's input, it is appreciated

3291. MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 03:04:50 UTC
From: Ed <ed@nospam.com>
Message-ID: <gvedndOwd-vKswKiRVn-gA@comcast.com>
Source record: 105857

Hi ,

Anyone here with some hands-on experience (i.e. not speculation, thanks)
able to share their observations on this unit ?

http://www.mfjenterprises.com/products.php?prodid=MFJ-974H

Many thanks in advance

Ed

3292. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 03:27:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9f344f_8@corp.newsgroups.com>
Source record: 105858

WA8ULX wrote:

>>Some of Intel's best engineers are "ragheads" and very nice guys
>>to boot.
>
> Whats so great about Intel

My retirement, for one thing. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3293. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 03:43:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9f37f7_8@corp.newsgroups.com>
Source record: 105860

w4jle wrote:

> Cecil, with all do respect, I do nor see Christians or members of other
> groups on the nightly news exhorting the death of all Americans.

Ahhhhh, but you sometimes see Christians exhorting the death of all Jews,
Blacks, Arabs, etc. The Aryan Nation comes to mind. Timothy McVey comes
to mind. Christian terrorists are just as evil as Islamic terrorists.

> The word terrorist, describes only an action, not the derivation of the
> perpetrator. Today, any finer definition than terrorist brings the
> politically correct out of the woodwork and springing to the keyboards like
> the Pharisees of old.

If one paints with too broad a brush, one is indeed likely to get painted
with too broad a brush. If you want to say "Arab terrorist" or "Palestinian
terrorist", that's OK. They are no better or worse than an "American terrorist"
like Timothy McVey. The key word for the whole stinkin' lot of those SOBs is
"terrorist". Do you avoid condemning Timothy McVey?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3294. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 03:59:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9f3bdb$1_8@corp.newsgroups.com>
Source record: 105861

jj wrote:
> So, the best I can ascertain is that radio waves are really
> probability waves. I'm not sure that really helps with an intuitive
> understanding.

Photons behave strangely when you are dealing with one at a time. When
you are dealing with billions of photons, quantum probability predicts their
collective behavior very well. Quoting _QED_, by Feynman: "So now I present to
you the three basic actions, from which all phenomena of light (including radio
waves) and electrons arise:

-Action #1: A photon goes from place to place.
-Action #2: An electron goes from place to place.
-Action #3: An electron emits or absorbs a photon.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3295. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 04:10:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9f3e49_8@corp.newsgroups.com>
Source record: 105862

Roy Lewallen wrote:
> "Things on a very small scale behave like nothing that you have any
> direct experience about. They do not behave like waves, they do not
> behave like particles, they do not behave like clouds, or billiard
> balls, or weights on springs, or like anything that you have ever seen.
> . . Historically, the electron, for example, was thought to behave like
> a particle, and then it was found that in many resepects it behaved like
> a wave. So it really behaves like neither. Now we have given up. We say:
> 'It is like *neither*'"

OTOH, quantum physics predicts the outcomes perfectly and has never been proven wrong so it doesn't matter what we call photons. If you really want to understand this stuff, you need to read a good book on string theory. May I suggest _The_Tenth_Dimension_, by Jeremy Bernstein or catch the two NOVAs that were on tonight.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3296. Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 04:29:59 UTC
From: Wayne Shanks <wshanks@charm.net.nospam>
Message-ID: <CrGnb.32$1P3.202751@news.abs.net>
Source record: 105859
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Will Reeve wrote:
> Hi,
>
> I have an interesting project! I am using a RF receiver device which has a
> 50 Ohm RF input. I want to use a PCB printed antenna on FR4 board, not
> unusual you say. but I need to pot the whole PCB in resin to make it
> waterproof. The receiver only needs to work when floating on water! Has
> anyone any experience in PCB antenna who would be so kind to comment on the
> effects, and possible actions to counter any effects, of the potting. The
> resin is much like araldite.
>
>
>
> Any thoughts much appreciated.
>
>
>
> Will
>
>

The potting compound will act as a dielectric load. My bet is that the
dielectric constant will be about 3. Your antenna will have to shrink.
If you know the dielectric properties of the potting compound, and
your antenna is simple, then I might be able to run a simulation (and
optimization) for you with IE3D.... I work with 900 MHz antennas on FR4
every day :)

Wayne Shanks
Senior RF and Antenna Engineer, Matrics Inc.

3297. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 04:41:04 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0310282041.513bd36d@posting.google.com>
Source record: 105863

wa8ulx@aol.com (WA8ULX) wrote in message
news:<20031028183431.14077.00000364@mb-m29.aol.com>...
> >Interesting that you mentioned the Indian Nations
> >The tactics that America is supporting against Islam is the same
> >tactics that we used to take Indian land away and killing all
> >"savages" I.E. the only good Indian is a dead Indian and delay
> >retribution by smoking so called peace pipes.
>
> Get Real, I have lived and worked on the RES, for 7 Years in the past, you
> have no IDEA what your talking about.

So you have resisted smoking the peace pipe in the hope you are the
one to gain ownership of the reservation after the bombing that you
advocate is complete ! The State of Illinois borrowed $2 million last
year
for Israel in the fight against Islam. Perhaps you can donate in a
similar manner in your own state to combat the shortage of missiles to
subdue the refugee camps or at least help Bush to hold the coats of
those who are willing to die because of those who are not willing to
walk the walk but prefer to be the judges of others. The only thing
good about your presence here is the solidarity of the normal
Americans that have lined up together against the abnormal Americans
such as yourself and thus give the opportunity of others to witness
the true American spirit and way of life.
For which I thank you and hope that other humans in this world will
be gratified to see that such people like yourself are a miniscule
minority
in this great country of ours.
Now that all can see that your face has a mouth but with no teeth
we can return to the subject of antennas as the garbage collector
graciously do their job.
Art Unwin

3298. Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 05:06:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpuio3mta1gaad@corp.supernews.com>
Source record: 105864
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

If the antenna is in close proximity to water, the water's dielectric constant of about 80 will have a profound effect, as will its very high loss.

Roy Lewallen, W7EL

Wayne Shanks wrote:
> Will Reeve wrote:
>
>> Hi,
>>
>> I have an interesting project! I am using a RF receiver device which
>> has a
>> 50 Ohm RF input. I want to use a PCB printed antenna on FR4 board, not
>> unusual you say. but I need to pot the whole PCB in resin to make it
>> waterproof. The receiver only needs to work when floating on water! Has
>> anyone any experience in PCB antenna who would be so kind to comment
>> on the
>> effects, and possible actions to counter any effects, of the potting. The
>> resin is much like araldite.
>>
>>
>>
>> Any thoughts much appreciated.
>>
>>
>>
>> Will
>>
>>
>
>
> The potting compound will act as a dielectric load. My bet is that the
> dielectric constant will be about 3. Your antenna will have to shrink.
> If you know the dielectric properties of the potting compound, and your
> antenna is simple, then I might be able to run a simulation (and
> optimization) for you with IE3D.... I work with 900 MHz antennas on FR4
> every day :)
>
> Wayne Shanks
> Senior RF and Antenna Engineer, Matrics Inc.
>

3299. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 05:09:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vpuitfbtnqud6f@corp.supernews.com>
Source record: 105865

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> "Things on a very small scale behave like nothing that you have any
>> direct experience about. They do not behave like waves, they do not
>> behave like particles, they do not behave like clouds, or billiard
>> balls, or weights on springs, or like anything that you have ever
>> seen. . . Historically, the electron, for example, was thought to
>> behave like a particle, and then it was found that in many resepects
>> it behaved like a wave. So it really behaves like neither. Now we have
>> given up. We say: 'It is like *neither*'"
>
>
> OTOH, quantum physics predicts the outcomes perfectly and has never been
> proven wrong so it doesn't matter what we call photons. If you really want
> to understand this stuff, you need to read a good book on string theory.
> May
> I suggest _The_Tenth_Dimension_, by Jeremy Bernstein or catch the two NOVAs
> that were on tonight.

Is that where we'll learn all about virtual photons, the fourth
dimension, and their application to measuring voltage?

Roy Lewallen, W7EL

3300. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 05:34:54 UTC
From: groundwave@telus.net
Message-ID: <eb867ae8.0310282134.47e3015d@posting.google.com>
Source record: 105866
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I cannot believe these two clowns are still at it. I found some of their original comments and sure enough they are as racist as they come. People have a right not be discriminated against or abused because of color, race and religion etc....

If they don't stop making racist posts on this "RADIO" newsgroup I am sure people in their own town will find out about them. They will be very embarassed very soon. Keep it up Charlie and Danny... Keep it up....

> Charles D. Braham (N5PVL)
> Rt 2 Box 46
> Lyford TX
> 78569
> >
> > Asked about his astounding success in mowing down thousands of screaming
> > raghead fanatics with very few casualties (sound familiar?) , the Israeli
> > general agreed to give the reporter the exclusive secret to his
> > unprecedented military success...
> >
> > "Fight Arabs." he said.
> >
> > Charles Brabham, N5PVL

> Daniel L. Jeswald
> 89 Wildman Road
> Anniston AL
> 36201
>
> > Wouldn't surprise me a bit. I thought from the git-go that Iraq would turn
> > into a quagmire. Unfortunatly for those fighting the fight, it is serving a
> > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > Idaho.
> >
> > As for your political commentary. As far as I'm concerned the Democratic
> > party left me when they turned it over to NOW and Phyliss.
> >
> > That does NOT mean I support Baby Bush 100%. However lets see how things
> > go.
> >
> > Dan/W4NTI

3301. Re: Sommer Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 05:42:10 UTC
From: richardharrison@webtv.net
Message-ID: <24942-3F9F5332-215@storefull-2315.public.lawson.webtv.net>
Source record: 105867

Ronald Walters wrote:
"Was hoping for more comments on the beam but at least we had some comments."

Go to e Ham. net for many more comments on the Sommer XP Series. I only read the first few but those echoed Lew McCoy`s review. Ronald should read the comments for himself and not accept hearsay from me.

Best regards, Richard Harrison, KB5WZI

3302. Re: 1.2GHz Antena projects wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 06:54:01 UTC
From: richardharrison@webtv.net
Message-ID: <24941-3F9F6409-565@storefull-2315.public.lawson.webtv.net>
Source record: 105868

Antonio wrote:
"And can someone send me some projects of antennas for 1.2 Ghz ----"

Microwave antennas can be scaled-down versions of lower frequency antennas. But microwave path loss is greater and transmitter power is often lower. Often microwaves are used for wider bandwidth signals because they can easily handle it, as a fixed percentage of the higher carrier frequency is more Hertz. A wideband receiver needs more signal for quieting than does a narrowband receiver.

Highly directional antennas can be physically small at microwave frequencies and are practical when microwave is used for fixed point to point service. A narrow azimuth of coverage is usually desirable for improved signal to noise, so the narrow beamwidth is no problem for point to point.

Radio beams can be highly concentrated by a parabolic reflector. The most common is the paraboloid of revolution with an antenna illuminating the reflector at its focal point. Antenna gain depends on reflector size in wavelengths. Gain grows with reflector size and shorter wavelengths.

Parabolic antenna gain:

Gain = (k) (pi diameter/wavelength)squared

k is an efficiency factor, often 0.55

At 1 GHz, a 36-ft. reflector has a gain of about 7000 or 38.6 dB.

Beamwidth is:
(70 degrees)(wavelength/diameter)

Beamwidth is 1.9-degrees for 1 GHz when the reflector has a diameter of 11 Meters

At 1.2 GHz, a 3 mtr. (10 ft) dia. dish will give a gain of about 28 dB. Gains like this on both ends of a path can overcome increased losses and more received signal requirements.

Parabems & best regards, Richard Harrison, KB5WZI

3303. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 07:36:45 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <h6Knb.8455$X22.4518@newsread2.news.atl.earthlink.net>
Source record: 105769

jj:

A round about way of defining a "radio wave" is that it is just
any field function that satisfies a wave equation.

Period, end of story. No one really knows any more than that!

A wave equation is a partial differential equation of theoretical
physics which describes the dynamics of electrical and magnetic
fields. i.e. a wave equation is a simple derivation from Maxwell's
celebrated equations of electrodynamics.

In the beginning of electrodynamics there were only circuit-theoretic
concepts [Kirchoff, Ohm] which sufficed to explain many
electromagnetic phenomena.

Then later wave-theoretic concepts or wave electrodynamics [Maxwell,
Heaviside] were required to explain phenomena that circuit theory could
not explain satisfactorily [radiation, skin effect, proximity effect, etc.].
This is when the concept of radio waves as the solutions to partial
differential wave equations arose.

Then later quantum-theoretic concepts known as quantum
electrodynamics, or QED [Einstein, Dirac, Pauli, Feynman] were
required to explain phenomena that wave-theory could not explain
satisfactorily [photoelectric effect]. This is when the concept of radio
waves as a flow of particles [photons] arose.

QED is completely without intuitive analogic interperation by anything
closely related to regular human experience, like say waves. One just
has to "crank" the formulas [Feynman] and see what comes out.
Regardless, today in the first decade of the 21st century it seems that
the QED theory which is now approximately 60 years old and which
casts the "true" meaning of "radio waves" as a floww of discrete photons,
remains as the only theory that can quantitatively explain exactly all of
electromagnetic phenomena and the interaction of energy with matter.

An interesting high school level introduction and explanation of all of
this is available in the popular book on QED by one of the world's
great teaching physicists. The guy from CalTech who dipped a piece
of the Challenger rocket booster's O-ring in the glass of ice water at
the Challenger space shuttle disaster hearings.

cfr:

Richard Phillips Feynman, QED - The Strange Theory of Light and
Matter, Princeton University Press, Princeton, NJ 1985.

ISBN:0-691-02417-0 [QC793.5P422F48]

From the page 9 of the Introduction to "QED" Feynman says,
"You're not going to be able to understand it... You see my
Physics students don't understand it either. That is because
I don't understand it. Nobody does!"

Good luck with analogies to things we seem to "understand".

--
Peter K1PO
Indialantic By-the-Sea, FL.

"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0310281618.1c226f88@posting.google.com...
> This may at first sound like a stupid question. But after some years
> as a radio enthusiast, I don't know what a radio wave is - what it
> really is. Supposedly, modern physics does not believe there is such
> a thing as "action at a distance". In other words, if you launch a
> radio wave and I intercept it, there must be a transfer of "stuff"
> between you and me. You can't just say that if I wiggle an electron
> at point A, I can cause a wiggle at the same wiggle rate at point B.
> I mean you can say it, but it doesn't explain anything.
>
> OK, so the latest science says that electromagnetic energy is really
> particle-waves. I guess this means that when I transmit, my antenna
> is firing particles in the form of low-energy photons (energy
> packets), and that these photons do not really exist anywhere but
> exist only as probability waves - until, of course, someone intercepts
> the wave. Then, magically, the photons appear at the receiving
> antenna, in which they manage to produce oscillating electrons.
>
> So, the best I can ascertain is that radio waves are really
> probability waves. I'm not sure that really helps with an intuitive
> understanding. Does anyone have a good description for what a radio
> wave really is?
>
> - JJ

3304. Re: water well ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 07:46:38 UTC
From: richardharrison@webtv.net
Message-ID: <24941-3F9F705E-567@storefull-2315.public.lawson.webtv.net>
Source record: 105771

Roy Lewallen wrote:
"The assumption that the skin depth varies inversely as the square root of the frequency is valid only for good conductors. Most types of soil fit this category only at low frequencies, with the transition falling on or near the HF range."

Yes. That is correct. Terman says:
"This depth of penetration depends upon the frequency, dielectric constant, and conductivity. It ranges from a few feet at the highest frequencies used in short-wave communication to tens and hundreds of feet at broadcast and lower frequencies."

The earth resistance and capacitance are in parallel. What happens around 7 MHz and holds for higher frequencies is that the capacitive reactance of the soil becomes so low that the earth`s resistance becomes effectively bypassed and out of the circuit for the high-frequency r-f.

Best regards, Richard Harrison, KB5WZI

3305. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 07:50:39 UTC
From: Matt <pissoff@spammers.suck.com>
Message-ID: <bnnrgk$30al$1@otis.netspace.net.au>
Source record: 105770
Cross-posted to: de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

Piss off idiot

"Airy.R.Bean." <me@privacy.net> wrote in message
news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com...
> uk.rec.radio.cb is where you need to be. A licence that is
> obtainable from scratch after only two days' effort is not a
> Ham Licence.
>
> You have been examined on your ability to operate a rig.
> CBers are not stupid such that they need to pass an exam before
> operating their rigs.
>
> Tim <tim.mcc@tesco.net> wrote in message
> news:3f9e5c88$1_1@mk-nntp-2.news.uk.tiscali.com...
> > Just an update I am now M3EYP and hope to be taking my intermediate in
the
> > next month or so.
>
>
>

3306. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 09:01:23 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310290004.54083b6@posting.google.com>
Source record: 105772

Roy Lewallen <w7el@eznec.com> wrote in message news:<vpu4hm1r8qmice@corp.supernews.com>...
...
(writing about Richard Feynman's books)
> I highly recommend this book, and other of his writings, if you're
> interested in understanding these phenomena on a more basic level.

I strongly agree. You'll also find some interesting words about it in the opening pages of the "Antennas" chapter of King, Mimno and Wing's "Transmission Lines, Antennas and Waveguides."

I would go so far as to say that everything we've summarized about "radio waves" in all our writings is all just models to explain our observations. On some level, we don't really know what anything is; we just have ways to communicate about those things. We have models. Some of them seem pretty darned good, but perhaps we're just looking at the actions in one tiny corner of our multi-dimensional universe and we may find that all our models are woefully inadequate to cover the big picture. So what? They work for what we're doing right now. We can deal with the inadequacies when they arise. We can stay constantly on the lookout for them, and accept them and learn from them. A couple hundred years ago, Newtonian physics seemed adequate, and for the time, for what people were observing and designing, it was. But we've learned more, and refined our models. You should expect it will continue to happen, as long as curious humans are around to ponder the problems. In fact, just because our models are somehow "better" now than they were five years ago, or fifty, or five hundred, that doesn't necessarily mean that the earlier models are now worthless. You just need to know their limitations, and apply them only where the limitations are practically unimportant. We still use Newtonian physics for a lot of engineering work because it's not worth the effort to add relativistic terms when we know that they won't be observable, and other errors will dominate.

Cheers,
Tom

3307. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 09:01:32 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de>
Source record: 105779
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Just like you and I.... I am quite sure there are things that we will fight
to death disagreeing about, and I am sure there are some things that we will
agree on too....

My way of thinking is "Don't hate the man... hate the thoughts driving that
man....." As Cecil stated, for the most part I am also closely aligned to
the Libertarian party, which is even more "right wing" than the
Republicrats, but I do believe in the basic human rights issues. I don't
hate all Arabs.... just the fundamental/orthodox ones like Osama, and the
others responsible for 9/11 and other related events.

--
Ryan KC8PMX

Some people are like Slinkies . . . not really good for anything, but you
still can't help but smile when you see one tumble down the stairs.

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:kQxnb.9908$FI2.1929@newsread1.news.atl.earthlink.net...
> Yes it is Ryan....I'm still discombodulated.
>
> Dan/W4NTI
>
> "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> news:bnlq3k$12jjnj$2@ID-189073.news.uni-berlin.de...
> > Scary, isn't it???
> >
> > Ryan KC8PMX
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:BiUmb.5642$FI2.887@newsread1.news.atl.earthlink.net...
> > > Dang Clint....Im amazed...We actually agree on the important things.
> > >
> > > Dan/W4NTI
> > >
> > > "Clint" <rattlehead at computron dot net> wrote in message
> > > news:vpnuq4c6f04gb9@corp.supernews.com...
> > > > Most politically correct types are. They are a gutless, spineless
> > > > breed that hide behind everything possible and when it's safe
> > > > to come out of thier holes, they snipe and take pot shots at
> > > > everything that is good and decent, if not just anything
> > > > that doesn't fit thier sleazy, terrible, hate-filled agenda.

> > > >
> > > > N.O.W., Earth First!, the ACLU and other yellow bellied
> > > > organizations like that are now quickly losing all clout and
> > > > political strength they have because they have gone to
> > > > the well of jealousy & race conflict just one time to many
> > > > to drink from, and now thier paying the price.
> > > >
> > > > Good riddance to bad rubbish.
> > > >
> > > > Clint
> > > >
> > > > --
> > > >
> > > >
> > > > "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> > > > news:bngrgi$8289$1@news3.infoave.net...
> > > > > If your so proud of your politically correct stance, why the heck
> are
> > > you
> > > > > posting behind a screen name?
> > > > >
> > > > > You are a low life bastard posting addresses of those you disagree
> > with
> > > ,
> > > > > while hiding in the dark.
> > > > >
> > > > >
> > > > > "Private" <groundwave@telus.net> wrote in message
> > > > > news:eb867ae8.0310260739.20e91357@posting.google.com...
> > > > > > I cannot believe these two posts below. Charles D. Braham, you
> are
> > > > > > worse then Dan L. Jeswald who started the thread making racist
> > > > > > remarks. You guys just don't get it do you, where does it stop?
> > > > > > Arabs? Black people? Both of you are discusting....
> > > > >
> > > > >
> > > >
> > > >
> > > >
> > >
> > >
> >
> >
>
>

3308. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 09:38:04 UTC
From: "Ray E. Brain." <me@privacy.net>
Message-ID: <3f9f8f28$1_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 105773
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

And how much time had you spent previously, being
interested in matters of radio and electronics that enabled
you to pass the rest of the RAE with such facility?

Exactly.

BTW, you are the first person to suggest that your licence is
not a proper Ham Licence. Are you admitting to being a
CBer-Masquerading-As-A-Radio-Ham, perchance?

Geoff <somebody@nospam.demon.co.uk> wrote in message
news:bnmi8b$j0b$1$8300dec7@news.demon.co.uk...
> "Airy.R.Bean." <me@privacy.net> wrote in
> news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com:
> > uk.rec.radio.cb is where you need to be. A licence that is
> > obtainable from scratch after only two days' effort is not a
> > Ham Licence.
> Excuse me, I spent one evening swotting up on licencing regulations and
> passed the C & G RAE the next evening. This was at my first attempt, "from
> scratch" as you describe it. Thus I have a proper amateur licence, and
have
> held it for 30+ years. If you are saying my licence is not a "Ham
Licence",
> I would agree, but not in the sense that I believe you to mean.

3309. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 09:39:32 UTC
From: "Ray E. Brain." <me@privacy.net>
Message-ID: <3f9f8f29_3@mk-nntp-1.news.uk.worldonline.com>
Source record: 105774
Cross-posted to: de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

Ham Radio is a technical pursuit for gentlemen.

For something unrelated to Ham Radio, the CBer
reveals himself every time that he opens his mouth...

Matt <pissoff@spammers.suck.com> wrote in message
news:bnnrgk$30al$1@otis.netspace.net.au...
> Piss off idiot

3310. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 10:21:11 UTC
From: steve H <steve@cpstelecomspam.co.uk>
Message-ID: <bno4an$6er$1@titan.btinternet.com>
Source record: 105775
Cross-posted to: de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Ray E. Brain." <me@privacy.net> wrote in message
news:3f9f8f29_3@mk-nntp-1.news.uk.worldonline.com...
> Ham Radio is a technical pursuit for gentlemen.
>
> For something unrelated to Ham Radio, the CBer
> reveals himself every time that he opens his mouth...
Why do you hide behind a cb handle mr Evans??????????????????

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.532 / Virus Database: 326 - Release Date: 27/10/03

3311. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 11:28:25 UTC
From: Whinging Courier <markonusenetTAKEITAWAY@yahoo.co.uk>
Message-ID: <MPG.1a09b4b2c84ad3999896c0@news.individual.net>
Source record: 105776
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

In uk.rec.radio.cb, Geoff said:

> "Airy.R.Bean." <me@privacy.net> wrote in
> news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com:
>
> > uk.rec.radio.cb is where you need to be. A licence that is
> > obtainable from scratch after only two days' effort is not a
> > Ham Licence.
>
> Excuse me, I spent one evening swotting up on licencing regulations and
> passed the C & G RAE the next evening. This was at my first attempt, "from
> scratch" as you describe it. Thus I have a proper amateur licence, and have
> held it for 30+ years. If you are saying my licence is not a "Ham Licence",
> I would agree, but not in the sense that I believe you to mean.

Do not feed the trolls.

--
M3EQK
CBR1000FL - Red, white and blue - Big Bimbler
GSF600 Bandit - For Sale

3312. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 11:28:57 UTC
From: Whinging Courier <markonusenetTAKEITAWAY@yahoo.co.uk>
Message-ID: <MPG.1a09b4d54dfb9e779896c1@news.individual.net>
Source record: 105777
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

In uk.rec.radio.cb, Ray E. Brain. said:

> And how much time had you spent previously, being
> interested in matters of radio and electronics that enabled
> you to pass the rest of the RAE with such facility?
>
> Exactly.
>
> BTW, you are the first person to suggest that your licence is
> not a proper Ham Licence. Are you admitting to being a
> CBer-Masquerading-As-A-Radio-Ham, perchance?

Plonk

--
M3EQK
CBR1000FL - Red, white and blue - Big Bimbler
GSF600 Bandit - For Sale

3313. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 12:53:41 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <pLOnb.6648$q65.2231@newssvr27.news.prodigy.com>
Source record: 105778
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310282134.47e3015d@posting.google.com...
> I cannot believe these two clowns are still at it. I found some of
> their original comments and sure enough they are as racist as they
> come. People have a right not be discriminated against or abused
> because of color, race and religion etc....

Here he goes again, whining -----

>
> If they don't stop making racist posts on this "RADIO" newsgroup I am
> sure people in their own town will find out about them. They will be
> very embarassed very soon. Keep it up Charlie and Danny... Keep it
> up....

---- and snapping like the mangy, coy dog that he is.

Bow Wow!

Good luck on attempting to "embarass" me, Fido! One of local hams here joined the Army, and was recently stationed in Baghdad. After being flown into Quwait, he was put in a convoy headed toward Bagdhad airport. Within hours of moving into Iraq, my friend's convoy was attacked and he had to mow down a couple of screaming raghead morons so that they could continue their rudely interrupted cruise down the road to Baghdad. Iraq is infested with hundreds imported raghead terrorists from Saudi Arabia and Syria these days, all anxious to die. Like all of the local hams, The hams in my area are proud that my buddy was able to expedite the way to hell for a few of those worthless arab scum.

Again: Good luck with "embarassing" me, dog-boy! :-P

Charles Brabham, N5PVL

3314. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:21:44 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <I9Pnb.35524$IA2.1252122@twister.southeast.rr.com>
Source record: 105780
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I guess Bush is a genius. Maybe that's what it takes to invent new words.
Yesterday it was, "suiciders". It's one thing though to invent words,
another to invent enemies behind every tree.

Here's a nice shot of your "genius" hero Rumsfield shaking hands with Saddam
a few years ago: http://www.mydd.com/archives/000427.html

Ah, who to believe in this mixed up world. Politicians are politicians. None
of which are geniuses. Calling politicians geniuses is a slap in the face to
Marconi, Maxwell, and Tesla.

Alan

--
Windsurfing Club: http://www.ibscc.org

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net...
> You could search the entire world and not find a better place to fight
> terrorists. A major sandbox surrounded by ragheads that need their ass
> kicked.
>
> Bush is a genius. Rummy is a genius. You will see.
>
> Let me ask you this; Would you rather have these ragheads blowing up
> Boston?
>
> Dan/W4NTI

3315. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:28:46 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <igPnb.6658$hd5.5003@newssvr27.news.prodigy.com>
Source record: 105781
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de...
>
> My way of thinking is "Don't hate the man... hate the thoughts driving
that
> man....."

That's a good policy, right up until the point where innocent people are murdered or enslaved by "men" who happen to be thinking those thoughts you hate.

Do not confuse the map with the territory. The thousands of innocent victims of 9-11 were not killed by "thoughts"... They were killed by "men", if you want to be generous and classify arab terrorist scum as "men".

My feeling is that when they step beyond the pale of civilized behavior to become terrorists, then they no longer qualify as "men", but instead must be handled like as you would handle a rabid dog. - You put them out of their misery before any innocent people can end up being hurt by them, and to prevent them from infecting other dogs.

Charles Brabham, N5PVL

3316. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:32:30 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9fc182_2@news.vo.lu>
Source record: 105782

Hi,

Thanks for all answers.
Ok for the capacitance and other loads than destroy the ability of the 31m G5RV to work on 160m.
But I must say that on 160m, my TS-570D automatic tuner does a good job. I do not remember the value but I think that I get a SWR 1:1
I can reach the end the S-meter scale in emission, but at first sight nobody hear me, although on 80m I arrived 59++ in near countries.
(if I had observed a high SWR value on my S-meter- say over SWR 3:1 or so, in all cases I know by experience that I could not emit the slightest signal or it should have been very weak).
But I wonder that having a SWR 1:1, nothing looks wrong (not heat, etc at first sight), but the result is 0.0 on that band !!

PS. As for the one like G4FGQ saying that a multiband G5RV is not a good antenna or the others saying that it can only work on 20m, I have to deny these opinions.
I confirmed over 250 DXCC in one year at less than 100 W PEP from 80 to 10m, including WARC. It works ! Not as a beam of course. But very well for what it cost (about 100 euros). That stays an excellent investissment, not necessary if you are hunting DX or want to participate in all contests (that stays a dipole than I work barefoot) but for ragchewing in local QSO (inside a radius of to say 5000 km) it is perfect. Now if you are a DX hunter or want to reach all pileups with ease, you can add it an amplifier (as I listen most far DX at least 53 or so) or purchase a performing "DX" antenna, I mean a 5-7 ele beam to place 10m high in an open field.

73
Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry

3317. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:39:46 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9fc321$1_2@news.vo.lu>
Source record: 105783

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnkeg7$703$1@hercules.btinternet.com...
> The moral is - DON'T USE A G5RV.
>
> Specially one with any coax in the feedline.
>
> If you've bought one, you've been robbed.

Hi,
At first sight you never uses a G5RV. You opinion is completely false and
will induce novices (and other if I beleive you) in error.
So read this and learn from the master, G5RV himself :
http://www.astrosurf.com/lombry/qsl-g5rv.htm

I confirmed over 250 DXCC in one year with the G5RV at less than 100 W PEP
from 80 to 10m, including WARC. It works ! Not as a beam of course. But very
well for what it cost (about 100 euros). That stays an excellent
investissment, not necessary if you are hunting DX (away that to say 8000 km
in low solar acticvities like now) or want to participate in all contests
(that stays a dipole than I work barefoot) but for ragchewing in local QSO
(inside a radius of to say 5000 km) it is perfect. With an average emitting
power of 50W or so, most hams receive me in voice 59 or more, even 57 up to
VE, east K, VP5, FY, YB. More far the signal decreases (53 and less). But
this is a beam after all.

Thierry
ON4SKY, LX3SKY

>
> Use a random length dipole, longer than about 1/3 of the wavelength at the
> lowest frequency of interest. Choose a length which makes best use of the
> size of your backyard. Take the 450 or 600-ohm balanced line all the way
> back to the shack. You will need a tuner and a choke balun at the tuner.
> For multi-band operation you will need a tuner whatever you do.
>
> If you find it inconvenient to feed the dipole in the middle, and you have
a
> relatively low local noise level, then feed it at one end and make an
> Inverted-L of it. It will then very likely work very well also on 160
> metres.
>
> And you will never think of using a G5RV again !
>
> By the way - Louis Varney, G5RV, a real genuine English gentleman, now
no

> longer with us, designed his antenna to work most efficiently ONLY on
14.15
> MHz, perhaps the best day-or-night, all-year-round, any part of the
sun-spot
> cycle, DX frequency. It's very good. And you may not need tuner even with
> the coax. Works great with the old fashioned TS-520 with its built-in
tuner
> !
> ----
> Reg, G4FGQ
>
>
>

3318. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:40:31 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310290540.57a683ce@posting.google.com>
Source record: 105784

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3f9deff3$1_2@corp.newsgroups.com>...
> Reg Edwards wrote:
>
> > The moral is - DON'T USE A G5RV.
> >
> > Specially one with any coax in the feedline.
> >
> > If you've bought one, you've been robbed.
>
> It's a pretty good antenna for 80m, 40m, & 20m. My web page shows
> how the "matching section" gives a pretty good match to coax on
> 80m and 40m. Mine also worked well on 12m.

I guess if a 2 S+ unit deficit compared to a coax fed dipole is
"pretty good", maybe so..."The average 2 s unit loss I saw was on 40,
not 80. 80 would have been worse. :(I remember a field day about 4-5
years ago where they used a G5RV on 80m. This particular one,
commercially made, was pitiful. My mobile antenna would have trounced
it...Was totally useless for us. I was so disgusted, I was gritting my
teeth. If I'm going to sit out in the sticks and eat bugs at night,
I'll be danged if I'm going to use a dummy load with wires attached.
:/ I decided that year, I'd never be stuck on anything like that
again. EVER! I have better things to do with my time otherwise. From
then on, I always bring the goodies along to build my own dipoles on
site. I have heard some on the air that seemed "ok", but the ones I've
ever seen and tried were horrible. 20 meters is about the only band
where I could see one being half decent, and even there, I bet the
average coax fed dipole would beat it. At least as far as overall
system efficiency. Who cares about a EDZ type pattern...
To each his own I guess....BTW, most G5RV's that sound "ok" on 75m,
have KW amps behind them...:/ Stick a barefoot radio on one,
and.......zzzzzzz. :(There are some exceptions, but most have been
converted to a total ladder line feed. MK

3319. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:44:53 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9fc454$1_1@news.vo.lu>
Source record: 105785

"Jerry" <joxendi@bellsouth.net> wrote in message
news:krCnb.87760$5n.61996@bignews5.bellsouth.net...
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bnkeg7$703$1@hercules.btinternet.com...
> > The moral is - DON'T USE A G5RV.
>
>
> Yup! I bought one in the late 80s and found that it was the craziest
acting
> thing I had ever used! It most often
> drove my Yaesu tuner bonkers; other times it would
> settle down to an "acceptable" SWR. I fiddled with it
> for a summer, and finally threw it out.

Hi,

Sorry to say that but you experimented a bad experience or have not enough
knowledge to use it properly.
I know several OM in ON that use G5RV, W3DZZ and alike, and even longwire of
about 20-30m that have similar results than mine.
And if the G5RV is always sold (thare a dozen variantes, see my website)
after decades, there is a good reason : this is because it works well !

Never hear on bands OM working with dipole and G5RV ? There are a lot !
better, G5RV offer you the best quality/price ratio !

73's

Thierry
ON4SKY

I then made me a
> 75 M doublet fed with ladder line. ....it's still up there.
>
> Jerry
> K4KWH
> >
> > Specially one with any coax in the feedline.
> >
> > If you've bought one, you've been robbed.
> >
> > Use a random length dipole, longer than about 1/3 of the wavelength at
the
> > lowest frequency of interest. Choose a length which makes best use of
the

> > size of your backyard. Take the 450 or 600-ohm balanced line all the way
> > back to the shack. You will need a tuner and a choke balun at the tuner.
> > For multi-band operation you will need a tuner whatever you do.
> >
> > If you find it inconvenient to feed the dipole in the middle, and you
have
> a
> > relatively low local noise level, then feed it at one end and make an
> > Inverted-L of it. It will then very likely work very well also on 160
> > metres.
> >
> > And you will never think of using a G5RV again !
> >
> > By the way - Louis Varney, G5RV, a real genuine English gentleman, now
> no
> > longer with us, designed his antenna to work most efficiently ONLY on
> 14.15
> > MHz, perhaps the best day-or-night, all-year-round, any part of the
> sun-spot
> > cycle, DX frequency. It's very good. And you may not need tuner even
with
> > the coax. Works great with the old fashioned TS-520 with its built-in
> tuner
> > !
> > ----
> > Reg, G4FGQ
> >
> >
> >
>
>

3320. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:46:56 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9fc4cf$1_2@news.vo.lu>
Source record: 105786

> VE, east K, VP5, FY, YB. More far the signal decreases (53 and less). But
> this is a beam after all.

Oops ... this is NOT a beam after all !

> Thierry
> ON4SKY, LX3SKY

3321. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:48:36 UTC
From: Al - KA5JGV <aburzynski@swri.nojunk.edu>
Message-ID: <vpvh9obc1ahe48@corp.supernews.com>
Source record: 105787

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0310290004.54083b6@posting.google.com...
On some level, we don't really know what anything is;
> we just have ways to communicate about those things. We have models.
> Cheers,
> Tom

I like that definition, Tom. Instead of struggling with what every tiny
thing is, just model it, apply it to your needs, and life (and radio waves)
goes on.

Al KA5JGV

3322. Re: dressler

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 13:56:41 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9fc718$1_2@news.vo.lu>
Source record: 105788

"blackcraven" <clausca55@hotmail.com> wrote in message
news:4SFlb.334644$R32.11040282@news2.tin.it...
> anyone could give to me comments about dressler active antennas for
> shortwawe?

No info about this small sticks full of coils... probably not as good as
expected.
Have you ever think about a Wellbrooks HF active magnetic loop ? It work
also outdoor if necessary
See here http://www.astrosurf.com/lombry/qsl-ala330.htm

73
Thierry
ON4SKY, LX3SKY

> claudio
> _____ claudio
> scarpa ICQ#: 337008085 Current ICQ status: + More ways to contact me
> _____
>
>

3323. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 14:33:47 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <fdQnb.27789$fl1.1262289@twister.southeast.rr.com>
Source record: 105789

But that's NOT a definition.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Al - KA5JGV" <aburzynski@swri.nojunk.edu> wrote in >
> I like that definition, Tom. Instead of struggling with what every tiny
> thing is, just model it, apply it to your needs, and life (and radio
waves)
> goes on.
>
> Al KA5JGV
>
>

3324. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 14:38:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9fd18b_4@corp.newsgroups.com>
Source record: 105790

Roy Lewallen wrote:
> Cecil Moore wrote:
>
>> Roy Lewallen wrote:
>>
>>> "Things on a very small scale behave like nothing that you have any
>>> direct experience about. They do not behave like waves, they do not
>>> behave like particles, they do not behave like clouds, or billiard
>>> balls, or weights on springs, or like anything that you have ever
>>> seen. . . Historically, the electron, for example, was thought to
>>> behave like a particle, and then it was found that in many resepects
>>> it behaved like a wave. So it really behaves like neither. Now we
>>> have given up. We say: 'It is like *neither*'"
>>
>> OTOH, quantum physics predicts the outcomes perfectly and has never been
>> proven wrong so it doesn't matter what we call photons. If you really
>> want to understand this stuff, you need to read a good book on string
>> theory. May I suggest _The_Tenth_Dimension_, by Jeremy Bernstein or
>> catch the two NOVAs that were on tonight.
>
> Is that where we'll learn all about virtual photons, the fourth
> dimension, and their application to measuring voltage?

Yes, six of the dimensions are thought to support the fabric of space,
the ï¿½ther, if you will. String theory has yielded a unified field theory
including massless gravitons.

The point is that just because photons do not behave like pure waves
or pure particles, doesn't mean they are useless. It just means that
we don't yet have a one word handle to describe their true nature.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3325. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 14:40:57 UTC
From: Geoff <somebody@nospam.demon.co.uk>
Message-ID: <bnojhp$r9d$1$8300dec7@news.demon.co.uk>
Source record: 105791
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Ray E. Brain." <me@privacy.net> wrote in
news:3f9f8f28$1_3@mk-nntp-1.news.uk.worldonline.com:

> And how much time had you spent previously, being
> interested in matters of radio and electronics that enabled
> you to pass the rest of the RAE with such facility?

I had been working in the electronics industry for about 5 years.

> BTW, you are the first person to suggest that your licence is
> not a proper Ham Licence. Are you admitting to being a
> CBer-Masquerading-As-A-Radio-Ham, perchance?

I admit that the licence that is relevant and held by me is an "Amateur
Radio Licence". It has nothing to do with poor quality acting. I also hold
other licences permitting me to use radio communication equipment. None of
the licences I hold or have held permits me to use "CB" equipment in the
context that you suggest.

Geoff

3326. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 14:48:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9fd3e4$1_4@corp.newsgroups.com>
Source record: 105792

Thierry wrote:
> But I wonder that having a SWR 1:1, nothing looks wrong (not heat, etc at
> first sight), but the result is 0.0 on that band !!

The SWR between your final amp and the antenna tuner is 1:1. The SWR
on the feedline to the antenna is sky high.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3327. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 15:04:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9fd7c9_4@corp.newsgroups.com>
Source record: 105793

Mark Keith wrote:

> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>It's a pretty good antenna for 80m, 40m, & 20m. My web page shows
>>how the "matching section" gives a pretty good match to coax on
>>80m and 40m. Mine also worked well on 12m.
>
> I guess if a 2 S+ unit deficit compared to a coax fed dipole is
> "pretty good", maybe so..."The average 2 s unit loss I saw was on 40,
> not 80. 80 would have been worse. :(I remember a field day about 4-5
> years ago where they used a G5RV on 80m. This particular one,
> commercially made, was pitiful. My mobile antenna would have trounced
> it...Was totally useless for us.

Of course, the quality of a G5RV makes a difference. Knowing all you do
about dipoles, I'll bet you could design a G5RV that is virtually
identical in performance to a dipole on 75m and 40m. The losses due
to SWR are pretty negligible using RG8x.

One note, however. The G5RV's null off the end of the antenna is about
6dB deeper than a 1/2WL dipole on 40m. Perhaps that explains part of
your findings.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3328. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 15:11:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3f9fd948$1_4@corp.newsgroups.com>
Source record: 105794

Alan wrote:
> But that's NOT a definition.

From the IEEE Dictionary: "radio wave - An electromagnetic
wave of radio frequency."
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3329. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 16:10:20 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <IP6dnZ2OYqjtewKiRVn-iw@comcast.com>
Source record: 105795

Thierry,

First, there is some confusion as to what a G5RV is. Some people refer to any dipole fed with open wire line as a G5RV. As far as I can determine, a G5RV is 3/2 wavelength long on 20 meters, fed with 1/2 wavelength at 20 meters of 450 ohm line.

I ran EZNEC on such an antenna, and got SWRs below 3:1 on 20 and 80 meters. If you juggle things, you can get it below 2:1 on 20. Free space gain was about 1 dbi on 20, and 2 dbi on 80. On 160m, the free space gain was about 2dbi, but that is almost meaningless because the impedance was 1 - j600. So, even if your antenna tuner lets you get an SWR of 1:1 on 160, you are really loading the transmitter into the losses of the transmission line, and not the antenna. Note that just the DC resistance of 100 feet of #14 wire approaches 1 Ohm.

Tam/WB2TT

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message news:3f9fc182_2@news.vo.lu...
>
> Hi,
>
> Thanks for all answers.
> Ok for the capacitance and other loads than destroy the ability of the 31m
> G5RV to work on 160m.
> But I must say that on 160m, my TS-570D automatic tuner does a good job. I
> do not remember the value but I think that I get a SWR 1:1
> I can reach the end the S-meter scale in emission, but at first sight
nobody
> hear me, although on 80m I arrived 59++ in near countries.
> (if I had observed a high SWR value on my S-meter- say over SWR 3:1 or so,
> in all cases I know by experience that I could not emit the slightest
signal
> or it should have been very weak).
> But I wonder that having a SWR 1:1, nothing looks wrong (not heat, etc at
> first sight), but the result is 0.0 on that band !!
>
> PS. As for the one like G4FGQ saying that a multiband G5RV is not a good
> antenna or the others saying that it can only work on 20m, I have to deny
> these opinions.
> I confirmed over 250 DXCC in one year at less than 100 W PEP from 80 to
10m,
> including WARC. It works ! Not as a beam of course. But very well for what
> it cost (about 100 euros). That stays an excellent investissment, not

> necessary if you are hunting DX or want to participate in all contests
(that
> stays a dipole than I work barefoot) but for ragchewing in local QSO
(inside
> a radius of to say 5000 km) it is perfect. Now if you are a DX hunter or
> want to reach all pileups with ease, you can add it an amplifier (as I
> listen most far DX at least 53 or so) or purchase a performing "DX"
antenna,
> I mean a 5-7 ele beam to place 10m high in an open field.
>
> 73
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry
>
>
>
>
>
>
>

3330. Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 16:20:25 UTC
From: ardujenski@aol.com
Message-ID: <20031029112025.27143.00000178@mb-m24.aol.com>
Source record: 105796

With a 1/4wl vertical (mounted close to ground level) and you add a parasitic (either a reflector or director) do you just ground mount it or do you need radials or does it depend upon the ground conditions?

I noticed in running a few simple examples on EZNEC that the impedance drops with the number of parasitics and the spacing. for example the 1/4wl alone will be close to 50 ohms and with a parasitic the impedance will drop to less than half in some arrangements (especially with 0.15wl spacing). Is this due to the interactions of the driven and parasitic element?

By the way I was quite impressed by the potential F/B ratio and almost cardioid pattern with a reflector and director added

Alan KB7MBI
Woodinville, WA

3331. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 16:46:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnoqtn$db2$1@hercules.btinternet.com>
Source record: 105797

> What becomes all the energy sent by my TX on 160m ? What become de
standing
> waves and reactive load ? Is it possible than all 100W are lost in the
coax
> or the feeder without be emitted ?
>
> Who could explain me this ?
>
> Thanks
>
> Thierry
> ON4SKY
==========

G5RV - WHERE THE POWER GOES ON 160m

Efficiency = Power into / Power out of

Efficiency % Location
========= =======
70.4 L-tuner
21.9 Coax line
78.8 Open wire line
11-6 Antenna wire and soil under anrenna

Overall radiating efficiency at 1.9 MHz = 1.40 %

or 18.5dB, or 3 S-units down relative to a very high 1/2-wave dipole.

Download program DIPOLE3 from website below. It analyses performance of any
dipole, of any length, any wire diameter at any height, and any lengths of
any types and combinations of feedlines. Also calculated are L and C
component values of L-network to match to 50 ohms.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3332. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:03:17 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3f9ff2d6_1@news.vo.lu>
Source record: 105798

Many thanks Reg, good link.

Thierry

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnoqtn$db2$1@hercules.btinternet.com...
> > What becomes all the energy sent by my TX on 160m ? What become de
> standing
> > waves and reactive load ? Is it possible than all 100W are lost in the
> coax
> > or the feeder without be emitted ?
> >
> > Who could explain me this ?
> >
> > Thanks
> >
> > Thierry
> > ON4SKY
> ============================
>
> G5RV - WHERE THE POWER GOES ON 160m
>
> Efficiency = Power into / Power out of
>
> Efficiency % Location
> ========= =======
> 70.4 L-tuner
> 21.9 Coax line
> 78.8 Open wire line
> 11-6 Antenna wire and soil under anrenna
>
> Overall radiating efficiency at 1.9 MHz = 1.40 %
>
> or 18.5dB, or 3 S-units down relative to a very high 1/2-wave dipole.
>
> Download program DIPOLE3 from website below. It analyses performance of
any
> dipole, of any length, any wire diameter at any height, and any lengths of
> any types and combinations of feedlines. Also calculated are L and C
> component values of L-network to match to 50 ohms.
> ----
> ======================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com

> ========================
>
>

3333. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:13:39 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>
Source record: 105799
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Guess what "Private"...two can play that game. I just sicked my buddy on
you. He works for the Feds. They track down pedofiles and such. He is
making you a 'special' case.

See you in the funny papers.....payback is a mo fo...bro.

Dan/W4NTI

"Private" <groundwave@telus.net> wrote in message
news:eb867ae8.0310282134.47e3015d@posting.google.com...
> I cannot believe these two clowns are still at it. I found some of
> their original comments and sure enough they are as racist as they
> come. People have a right not be discriminated against or abused
> because of color, race and religion etc....
>
> If they don't stop making racist posts on this "RADIO" newsgroup I am
> sure people in their own town will find out about them. They will be
> very embarassed very soon. Keep it up Charlie and Danny... Keep it
> up....
>
>
> > Charles D. Braham (N5PVL)
> > Rt 2 Box 46
> > Lyford TX
> > 78569
> > >
> > > Asked about his astounding success in mowing down thousands of
screaming
> > > raghead fanatics with very few casualties (sound familiar?) , the
Israeli
> > > general agreed to give the reporter the exclusive secret to his
> > > unprecedented military success...
> > >
> > > "Fight Arabs." he said.
> > >
> > > Charles Brabham, N5PVL
>
>
> > Daniel L. Jeswald
> > 89 Wildman Road
> > Anniston AL
> > 36201

> >
> > > Wouldn't surprise me a bit. I thought from the git-go that Iraq would
turn
> > > into a quagmire. Unfortunatly for those fighting the fight, it is
serving a
> > > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > > Idaho.
> > >
> > > As for your political commentary. As far as I'm concerned the
Democratic
> > > party left me when they turned it over to NOW and Phyliss.
> > >
> > > That does NOT mean I support Baby Bush 100%. However lets see how
things
> > > go.
> > >
> > > Dan/W4NTI

3334. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:16:04 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <oBSnb.9053$X22.3106@newsread2.news.atl.earthlink.net>
Source record: 105801
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I used to hate the Vietnamese. But now 30 plus years later I can tolerate them. That makes me a racist? OK Im a racist. So what?

I reckon that after we nuke the ragheads and let god sort them out I'll be able to tolerate them also.

Dan/W4NTI

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message news:bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de...
> Just like you and I.... I am quite sure there are things that we will fight
> to death disagreeing about, and I am sure there are some things that we will
> agree on too....
>
> My way of thinking is "Don't hate the man... hate the thoughts driving that
> man....." As Cecil stated, for the most part I am also closely aligned to
> the Libertarian party, which is even more "right wing" than the
> Republicrats, but I do believe in the basic human rights issues. I don't
> hate all Arabs.... just the fundamental/orthodox ones like Osama, and the
> others responsible for 9/11 and other related events.
>
>
>
> --
> Ryan KC8PMX
>
> Some people are like Slinkies . . . not really good for anything, but you
> still can't help but smile when you see one tumble down the stairs.
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:kQxnb.9908$FI2.1929@newsread1.news.atl.earthlink.net...
> > Yes it is Ryan....I'm still discombodulated.
> >
> > Dan/W4NTI
> >
> > "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> > news:bnlq3k$12jjnj$2@ID-189073.news.uni-berlin.de...
> > > Scary, isn't it???

> > >
> > > Ryan KC8PMX
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > news:BiUmb.5642$FI2.887@newsread1.news.atl.earthlink.net...
> > > > Dang Clint....Im amazed...We actually agree on the important things.
> > > >
> > > > Dan/W4NTI
> > > >
> > > > "Clint" <rattlehead at computron dot net> wrote in message
> > > > news:vpnuq4c6f04gb9@corp.supernews.com...
> > > > > Most politically correct types are. They are a gutless, spineless
> > > > > breed that hide behind everything possible and when it's safe
> > > > > to come out of thier holes, they snipe and take pot shots at
> > > > > everything that is good and decent, if not just anything
> > > > > that doesn't fit thier sleazy, terrible, hate-filled agenda.
> > > > >
> > > > > N.O.W., Earth First!, the ACLU and other yellow bellied
> > > > > organizations like that are now quickly losing all clout and
> > > > > political strength they have because they have gone to
> > > > > the well of jealousy & race conflict just one time to many
> > > > > to drink from, and now thier paying the price.
> > > > >
> > > > > Good riddance to bad rubbish.
> > > > >
> > > > > Clint
> > > > >
> > > > > --
> > > > >
> > > > >
> > > > > "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> > > > > news:bngrgi$8289$1@news3.infoave.net...
> > > > > > If your so proud of your politically correct stance, why the
heck
> > are
> > > > > you
> > > > > > posting behind a screen name?
> > > > > >
> > > > > > You are a low life bastard posting addresses of those you
disagree
> > > with
> > > > > ,
> > > > > > while hiding in the dark.
> > > > > >
> > > > > >
> > > > > > "Private" <groundwave@telus.net> wrote in message
> > > > > > news:eb867ae8.0310260739.20e91357@posting.google.com...
> > > > > > > I cannot believe these two posts below. Charles D. Braham,
you
> > are

> > > > > > > worse then Dan L. Jeswald who started the thread making racist
> > > > > > > remarks. You guys just don't get it do you, where does it
stop?
> > > > > > > Arabs? Black people? Both of you are discusting....
> > > > > > >
> > > > > > >
> > > > > > >
> > > > > > >
> > > > > >
> > > > > >
> > > > >
> > > > >
> > >
> > >
>
>

3335. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:17:38 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <SCSnb.9055$X22.448@newsread2.news.atl.earthlink.net>
Source record: 105802
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:igPnb.6658$hd5.5003@newssvr27.news.prodigy.com...
>
> "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
> news:bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de...
> >
> > My way of thinking is "Don't hate the man... hate the thoughts driving
> that
> > man....."
>
> That's a good policy, right up until the point where innocent people are
> murdered or enslaved by "men" who happen to be thinking those thoughts you
> hate.
>
> Do not confuse the map with the territory. The thousands of innocent
victims
> of 9-11 were not killed by "thoughts"... They were killed by "men", if you
> want to be generous and classify arab terrorist scum as "men".
>
> My feeling is that when they step beyond the pale of civilized behavior to
> become terrorists, then they no longer qualify as "men", but instead must
be
> handled like as you would handle a rabid dog. - You put them out of their
> misery before any innocent people can end up being hurt by them, and to
> prevent them from infecting other dogs.
>
> Charles Brabham, N5PVL
>
>
>

OH NO!!!!!! Poor "Private" he is flippin all over the cubicle.

Dan/W4NTI
```

3336. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:18:39 UTC
From: Lionel Carter <lionelcarter@cut-this-out.freezone.co.uk>
Message-ID: <3f9ff585_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 105800

I've been expecting one of the gurus in the ng would be saying Real Radio Hams build their own theories.

Lionel Carter

"W7TI" <noway@nohow.com> wrote in message news:377vpvs9psja61ceepmqv739niuq1al7gs@4ax.com...
> On 28 Oct 2003 16:18:17 -0800, wizard12342002@yahoo.com (jj) wrote:
>
> >Does anyone have a good description for what a radio
> >wave really is?
>
> ____
>
> The short answer is "no". Many people confuse the measurement of things
> with having an understanding of them.
>
> Scientists are very good at measuring things; less good at understanding
> what they measure. For example, gravity is measurable down to a gnat's
> eyelash, but nobody knows what it really "is".
>
> --
> Bill, W7TI
>

3337. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:22:52 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <MHSnb.25415$v82.1520088@twister.southeast.rr.com>
Source record: 105804

Sounds good to me. Thanks!
Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9fd948$1_4@corp.newsgroups.com...
> Alan wrote:
> > But that's NOT a definition.
>
> From the IEEE Dictionary: "radio wave - An electromagnetic
> wave of radio frequency."
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3338. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:24:47 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <zJSnb.9061$X22.1965@newsread2.news.atl.earthlink.net>
Source record: 105803
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Can you imagine, liberal puke, how things would have gone if Klintoon was
still president on 9/11 ?

Uh.....I.....didn't have sex with Sadam....uh we just shook
hands.....uh.....wait a minute Monica.....uh as for Osama....uh....he is
just a bit confused...uh....ok I gotta go....uh uh..

Dan/W4NTI

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:I9Pnb.35524$IA2.1252122@twister.southeast.rr.com...
> I guess Bush is a genius. Maybe that's what it takes to invent new words.
> Yesterday it was, "suiciders". It's one thing though to invent words,
> another to invent enemies behind every tree.
>
> Here's a nice shot of your "genius" hero Rumsfield shaking hands with
Saddam
> a few years ago: http://www.mydd.com/archives/000427.html
>
> Ah, who to believe in this mixed up world. Politicians are politicians.
None
> of which are geniuses. Calling politicians geniuses is a slap in the face
to
> Marconi, Maxwell, and Tesla.
>
> Alan
>
> --
> Windsurfing Club: http://www.ibscc.org
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net...
> > You could search the entire world and not find a better place to fight
> > terrorists. A major sandbox surrounded by ragheads that need their ass
> > kicked.
> >
> > Bush is a genius. Rummy is a genius. You will see.
> >
> > Let me ask you this; Would you rather have these ragheads blowing up
> > Boston?
> >

> > Dan/W4NTI
>
>
>

3339. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:33:18 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <yRSnb.9088$X22.1@newsread2.news.atl.earthlink.net>
Source record: 105805

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031028165959.05939.00000269@mb-m11.aol.com...
> >Some of Intel's best engineers are "ragheads" and very nice guys
> >to boot.
> >--
> >73, Cecil http://www.qsl.net/w5dxp
> >
>
> Whats so great about Intel

Good to know where their at. Makes it easier to round them up when the time comes.

Dan/W4NTI

3340. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:37:29 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <tVSnb.9101$X22.4216@newsread2.news.atl.earthlink.net>
Source record: 105806

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031028131242.22368.00000288@mb-m02.aol.com...
> Dan wrote,
> >
> >The Muslims started it. We will end it.
> >
> >Have a nice day
> >
> >Dan/W4NTI
>
> "We?" You mean a bunch of rural Southern boys
> like you? If that's the case, my money is on the
> Muslims. You fellows lost the Civil War, the race
> war, and you'll lose the religious war. You can't
> even keep a statue of the ten commandments in
> the Alabama statehouse because everyone's against
> you. Give up. You can't win. You're wrong. You've
> already lost. It's over. Quit.
> 73,
> Tom Donaly, KA6RUH
>
>
>

Fine, your intitled to your opinion. I'll just tell the governor to tell Bush that the Alabama contingent of citizen soldiers will be leaving Iraq and Kuwait.

You did know that the MAJORITY of troops presently in the war zone come from the South don't you? And most of them from Alabama.

In fact Alabama has supplied a large portion of combat troops to ALL wars this nation has been in after we 'lost' the war between the states'.

Oh, liberal puke, allow me to correct you on something. Alabama never surrendered. Lee surrendered the Army of Northern Virginia. Not the state of Alabama.

The war officially ended when the fighting stopped, and that was several YEARS after that day at the courthouse in Va.

Have a nice day....take a deep breath...thats the smell of your state burning up. Love it.

Dan/W4NTI

3341. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:38:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i2uvpvgp9rrffm8jks96tae8fclb6huehv@4ax.com>
Source record: 105807

On 29 Oct 2003 16:20:25 GMT, ardujenski@aol.com (ARDUJENSKI) wrote:

>With a 1/4wl vertical (mounted close to ground level) and you add a parasitic
>(either a reflector or director) do you just ground mount it or do you need
>radials or does it depend upon the ground conditions?
>
>I noticed in running a few simple examples on EZNEC that the impedance drops
>with the number of parasitics and the spacing. for example the 1/4wl alone will
>be close to 50 ohms and with a parasitic the impedance will drop to less than
>half in some arrangements (especially with 0.15wl spacing). Is this due to the
>interactions of the driven and parasitic element?
>
>By the way I was quite impressed by the potential F/B ratio and almost
>cardioid pattern with a reflector and director added
>
>Alan KB7MBI
>Woodinville, WA

Hi Alan,

The parasitic is simply an antenna that is not directly driven. In other words, to be efficient it has to conform to all the requirements of the active element. In more words, it also follows all the variables that affect the active element.

Do you ground mount it w/wo radials? Yes/no. Symmetry usually brings its reward, but there are certainly a lot of variations that maintain symmetry without being exactly identical. Further, the addition of the parasitic inevitably upsets the original configuration (sometimes to the benefit of the user) through interactions. Why? Just like paralleling resistors changes the load R. In this case, the fields do the job of connecting up instead of wire. Here in Woodinville, trees will do the same thing.

The F/B thing will vary with coupling (distance/wavelength) and efficiency (back to ground conditions). Simple examples abound in the AM band. Examine the slough south of Bellevue near the I-90 connection to Mercer Island.

73's
Richard Clark, KB7QHC

3342. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:38:40 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <AWSnb.9105$X22.1870@newsread2.news.atl.earthlink.net>
Source record: 105808

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031028181304.22447.00000195@mb-m25.aol.com...
> >You could search the entire world and not find a better place to fight
> >terrorists. A major sandbox surrounded by ragheads that need their ass
> >kicked.
> >
> >Bush is a genius. Rummy is a genius. You will see.
> >
> >Let me ask you this; Would you rather have these ragheads blowing up
> >Boston?
> >
> >Dan/W4NTI
> >
>
> Dan these Clowns on here whinning would rather "KISS a TREE" then do
whats
> right.

I too would rather they kiss a tree. One thats on fire.

Dan/W4NTI

3343. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:40:56 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <IYSnb.9114$X22.1232@newsread2.news.atl.earthlink.net>
Source record: 105809

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0310282041.513bd36d@posting.google.com...
> wa8ulx@aol.com (WA8ULX) wrote in message
news:<20031028183431.14077.00000364@mb-m29.aol.com>...
> > >Interesting that you mentioned the Indian Nations
> > >The tactics that America is supporting against Islam is the same
> > >tactics that we used to take Indian land away and killing all
> > >"savages" I.E. the only good Indian is a dead Indian and delay
> > >retribution by smoking so called peace pipes.
> >
> > Get Real, I have lived and worked on the RES, for 7 Years in the past,
you
> > have no IDEA what your talking about.
>
> So you have resisted smoking the peace pipe in the hope you are the
> one to gain ownership of the reservation after the bombing that you
> advocate is complete ! The State of Illinois borrowed $2 million last
> year
> for Israel in the fight against Islam. Perhaps you can donate in a
> similar manner in your own state to combat the shortage of missiles to
> subdue the refugee camps or at least help Bush to hold the coats of
> those who are willing to die because of those who are not willing to
> walk the walk but prefer to be the judges of others. The only thing
> good about your presence here is the solidarity of the normal
> Americans that have lined up together against the abnormal Americans
> such as yourself and thus give the opportunity of others to witness
> the true American spirit and way of life.
> For which I thank you and hope that other humans in this world will
> be gratified to see that such people like yourself are a miniscule
> minority
> in this great country of ours.
> Now that all can see that your face has a mouth but with no teeth
> we can return to the subject of antennas as the garbage collector
> graciously do their job.
> Art Unwin

I like your last name 'Unwin'.

Dan/W4NTI

3344. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:43:48 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <o%Snb.9123$X22.646@newsread2.news.atl.earthlink.net>
Source record: 105810

"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20031028131421.14254.00000303@mb-m29.aol.com...
> >Just bring it on down here Tom. We will be happy to 'educate' you.
> >
> >Dan/W4NTI
>
> Have him stop in Louisanna first Dan, will take him out in the swamps, and
send
> whats left over to you.

Like ole Jerry Clower said....."Jest shoot on up heah, one of us gotta have
some relief".

Dan/W4NTI

3345. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:44:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnou9ripf1@sparta.btinternet.com>
Source record: 105812

The ground electrodes or radials of ground-mounted vertical radiators, parasitic or directly-fed, reflectors or directors, must be given just as much loving care and attention as the primary vertical radiator.

3346. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:44:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <20Tnb.9126$X22.3347@newsread2.news.atl.earthlink.net>
Source record: 105811

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9ee35f_1@corp.newsgroups.com...
> WA8ULX wrote:
> > Have him stop in Louisanna first Dan, will take him out in the swamps,
and send
> > whats left over to you.
>
> "Wonder where the Louisiana sheriff went to,"
> "You can sure get lost in the Louisiana Bayou."
>
> What was the one-armed guy's name in that song?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

I believe that was my cousin....gator.

Dan/W4NTI

3347. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:45:47 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <f1Tnb.9130$X22.8007@newsread2.news.atl.earthlink.net>
Source record: 105813

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3f9ee1c4_1@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > What I am fighting for is the survival of my and your country.
> > And I'll do whatever is needed to help.
>
> Well, you can start by condemning criminals, not religions or
> ethnic groups. Did you know most of the people in prison in
> the US are Christians?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

Don't worry about it. They will be converting to Muslim any day now.

Dan/W4NTI

3348. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:48:43 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <%3Tnb.9139$X22.6341@newsread2.news.atl.earthlink.net>
Source record: 105814

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031028160012.23966.00000136@mb-m21.aol.com...
> Dan wrote,
> >
> >
> >Hey Tom,
> >
> >You wouldn't last ten minutes in Alabama. We know how to deal with fruit
> >and nuts folks.
> >
> >Dan/W4NTI
> >
> >
>
> Yep, when logic fails, which it always does with your kind, you resort to
> threats, and bluster. Well, I'll quit pickin' on you boys. I'll leave you
> to your Red Man, your shotguns, and the sheets you fellas like to
> dress up in at night. It's almost, but not quite, too bad you're
> a disappearing breed; you've formed a colorful, if dismal, part of
> American history.
> Take care, and 73,
> Tom Donaly, KA6RUH
>
>
>

This coming from a ultra liberal. Living on the side of a hill with the
flames coming on strong...awaiting the final 'big one' to end his misery.
What a looooooosssssseeeeeerrrrrrr.

Dan/W4NTI

3349. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 17:49:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f8vvpv4e0663nuib9ev6uh0n5kgu0nsd51@4ax.com>
Source record: 105815

On Wed, 29 Oct 2003 17:18:39 -0000, "Lionel Carter"
<lionelcarter@cut-this-out.freezone.co.uk> wrote:

>I've been expecting one of the gurus in the ng would be saying Real Radio
>Hams build their own theories.
>
>Lionel Carter

Hi Lionel,

Some of the "explanations" couched in Quantum nonsense have
accomplished that end none the less.

73's
Richard Clark, KB7QHC

3350. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:03:12 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029130312.27758.00000496@mb-m04.aol.com>
Source record: 105816

>
>From the page 9 of the Introduction to "QED" Feynman says,
>"You're not going to be able to understand it... You see my
>Physics students don't understand it either. That is because
>I don't understand it. Nobody does!"
>
>Good luck with analogies to things we seem to "understand".
>
>--
>Peter K1PO
>Indialantic By-the-Sea, FL.
>

Makes me feel better :-)
but....

I just picked up "Advanced Electromagnetism and Vacuum Physics" by Patrick Cornille (Advanced Electromagnetic Systems, France) published by World Scientific Publishing Co. 2003 while browsing Strand Book Store in NYC (sale $32) and the following Preface introduction caught my interest:

"The electromagnetic theory is the most important theory in physics, first because the electromagnetic force is the only force that can be easily manipulated by man with wellknown applications, secondly an extension of this theory in the future may explain all the fundamental forces known to day in nature.
A large volume of literature has appeared since the latter days of World war II, written by researchers expanding the basic principles of electromagnetic theory and applying Maxwell's equations to many important practical problems. However, it is my opinion that the electromagnetic theory is not complete and fully understood. A simple example proven these claims is given in this book when the Helmholtz theorem is analyzed. We proved from a mathematical point of view that Maxwell's equations are not complete since a scalar polarization must be taken into account in the equations.
It is worth insisting that Maxwell, when he formulated out his theory, was mainly guided by the experimental work performed by the physicists of his time. He tried to give an hydrodynamics understanding of his theory, which is still favored by certain physicists. Even today, Maxwell's equations are given as granted, their validity being justified by experiments. Actually, there is no demonstration of Maxwell's equations from first principles since the mechanical approach used by Maxwell was rapidly abandoned in favor of a novel nonmechanical entity: the electromagnetic field. While the Maxwell's equations can obviously be obtained from a variational principle where they are derived from an action appropriately chosen in order to recover them. In spite of the success of the Maxwell theory in our present technology, we believe that the

last word on Maxwell's equations has not been said yet. The reason is that Maxwell's equations raise a number of fundamental questions which have not been answered in a satisfactory manner to date:
- One of these questions deals with the existence of a medium sustaining transverse electromagnetic waves.
- Another question concerns the fact that Maxwell's equations are not Galilean invariant.
- The question of covariance is also strongly related to the electromagnetic induction phenomena, which is difficult to understand within the framework of the special relativity theory.
- The discrete nature of the electric charge, where no physical concept has been proposed to explain its quantization, remains one of the deepest mysteries of physics.
- There is also the reason why the Lorentz force does not come from the Maxwell's equations, but is additional to them. The reader is reminded that classical electrodynamics demands a connection between the Maxwell's equations and the Lorentz force.
In view of a prevalent trend towards a hydrodynamic description of matter and radiation, we propose in this book another hydrodynamic wave model for the existence and the propagation of matter and radiation in the vacuum where equations of electrodynamics can be derived from simple fundamental principles. We shall answer the above questions. " etc.

Hoping to find answers to some of the puzzling questions relating to antennas and propagation, I am looking forward to time when I can immerse myself deeply into this new stuff (and get more confused?)

Maybe this will intrigue some of youze guyz and help in sheding some light on our neandertal brains?

73 Yuri, K3BU

3351. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:09:49 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <NnTnb.38062$IA2.1285265@twister.southeast.rr.com>
Source record: 105817
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

How could things have gone any worse? We still don't have Osama, and guys are still dying in Afghanistan even though the news acts like it's fallen off the earth.

As far as Sadam, what, specifically, did he have to do with 9/11? When it comes down to it, he was probably more of an ally against militant Islamic terrorists than any other.

....and, I'm probably more conservative than you..... There's nothing more liberal than "nation building", something we were told six years ago that wasn't going to happen under this presidency. My how things change.

I'll make a prediction: the 87 billion dollars going to Iraq is just the beginning.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message news:zJSnb.9061$X22.1965@newsread2.news.atl.earthlink.net...
> Can you imagine, liberal puke, how things would have gone if Klintoon was
> still president on 9/11 ?
>
> Uh.....I.....didn't have sex with Sadam....uh we just shook
> hands.....uh.....wait a minute Monica.....uh as for Osama....uh....he is
> just a bit confused...uh....ok I gotta go....uh uh..
>
> Dan/W4NTI
>
> "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> news:I9Pnb.35524$IA2.1252122@twister.southeast.rr.com...
> > I guess Bush is a genius. Maybe that's what it takes to invent new words.
> > Yesterday it was, "suiciders". It's one thing though to invent words,
> > another to invent enemies behind every tree.
> >
> > Here's a nice shot of your "genius" hero Rumsfield shaking hands with
> Saddam
> > a few years ago: http://www.mydd.com/archives/000427.html
> >

> > Ah, who to believe in this mixed up world. Politicians are politicians.
> None
> > of which are geniuses. Calling politicians geniuses is a slap in the
face
> to
> > Marconi, Maxwell, and Tesla.
> >
> > Alan
> >
> > --
> > Windsurfing Club: http://www.ibscc.org
> >
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net...
> > > You could search the entire world and not find a better place to fight
> > > terrorists. A major sandbox surrounded by ragheads that need their
ass
> > > kicked.
> > >
> > > Bush is a genius. Rummy is a genius. You will see.
> > >
> > > Let me ask you this; Would you rather have these ragheads blowing up
> > > Boston?
> > >
> > > Dan/W4NTI
> >
> >
> >
>
>

3352. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:13:14 UTC
From: tdonaly@aol.com
Message-ID: <20031029131314.14077.00000406@mb-m29.aol.com>
Source record: 105818

Dan wrote,
>
>
>Fine, your intitled to your opinion. I'll just tell the governor to tell
>Bush that the Alabama contingent of citizen soldiers will be leaving Iraq
>and Kuwait.
>
>You did know that the MAJORITY of troops presently in the war zone come from
>the South don't you? And most of them from Alabama.

I didn't know so many black people and Latinos lived in Alabama. Why would anyone want to live there when they can make some real money in California or New York? Annnd, they won't have to live around people like you, either.

>
>In fact Alabama has supplied a large portion of combat troops to ALL wars
>this nation has been in after we 'lost' the war between the states'.
>
>Oh, liberal puke, allow me to correct you on something. Alabama never
>surrendered. Lee surrendered the Army of Northern Virginia. Not the state
>of Alabama.

Thanks, Dan. I haven't laughed so hard in weeks. Southern sympathizers didn't give up here until long after the war, either. No problem. We just jailed or hanged
'em as we saw fit.

>
>The war officially ended when the fighting stopped, and that was several
>YEARS after that day at the courthouse in Va.
>
>Have a nice day....take a deep breath...thats the smell of your state
>burning up. Love it.

You would. You've made one point, though. For most of my life I didn't think there was anything lower than a snake's belly. You are, though, and I thank you for helping me see the light.

>
>Dan/W4NTI

73,
Tom Donaly, KA6RUH

3353. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:30:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa007fc_7@corp.newsgroups.com>
Source record: 105719

Dan/W4NTI wrote:
> Good to know where their at.

Maybe we should just nuke everyone who butchers the English language. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3354. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:33:32 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0310291033.67873ed2@posting.google.com>
Source record: 105720
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
= = = "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
= = = wrote in message news:<bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de>...
>
> I am also closely aligned to the Libertarian party,
> which is even more "right wing" than the Republicrats,
> but I do believe in the basic human rights issues.
>
> --
> Ryan KC8PMX
>
```

Ryan,

I think that many (most) Libertarians would view themselves as
Moderate or more "middle-of-the-road'.

Not as extreme as the "Right Wing" [Ultra-Conservative Christian]
segment of the Republican Party.

Or, not as extreme as the "Left Wing" [Socialist Secularist
Anti-Religion] segment of the Democrat Party.

Even these extremes from both ends of the political spectrum to some
degree 'believe in basic human rights': Although their definition of
what those 'basic human rights' mite be, would vary on a point or two.

~ RHF

.

.

3355. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:34:13 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <mJTnb.92317$5n.45202@bignews5.bellsouth.net>
Source record: 105721

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message
news:3f9fc454$1_1@news.vo.lu...
>
> "Jerry" <joxendi@bellsouth.net> wrote in message
> news:krCnb.87760$5n.61996@bignews5.bellsouth.net...
> >
> > "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> > news:bnkeg7$703$1@hercules.btinternet.com...
> > > The moral is - DON'T USE A G5RV.
> >
> >
> > Yup! I bought one in the late 80s and found that it was the craziest
> acting
> > thing I had ever used! It most often
> > drove my Yaesu tuner bonkers; other times it would
> > settle down to an "acceptable" SWR. I fiddled with it
> > for a summer, and finally threw it out.
>
> Hi,
>
> Sorry to say that but you experimented a bad experience.

Who else has had non-success with this antenna?

or have not enough
> knowledge to use it properly.

Wanna BET? I've been doing this stuff since I was a child of 8--trying to
get everything from a window screen to
work to all sorts of wires and verticals. I learned from
quite a few mistakes. Like wondering why I couldn't tune
in those "Donald Duck" sounds (was SSB, but I was too
young and new to know that). Or pretending that those
heterodynes were airplane engines and I was a bomber
pilot (drove my Mom crazy! and also led me to learn to
fly!

Just because something doesn't work for *me* does not
make me an idiot. If it works for you, FINE! If it doesn't
happen to work for me, that's fine, too. I didn't like the antenna, it made
my Yaesu tuner go nuts, did things that
couldn't be explained by usual antenna theory, and I shucked it.

Jerry
K4KWH

> I know several OM in ON that use G5RV, W3DZZ and alike, and even longwire
of
> about 20-30m that have similar results than mine.
> And if the G5RV is always sold (thare a dozen variantes, see my website)
> after decades, there is a good reason : this is because it works well !
>
> Never hear on bands OM working with dipole and G5RV ? There are a lot !
> better, G5RV offer you the best quality/price ratio !
>
> 73's
>
> Thierry
> ON4SKY
>
> I then made me a
> > 75 M doublet fed with ladder line. ....it's still up there.
> >
> > Jerry
> > K4KWH
> > >
> > > Specially one with any coax in the feedline.
> > >
> > > If you've bought one, you've been robbed.
> > >
> > > Use a random length dipole, longer than about 1/3 of the wavelength at
> the
> > > lowest frequency of interest. Choose a length which makes best use of
> the
> > > size of your backyard. Take the 450 or 600-ohm balanced line all the
way
> > > back to the shack. You will need a tuner and a choke balun at the
tuner.
> > > For multi-band operation you will need a tuner whatever you do.
> > >
> > > If you find it inconvenient to feed the dipole in the middle, and you
> have
> > a
> > > relatively low local noise level, then feed it at one end and make an
> > > Inverted-L of it. It will then very likely work very well also on 160
> > > metres.
> > >
> > > And you will never think of using a G5RV again !
> > >
> > > By the way - Louis Varney, G5RV, a real genuine English gentleman,
now
> > no
> > > longer with us, designed his antenna to work most efficiently ONLY on
> > 14.15
> > > MHz, perhaps the best day-or-night, all-year-round, any part of the
> > sun-spot
> > > cycle, DX frequency. It's very good. And you may not need tuner even

> with
> > > the coax. Works great with the old fashioned TS-520 with its built-in
> > tuner
> > > !
> > > ----
> > > Reg, G4FGQ
> > >
> > >
> > >
> >
> >
>
>

3356. Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 18:58:40 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029135840.27758.00000501@mb-m04.aol.com>
Source record: 105722

Howdy perpetual arguers!

Here is the good one for you on eHam.net

http://www.eham.net/articles/6512

between yours truly (right) and Tom, W8JI (wrong).

It centers around the argument that the RF current in the antenna loading coils is (or not) equal. Classic case of "theory" (wrongly applied) to real life measurements and facts. There is referenced previous article that started it all and on my budding web site www.K3BU.us full text with pictures at http://www.k3bu.us/loadingcoils.htm

It looks like this factor is not properly accommodated in modeling programs using loading inductors in antenna elements. In view of the above, time permitting, I will try to do some work and try to shed some more light on the subject.

Any experiences out there, rather than more "reasons" why it ain't so?
Proper accommodation in modeling programs can give substantial improvement in loaded elements modeling.

Let the games begin :-)

Yuri, K3BU

3357. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 19:33:51 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310291133.146cbaae@posting.google.com>
Source record: 105723

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> I'll bet you could design a G5RV that is virtually
> identical in performance to a dipole on 75m and 40m. The losses due
> to SWR are pretty negligible using RG8x.

The only way to do that and keep a dipole pattern on both bands is to run parallel dipoles on one coax. And thats what I run. If I only have room for one wire, I'll make a dipole for the lowest band, and "jumper" the higher bands, using insulators and clips to bypass them. Still dipole performance for each band...
>
> One note, however. The G5RV's null off the end of the antenna is about
> 6dB deeper than a 1/2WL dipole on 40m. Perhaps that explains part of
> your findings.

Nope, don't think so. Wouldn't that be on 20m? We used it on 80m. The pattern should have been about the same as the dipole, considering it's shorter than the dipole by 20-30 ft. The problem with the one we ran was feedline and tuner losses. It made my 100w feel like 10w at the rate we were cutting through the summer noise. Worst antenna I've ever used on that band. :(What I never could understand is why we were using a "compromise" antenna out on field day, when we have enough room for anything. That seemed to be the normal pattern every year, until I put my foot down..."for me to use personally" I never could fathom that, when a dipole is only 20-30 ft longer, and the overall efficiency is usually a large magnitude greater. Like I said, after that field day, and all my lost hair from pulling it out, I said never, ever, again.
If anyone wants to run one of those compromise antennas, G5RV, windoms, etc, etc, be my guest. But don't expect me to use it. I'll run like anthrax spores are on the radio. :(I can't afford to lose any more hair. MK

3358. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 19:55:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnp5us$4bu$1@hercules.btinternet.com>
Source record: 105724

Yuri, as a self-appointed referee in this game your kick-off has now added
to the controversy.

" . . . loading coil current . . . is (or is not) equal to what
????????? ".

Please state unambiguously and explicitly what it is you wish to know.

Reg.

3359. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:05:18 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310291205.17a57eb1@posting.google.com>
Source record: 105725

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message
news:<3f9fc321$1_2@news.vo.lu>...
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bnkeg7$703$1@hercules.btinternet.com...
> > The moral is - DON'T USE A G5RV.
> >
> > Specially one with any coax in the feedline.
> >
> > If you've bought one, you've been robbed.
>
> Hi,
> At first sight you never uses a G5RV. You opinion is completely false and
> will induce novices (and other if I beleive you) in error.

Have you ever actually compared a G5RV to a coax fed dipole on 80m?
I'm talking A/B tests quickly using an antenna switch. His opinion is
most certainly not false. My first hand tests confirm his opinion.
Yes, I didn't make the G5RV's and Windoms that were tested against,
but I wouldn't bother using something like those anyway. It's not my
fault the the ones I tested against were poorly engineered. They were
all storebought antennas. Most made by a co. that uses a state for
part of it's name.

> So read this and learn from the master, G5RV himself :
> http://www.astrosurf.com/lombry/qsl-g5rv.htm

Even he usually recommended you do away with the junk, and run all
ladder line if using for all bands. The antenna as he designed was for
20m only.
>
> I confirmed over 250 DXCC in one year with the G5RV at less than 100 W PEP
> from 80 to 10m, including WARC. It works !

That doesn't mean anything though. You could do that with a mobile
antenna and 10w. How many qso's an antenna makes is not a good
judgement of performance.

Not as a beam of course. But very
> well for what it cost (about 100 euros). That stays an excellent
> investissment,

I think making a dipole from your own wire, is more cost effective.
Not to mention the best performer, being most won't ruin it by adding
a micky mouse feedline setup.

not necessary if you are hunting DX (away that to say 8000 km
> in low solar acticvities like now) or want to participate in all contests
> (that stays a dipole than I work barefoot) but for ragchewing in local QSO
> (inside a radius of to say 5000 km) it is perfect.

No, it's far from perfect. On 75m phone, where most are closer than
500 miles, my coax fed dipole will eat that G5RV for lunch, if it's
the type and fed like the ones I usually see.

With an average emitting
> power of 50W or so, most hams receive me in voice 59 or more, even 57 up to
> VE, east K, VP5, FY, YB. More far the signal decreases (53 and less). But
> this is a beam after all.

Again, signal reports are not an accurate indicator of antenna
performance, unless you quickly A/B with a switch with a comparison
benchmark antenna like the dipole. If you are two S units under me,
you would still make most all the same contacts I would. You would
just be 2 s units weaker. On an average radio, 2 S units is probably
about 10 db or so. I say this, because most all that change from 100w
to 1kw, usually increase by about 2 S units on most radios I see. When
I compared my dipole to one windom at a field day, and saw 2 S units
better performance on the dipole, just in the loss of efficiency with
the windom, that means he would have to run a KW to equal my 100w.
Thats no way to live. Just because they can still make most of the
qso's I do, doesn't mean the antenna is just as good. If I'm 20 over 9
somewhere, you would still be 10 over 9 if you used your antenna at my
qth. MK

3360. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:05:44 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <ePGdncHUbuXjgD2iRVn-sA@comcast.com>
Source record: 105726

> I just picked up "Advanced Electromagnetism and Vacuum Physics" by Patrick
> Cornille (Advanced Electromagnetic Systems, France) published by World
> Scientific Publishing Co. 2003 while browsing Strand Book Store in NYC
(sale
> $32) and the following Preface introduction caught my interest:

Good deal. Amazon wants $96 new, and $91 used. (VERY gently, I hope!)

3361. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:20:36 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <kr60qvgj9e95e2eq4kp5irvds57hhado3n@4ax.com>
Source record: 105727

On 29 Oct 2003 18:58:40 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
set up a tar baby:

|
|Let the games begin :-)

You say (at least I think you said): "Roy Lewallen, W7EL, author of
EZNEC and Wes Stewart, N7WS recommend workarounds to replace the coil
with cylinder of similar size or breaking the coil to number of
physical segments with appropriate inductances."

I'll admit to forgetting more things as I get older but I'll be damned
if I remember making any such statement.

Can you post a link to this so I know what it is that you think I
said, or what I said that I don't remember saying?

Wes Stewart N7WS

3362. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:28:07 UTC
From: ardujenski@aol.com
Message-ID: <20031029152807.14784.00000252@mb-m20.aol.com>
Source record: 105728

Richard and Reg
Thanks for the feedback. Let me ask a question that goes hand in hand with the initial querry. When you set up the vertical and its parasitic how do you tune them for either max gain or max F/B ratio? You can set the height differences by plus or minus 5 percent and space between 0.15 and 0.20 wl but this will get you in the ballpark. I had heard to install a variable cap at the base to fine tune the arrangement but how do you tune it? With a second person and a field strength meter and either tune for max fwd signal or min signal off the back?

3363. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:37:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029153757.27758.00000506@mb-m04.aol.com>
Source record: 105729

>. . loading coil current . . . is (or is not) equal to what
>????????? ".
>
>Please state unambiguously and explicitly what it is you wish to know.
>---
>Reg.

Look at the article(s), it refers to current being equal (or not) at both ends of the loading coil in the antenna elemnt.

In a nutshell, I (and W9UCW, etc.) found that current diminishes accross the coil. W8JI using Kirchoff and Ohm says it can't.

I am curious if anyone else made measurements (never mind "theory") and what they found.

Yuri

3364. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:40:11 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029154011.27758.00000507@mb-m04.aol.com>
Source record: 105730

>
>Can you post a link to this so I know what it is that you think I
>said, or what I said that I don't remember saying?
>
>Wes Stewart N7WS
>
>

Without going the route of providing "evidence" I posted the question about the modeling loading coils here, and Roy and you provided suggestions of the described workaround (if my memory doesn't fail me :-)

Yuri

3365. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:44:07 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029154407.27758.00000508@mb-m04.aol.com>
Source record: 105731

>
>> I just picked up "Advanced Electromagnetism and Vacuum Physics" by Patrick
>> Cornille (Advanced Electromagnetic Systems, France) published by World
>> Scientific Publishing Co. 2003 while browsing Strand Book Store in NYC
>(sale
>> $32) and the following Preface introduction caught my interest:
>
>Good deal. Amazon wants $96 new, and $91 used. (VERY gently, I hope!)
>

There was one more left on the shelf as I remember. If anyone wants, I might be able to check it out at this "World's Largest Used Bookstore". I giured it was worth for the third I wanted to read in the book :-)

Yuri

3366. Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:44:58 UTC
From: private <private@private.com>
Message-ID: <3FA026CA.A1AD387C@private.com>
Source record: 105733

. . .

3367. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 20:46:05 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnp8ud$cst3$1@news3.infoave.net>
Source record: 105732

Another stiff dick contest between you and Tom?

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031029135840.27758.00000501@mb-m04.aol.com...
> Howdy perpetual arguers!

3368. LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:07:05 UTC
From: Dennis <dedey1@bigpond.net.au>
Message-ID: <ZZVnb.170200$bo1.160416@news-server.bigpond.net.au>
Source record: 105734

Any one using the above tuners that wouldn't mind answering a couple of questions please

Rgds

de Dennis vk4sx

3369. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:11:19 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <3FA02CF7.3010808@frontiernet.net>
Source record: 105735
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dan/W4NTI wrote:
> In todays climate many countries are not worth getting too friendly with.
> We are at war. Govern yourself accordingly. Know your enemy.
>
> Dan/W4NTI

'We have seen the enemy, and he is us!'

-Bill Mauldin

3370. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:18:30 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <bdb0qvkq5k381v5n4rf24c5akkqmj7kk26@4ax.com>
Source record: 105736

On 29 Oct 2003 20:40:11 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

|>
|>Can you post a link to this so I know what it is that you think I
|>said, or what I said that I don't remember saying?
|>
|>Wes Stewart N7WS
|>
|>
|
|Without going the route of providing "evidence" I posted the question about the
|modeling loading coils here, and Roy and you provided suggestions of the
|described workaround (if my memory doesn't fail me :-)

In other words, I didn't say it.

|
|Yuri

3371. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:23:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnpb3r$c8g$1@sparta.btinternet.com>
Source record: 105737

"Yuri Blanarovich" wrote

> I (and W9UCW, etc.) found that current diminishes across the
> coil. W8JI using Kirchoff and Ohm says it can't.
>
> I am curious if anyone else made measurements (never mind "theory") and
what
> they found.

==========

If you mean the current distribution along the length of the coil was not uniform but tapering then it is not surprising.

The important thing is by how much did it taper and in what direction? Up or down?

Please describe clearly the type of instruments used and how you made your measurements.

By how much did the current measuring instrument affect the strength of current flowing, for example by detuning the antenna?

What was the length and diameter of the coil, and the number of turns?

What were the lengths of the antenna above and below the coil?

At what frequencies were the measurement made?

What was the current in amps in the coil wire at the bottom, at the centre and at the top of the coil?

What does the current distribution in the coil affect, AND BY HOW MUCH?

Reg

3372. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:43:02 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA03466.5D5D2460@uci.edu>
Source record: 105738

Reg Edwards wrote:
> If you mean the current distribution along the length of the coil was not
> uniform but tapering then it is not surprising.
>
> The important thing is by how much did it taper and in what direction? Up
> or down?
>
> Please describe clearly the type of instruments used and how you made your
> measurements.
>
> By how much did the current measuring instrument affect the strength of
> current flowing, for example by detuning the antenna?
>
> What was the length and diameter of the coil, and the number of turns?
>
> What were the lengths of the antenna above and below the coil?
>
> At what frequencies were the measurement made?
>
> What was the current in amps in the coil wire at the bottom, at the centre
> and at the top of the coil?
>
> What does the current distribution in the coil affect, AND BY HOW MUCH?
> ----
> Reg

Gee, Reg. Until now I've always gotten the impression that you already
learned everything there was to know about this stuff. :-)

73, AC6XG

3373. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 21:58:56 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <soqdnS5kTeP3pT2iRVn-jw@crocker.com>
Source record: 105739

"private" <private@private.com> wrote in message
news:3FA026CA.A1AD387C@private.com...
> ...
>
definitely, you don't want those energetic protons getting into your rx!

3374. Re: nice amateur software!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 22:21:12 UTC
From: A Veteran Has Lung <newbury66@hotmail.com>
Message-ID: <93Xnb.3960$Zr6.3758@newsfep4-winn.server.ntli.net>
Source record: 105740
Cross-posted to:
alt.ham-radio.vhf-uhf,de.comm.ham,rec.radio.amateur.antenna,rec.radio.amateur.dx,uk.radio.amateur,uk.rec.radio.cb

"Ray E. Brain." <me@privacy.net> wrote in message
news:3f9f8f28$1_3@mk-nntp-1.news.uk.worldonline.com...
> And how much time had you spent previously, being
> interested in matters of radio and electronics that enabled
> you to pass the rest of the RAE with such facility?
>
> Exactly.
>
> BTW, you are the first person to suggest that your licence is
> not a proper Ham Licence. Are you admitting to being a
> CBer-Masquerading-As-A-Radio-Ham, perchance?
>
> Geoff <somebody@nospam.demon.co.uk> wrote in message
> news:bnmi8b$j0b$1$8300dec7@news.demon.co.uk...
> > "Airy.R.Bean." <me@privacy.net> wrote in
> > news:3f9e7d17$1_1@mk-nntp-1.news.uk.worldonline.com:
> > > uk.rec.radio.cb is where you need to be. A licence that is
> > > obtainable from scratch after only two days' effort is not a
> > > Ham Licence.
> > Excuse me, I spent one evening swotting up on licencing regulations and
> > passed the C & G RAE the next evening. This was at my first attempt,
"from
> > scratch" as you describe it. Thus I have a proper amateur licence, and
> have
> > held it for 30+ years. If you are saying my licence is not a "Ham
> Licence",
> > I would agree, but not in the sense that I believe you to mean.
>
>
>
And are you Airy R Bean masquerading under another sockpuppet because you're
to embarrassed to use your old one perchance?

3375. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 22:22:12 UTC
From: luigi_fatchenelli_125@hotmail.com
Message-ID: <16218d3a.0310291422.9b8e682@posting.google.com>
Source record: 105741
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Danny boy, does your buddy at the Feds also investigate stupidity?
You and Chuck are as racist as they come. You are right about one
thing, "payback is a mo fo...bro."

These are radio newsgroups you fool.

Luigi

These two racists make me sick!!!!

Daniel L. Jeswald (W4NTI)
89 Wildman Road
Anniston AL
36201

Charles D. Braham (N5PVL)
Rt 2 Box 46
Lyford TX
78569

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> Guess what "Private"...two can play that game. I just sicked my buddy on
> you. He works for the Feds. They track down pedofiles and such. He is
> making you a 'special' case.
>
> See you in the funny papers.....payback is a mo fo...bro.
>
> Dan/W4NTI
>
> "Private" <groundwave@telus.net> wrote in message
> news:eb867ae8.0310282134.47e3015d@posting.google.com...
> > I cannot believe these two clowns are still at it. I found some of
> > their original comments and sure enough they are as racist as they
> > come. People have a right not be discriminated against or abused
> > because of color, race and religion etc....
> >
> > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > sure people in their own town will find out about them. They will be
> > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > up....
> >
> >

> > > Charles D. Braham (N5PVL)
> > > Rt 2 Box 46
> > > Lyford TX
> > > 78569
> > > >
> > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > raghead fanatics with very few casualties (sound familiar?) , the
> Israeli
> > > > general agreed to give the reporter the exclusive secret to his
> > > > unprecedented military success...
> > > >
> > > > "Fight Arabs." he said.
> > > >
> > > > Charles Brabham, N5PVL
> >
> >
> > > Daniel L. Jeswald
> > > 89 Wildman Road
> > > Anniston AL
> > > 36201
> > >
> > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq would
> turn
> > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> serving a
> > > > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > > > Idaho.
> > > >
> > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > party left me when they turned it over to NOW and Phyliss.
> > > >
> > > > That does NOT mean I support Baby Bush 100%. However lets see how
> things
> > > > go.
> > > >
> > > > Dan/W4NTI

3376. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 22:54:28 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <EyXnb.12505$FI2.7115@newsread1.news.atl.earthlink.net>
Source record: 105742
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Let me try to explain thing in special english.

Bush and Rummy are smart.

Most Americans are dumb.

The idea is to occupy territory in the middle of the zoo zone.

The purpose of the army is to kill enemies of the USA.

The Iraqi regime was a enemy of this country.

A. They paid money to the family of the murders that killed women and children in Israel

B. They provided safe passage for terrorists.

C. They provided logistical support to terrorists.

D. In cahoots with Syria they helped to funnel
funds to terrorist organizations, such as hezzbolah, which is guarding the Chemical weapons Sadam made in the Beka valley of Lebannon. Which is controlled by Syria.

Have you noticed how quickly Iran has become nice nice with Washington? Think maybe it might have something to do with 130,000 US Combat troops on their border?

You must understand that it is much much better to have ragheads throwing bombs and shooting off RPGs in raghead land, than some city in the USA. You do agree don't you?

So basically I am saying we are using the hell out of Iraq. What place is better to have a fight?

You are hung up on the WMD thing. Move on, history is bypassing you.

I agree, we were mislead. But what is the option at this point? Do we re-call our warriors and watch the middle east explode? We have made our bed and its time we layed in it.

In otherwords we are in the middle of the crap. So we have to take care of business.

I hope that one day you Bush haters will get your head screwed on straight and realize that you are HURTING this country.

Jane Fonda did the same thing about Nam. It hurts morale. It caused
American troops to die. It extended the war.

Stop repeating history and back this president so we can take care of
business and get the hell out of there.

Dan/W4NTI

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:NnTnb.38062$IA2.1285265@twister.southeast.rr.com...
> How could things have gone any worse? We still don't have Osama, and guys
> are still dying in Afghanistan even though the news acts like it's fallen
> off the earth.
>
> As far as Sadam, what, specifically, did he have to do with 9/11? When
it
> comes down to it, he was probably more of an ally against militant Islamic
> terrorists than any other.
>
> ....and, I'm probably more conservative than you..... There's nothing
more
> liberal than "nation building", something we were told six years ago that
> wasn't going to happen under this presidency. My how things change.
>
> I'll make a prediction: the 87 billion dollars going to Iraq is just the
> beginning.
>
> Alan
> WN4HOG
>
> --
> Windsurfing Club: http://www.ibscc.org
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:zJSnb.9061$X22.1965@newsread2.news.atl.earthlink.net...
> > Can you imagine, liberal puke, how things would have gone if Klintoon
was
> > still president on 9/11 ?
> >
> > Uh.....I.....didn't have sex with Sadam....uh we just shook
> > hands.....uh.....wait a minute Monica.....uh as for Osama....uh....he is
> > just a bit confused...uh....ok I gotta go....uh uh..
> >
> > Dan/W4NTI
> >
> > "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> > news:I9Pnb.35524$IA2.1252122@twister.southeast.rr.com...
> > > I guess Bush is a genius. Maybe that's what it takes to invent new
> words.
> > > Yesterday it was, "suiciders". It's one thing though to invent words,
> > > another to invent enemies behind every tree.

> > >
> > > Here's a nice shot of your "genius" hero Rumsfield shaking hands with
> > Saddam
> > > a few years ago: http://www.mydd.com/archives/000427.html
> > >
> > > Ah, who to believe in this mixed up world. Politicians are
politicians.
> > None
> > > of which are geniuses. Calling politicians geniuses is a slap in the
> face
> > to
> > > Marconi, Maxwell, and Tesla.
> > >
> > > Alan
> > >
> > > --
> > > Windsurfing Club: http://www.ibscc.org
> > >
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > news:bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net...
> > > > You could search the entire world and not find a better place to
fight
> > > > terrorists. A major sandbox surrounded by ragheads that need their
> ass
> > > > kicked.
> > > >
> > > > Bush is a genius. Rummy is a genius. You will see.
> > > >
> > > > Let me ask you this; Would you rather have these ragheads blowing
up
> > > > Boston?
> > > >
> > > > Dan/W4NTI
> > >
> > >
> > >
> >
> >
>
>

3377. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 22:55:59 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <3AXnb.12511$FI2.4795@newsread1.news.atl.earthlink.net>
Source record: 105743
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Hey Luigi, you a wanta meet my cousin? His name is Guido.

Dan/W4NTI

"luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
news:16218d3a.0310291422.9b8e682@posting.google.com...
> Danny boy, does your buddy at the Feds also investigate stupidity?
> You and Chuck are as racist as they come. You are right about one
> thing, "payback is a mo fo...bro."
>
> These are radio newsgroups you fool.
>
> Luigi
>
>
> These two racists make me sick!!!!
>
> Daniel L. Jeswald (W4NTI)
> 89 Wildman Road
> Anniston AL
> 36201
>
> Charles D. Braham (N5PVL)
> Rt 2 Box 46
> Lyford TX
> 78569
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > Guess what "Private"...two can play that game. I just sicked my buddy
on
> > you. He works for the Feds. They track down pedofiles and such. He is
> > making you a 'special' case.
> >
> > See you in the funny papers.....payback is a mo fo...bro.
> >
> > Dan/W4NTI
> >
> > "Private" <groundwave@telus.net> wrote in message
> > news:eb867ae8.0310282134.47e3015d@posting.google.com...
> > > I cannot believe these two clowns are still at it. I found some of
> > > their original comments and sure enough they are as racist as they

> > > come. People have a right not be discriminated against or abused
> > > because of color, race and religion etc....
> > >
> > > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > > sure people in their own town will find out about them. They will be
> > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > up....
> > >
> > >
> > > > Charles D. Braham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
> > > > 78569
> > > > >
> > > > > Asked about his astounding success in mowing down thousands of
> > screaming
> > > > > raghead fanatics with very few casualties (sound familiar?) ,
the
> > Israeli
> > > > > general agreed to give the reporter the exclusive secret to his
> > > > > unprecedented military success...
> > > > > >
> > > > > "Fight Arabs." he said.
> > > > > >
> > > > > Charles Brabham, N5PVL
> > > >
> > > >
> > > > Daniel L. Jeswald
> > > > 89 Wildman Road
> > > > Anniston AL
> > > > 36201
> > > >
> > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
would
> > turn
> > > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> > serving a
> > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
Boise
> > > > > Idaho.
> > > > > >
> > > > > As for your political commentary. As far as I'm concerned the
> > Democratic
> > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > >
> > > > > That does NOT mean I support Baby Bush 100%. However lets see how
> > things
> > > > > go.
> > > > > >
> > > > > Dan/W4NTI

3378. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 22:57:10 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <aBXnb.12513$FI2.7648@newsread1.news.atl.earthlink.net>
Source record: 105744
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

How about bitching out 'Private'. He is the son of a bee that started this
line. And I'll damn sure end it.

Dan/W4NTI

"luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
news:16218d3a.0310291422.9b8e682@posting.google.com...
> Danny boy, does your buddy at the Feds also investigate stupidity?
> You and Chuck are as racist as they come. You are right about one
> thing, "payback is a mo fo...bro."
>
> These are radio newsgroups you fool.
>
> Luigi
>
>
> These two racists make me sick!!!!
>
> Daniel L. Jeswald (W4NTI)
> 89 Wildman Road
> Anniston AL
> 36201
>
> Charles D. Braham (N5PVL)
> Rt 2 Box 46
> Lyford TX
> 78569
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > Guess what "Private"...two can play that game. I just sicked my buddy
on
> > you. He works for the Feds. They track down pedofiles and such. He is
> > making you a 'special' case.
> >
> > See you in the funny papers.....payback is a mo fo...bro.
> >
> > Dan/W4NTI
> >
> > "Private" <groundwave@telus.net> wrote in message
> > news:eb867ae8.0310282134.47e3015d@posting.google.com...
> > > I cannot believe these two clowns are still at it. I found some of

> > > their original comments and sure enough they are as racist as they
> > > come. People have a right not be discriminated against or abused
> > > because of color, race and religion etc....
> > >
> > > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > > sure people in their own town will find out about them. They will be
> > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > up....
> > >
> > >
> > > > Charles D. Braham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
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> > > > >
> > > > > Asked about his astounding success in mowing down thousands of
> > screaming
> > > > > raghead fanatics with very few casualties (sound familiar?) ,
the
> > Israeli
> > > > > general agreed to give the reporter the exclusive secret to his
> > > > > unprecedented military success...
> > > > >
> > > > > "Fight Arabs." he said.
> > > > >
> > > > > Charles Brabham, N5PVL
> > > >
> > > >
> > > > Daniel L. Jeswald
> > > > 89 Wildman Road
> > > > Anniston AL
> > > > 36201
> > > >
> > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
would
> > turn
> > > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> > serving a
> > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
Boise
> > > > > Idaho.
> > > > >
> > > > > As for your political commentary. As far as I'm concerned the
> > Democratic
> > > > > party left me when they turned it over to NOW and Phyliss.
> > > > >
> > > > > That does NOT mean I support Baby Bush 100%. However lets see how
> > things
> > > > > go.
> > > > >

> > > > > Dan/W4NTI

3379. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:01:59 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <HFXnb.1338$QB5.15929524@newssvr21.news.prodigy.com>
Source record: 105745
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"gwatts" <gwatts@frontiernet.net> wrote in message
news:3FA02CF7.3010808@frontiernet.net...
>
> 'We have seen the enemy, and he is us!'

That was from "Pogo", wasn't it? I have forgotten.

Charles Brabham, N5PVL

3380. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:08:50 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <6MXnb.12525$FI2.3943@newsread1.news.atl.earthlink.net>
Source record: 105746

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031029131314.14077.00000406@mb-m29.aol.com...
> Dan wrote,
> >
> >
> >Fine, your intitled to your opinion. I'll just tell the governor to
tell
> >Bush that the Alabama contingent of citizen soldiers will be leaving Iraq
> >and Kuwait.
> >
> >You did know that the MAJORITY of troops presently in the war zone come
from
> >the South don't you? And most of them from Alabama.
>
> I didn't know so many black people and Latinos lived in Alabama. Why
would
> anyone want to live there when they can make some real money in California
> or New York? Annnd, they won't have to live around people like you,
either.
>
>

You can't talk like that. Thats RACIST. I'm gonna call the NAACP on you.

> >
> >In fact Alabama has supplied a large portion of combat troops to ALL wars
> >this nation has been in after we 'lost' the war between the states'.
> >
> >Oh, liberal puke, allow me to correct you on something. Alabama never
> >surrendered. Lee surrendered the Army of Northern Virginia. Not the
state
> >of Alabama.
>
> Thanks, Dan. I haven't laughed so hard in weeks. Southern sympathizers
didn't
> give up here until long after the war, either. No problem. We just jailed
or
> hanged
> 'em as we saw fit.

Now he is throwing ethnic slurs towards southerners. Im going to call the
ACLU on you.

>
> >
> >The war officially ended when the fighting stopped, and that was several
> >YEARS after that day at the courthouse in Va.
> >
> >Have a nice day....take a deep breath...thats the smell of your state
> >burning up. Love it.
>
> You would. You've made one point, though. For most of my life I didn't
> think there was anything lower than a snake's belly. You are, though,
> and I thank you for helping me see the light.
>

Coming from you an insult is a compliment.

I always thought something was genetically wrong with people from
California. Now I realise it is just inborn.....get it liberal puke?

> >
> >Dan/W4NTI
>
> 73,
> Tom Donaly, KA6RUH
>
>

3381. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:08:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cqh0qvgaoo75gt47knqa4ld244320us6bb@4ax.com>
Source record: 105747

On 29 Oct 2003 20:28:07 GMT, ardujenski@aol.com (ARDUJENSKI) wrote:

>Richard and Reg
>Thanks for the feedback. Let me ask a question that goes hand in hand with the
>initial querry. When you set up the vertical and its parasitic how do you tune
>them for either max gain or max F/B ratio? You can set the height differences
>by plus or minus 5 percent and space between 0.15 and 0.20 wl but this will get
>you in the ballpark. I had heard to install a variable cap at the base to fine
>tune the arrangement but how do you tune it? With a second person and a field
>strength meter and either tune for max fwd signal or min signal off the back?

Hi Alan,

I would suggest you return to your modeling with EZNEC for a first
pass approximation. As for the final tune, I cannot see how you can
escape the test of the model without some field work. Max Gain and
best F/B are not always achieved with the same solution; so you may
wish to commit to which is more important. You may also want to
investigate how to reverse the pattern (switchable driven element).

73's
Richard Clark, KB7QHC

3382. hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:40:28 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0310291540.ef21d63@posting.google.com>
Source record: 105748
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Goal:
* Minimum fuss 3-30MHz operation, mostly on 5-15MHz.
* Will use step-dowm RF transformer between antenna and low impedance coax
* May use autotuner on TX
* Like the wirecage antennas still today seen on many a military vessel.

Available on roof:
- 25ft steel structure (like piramid base for power line)
- about 100 feet space in one direction
-...to abandoned flue chimney, 100ft away and 10 feet lower than base of steel structure
- roof covered with alu plates on tar (could be all arc welded together, perhaps.

THIS LOOKS PRETTY MUCH LIKE A SHIP TO ME cept its' 120ft aboveground.

I want to build a wire cage monopole
- sloping down from steel tower
- using tower as counterpoise
- feedpoint at top of sloper, via stepdown rf transfomrer, grounded to tower
- coax cable lead, with rf choke coils and surge suppressors.

Questions:
- what kind of cage antenna?
- how many wires?
- what spreaders, how large?
- ideal wire?

Current plan config:
- length 14 m = 2 x 4m straight sections, + 2 x 3m truncated cubes
- spreaders at 3-7-11 m
- 140 cm dia. spreaders, each made with two waterproofed bamboo triangles in "star of David" configuration; wire kept parallel at 70cm distance from each orther.
- material: .8mm copperclad, abt. 90 m (270 ft) total.

Any hints, like more/fewer parallel wires, broader / smaller spreaders, different materials, dirrerent antenna wire, RF downtransformer, whatever?

Filippo

3383. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:48:39 UTC
From: N8KDV <n8kdv@nospam.iserv.net>
Message-ID: <3FA051D7.5E6F804E@nospam.iserv.net>
Source record: 105749
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

SpamLover wrote:

> Goal:
> * Minimum fuss 3-30MHz operation, mostly on 5-15MHz.
> * Will use step-dowm RF transformer between antenna and low impedance
> coax
> * May use autotuner on TX
> * Like the wirecage antennas still today seen on many a military
> vessel.
>
> Available on roof:
> - 25ft steel structure (like piramid base for power line)
> - about 100 feet space in one direction
> -...to abandoned flue chimney, 100ft away and 10 feet lower than base
> of steel structure
> - roof covered with alu plates on tar (could be all arc welded
> together, perhaps.
>
> THIS LOOKS PRETTY MUCH LIKE A SHIP TO ME cept its' 120ft aboveground.
>
> I want to build a wire cage monopole
> - sloping down from steel tower
> - using tower as counterpoise
> - feedpoint at top of sloper, via stepdown rf transfomrer, grounded to
> tower
> - coax cable lead, with rf choke coils and surge suppressors.
>
> Questions:
> - what kind of cage antenna?
> - how many wires?
> - what spreaders, how large?
> - ideal wire?
>
> Current plan config:
> - length 14 m = 2 x 4m straight sections, + 2 x 3m truncated cubes
> - spreaders at 3-7-11 m
> - 140 cm dia. spreaders, each made with two waterproofed bamboo
> triangles in "star of David" configuration; wire kept parallel at 70cm
> distance from each orther.
> - material: .8mm copperclad, abt. 90 m (270 ft) total.
>
> Any hints, like more/fewer parallel wires, broader / smaller
> spreaders, different materials, dirrerent antenna wire, RF

> downtransformer, whatever?
>
> Filippo

Why?

3384. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:53:39 UTC
From: wizard12342002@yahoo.com
Message-ID: <a3232cc0.0310291553.643f967e@posting.google.com>
Source record: 105750

I guess for now I will accept that a radio wave is a force field (or energy field, if you like), and leave it at that (still seems to imply action-at-a-distance). When I was in school, if this question were asked, the professor would right down Maxwell's Equations on the blackboard and state that they explain everything. I suppose that's about as good as anything.

Thanks for the responses.

JJ

3385. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-29 23:57:33 UTC
From: tdonaly@aol.com
Message-ID: <20031029185733.19947.00000236@mb-m07.aol.com>
Source record: 105751

Charles wrote,
>
>
>"gwatts" <gwatts@frontiernet.net> wrote in message
>news:3FA02CF7.3010808@frontiernet.net...
>>
>> 'We have seen the enemy, and he is us!'
>
>That was from "Pogo", wasn't it? I have forgotten.
>
>Charles Brabham, N5PVL
>

You're right, it was Pogo. It's the title of a 1972 Pogo
book "We Have Met the Enemy and He is Us," by
Walt Kelly.
73,
Tom Donaly, KA6RUH

3386. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 00:36:27 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <f2Znb.12612$FI2.7196@newsread1.news.atl.earthlink.net>
Source record: 105752
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Amazing....he must have nothing to do.

Dan/W4NTI

"Jay" <jsouter@REMOVEbellsouth.net> wrote in message
news:bfYnb.63955$h47.11535@bignews4.bellsouth.net...
>
> On Wed, 29 Oct 2003 22:55:59 GMT, Dan/W4NTI
<w4nti@getridofthismindspring.com> wrote:
> > Hey Luigi, you a wanta meet my cousin? His name is Guido.
> >
> > Dan/W4NTI
>
> Luigi == Private
>
> He's just morphed but is trolling from the same IP address in
> Edmonton, Alberta. The boy ain't too skilled at trolling.
>
> So <plonk> him and move on. Don't feed the troll.

3387. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 01:10:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l5p0qvkcqo0jho6nm7mc4obf8m9t1pe4he@4ax.com>
Source record: 105753
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

On 29 Oct 2003 15:40:28 -0800, n1jpr@hotmail.com (SpamLover) wrote:

>Questions:
>- what kind of cage antenna?
>- how many wires?
>- what spreaders, how large?
>- ideal wire?

Hi OM,

http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm

73's
Richard Clark, KB7QHC

3388. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 01:12:19 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029201219.27758.00000515@mb-m04.aol.com>
Source record: 105754

>
>Another stiff dick contest between you and Tom?
>

Yep,
I post fact of life, Tom pompously chimes in that it can't be so with some added ridicule, and I won't budge to a bully that is barking up the wrong tree. This is about 5th time. Watch him to become expert in few moths "he said it all along" :-) and will become a guru.

All in the good spirit of learning :-)

Yuri

3389. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 01:16:24 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029201624.27758.00000516@mb-m04.aol.com>
Source record: 105755

>
>What does the current distribution in the coil affect, AND BY HOW MUCH?
>----
>Reg
>
>

Reg it is all there in my article and references I posted in my post. Can you look up those links or is there a problem? I hate to go over the stuff again. If you can't look up the links, perhaps I could post the text here, but article has details, measurements, pictures of meters and facts of life.

Yuri
www.K3BU.us

3390. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 01:17:54 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029201754.27758.00000517@mb-m04.aol.com>
Source record: 105756

Dont make no difference, you wont hear anything.

3391. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 02:57:45 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnpun9$6e5$1@sparta.btinternet.com>
Source record: 105757

> Gee, Reg. Until now I've always gotten the impression that you already
> learned everything there was to know about this stuff. :-)
>
> 73, AC6XG

==========

Jim, if you promise, cross-your-heart, not to tell anybody I'll let you into a long-hidden secret.

When it comes to the the distribution of current along a loading coil on a vehicle-mounted whip I am severely handicapped in that I have never been mobile in a motor car with a radio transmitter, never owned a motor car, never even held a driver's licence.

Otherwise I am quite a normal person who takes an interest in electric currents flowing along wires, rods, through coils and around the surfaces of such things as vehicle bodies. Normallity extends to world-wide objections against being choked by petrol fumes and the now common practice of financing pirate expeditions to obtain the diminishing raw material from which the poisonous liquid is refined.

It seems Yuri is interested in modelling short, coil loaded antennas. He refers to controversy. I can set his mind at rest and assure him there is none.

When the length of a loading coil is short in comparison with the overall height of the antenna, certainly in comparison with a wavelength, the current into one end can be assumed, with negligible error, to be equal to that which comes out of the other end as with any other coil in an L,C,R network analysis. Its stray capacitance can be ignored except for investigating its self-resonant frequency.

It is a lump of inductance effectively concentrated at its midpoint. For estimating antenna behaviour and performance it is necessary only to add half the length of the coil to the length of the lower portion of the antenna, and to do likewise to the upper length. The antenna's distributed radiation and wire loss resistance can be sufficiently accurately estimated from these dimensions, all being transformed to the feedpoint according to the normal transforming action of the lengths of transmission line (the antenna parts) involved.

==========

When coil length is nearly as long as the antenna, ie., a close-wound helical for the lower frequencies, in which coil loss for a high inductance is minimised by using thick wire rather than an inconvenient, very large

diameter coil, the antenna is best considered as a continuously loaded 1/4-wavelength transmission line in which its uniformly-distributed capacitance, loss resistance and radiation resistance per unit length is taken into account.

==========

For practical purpose, these different-proportioned sorts of short vertical antennas all have the same, simple, well known radiation pattern. Any slight differences are overwhelmed by variations, entirely out-of-human-control, in the local environment and along the propagation path. What matters is radiating efficiency. The standard of radiating efficiency is that of a very high 1/2-wave dipole of any orientation and there's no need to be concerned here where the radiation disappears to.

There is only one question of consequence. At what height up a short vertical is a coil of given intrinsic Q to be located to maximise radiating efficiency? It is never at or very near the top! As coil height increases the required inductance and number of turns increases rapidly. Coil loss resistance always overtakes the improvement in radiation resistance due to the change in distribution of current along the antenna. A high resistance, self resonant coil of many turns of fine wire right at the top of the antenna eventually fails.

==========

There are various special cases which are dealt with by simple programs available from the website below.

There is one program which covers from helicals, via screwdrivers, to lumped coils. The coil can slide up and down the antenna to find the location of maximum efficiency for given coil length and diameter. The number of coil turns and wire gauge are automatically recalculated to maintain the same required antenna resonant frequency. Program name is LOADCOIL.exe
Download and run in a few seconds.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3392. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 02:59:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6iv0qvo9gh6atpog0qhs7nhfkqtl8bc2i8@4ax.com>
Source record: 105758

On 30 Oct 2003 01:16:24 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:
>but article
>has details, measurements, pictures of meters and facts of life.

Hi Yuri,

Then what's left to be said here?

73's
Richard Clark, KB7QHC

3393. Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 03:10:27 UTC
From: Twistedhed <twistedhed@webtv.net>
Message-ID: <bnpvf3$7jl$1@news.x-echo.com>
Source record: 105759

I need an antenna that will get me on the channels above 27.3. My Galaxy goes to 32 mhz.

twistedhed@webtv.net

=-
Article poste via Voila News - http://www.news.voila.fr
Le : Thu Oct 30 04:10:27 2003 depuis l'IP : ac8d51fc.ipt.aol.com [VIP 532284301978]

3394. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:02:20 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029230220.00634.00000391@mb-m12.aol.com>
Source record: 105760

Reg writes:
>
>It seems Yuri is interested in modelling short, coil loaded antennas. He
>refers to controversy. I can set his mind at rest and assure him there is
>none.
>
>When the length of a loading coil is short in comparison with the overall
>height of the antenna, certainly in comparison with a wavelength, the
>current into one end can be assumed, with negligible error, to be equal to
>that which comes out of the other end as with any other coil in an L,C,R
>network analysis. Its stray capacitance can be ignored except for
>investigating its self-resonant frequency.

There is none? You are confirming there is one by your above statements.

The point is that W9UCW measured, that difference in "normal" loading coil (not long coils or helicals) is in order of 40 to 60% less at the top of the coil. That is significant in calculating or optimizing the efficiency of loaded antenna. MEASURE it and don't rely on myth perpetuated since 1955 by Belrose till today's ARRL Antenna Book. ON4UN has it right in his book.

Resonance is no big deal, efficiency is greatly affected, modeling programs are way off especially if you include more loaded parasitic elements.

Did you read my article, facts and measurements? You can try to repeat the measurements to validate the effect. That's what I am looking for, if we are in error, would like to have it pointed out. Not speculations that it "should be" like that.

Yuri

3395. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:06:27 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029230627.00634.00000394@mb-m12.aol.com>
Source record: 105761

>
>Then what's left to be said here?
>
>73's
>Richard Clark, KB7QHC
>

See the comments from the flat earth society, even Reg has and "hasn't" have a problem.

Significant impact on modeling software. If the stuff is not accomodated properly, then results (mainly efficiency) are way off.

Mobile antennas, shortened antennas can be made better if we have handle on the thing.

Yuri, K3BU/m

3396. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:17:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa0916e_3@corp.newsgroups.com>
Source record: 105762

Yuri Blanarovich wrote:
> Any experiences out there, rather than more "reasons" why it ain't so?
> Proper accommodation in modeling programs can give substantial improvement in
> loaded elements modeling.

Assume a transmission line with an SWR of 10:1. Put a series inductor in series with the transmission line. Assuming negligible losses, the forward current is the same at each end of the coil and the reflected current is the same at each end of the coil. The question is: Do the superposed currents, Ifwd+Iref, remain constant? Of course not, because of phase shifts. With a large enough coil, one could cause a current maximum point on one side of the coil and a current minimum point on the other side.

That same principle holds true for standing wave antennas which are antennas with (surprise!) standing waves. The current is NOT the same at each end of the coil (unless a current maximum or current minimum occurs in the middle of the coil). However, for traveling wave antennas, the current at each end of a loading coil would be close to equal.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3397. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:26:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa09392$1_3@corp.newsgroups.com>
Source record: 105763

Yuri Blanarovich wrote:
> In a nutshell, I (and W9UCW, etc.) found that current diminishes accross the
> coil. W8JI using Kirchoff and Ohm says it can't.

If you put a loading coil 1/3 of the way up on an end-fed 1/2WL
vertical, the net current will increase across the coil. The
net current can decrease, or increase, or be the same magnitude
for special cases. Think Ifwd+Iref with the coil causing major
phase shifts.

Open-ended antennas like dipoles are standing wave antennas. The
forward current is relatively constant through the coil and the
reflected current is relatively constant through the coil. But
the phasor sum of those two currents can vary wildly from end
to end in the coil because of phase shifts.
--
73, Cecil http://www.qsl.net/w5dxp

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3398. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:28:24 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <lr0ob.505$mc1.180@newssvr14.news.prodigy.com>
Source record: 105764
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:f2Znb.12612$FI2.7196@newsread1.news.atl.earthlink.net...
> Amazing....he must have nothing to do.
>

Amazing that we didn't have anything better to do than answer him, but
that's how it goes, sometimes.

Charles Brabham, N5PVL

3399. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:30:28 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029233028.00634.00000401@mb-m12.aol.com>
Source record: 105765

Thanks Cecil,
the standing waves do it again!

So far the best argument against W8JI's Kirchoffs and Ohms!

With your permission I will post this public posting back at the eHam.net.

Now see what Reg says, hopefuly after reading the article.

Yuri

3400. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:32:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa09510_3@corp.newsgroups.com>
Source record: 105766

Tdonaly wrote:
> You're right, it was Pogo.

Who said, "No man is an Ireland"?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3401. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:43:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031029234301.00634.00000406@mb-m12.aol.com>
Source record: 105767

>
>Open-ended antennas like dipoles are standing wave antennas. The
>forward current is relatively constant through the coil and the
>reflected current is relatively constant through the coil. But
>the phasor sum of those two currents can vary wildly from end
>to end in the coil because of phase shifts.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

Don't we have a case of coil being RF choke to certain extent?
Also I think that behaviour of radiator before and after the coil defines the magnitude of the current, no?

Yuri, K3BU

3402. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:44:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3j41qvcp2l3bf28jntphtkq6kd4h6n0mi8@4ax.com>
Source record: 105768

On 29 Oct 2003 18:58:40 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>It looks like this factor is not properly accommodated in modeling programs
>using loading inductors in antenna elements. In view of the above, time
>permitting, I will try to do some work and try to shed some more light on the
>subject.

Hi Yuri,

With respect to the data:
>Here are some actual measurements of current below and above loading coils.
> 92" mast, using a HI-Q coil (openwound airdux, 2 1/2"d) with small thermocouple
>type meters mounted on the insulated coil support. First for 40m, moving the coil
>in the mast from base to center to top (with hat) and reresonating.
> Base --100ma below & 66ma above
> Center --100ma below & 45ma above
> Top --100ma below & 37ma above

This speaks more of simple Resistive heat loss supported by your own
direct observation of:
> I fried the loading coil with 600W into Hustler resonator,
>melting heat-shrink tubing and wire at the bottom of the coil.

As you, through personal testimony, offer that the bottom of the coil
was warmer (hotter even) than the top; and further, given that the
measuring device is caloric based (thermocouple) it stands to reason
that the close association to heat inflates the base reading not
through the evidence of higher current, but higher (and demonstrable)
heat. The pictures show the close proximity of the thermocouples to
the heat source/coil and also reveal no readings at greater distances
from the coil.

You go to great lengths to portray the current distribution along the
entire length of the radiator from authoritative sources, and yet you
do nothing to confirm them; except over the small portion that
fascinates you and is prone to just such systematic error as I
describe.

73's
Richard Clark, KB7QHC

3403. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:44:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa097d1$1_3@corp.newsgroups.com>
Source record: 105669

Yuri Blanarovich wrote:
> I post fact of life, Tom pompously chimes in that it can't be so with some
> added ridicule, and I won't budge to a bully that is barking up the wrong tree.
> This is about 5th time. Watch him to become expert in few moths "he said it all
> along" :-) and will become a guru.

I don't understand what the fuss is all about. The forward current hits
the end of the dipole and is reflected. There are standing current waves
on a standing wave antenna. A loading coil shifts the phase between Ifwd
and Iref so anything is possible across a coil, increasing currents,
decreasing currents, or equal magnitudes of currents. It all depends on
the phases involved. For dipoles shorter than 1/2WL, the current decreases
across the loading coils. For a 1WL dipole with the loading coils located
1/3 of the way from the feedpoint, the net current through the coils will
actually increase.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3404. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:48:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa098ea_3@corp.newsgroups.com>
Source record: 105670

Reg Edwards wrote:
> When the length of a loading coil is short in comparison with the overall
> height of the antenna, certainly in comparison with a wavelength, the
> current into one end can be assumed, with negligible error, to be equal to
> that which comes out of the other end as with any other coil in an L,C,R
> network analysis.

But Reg, why do you think they call it a standing wave antenna? Would
you also assert that the current is equal when a coil is installed in
a transmission line with reflections? If it weren't for reflections
from the open ends of a dipole, the feedpoint impedance would be
hundreds of ohms. It's the reflections that reduces the feedpoint
impedance to ~70 ohms.
--
73, Cecil http://www.qsl.net/w5dxp

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3405. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:54:56 UTC
From: tdonaly@aol.com
Message-ID: <20031029235456.14077.00000418@mb-m29.aol.com>
Source record: 105672

Cecil wrote,
>
>Tdonaly wrote:
>> You're right, it was Pogo.
>
>Who said, "No man is an Ireland"?
>--
>73, Cecil http://www.qsl.net/w5dxp

I dunno, but it doesn't apply to me.
73,
Tom Donaly, KA6RUH

3406. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:55:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa09a5f$1_3@corp.newsgroups.com>
Source record: 105671

Yuri Blanarovich wrote:
> The point is that W9UCW measured, that difference in "normal" loading coil
> (not long coils or helicals) is in order of 40 to 60% less at the top of the
> coil.

All explained by the different phasing of the forward and reflected
currents at that point. If you want to blow Tom's mind, measure the current
in and out of a coil placed 1/3 of the distance up in a 1/2WL vertical.
The current will *INCREASE* from the bottom of the coil to the top of
the coil. How many times have we been warned not to use lumped circuit
theory on distributed networks?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3407. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 04:56:44 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <cm5qnb-lku.ln@p400bob.lse.com.au>
Source record: 105686

Shorten the one you have in proportion to the frequency change...?

The possibilities are endless. You have to ask what kind of propogation you want, directivity and so on. In my experience a single simple antenna wont cover that range without retuning. You could of course make a big broadband thing but that gets a little complex! If you just want it to "work" get an ATU.

Cheers Bob

> I need an antenna that will get me on the channels above 27.3. My Galaxy
> goes to 32 mhz.
>
> twistedhed@webtv.net
>
> =-
> Article poste via Voila News - http://www.news.voila.fr
> Le : Thu Oct 30 04:10:27 2003 depuis l'IP : ac8d51fc.ipt.aol.com [VIP
> 532284301978]

3408. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:06:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa09d16_3@corp.newsgroups.com>
Source record: 105673

Yuri Blanarovich wrote:

> Thanks Cecil,
> the standing waves do it again!

See if you can get Tom to assert that the current into and
out of a coil in series with a transmission line with reflections
is also constant. :-) Same principles apply.

> So far the best argument against W8JI's Kirchoffs and Ohms!

You can get a ballpark estimate of those currents by comparing
a 1/2WL dipole to a loading coil dipole. Assuming the following
two dipoles are resonant on the same frequency:

```
-----y----------x-----FP-----x----------y-----

-----coil-----FP-----coil-----
```

Assume the feedpoint impedances are the same and the losses in
the coils are negligible. The net current into the coil is close
to the current at 'x'. The net current out of the coil is close
to the current at 'y'.
--
73, Cecil http://www.qsl.net/w5dxp

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3409. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:10:12 UTC
From: luigi_fatchenelli_125@hotmail.com
Message-ID: <16218d3a.0310292110.83d8726@posting.google.com>
Source record: 105674
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Again Daniel, this is a Radio newsgroup. You and Chuck should take
your racist comments to yourselves. Everyone knows the type of people
you are.

All you have to do is read your own posts to see who started what.
You got caught, now grow up.

Luigi

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<aBXnb.12513$FI2.7648@newsread1.news.atl.earthlink.net>...
> How about bitching out 'Private'. He is the son of a bee that started this
> line. And I'll damn sure end it.
>
> Dan/W4NTI
>
> "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> news:16218d3a.0310291422.9b8e682@posting.google.com...
> > Danny boy, does your buddy at the Feds also investigate stupidity?
> > You and Chuck are as racist as they come. You are right about one
> > thing, "payback is a mo fo...bro."
> >
> > These are radio newsgroups you fool.
> >
> > Luigi
> >
> >
> > These two racists make me sick!!!!
> >
> > Daniel L. Jeswald (W4NTI)
> > 89 Wildman Road
> > Anniston AL
> > 36201
> >
> > Charles D. Braham (N5PVL)
> > Rt 2 Box 46
> > Lyford TX
> > 78569
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > > Guess what "Private"...two can play that game. I just sicked my buddy

> on
> > > you. He works for the Feds. They track down pedofiles and such. He is
> > > making you a 'special' case.
> > >
> > > See you in the funny papers.....payback is a mo fo...bro.
> > >
> > > Dan/W4NTI
> > >
> > > "Private" <groundwave@telus.net> wrote in message
> > > news:eb867ae8.0310282134.47e3015d@posting.google.com...
> > > > I cannot believe these two clowns are still at it. I found some of
> > > > their original comments and sure enough they are as racist as they
> > > > come. People have a right not be discriminated against or abused
> > > > because of color, race and religion etc....
> > > >
> > > > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > > > sure people in their own town will find out about them. They will be
> > > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > > up....
> > > >
> > > >
> > > > > Charles D. Braham (N5PVL)
> > > > > Rt 2 Box 46
> > > > > Lyford TX
> > > > > 78569
> > > > > >
> > > > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > > > raghead fanatics with very few casualties (sound familiar?) ,
> the
> Israeli
> > > > > > general agreed to give the reporter the exclusive secret to his
> > > > > > unprecedented military success...
> > > > > >
> > > > > > "Fight Arabs." he said.
> > > > > >
> > > > > > Charles Brabham, N5PVL
> > > > >
> > > > >
> > > > > Daniel L. Jeswald
> > > > > 89 Wildman Road
> > > > > Anniston AL
> > > > > 36201
> > > > >
> > > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
> would
> turn
> > > > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> serving a
> > > > > > purpose. It is keeping the ragheads 'occupied'. And its not in

> Boise
> > > > > > Idaho.
> > > > > >
> > > > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > >
> > > > > > That does NOT mean I support Baby Bush 100%. However lets see how
> things
> > > > > > go.
> > > > > >
> > > > > > Dan/W4NTI

3410. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:11:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa09e48_3@corp.newsgroups.com>
Source record: 105675

Yuri Blanarovich wrote:

>>Open-ended antennas like dipoles are standing wave antennas. The
>>forward current is relatively constant through the coil and the
>>reflected current is relatively constant through the coil. But
>>the phasor sum of those two currents can vary wildly from end
>>to end in the coil because of phase shifts.
>
> Don't we have a case of coil being RF choke to certain extent?

RF chokes are usually high enough impedance to drop virtually all
the RF voltage across the choke.

> Also I think that behaviour of radiator before and after the coil defines the
> magnitude of the current, no?

It can be thought of as a very lossy transmission line where
the loss is radiation. Please see my other posting comparing
a 1/2WL dipole to a loaded dipole.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3411. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:13:02 UTC
From: dxlover <dxlover@adelphia.net>
Message-ID: <y51ob.133655$qj6.9957499@news1.news.adelphia.net>
Source record: 105676
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

>
> >Questions:
> >- what kind of cage antenna?
> >- how many wires?
> >- what spreaders, how large?
> >- ideal wire?
>
> Hi OM,
>
> http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
>
Ahhhh man, there is this home I pass by at least once or twice a week that has this antenna on top of his home. I didn't really know what it was, I do now. :-)

Looks pretty wild to the driver-by

--
^~^~^Monitoring The Spectrum^~^~^~^
*********Hammarlund129X & 140X**********
^^^^^^^^Heathkit Q Multiplier^^^^^^^^^
~~++++++GO BEARCATS++++++~*~*~
<><><><><><>GE P-780<><><><><><><><>

3412. Re: LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:27:23 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <C_OdnYUYuL2mPD2iRVn-iQ@comcast.com>
Source record: 105677

On 29-Oct-2003, "Dennis" <dedey1@bigpond.net.au> wrote:

> Any one using the above tuners that wouldn't mind answering a couple of
> questions please
>
> Rgds
>
> de Dennis vk4sx

Been using one for a year. What's the question?
Ken Fowler

3413. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:29:04 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310292129.1ec646be@posting.google.com>
Source record: 105678

private <private@private.com> wrote in message news:<3FA026CA.A1AD387C@private.com>...
> ...

I plug all mine up. I want to channel as much lectricity as possible
to that stainless sheathed vehicle I have parked in the garage. MK

3414. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 05:51:42 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310292151.3ea8fea3@posting.google.com>
Source record: 105679

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031029135840.27758.00000501@mb-m04.aol.com>...

>
> Any experiences out there, rather than more "reasons" why it ain't so?
> Proper accommodation in modeling programs can give substantial improvement in
> loaded elements modeling.
>
> Let the games begin :-)
>
> Yuri, K3BU

Dunno, I think it varies. But I sort of agree with Tom, I think it's
fairly constant across the coil. The reason I think so, is because the
electric field across the coil is also constant, and I can easily see
that using a fluorescent bulb across the antenna and coil. Sure, there
may be some decrease, but that could be due to wire resistance loss.
Also, the construction of the antenna itself could vary the current
across the coil. If the whip is top loaded, and the current would be
linear up the whip anyway, I would think it would also be linear
across the coil, no matter where it was. If the coil were base loaded,
with the sharply tapering current distribution up the whip, the taper
across the coil *might* be more. Another reason I think it's fairly
constant is because if I elevate the coil up the whip, I also elevate
and improve the current distribution. The current will be fairly
constant all the way up to the top of the coil, and then start to
taper off as you go up the "stinger" part of the whip. If the
distribution were not fairly linear across the coil, I don't think you
would see this. I'm sure it's not perfectly linear, but I think it is
for all *practical* purposes. And like I said, probably can vary from
antenna to antenna. I haven't read the eham thing yet, but I guess
this is my wishy washy vote... MK

3415. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 06:27:42 UTC
From: ardujenski@aol.com
Message-ID: <20031030012742.06171.00000430@mb-m11.aol.com>
Source record: 105680

Richard
I agree in that you need to chose either focusing on F/B or forward gain, just like the YAGI. I guess from a practical point of view how is this accomplished? I am not quite sure how far the field strength reading need to be to be of value. I guess a little trial and error is in order here.

As you noted computers will get you in the ballpark but the real proof is in actual testing which takes into account other variables.

I am a little surprised that there is not quite a bit of literature on this, or at least not what I have found (tuning parasitics). Maybe some reading up on the YAGI may help shed some light

As an aside I have worked on arrangements that do not employ radials such as the inverted half square for 20 and 40m. This is where you have two 1/4wl verticals elevated about 0.05wl and spaced about 1/2wl and the phasing line is at the bottom vs the top. This enables you to have a rotatable half square and get about 2 S-unit rejection off the ends (just like the calculations). The nice thing is portability and not radial dependent. I got off the subject.

I wil try the strength meter at varying distances to see if it makes a difference.

Thanks---Alan KB7MBI

3416. Re: LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 06:56:52 UTC
From: Dennis <dedey1@bigpond.net.au>
Message-ID: <UC2ob.170804$bo1.63280@news-server.bigpond.net.au>
Source record: 105681

Hi Ken, was wondering which model would suit my application, I wish to Remote the tuner 100ft from Transmitter, in a shed, and then 6mtrs to my Ground Mounted verticle fed with coax, the verticle is a BUTTERNUT HF2V which is resonant on 3 freqs 1.845/3.650/7.100 Mhz, and I would want coverage say 30/20/17/15 Mtrs and maybe a few RFDS at 5MHZ and 8 Mhz, to get the MAX use out of the beast, can i remote mount the AT-11MP in the shed and use it in AUTO MODE, would that work ok, or should i go for the RT-11 and still mount it in the shed and feed antenna 6 mtrs away with coax and then have the REMOTE HEAD control unit for the RT-11. for when i want to take it mobile ??
or do i have to mount RT-11 right at base of antenna ?? in that case the AT-11MP would be no good to me, I was looking at trying to be able to uncouple 2 coax feeds and take tuner travelling or camping hence the shed mount, I would appreciate any comments I spoke to Dwayne but we never got to discussing the AT-11MP

Kind Regards

Dennis vk4sx

"Ken Fowler" <ko6no@yahoo.com> wrote in message
news:C_OdnYUYuL2mPD2iRVn-iQ@comcast.com...
>
> On 29-Oct-2003, "Dennis" <dedey1@bigpond.net.au> wrote:
>
> > Any one using the above tuners that wouldn't mind answering a couple of
> > questions please
> >
> > Rgds
> >
> > de Dennis vk4sx
>
> Been using one for a year. What's the question?
> Ken Fowler

3417. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 07:56:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <67g1qv4o07il8asn51mc7goc8v116hgcu9@4ax.com>
Source record: 105682

On 30 Oct 2003 06:27:42 GMT, ardujenski@aol.com (ARDUJENSKI) wrote:

>Richard
>I agree in that you need to chose either focusing on F/B or forward gain, just
>like the YAGI. I guess from a practical point of view how is this accomplished?
>I am not quite sure how far the field strength reading need to be to be of
>value. I guess a little trial and error is in order here.
>
>As you noted computers will get you in the ballpark but the real proof is in
>actual testing which takes into account other variables.
>
>I am a little surprised that there is not quite a bit of literature on this, or
>at least not what I have found (tuning parasitics). Maybe some reading up on
>the YAGI may help shed some light
>
>As an aside I have worked on arrangements that do not employ radials such as
>the inverted half square for 20 and 40m. This is where you have two 1/4wl
>verticals elevated about 0.05wl and spaced about 1/2wl and the phasing line is
>at the bottom vs the top. This enables you to have a rotatable half square and
>get about 2 S-unit rejection off the ends (just like the calculations). The
>nice thing is portability and not radial dependent. I got off the subject.
>
>I wil try the strength meter at varying distances to see if it makes a
>difference.
>
>Thanks---Alan KB7MBI

Hi Alan,

Comparisons to yagis is intriguing, but likely going to be harder to
obtain equal results barring considerable ground development.
However, your comments about elevated structures brings back the
symmetry I discussed earlier and their equivalents. The relation of
director/reflector is bound to be a useful paradigm, and using tuning
to enforce that relationship would pay off. Just remember it is all
about phase; and phase is a product of both distance and electrical
delay within the resonant structures. These phase relationships are
more quickly experimented with in the computer to answer your question
about gain/F/B; but in all reality, with just two elements the F/B is
probably going to yield more dramatic results. In other words, the
best you will do by gain would be 3dB, but the F/B may easily find
10dB variation or more.

I think Roy's work on phasing antennas is in one of the ARRL Antenna
Compendiums and it should be sought as a source for you to reference

in these matters.

73's
Richard Clark, KB7QHC

3418. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 08:43:23 UTC
From: ardujenski@aol.com
Message-ID: <20031030034323.06171.00000439@mb-m11.aol.com>
Source record: 105683

Richard
I will check out the Compendiums. Regarding the ground affect and the YAGI vs parasitic verticals, once this is figured out I would like to take a Moxon Rectangle and rotate it vertically. On this axis it would be easier to rotate it but need to check out the same factors you mentioned here.

As an aside, we all know the ground plays an important role in the antenna performance yet it seems there is very little effort on behalf of the amatures to measure actual ground conditions near and far field. Getting back to the parasitic radials, TUNING ther verticals at least allows us to compensate for this unknown.

I know in Reg's antenna programs I generally assume AVERAGE ground conditions or about 20 ohms to be on the conservative side. What would be nice is some sort of set up that you could tune the antennas by use of an audio sound. It seems in theory that you could connect a receiver to the vertical driven element and have a signal source a few hundred yards away or more and tune the forward for max volume and a signal from behind for min volume and strike a happy medium....Alan

3419. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 08:45:19 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <zc4ob.13222$FI2.11945@newsread1.news.atl.earthlink.net>
Source record: 105684

jj:

[snip]
> I guess for now I will accept that a radio wave is a force field (or
> energy field, if you like), and leave it at that (still seems to imply
> action-at-a-distance).
:
:
> Thanks for the responses.
>
> JJ
[snip]

There is a phenomena associated with Quantum ElectroDynamics or QED known as "entaglement" which really does involve instantaneous action at a distance.

Entanglement was/is the most controversial part of quantum theory and it's predicted existence comprised the main "objection" that Einstein had to QED. In recent years "entanglement" has been experimentally verified in several ways at several different authoratative laboratories by leading Physics researchers around the world.

Entanglement of quantum particles is a facinating part of the whole field of quantum mechanics. There is a recent popular book on the subject of entanglement which outlines the delightful history of the controversy and the study of how quantum particles can become "entangled" and can then exert instantaneous [faster than light] force at a distance and helps to clarify the subject for lay folks. The book develops some basic "understanding" of QED but it needs a "little" bit of tolerance for maths.

cfr:

Amir D. Aczel, "Entanglement - The Greatest Mystery in Physics", Four Walls Eight Windows, New York, 2001. ISBN: 1-568-58-232-3 [QC174.12.A29]

Aczel's book is not strictly a Science or Physics book but is more of a popular account of the subject. Aczel has personally known many of the famous protaganists of quantum theory on a personal basis and the book includes

photos
of him together with some of the world famous physicists at their homes,
where
he visited and got their views/contributions on the subject.

Facinating stuff...

--
Peter K1PO
Indialantic By-the-Sea, FL

3420. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 08:56:28 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0310300056.b42844e@posting.google.com>
Source record: 105685
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Thank you Richard!

N8KDV: >> Why?

Goals:
- single antenna setup
- little or no need for tuner, or at least little need of re-tuning every 3 kHz
- effective broadband response, i.e. low likelyhood of really dead spots thru the spectrum
- unlike a T2FD, still very usable on MF/LF for listening using an ultrabroadband double-transformer impedance adaptor (receive-only types, confirmed usable for QRP)
- compromises accepted for efficiency, radiation pattern

It is really telling that professional setups hardly ever optimize for narrowband coverage. The cage-discone is a prime example.

If you trawl the web, you find many examples of very rough "vertical monopoles", and I have seen they fall into 2 main categories:
- multiple vertical masts (usually 2 or 3), with a symmetrical horizontal crossbar, fed from a broadband transformer, cold end grounded to ship deck
- cage designs, either cage-discone or just a huge paunchy ellipsoid-like cage.

Either way, SWR may wag a little, impedance mismatch is roughly dealt with by transformer, and a big whocares for rad pattern etc etc. This is what you need for spreadspectrum, ALE, multiplexing etc. Multi-kW transmitters help. Some of those commercial military designs are rated for tens of kW continuous. At most, I'll put 5W into this thing. Maybe.

Richard, your design seems to favor a lot of parallel wires, but the big improvement in broadbanding seems to be going from 1 to 2-3 wires. Does the model confirm that? I have no modeling SW - what do you use?

Also, everyone,

- any hints at to whether wire diameter matters? Commercial antennas have EITHER lots of wires OR thick masts. Is that out of mechanical or electrical considerations?

- what are the dimensions of typical HF multiwire monopoles in actual use on ships?

and

- don't u thing a multiwire cage sloper looks ubercool too?? a real neighbour-pleaser!

3421. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 09:06:13 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <9w4ob.13239$FI2.3171@newsread1.news.atl.earthlink.net>
Source record: 105687

Yuri:

[snip]
> Maybe this will intrigue some of youze guyz and help in sheding some
light on
> our neandertal brains?
>
> 73 Yuri, K3BU
[snip]

Maxwell's Equations?

No thanks...

Maxwell is soooo pase.

I prefer to use the equations of quantum electrodynamics when computing the
lengths of the wire loops for my twenty meter quad antennas!

I get better accuracy and more gain that way.

:-)

--
Peter K1PO
Indialantic By-by-the-Sea, FL.

3422. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 09:35:57 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <1Y4ob.18946$lu7.11572@newssvr29.news.prodigy.com>
Source record: 105688
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
news:16218d3a.0310292110.83d8726@posting.google.com...
> Again Daniel, this is a Radio newsgroup. You and Chuck should take
> your racist comments to yourselves. Everyone knows the type of people
> you are.

First it's the anti-ham trolls, now it's the anti-american trolls.

Charles Brabham, N5PVL

3423. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 11:53:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnqu39$e5c$1@hercules.btinternet.com>
Source record: 105689

Can any of you guys tell me which of the waves on the antenna does the
radiating - is it the forward or is it the backward wave ?

Reg

3424. Homebrew tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 13:52:46 UTC
From: "Patrick J. Hoban" <hobanp@lucent.com>
Message-ID: <bnr53k$lio@netnews.proxy.lucent.com>
Source record: 105690

All,
I am planning on building a "T" antenna tuner. <---Series Cap--Shunt Inductor--Series Cap-->
I scrounged up an old 5KW RF deck (FREE!!!)
It has 2 large caps (1 is much larger and has 2 ganged section) and a 10 turn tapped inductor (air core).

My question is:
Would I use the larger cap at the antenna side of the inductor or the receiver side?
Does it make a difference?
I plan on using an alligator clip on the inductor until I can establish some useful positions, then I will install a multi-position switch.

Thanks for any assistance,

Pat Hoban - N2ZVT

3425. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 13:59:54 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030085954.06269.00000003@mb-m19.aol.com>
Source record: 105691

Richard KB7QHC wrote:
>
>This speaks more of simple Resistive heat loss supported by your own
>direct observation of:
>> I fried the loading coil with 600W into Hustler resonator,
>>melting heat-shrink tubing and wire at the bottom of the coil.

No, it confirms that there is a significant (not negligible) difference in the current at the bottom vs. top of the coil. Yes, Hustler has small (almost resistive) wire on 80m resonator. If you trasmit for short period of time (not enough for heat to equalize) and feel it, or use thermal strips to check temperature, you would see the taper in the current from bottom to top. It is in order of 50%, not negligible. Coils in tests are good quality, not "resistive" wire, current relatively low (100mA) as shown in W9UCW measurements and pictures.

The point is, if the current was constant or close to it, you would not see the difference as we see it. Heat rises to the top, if anything the top would be warmer if the current was constant. If the coil is uniform colenoid, same wire, diameter (resistance), spacing and it shows difference in heat produced accross the coil, then we can, using I2R formula, deduct that that current at the bottom is greater than on the top. W9UCW measurements confirm that, Cecil explains. Speculations that Earth must be flat might satisfy those reading the (wrong) books, but will not jive with reality.

Simple way to test it, transmit 100W to 80m Hustler resonator, and feel the coil. Even insensitive people can feel the significant difference in temperatures. Put 500W to it for longer period and watch the heatshrink tubing shrivel from the bottom up. This eliminates all the "errors" with meters to prove the point.

Yuri, K3BU/m

3426. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 14:04:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030090457.06269.00000004@mb-m19.aol.com>
Source record: 105692

NM5K
>
>Dunno, I think it varies. But I sort of agree with Tom, I think it's
>fairly constant across the coil.

MEASURE or FEEL it! Or disprove what W5DXP is saying.

It appears that current drop is proportional to the current drop in the section of the antenna that is "missing" - replaced by the coil. You can express it in electrical degrees and it appears to correspond to cosine distribution.

Yuri, K3BU

3427. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 14:20:40 UTC
From: Anonymous <discord-nobody@erisiandiscord.de>
Message-ID: <ba037c21bf91cf3a9ab5b27beb066453@erisiandiscord.de>
Source record: 105693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

In article <16218d3a.0310292110.83d8726@posting.google.com>
luigi_fatchenelli_125@hotmail.com (luigi) wrote:
>
>
> Again Daniel, this is a Radio newsgroup. You and Chuck should take
> your racist comments to yourselves. Everyone knows the type of people
> you are.
>
> All you have to do is read your own posts to see who started what.
> You got caught, now grow up.
>
> Luigi

Smells like a David "non-renewed" Tolassi post.
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<aBXnb.12513$FI2.7648@newsread1.news.atl.earthlink.net>...
> > How about bitching out 'Private'. He is the son of a bee that started this
> > line. And I'll damn sure end it.
> >
> > Dan/W4NTI
> >
> > "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> > news:16218d3a.0310291422.9b8e682@posting.google.com...
> > > Danny boy, does your buddy at the Feds also investigate stupidity?
> > > You and Chuck are as racist as they come. You are right about one
> > > thing, "payback is a mo fo...bro."
> > >
> > > These are radio newsgroups you fool.
> > >
> > > Luigi
> > >
> > >
> > > These two racists make me sick!!!!
> > >
> > > Daniel L. Jeswald (W4NTI)
> > > 89 Wildman Road
> > > Anniston AL
> > > 36201
> > >
> > > Charles D. Braham (N5PVL)
> > > Rt 2 Box 46

> > > Lyford TX
> > > 78569
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > > > Guess what "Private"...two can play that game. I just sicked my buddy
> on
> > > > you. He works for the Feds. They track down pedofiles and such. He is
> > > > making you a 'special' case.
> > > >
> > > > See you in the funny papers.....payback is a mo fo...bro.
> > > >
> > > > Dan/W4NTI
> > > >
> > > > "Private" <groundwave@telus.net> wrote in message
> > > > news:eb867ae8.0310282134.47e3015d@posting.google.com...
> > > > > I cannot believe these two clowns are still at it. I found some of
> > > > > their original comments and sure enough they are as racist as they
> > > > > come. People have a right not be discriminated against or abused
> > > > > because of color, race and religion etc....
> > > > >
> > > > > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > > > > sure people in their own town will find out about them. They will be
> > > > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > > > up....
> > > > >
> > > > >
> > > > > > Charles D. Braham (N5PVL)
> > > > > > Rt 2 Box 46
> > > > > > Lyford TX
> > > > > > 78569
> > > > > >
> > > > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > > > raghead fanatics with very few casualties (sound familiar?) ,
> > the
> > Israeli
> > > > > > general agreed to give the reporter the exclusive secret to his
> > > > > > unprecedented military success...
> > > > > >
> > > > > > "Fight Arabs." he said.
> > > > > >
> > > > > > Charles Brabham, N5PVL
> > > > >
> > > > >
> > > > > > Daniel L. Jeswald
> > > > > > 89 Wildman Road
> > > > > > Anniston AL
> > > > > > 36201
> > > > >

> > > > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
> > would
> > turn
> > > > > > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> serving a
> > > > > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
> Boise
> > > > > > > > Idaho.
> > > > > > > >
> > > > > > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > > > >
> > > > > > > > That does NOT mean I support Baby Bush 100%. However lets see how
> things
> > > > > > > > go.
> > > > > > > >
> > > > > > > > Dan/W4NTI

3428. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 14:33:44 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <cj9ob.31947$fl1.1439993@twister.southeast.rr.com>
Source record: 105694
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I appreciate your "special english". Very well written and easy to read.

What evades me now are some of the conclusions and logic. On one hand you say Bush and Rummy are smart, then you admit we're in the middle of crap. (Iraq) Who put us there? And, don't go saying it was the terrorists. The terrorists we were after were in Afghanistan, Yemen, and Indonesia, with help from all over the world, including our buddies the Saudis. The response to the 9/11 terrorists should've been considered separately from our policy concerning Iraq. Bush-Cheney did a splendid job of mingling and confusing the two disparate issues.

You wanted a sand box to fight in, what was wrong with Afghanistan? Why the shift? Just as we were moving in on Ladin we did this major shift to Iraq. That made no sense.

As far as Iran, we were already on speaking terms. The upcoming elections and internal moderation were already under way long before this whole mess. Both Iran, and especially Iraq, were sworn enemies of Ben Ladin. They were actually on our side as far as routing out Al Qaida. And, as far as justification for invading Iraq based on supporting Hamas, and others, what about Saudi Arabia, home of The Wahhabi sect, certainly no pals of ours. I don't know what agenda Bush, Cheney, and Rumsfield had for going into Iraq. Which theory sounds good to you: Being Israel's big brother, or getting our hands on all that oil? Perhaps it was the personal vendetta Bush Jr. had for avenging the threat made to Bush senior by Saddam? Who knows. The point is, we had the World's sympathy after 9/11 and now we've squandered it, along with 87 billion plus dollars into quick sand.

Our option? Re-hire the Iraqi military.....who did NOT fight us while we entered their country. Help them establish some sort of code and leadership, perhaps through the UN.... and leave Iraq to the Iraqis. We're now just 'occupier's, and as such are quickly drawing the ire of all moderate Arabs. People who could help us.

Yep, 87 billion is just the beginning. Real smart your heroes. Oh, and don't leave out Cheney (Halliburton) in your adoration. He's pretty cunning too.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:EyXnb.12505$FI2.7115@newsread1.news.atl.earthlink.net...
> Let me try to explain thing in special english.
>
> Bush and Rummy are smart.
>
> Most Americans are dumb.
>
> The idea is to occupy territory in the middle of the zoo zone.
>
> The purpose of the army is to kill enemies of the USA.
>
> The Iraqi regime was a enemy of this country.
>
> A. They paid money to the family of the murders that killed women and
> children in Israel
>
> B. They provided safe passage for terrorists.
>
> C. They provided logistical support to terrorists.
>
> D. In cahoots with Syria they helped to funnel
> funds to terrorist organizations, such as hezzbolah, which is guarding
the
> Chemical weapons Sadam made in the Beka valley of Lebannon. Which is
> controlled by Syria.
>
> Have you noticed how quickly Iran has become nice nice with Washington?
> Think maybe it might have something to do with 130,000 US Combat troops on
> their border?
>
> You must understand that it is much much better to have ragheads throwing
> bombs and shooting off RPGs in raghead land, than some city in the USA.
You
> do agree don't you?
>
> So basically I am saying we are using the hell out of Iraq. What place is
> better to have a fight?
>
> You are hung up on the WMD thing. Move on, history is bypassing you.
>
> I agree, we were mislead. But what is the option at this point? Do we
> re-call our warriors and watch the middle east explode? We have made our
> bed and its time we layed in it.
>
> In otherwords we are in the middle of the crap. So we have to take care
of
> business.
>
> I hope that one day you Bush haters will get your head screwed on straight
> and realize that you are HURTING this country.

>
> Jane Fonda did the same thing about Nam. It hurts morale. It caused
> American troops to die. It extended the war.
>
> Stop repeating history and back this president so we can take care of
> business and get the hell out of there.
>
> Dan/W4NTI
>
> "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> news:NnTnb.38062$IA2.1285265@twister.southeast.rr.com...
> > How could things have gone any worse? We still don't have Osama, and
guys
> > are still dying in Afghanistan even though the news acts like it's
fallen
> > off the earth.
> >
> > As far as Sadam, what, specifically, did he have to do with 9/11? When
> it
> > comes down to it, he was probably more of an ally against militant
Islamic
> > terrorists than any other.
> >
> > ....and, I'm probably more conservative than you..... There's nothing
> more
> > liberal than "nation building", something we were told six years ago
that
> > wasn't going to happen under this presidency. My how things change.
> >
> > I'll make a prediction: the 87 billion dollars going to Iraq is just the
> > beginning.
> >
> > Alan
> > WN4HOG
> >
> > --
> > Windsurfing Club: http://www.ibscc.org
> >
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:zJSnb.9061$X22.1965@newsread2.news.atl.earthlink.net...
> > > Can you imagine, liberal puke, how things would have gone if Klintoon
> was
> > > still president on 9/11 ?
> > >
> > > Uh.....I.....didn't have sex with Sadam....uh we just shook
> > > hands.....uh.....wait a minute Monica.....uh as for Osama....uh....he
is
> > > just a bit confused...uh....ok I gotta go....uh uh..
> > >

> > > Dan/W4NTI
> > >
> > > "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> > > news:I9Pnb.35524$IA2.1252122@twister.southeast.rr.com...
> > > > I guess Bush is a genius. Maybe that's what it takes to invent new
> > words.
> > > > Yesterday it was, "suiciders". It's one thing though to invent
words,
> > > > another to invent enemies behind every tree.
> > > >
> > > > Here's a nice shot of your "genius" hero Rumsfield shaking hands
with
> > > Saddam
> > > > a few years ago: http://www.mydd.com/archives/000427.html
> > > >
> > > > Ah, who to believe in this mixed up world. Politicians are
> politicians.
> > > None
> > > > of which are geniuses. Calling politicians geniuses is a slap in the
> > face
> > > to
> > > > Marconi, Maxwell, and Tesla.
> > > >
> > > > Alan
> > > >
> > > > --
> > > > Windsurfing Club: http://www.ibscc.org
> > > >
> > > >
> > > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > > > news:bDCnb.7913$X22.1515@newsread2.news.atl.earthlink.net...
> > > > > You could search the entire world and not find a better place to
> fight
> > > > > terrorists. A major sandbox surrounded by ragheads that need
their
> > ass
> > > > > kicked.
> > > > >
> > > > > Bush is a genius. Rummy is a genius. You will see.
> > > > >
> > > > > Let me ask you this; Would you rather have these ragheads blowing
> up
> > > > > Boston?
> > > > >
> > > > > Dan/W4NTI
> > > >
> > > >
> > > >
> > >
> > >
> >

> >
> >
>
>

3429. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 14:48:01 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa124a0_1@news.vo.lu>
Source record: 105695

Hi,

Here is an excellent website with explanations, full of animations:
http://users.telenet.be/educypedia/electronics/javarf.htm

My webiste also contain an explanation but it is written in French in
section devoted to quantum physics.

73's

Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry

"jj" <wizard12342002@yahoo.com> wrote in message
news:a3232cc0.0310281618.1c226f88@posting.google.com...
> This may at first sound like a stupid question. But after some years
> as a radio enthusiast, I don't know what a radio wave is - what it
> really is. Supposedly, modern physics does not believe there is such
> a thing as "action at a distance". In other words, if you launch a
> radio wave and I intercept it, there must be a transfer of "stuff"
> between you and me. You can't just say that if I wiggle an electron
> at point A, I can cause a wiggle at the same wiggle rate at point B.
> I mean you can say it, but it doesn't explain anything.
>
> OK, so the latest science says that electromagnetic energy is really
> particle-waves. I guess this means that when I transmit, my antenna
> is firing particles in the form of low-energy photons (energy
> packets), and that these photons do not really exist anywhere but
> exist only as probability waves - until, of course, someone intercepts
> the wave. Then, magically, the photons appear at the receiving
> antenna, in which they manage to produce oscillating electrons.
>
> So, the best I can ascertain is that radio waves are really
> probability waves. I'm not sure that really helps with an intuitive
> understanding. Does anyone have a good description for what a radio
> wave really is?
>
> - JJ

3430. Re: G5RV on 160m. Where goes the signal ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 14:50:48 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa12546$1_2@news.vo.lu>
Source record: 105696

"Jerry" <joxendi@bellsouth.net> wrote in message
news:mJTnb.92317$5n.45202@bignews5.bellsouth.net...
>
> "Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message
> news:3f9fc454$1_1@news.vo.lu...
> >
>...
I didn't like the antenna, it made
> my Yaesu tuner go nuts, did things that
> couldn't be explained by usual antenna theory, and I shucked it.

Hi,

Have you ever try to solve your problem ? Replacing a component (feeder ?)
or doing measurements, etc.
That helps !

Thierry

>
> Jerry
> K4KWH

3431. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:02:39 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa1280e$1_1@news.vo.lu>
Source record: 105697

"private" <private@private.com> wrote in message
news:3FA026CA.A1AD387C@private.com...
> ...
>

In country away from the geomagnetic pole there is nothing to worry about
statics and other high energy protons emitted by the Sun.
The most dangerous rays are X-rays emitted during solar stroms. these reach
the earth at the sped of ligh (8 min after the flare/CME) and thay are
alrady away. Most of them are captured by the magnetic field and some are
"converted" in light trough auroras.
The main risks is for atronauts inboad of ISS that are at the first places,
and passagers of jets
But usually they endure only the equivalent of a radiography

Then there are CME which gaz enveloppe reach the earth about 2 days after
the eruption.
Not worry, they only "attack" the ionosphere (D-region, E-F layers) in
creating mainly blackouts in Scandinavian/Can. countries
Sometimes the static is so huge that gaz pipeline have to be monitored with
specialized forecasters.
In some circumstances huge relay can blow up and create blackoput over large
cities.

At last, these X-rays can also saturated or even damage orbital satellites
(their CCD and other sensors), or decrease their orbit.
I think that NORAD has much much job for the moment in rectifying orbits of
dozen satellites.

Here are some anomalies :
http://www.astrosurf.com/lombry/Documents/satellite-failure1998.gif

More comments on my website but in French (although there is a translate
tool on the menu too) about Auroras:
http://www.astrosurf.com/lombry/aurore.htm

73's
ON4SKY, LX3SKY (SKY you know why now, Hi!)

3432. Whaow : educypedia, java simulations online

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:07:09 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa1291c$1_1@news.vo.lu>
Source record: 105698
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,uk.radio.amateur

Hi,

Found by chance.
If you want to understand graphically, with java animations and simulations
some radio concepts (antenna rad.pattern, T-network, etc...)
take a look here, that helps :
http://users.telenet.be/educypedia/electronics/javarf.htm

Thierry

3433. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:07:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa129d1$1_4@corp.newsgroups.com>
Source record: 105699

Reg Edwards wrote:
> Can any of you guys tell me which of the waves on the antenna does the
> radiating - is it the forward or is it the backward wave ?

An electron experiences the sum of those two waves and emits a
photon when it is energized enough. So the answer is both.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3434. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:34:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa13038$1_4@corp.newsgroups.com>
Source record: 105700

Yuri Blanarovich wrote:
> MEASURE or FEEL it! Or disprove what W5DXP is saying.

This is easy to see using EZNEC. Model a 102' G5RV on 20m
and look at the current distribution. There are three
current maximums and four current minimums. If you install
a loading coil at a current maximum or current minimum, the
current magnitude will be the same on both sides of the coil.

If you install a loading coil at a point where the slope of
the current is negative (decreasing), the current at the bottom
of the coil will be greater than the current at the top of the
coil. This is the usual case for mobile antennas.

If you install a loading coil at a point where the slope of
the current is positive (increasing), the current at the bottom
of the coil will be less than the current at the top of the
coil.

Note: 'Top' of coil is the end closest to the the ends of the
antenna. 'Bottom' of coil is the end closest to the feedpoint.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3435. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:38:13 UTC
From: richardharrison@webtv.net
Message-ID: <13743-3FA13065-272@storefull-2316.public.lawson.webtv.net>
Source record: 105701

Reg Edwards wrote:
"Can any of you guys tell me which of the waves on the antenna does the radiating - is it the forward or is it the backward wave?"

I agree with Cecil, "So the answer is both."

Think of a traveling wave antenna, the rhombic. When it is properly terminated, there is no backward wave and the radiation pattern is unidirectional. Eliminate the termination resistance and a total reflection occurs at the antenna`s far end. Now the rhombic is a bidirectional antenna.

Best regards, Richard Harrison, KB5WZI

3436. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 15:59:08 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <gzaob.13900$FI2.13118@newsread1.news.atl.earthlink.net>
Source record: 105702
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:1Y4ob.18946$lu7.11572@newssvr29.news.prodigy.com...
>
> "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> news:16218d3a.0310292110.83d8726@posting.google.com...
> > Again Daniel, this is a Radio newsgroup. You and Chuck should take
> > your racist comments to yourselves. Everyone knows the type of people
> > you are.
>
> First it's the anti-ham trolls, now it's the anti-american trolls.
>
> Charles Brabham, N5PVL
>
>
>

I never realized how some Canadians were. I always thought Canada and the
USA were really like brothers. I no longer think that way.

Dan/W4NTI

3437. Re: Parasitic question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 17:02:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s7g2qvcfvqbkbjqoau5474pfv7lidjrm5f@4ax.com>
Source record: 105703

On 30 Oct 2003 08:43:23 GMT, ardujenski@aol.com (ARDUJENSKI) wrote:
Hi Alan,

>As an aside, we all know the ground plays an important role in the antenna
>performance yet it seems there is very little effort on behalf of the amatures
>to measure actual ground conditions near and far field. Getting back to the
>parasitic radials, TUNING ther verticals at least allows us to compensate for
>this unknown.

Tuning and ground should have no relation except in Q. The tuning is
for the benefit of variable phase delay and the proximity of ground is
going to blur that distinction causing the F/B to back fill the null.

>
>I know in Reg's antenna programs I generally assume AVERAGE ground conditions
>or about 20 ohms to be on the conservative side. What would be nice is some
>sort of set up that you could tune the antennas by use of an audio sound. It
>seems in theory that you could connect a receiver to the vertical driven
>element and have a signal source a few hundred yards away or more and tune the
>forward for max volume and a signal from behind for min volume and strike a
>happy medium....Alan

That sounds rather complex. How are you going to hear the sounds,
loudspeakers? Won't the neighbors mind? Remember, if you are close
enough to hear, you are close enough to upset the tuning. I suppose
you are trying to accomplish this solo, but keep in mind that near
fields (those within 1 wavelength radius of the elements at a minimum,
3-5 wavelengths modestly, 10 conservatively) do not geometrically
represent the launch characteristics observed in the far field (which
dominates all our activities).

73's
Richard Clark, KB7QHC

3438. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 17:17:08 UTC
From: richardharrison@webtv.net
Message-ID: <18288-3FA14794-233@storefull-2318.public.lawson.webtv.net>
Source record: 105705

Yuri, K3BU wrote:
"I ordered 19th edition of ARRL Antenna Book and followed chain of references that led to information on page 16-7 and Fig. 9 and 10."

Excellent purchase. A series circuit tends to have the same current throughout except when its length is significant with respect to wavelength. A standing wave antenna has a reflected wave which makes impedance a function of location along the antenna. So, a certain power, incident and reflected, combine to produce voltage and current variations on an antenna which are related to those on a transmission line. Since radiation from an antenna occurs, power in each direction is not constant as it tends to be on a transmission line because radiation is taking a toll in each direction, and that`s a good thing. It`s the purpose of the antenna.

Coil Q is important to efficiency if any part of the XL/R is loss resistance and not radiation resistance. Radiation resistance is the purpose of the antenna.

My ON4UN Figures are the same as Yuri`s but appear as Fig 9-22 on page 9-15. These show the current decline across a loading coil including the obvious case of a solenoid used as an antenna where the entire current distribution is within the continuous loading coil.

The ARRL Antenna Book has been exposed to scrutiny for many years. By the 19th edition it`s a safe bet that moat of it is correct (without consideration of "strings", 5 dimensions, or 11 parallel universes).

From what I`ve seen of ON4UN`s book, he got it right too.

Best regards, Richard Harrison, KB5WZI

3439. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 17:17:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g2h2qv0ikdaiopt8vbo5b1unhp1nerk2ij@4ax.com>
Source record: 105704

On 30 Oct 2003 13:59:54 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>Richard KB7QHC wrote:
>>
>>This speaks more of simple Resistive heat loss supported by your own
>>direct observation of:
>>> I fried the loading coil with 600W into Hustler resonator,
>>>melting heat-shrink tubing and wire at the bottom of the coil.
>
>The point is, if the current was constant or close to it, you would not see the
>difference as we see it. Heat rises to the top, if anything the top would be
>warmer if the current was constant.

Hi Yuri,

Your testimony contradicts your sentiments. You offer
incontrovertible evidence of heat at the bottom of the coil explicitly
in your statement above, and this below:

>Simple way to test it, transmit 100W to 80m Hustler resonator, and feel the
>coil. Even insensitive people can feel the significant difference in
>temperatures. Put 500W to it for longer period and watch the heatshrink tubing
>shrivel from the bottom up. This eliminates all the "errors" with meters to
>prove the point.
>
You are using a thermocouple which is sensitive to heat, the heat of
coil loss will inflate the reading. You have twice offered heat at
the bottom of the coils that correlate strongly with inflated current
values from a caloric sensor. You have no other thermocouple data
supporting the nature of the current distribution, just the isolated
section you find attractive. Put simply, your measurements have no
reference (readings from the entire length of the radiator).

You went to some trouble to offer testimonial from reference sources
on the nature of that distribution, but you did not measure it confirm
your testing. Two readings in isolation do not prove you have 100mA
into the bottom when there is only one reading below the coil.

If you are not interested in obtaining those remaining readings of
that current distribution, then you have a poor case.

73's
Richard Clark, KB7QHC

3440. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 17:43:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5ji2qvcqqgvpiudv2iq54cetba23hemj3j@4ax.com>
Source record: 105706
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

On 30 Oct 2003 00:56:28 -0800, n1jpr@hotmail.com (SpamLover) wrote:

>
>Richard, your design seems to favor a lot of parallel wires, but the
>big improvement in broadbanding seems to be going from 1 to 2-3 wires.
> Does the model confirm that? I have no modeling SW - what do you use?
>
>Also, everyone,
>
>- any hints at to whether wire diameter matters? Commercial antennas
>have EITHER lots of wires OR thick masts. Is that out of mechanical
>or electrical considerations?
>
>- what are the dimensions of typical HF multiwire monopoles in actual
>use on ships?
>
>and
>
>- don't u thing a multiwire cage sloper looks ubercool too?? a real
>neighbour-pleaser!

Hi Filippo,

More wires, smoother passband. Less wires, more mismatches. If you want one thicker element rather than more wire, it will have to be roughly the same diameter as the cage presented at my page. No free lunches at the Maxwell Cafe.

The model is available at that page, you can find a restricted version of EZNEC at (predictably):
http://www.eznec.com/
It won't allow you to do analysis for this model (unless you cut loose the $89), but you can view the design and the particulars (like wire size, length, distance above ground, etc.).

I have a photograph of a pre-WWII battleship sitting above my workstation here. Within the field of view is a cage dipole end (from the photographer's perspective of being above the after gun turret, it is quite close with six wires at a diameter of at least 18 inches).

73's
Richard Clark, KB7QHC

3441. Re: Homebrew tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 18:08:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnrk36$gt6$1@sparta.btinternet.com>
Source record: 105707

> I plan on using an alligator clip on the inductor until I can establish
some
> useful positions, then I will install a multi-position switch.
>
============================

I have always found crocodile clips to be effective provided they are brass
and not magnetic steel.

Reg, G4FGQ.

3442. Re: LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 18:35:47 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <Nf2dnYOLI6-exzyiRVn-vA@comcast.com>
Source record: 105708

On 29-Oct-2003, "Dennis" <dedey1@bigpond.net.au> wrote:

> Xref: intern1.nntp.aus1.giganews.com rec.radio.amateur.antenna:212452
>
> Hi Ken, was wondering which model would suit my application, I wish to
> Remote the tuner 100ft from Transmitter, in a shed, and then 6mtrs to my
> Ground Mounted verticle fed with coax, the verticle is a BUTTERNUT HF2V
> which is resonant on 3 freqs 1.845/3.650/7.100 Mhz, and I would want
> coverage say 30/20/17/15 Mtrs and maybe a few RFDS at 5MHZ and 8 Mhz, to get
> the MAX use out of the beast, can i remote mount the AT-11MP in the shed and
> use it in AUTO MODE, would that work ok, or should i go for the RT-11 and
> still mount it in the shed and feed antenna 6 mtrs away with coax and then
> have the REMOTE HEAD control unit for the RT-11. for when i want to take it
> mobile ??
> or do i have to mount RT-11 right at base of antenna ?? in that case the
> AT-11MP would be no good to me, I was looking at trying to be able to
> uncouple 2 coax feeds and take tuner travelling or camping hence the shed
> mount, I would appreciate any comments I spoke to Dwayne but we never got to
> discussing the AT-11MP
>
> Kind Regards

Sorry, Dennis. I misread or misunderstood the Subject. I have the RT-11 and don't know anything
about the AT-11MP. I have considered mounting the RT-11 outside and controlling it remotely.
Should avoid a little bit of loss in the co-ax on some bands, but I would probably need to use some
form of Balun or RF Choke. Also I might run into untunable impedances on one or more bands closer
to the antenna. Who knows without measurement? Good Luck and 73. -ken-

3443. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 19:48:04 UTC
From: wn6bdb@hotmail.com
Message-ID: <fda4618.0310301148.1f0a4a81@posting.google.com>
Source record: 105709

9.8 on the Troll-O-Meter

Twistedhed <twistedhed@webtv.net> wrote in message news:<bnpvf3$7jl$1@news.x-echo.com>...
> I need an antenna that will get me on the channels above 27.3. My Galaxy
> goes to 32 mhz.
>
> twistedhed@webtv.net
>
> =-
> Article poste via Voila News - http://www.news.voila.fr
> Le : Thu Oct 30 04:10:27 2003 depuis l'IP : ac8d51fc.ipt.aol.com [VIP 532284301978]

3444. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 20:10:21 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bnrrrk$6dj$1@reader2.nmix.net>
Source record: 105710

I think your meter is out of calibration, Steve. Mine
registered a solid 9.9. ;-)
Bill / W5WVO

Steve .. AI7W wrote:
> 9.8 on the Troll-O-Meter
>
> Twistedhed <twistedhed@webtv.net> wrote in message
> news:<bnpvf3$7jl$1@news.x-echo.com>...
>> I need an antenna that will get me on the channels above
27.3. My
>> Galaxy goes to 32 mhz.
>>
>> twistedhed@webtv.net
>>
>> =-
>> Article poste via Voila News - http://www.news.voila.fr
>> Le : Thu Oct 30 04:10:27 2003 depuis l'IP :
ac8d51fc.ipt.aol.com
>> [VIP 532284301978]

3445. 100 w, Automatic Ladder line HF tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 20:54:05 UTC
From: Tom - KS5x <ks5x@cox.net>
Message-ID: <ITeob.37482$Rd4.19838@fed1read07>
Source record: 105711

Looking for info, experience with a 100 watt automatic tuner for twin lead (ladder line) to an 80 meter dipole. Would like to work all HF bands, if possible without manually tuning.

Tom ks5x@cox.net

3446. harness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 21:17:19 UTC
From: luis <cristianalpfm@cox.net>
Message-ID: <R8fob.51192$N94.42841@lakeread02>
Source record: 105712

hi , I want a harness for two antennas 1/2 wave 87.5 mz.
In Honduras ,my country,is impossible to find any documentation.Can somebody help me w/some documentation or information? tks
pd :the two antennas are dipoles w/gamma match.

3447. Ionosphere charge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 21:17:20 UTC
From: k7itm@aol.com
Message-ID: <3200347.0310301317.c025f4c@posting.google.com>
Source record: 105713

Here's a link to an article about charge in the ionosphere that might be interesting to antenna folk. Nothing directly about antennas or radio wave propagation there, but since we depend on the ionosphere so much for skip, knowing a little more about it may be interesting.

http://science.nasa.gov/headlines/y2003/30oct_lightning.htm?list155159

Cheers,
Tom

3448. Re: Homebrew tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:02:21 UTC
From: jgboyles@aol.com
Message-ID: <20031030170221.01033.00000008@mb-m03.aol.com>
Source record: 105714

>I am planning on building a "T" antenna tuner

>I scrounged up an old 5KW RF deck (FREE!!!)
>It has 2 large caps (1 is much larger and has 2 ganged section) and a 10
>turn tapped inductor (air core).

>Would I use the larger cap at the antenna side of the inductor or the
>receiver side?

Hi Pat, With all the T type tuners I have played with, one cap is always set to maximum. Which one depends on whether the complex impedance you are attempting to match is inductive or capacitive. I would think the larger cap would be preferred on the one set to maximum, since that cap needs to be a low impedance to rf.
To make your tuner more versitle, use jumpers or switches or whatever to exchange the positions of the two caps. That way you have the best cap in the right position for the impedance you are attempting to match.
W9CF has a neat T tuner simulator on his web page. I found it to be very educational on how these tuners work, and helpful determining the value of the components I needed to match various loads.
73 Gary N4AST

3449. Re: Ionosphere charge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:20:41 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa18eb9_2@news.vo.lu>
Source record: 105715

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0310301317.c025f4c@posting.google.com...
> Here's a link to an article about charge in the ionosphere that might
> be interesting to antenna folk. Nothing directly about antennas or
> radio wave propagation there,

Hi,

So try this one then http://www.astrosurf.com/lombry/qsl-perturbation.htm
More are available but written in French (Science section, specially "La
Belle aurore !" or "le Soleil" in Compendium of the solar system)
Use the translation tool to read it in English. Should work.

73's
Thierry
ON4SKY, LX3SKY (why god "SKY" ? Guess...)

but since we depend on the ionosphere so
> much for skip, knowing a little more about it may be interesting.
>
> http://science.nasa.gov/headlines/y2003/30oct_lightning.htm?list155159
>
> Cheers,
> Tom

3450. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:26:41 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bns37c$e4qi$1@news3.infoave.net>
Source record: 105716

Simply shorten your coax 2.01734695436248538129 feet.

"Twistedhed" <twistedhed@webtv.net> wrote in message
news:bnpvf3$7jl$1@news.x-echo.com...
> I need an antenna that will get me on the channels above 27.3. My Galaxy
> goes to 32 mhz.
>
> twistedhed@webtv.net
>
> =-
> Article poste via Voila News - http://www.news.voila.fr
> Le : Thu Oct 30 04:10:27 2003 depuis l'IP : ac8d51fc.ipt.aol.com [VIP
532284301978]

3451. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:46:57 UTC
From: dplatt@radagast.org
Message-ID: <vq3571ftcd68a9@corp.supernews.com>
Source record: 105717

>> I need an antenna that will get me on the channels above 27.3. My Galaxy
>> goes to 32 mhz.

>Simply shorten your coax 2.01734695436248538129 feet.

An even easier method for achieving a similar result is to simply
modify the coax cable a bit, so as to change the dielectric constant
of a small length of the cable's internal insulation. This generates
an impedance "bump" which acts as a short matching section, tuning out
the higher SWR which results if you try to "push" an antenna beyond
its normal resonant frequency range.

The DC can best be modified by displacing a small amount of the
insulation to the side. Simply measure back along the cable from the
antenna approximately 1/4 electrical wavelength, and then drive a
small nail straight through the center of the coax - it must penetrate
the center conductor, and (ideally) the braid/shield on both sides of
the cable. Typically, a 1-penny nail is of the correct length and
diameter. For small-diameter cable, try a carpet tack.

Test the freeband transmitter's SWR and see how well it transmits.
You might find it necessary to adjust the cable at several points, a
few inches on either side of the quarter-wave-away-from-the-antenna
point to get the best match.

I have not actually tested this procedure with a Galaxy radio - your
results may differ, and (as with any homebrew electronics or antenna
modifications) they're done entirely at your own risk.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3452. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:51:27 UTC
From: ktunks@earthlink.net
Message-ID: <248764dd.0310301451.4d1d36ce@posting.google.com>
Source record: 105718

"Ed" <ed@nospam.com> wrote in message news:<gvedndOwd-vKswKiRVn-gA@comcast.com>...
> Hi ,
>
> Anyone here with some hands-on experience (i.e. not speculation, thanks)
> able to share their observations on this unit ?
>
>
> http://www.mfjenterprises.com/products.php?prodid=MFJ-974H
>
>
>
> Many thanks in advance
>
>
> Ed

Dear Folks,

I called MFJ last week and they said that it would not be available
until the end of this week.I too would be interested in first hand
opinions of the MFJ 974H when it becomes available.

Kent Tunks KC6LXR

3453. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:55:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310301455.7ae51114@posting.google.com>
Source record: 105619

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031030090457.06269.00000004@mb-m19.aol.com>...
> NM5K
> >
> >Dunno, I think it varies. But I sort of agree with Tom, I think it's
> >fairly constant across the coil.
>
> MEASURE or FEEL it! Or disprove what W5DXP is saying.

Dunno, he seems to be saying about the same thing. It depends where
the coil is mounted.
>
> It appears that current drop is proportional to the current drop in the section
> of the antenna that is "missing" - replaced by the coil. You can express it in
> electrical degrees and it appears to correspond to cosine distribution.

I could buy that to an extent I guess. But say if you had a top loaded
vertical, with linear current distribution, the current across the
coil should be appx equal no matter where the coil is placed. But if
no top loading, maybe so.. MK

3454. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:59:22 UTC
From: jgboyles@aol.com
Message-ID: <20031030175922.01033.00000014@mb-m03.aol.com>
Source record: 105620

>Anyone here with some hands-on experience (i.e. not speculation, thanks)
>able to share their observations on this unit ?

Ed, I don't think you will find any hands-on experience because it is a new product and they haven't sold any yet. Probably have to wait a few months to get an answer to your question.
73 Gary N4AST

3455. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 22:59:26 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030175926.05882.00000028@mb-m02.aol.com>
Source record: 105621

>
>Incorrect. HEAT does not rise at all, however hot gas or hot liquid
>will rise in response to gravity. This has nothing to do with a loading
>coil made from solid parts.
>
>--
>Bill, W7TI

Incorrect, incorrect.
If we suppose the loading coil is heating up equally (the flat earth society argument), it heats air immediately surrounding it. Air is heating up, rises up as you say, as it rises it picks up the other air that is heating up and they rise together. As they progress, they heat up rest of the coil on the way up, with the result being that the top should be warmer (hotter) than the bottom.

If we have quarter wave whip with loading coil, and the bottom contrary to the above mechanism is warmer, thet ergo ipso there must be more current flowing in the bottom part of the coil, confirming what we say.

Yuri, K3BU/m

3456. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 23:19:00 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030181900.05882.00000029@mb-m02.aol.com>
Source record: 105622

>
>You are using a thermocouple which is sensitive to heat, the heat of
>coil loss will inflate the reading. You have twice offered heat at
>the bottom of the coils that correlate strongly with inflated current
>values from a caloric sensor. You have no other thermocouple data
>supporting the nature of the current distribution, just the isolated
>section you find attractive. Put simply, your measurements have no
>reference (readings from the entire length of the radiator).
>

The bottom meter is below the coil, so there is no heat heating up the thermocoupled meter. If you insert the meters some distance away from the coil, you would see the corresponding readings showing the difference between the top and bottom. Arguments that heat or magnetic field affect the thermocouple RF ammeters are just not realistic.

>You went to some trouble to offer testimonial from reference sources
>on the nature of that distribution, but you did not measure it confirm
>your testing. Two readings in isolation do not prove you have 100mA
>into the bottom when there is only one reading below the coil.
>

I did just rough test with one of my meters (has 8 A), flipping the coil and I can see some deflection at the bottom and none at the top with 100 W into the antenna. W9UCW et al did hundreds of measurements and showed just some examples.

>If you are not interested in obtaining those remaining readings of
>that current distribution, then you have a poor case.
>

My "case" is to bring this to attention of those who are still "knowing" that the current in loading coils is the same at both ends. If they doubt, they can do their own measurements and see what it is, or show us where we are wrong. Again, ON4UN in his Low Band DXing book has it right, ARRL Antenna Book has it wrong and is perpetuating 50 year old misconception.

Just MEASURE or FEEL it!

>73's
>Richard Clark, KB7QHC

Yuri, K3BU/m

3457. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 23:35:42 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030183542.05882.00000031@mb-m02.aol.com>
Source record: 105623

>
>I could buy that to an extent I guess. But say if you had a top loaded
>vertical, with linear current distribution, the current across the
>coil should be appx equal no matter where the coil is placed. But if
>no top loading, maybe so.. MK
>

Top loaded vertical does not have LINEAR current distribution, that is another simplification, fallacy. Current in the radiator has cosine distribution. At the base, there is not much difference, just like in cosine of the angle corresponding to the electrical length of radiator at that point.

Again, this subject of current distribution is important in optimizing the antenna design by fine tuning the position of the loading coil in the antenna, combination with top loading etc. Morew current flowing in the radiating part of the antenna - the stronger the field and louder signal.

The "linear" current distribution mentioned in ARRL Compendium and Antenna Book is the simplification propagated from Belrose's 1955 QST article. It is close, but not exact and introduces confusion as it is demonstrated by the flat earth society.

Yuri, K3BU/m

3458. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-30 23:57:15 UTC
From: tdonaly@aol.com
Message-ID: <20031030185715.13068.00000022@mb-m14.aol.com>
Source record: 105624

Yuri wrote,
>
>Again, this subject of current distribution is important in optimizing the
>antenna design by fine tuning the position of the loading coil in the
>antenna,
>combination with top loading etc. Morew current flowing in the radiating part
>of the antenna - the stronger the field and louder signal.

What is "the radiating part of the antenna," Yuri?
73,
Tom Donaly, KA6RUH

3459. Re: Ionosphere charge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:08:37 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fa1a805$1_1@news.vo.lu>
Source record: 105625

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message
news:3fa18eb9_2@news.vo.lu...
>

Another interesting article about blackouts "Geomagnetic Storms Can Threaten
Electric Power Grid"
http://www.agu.org/sci_soc/eiskappenman.html

Thierry
ON4SKY
http://www.astrosurf.com/lombry

3460. ALERT: Aurora happening NOW

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:10:38 UTC
From: fractenna@aol.com
Message-ID: <20031030191038.05771.00000009@mb-m15.aol.com>
Source record: 105626

Incredibly intense and readily viewable aurora happening now: 0000 UTC 31 Oct.

Enjoy!

73,
Chip N1IR

3461. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:47:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kub3qvkr1cv0mvkkbcfr72g6rrp7adb1at@4ax.com>
Source record: 105627

On 30 Oct 2003 23:19:00 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote:

>>
>>You are using a thermocouple which is sensitive to heat, the heat of
>>coil loss will inflate the reading. You have twice offered heat at
>>the bottom of the coils that correlate strongly with inflated current
>>values from a caloric sensor. You have no other thermocouple data
>>supporting the nature of the current distribution, just the isolated
>>section you find attractive. Put simply, your measurements have no
>>reference (readings from the entire length of the radiator).
>>
>
>The bottom meter is below the coil, so there is no heat heating up the
>thermocoupled meter
...
>Just MEASURE or FEEL it!
>

Hi Yuri,

As I said, your testimony contradicts your sentiments (for the third time now). As you offer no inclination to provide more data (a complete survey along the entire length of the radiator using the thermocouple devices), this is not much in the way of proof.

73's
Richard Clark, KB7QHC

3462. Re: 100 w, Automatic Ladder line HF tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:49:00 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA1B17C.FC760A5@cwis.net>
Source record: 105628

Tom,
How about an automatic antenna tuner and a balun?
'Doc

3463. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:51:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e9c3qvce8s6345551dd9lfcmndul6hrste@4ax.com>
Source record: 105629

On 30 Oct 2003 22:59:26 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>If we suppose the loading coil is heating up equally

Hi Yuri,

You have already testified twice that it does not - so why IF it
around?
1.)
>>If you trasmit for short period of time (not
>>enough for heat to equalize) and feel it, or use thermal strips to check
>>temperature, you would see the taper in the current from bottom to top. It is
>>in order of 50%, not negligible.
2.)
>>Put 500W to it for longer period and watch the heatshrink tubing
>>shrivel from the bottom up.

73's
Richard Clark, KB7QHC

3464. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:53:05 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA1B271.C13361E8@cwis.net>
Source record: 105630

Yes! Otherwise you will get an ugly mess of photons
all over the floor.
'Doc

private wrote:
>
> ...

3465. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:54:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1b363$1_7@corp.newsgroups.com>
Source record: 105631

Yuri Blanarovich wrote:
> My "case" is to bring this to attention of those who are still "knowing" that
> the current in loading coils is the same at both ends.

The current can be the same at both ends if the coil is positioned at a
current minimum or current maximum point which is NOT the case with
mobile antennas.

The key to understanding is to recognize that the coil causes the
opposite phase change in the forward current as it does in the reflected
current so they *cannot* track each other through the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3466. Re: harness

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:55:32 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <8qiob.64433$HS4.576464@attbi_s01>
Source record: 105632

"luis" <cristianalpfm@cox.net> wrote in message
news:R8fob.51192$N94.42841@lakeread02...
> hi , I want a harness for two antennas 1/2 wave 87.5 mz.
> In Honduras ,my country,is impossible to find any documentation.Can
somebody
> help me w/some documentation or information? tks
> pd :the two antennas are dipoles w/gamma match.
>
Luis -

An ARRL Antenna or RSGB VHF/UHF Handbook is loaded with the information you
desire.

You require information on stacking 2 antennas (since the distance apart is
critical)
and building the phase lines (whose length is critical) to connect to these
2 antennas from the transmitter's coax.
http://www.ifwtech.co.uk/g3sek/#dxbk

This information can be found in most VHF antenna books OR web sites devoted
to
antennas or transmission lines. [G.J.McDonald, VK2ZAB]
http://www.grantronics.com.au/docs/StkYagis.pdf

Since 87.5 MHz is an the low end of the commercial FM broadcast band - I
assume that this
is for some type of broadcast station. Antennas and harnesses cut to a
specific frequency are available
from any commercial FM broadcast antenna mfg -- but I assume that this is a
"no or low budget" operation OR
for educational purposes.

Good luck

w9gb

3467. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 00:55:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1b3d0_7@corp.newsgroups.com>
Source record: 105633

Tdonaly wrote:
> What is "the radiating part of the antenna," Yuri?

The part of the antenna under the ideal top hat.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3468. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 01:33:43 UTC
From: luigi_fatchenelli_125@hotmail.com
Message-ID: <16218d3a.0310301733.2b405e5@posting.google.com>
Source record: 105634
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Are you feeling OK Chuck?

No one is being anti-american. We are all just tired of your and
Daniel's racist remarks on a radio newsgroup.

Stop posting on here already and leave us all alone!

Luigi

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<gzaob.13900$FI2.13118@newsread1.news.atl.earthlink.net>...
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:1Y4ob.18946$lu7.11572@newssvr29.news.prodigy.com...
> >
> > "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> > news:16218d3a.0310292110.83d8726@posting.google.com...
> > > Again Daniel, this is a Radio newsgroup. You and Chuck should take
> > > your racist comments to yourselves. Everyone knows the type of people
> > > you are.
> >
> > First it's the anti-ham trolls, now it's the anti-american trolls.
> >
> > Charles Brabham, N5PVL
> >
> >
> >
>
> I never realized how some Canadians were. I always thought Canada and the
> USA were really like brothers. I no longer think that way.
>
> Dan/W4NTI

3469. Re: LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 01:46:23 UTC
From: spam@spam.com
Message-ID: <3fa1be5d.2397328@news.east.cox.net>
Source record: 105635

On Thu, 30 Oct 2003 18:35:47 GMT, "Ken Fowler" <ko6no@yahoo.com>
wrote:

>
>On 29-Oct-2003, "Dennis" <dedey1@bigpond.net.au> wrote:
>
>> Xref: intern1.nntp.aus1.giganews.com rec.radio.amateur.antenna:212452
>>
>> Hi Ken, was wondering which model would suit my application, I wish to
>> Remote the tuner 100ft from Transmitter, in a shed, and then 6mtrs to my
>> Ground Mounted verticle fed with coax, the verticle is a BUTTERNUT HF2V
>> which is resonant on 3 freqs 1.845/3.650/7.100 Mhz, and I would want
>> coverage say 30/20/17/15 Mtrs and maybe a few RFDS at 5MHZ and 8 Mhz, to get
>> the MAX use out of the beast, can i remote mount the AT-11MP in the shed and
>> use it in AUTO MODE, would that work ok, or should i go for the RT-11 and
>> still mount it in the shed and feed antenna 6 mtrs away with coax and then
>> have the REMOTE HEAD control unit for the RT-11. for when i want to take it
>> mobile ??
>> or do i have to mount RT-11 right at base of antenna ?? in that case the
>> AT-11MP would be no good to me, I was looking at trying to be able to
>> uncouple 2 coax feeds and take tuner travelling or camping hence the shed
>> mount, I would appreciate any comments I spoke to Dwayne but we never got to
>> discussing the AT-11MP
>>
>> Kind Regards
>
>Sorry, Dennis. I misread or misunderstood the Subject. I have the RT-11 and don't know
anything
>about the AT-11MP. I have considered mounting the RT-11 outside and controlling it
remotely.
>Should avoid a little bit of loss in the co-ax on some bands, but I would probably need to
use some
>form of Balun or RF Choke. Also I might run into untunable impedances on one or more bands
closer
>to the antenna. Who knows without measurement? Good Luck and 73. -ken-

The RT-11 can be remotely located up to 100 ft. away. I was able to
test this out with my Icom IC-706MKIIG and some CAT5 cable.

All tuners work best when they're mounted near the base of the antenna
to be tuned. It's better to tune the antenna alone, not the antenna
and feedline!

Mark

3470. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 01:58:36 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0310301758.36f161ad@posting.google.com>
Source record: 105636
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Right!

>> the big improvement in broadbanding seems to be going
>> from 1 to 2-3 wires.
Rather, from 1 to a lot of wires OR to 2 or 3 THICK self supporting
masts.

> More wires, smoother passband. Less wires, more mismatches.
I have checked a couple of things:

1) Land based cage monopoles. Typically:
- height: .24 lambda at the lowest frequency
- max diameter: .18 lambda at almost half height
- up to 24 / 36 wires
- ground plane with at least 24 wires
- bandwidth easily 7:1

2) Pix of dipoles spotted atop Russian embassies, eyeballed based on
height of balcony railings
- 6 conductors
- spacers approx. 1 m diameter, every 3 m
- poles typically 10-12 m each

If you
> No free lunches at the Maxwell Cafe.
Whence the success of the Maxwell House brand.

> http://www.eznec.com/
No free lunch there either. The demo only does 20 elements. If I did
an 8-wire cage in decent sized diameter stainless steel rope, it would
set me back in the 100s at my local prices, so I might as well buy the
SW and learn to use it.

The copperclad steel MIG continuous welding wire I was testing has
rusted in ONE NIGHT under the fall rain. I'll look for a source of
stainless welding wire. I have a single wire sloper up for the last 4
years and it looks absolutely new - courtesy of the head of mechanical
maintenance at a cement factory I did consulting at.

3471. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 02:08:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnsg67$t56$1@hercules.btinternet.com>
Source record: 105637

What happens when the coil is a flat pancake ?

Reg.

3472. Re: Homebrew tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 02:29:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnshdp$2m8$1@titan.btinternet.com>
Source record: 105638

To calculate L and C settings of T-match and L-match networks to tune
vertical or inverted-L antennas, download program ENDFEED from website
below.

To calculate L and C values and efficiency of C-L-C T-networks download
program T_MATCH

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3473. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 02:39:25 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030213925.06042.00000028@mb-m02.aol.com>
Source record: 105639

>
>What happens when the coil is a flat pancake ?
>---
>Reg.
>
>
>

It tastes good :-)

Wouldn't make a difference. W9UCW used toroid and got the same results. Have you read the article?

Yuri

3474. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 02:50:49 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310301850.2a1a9a4@posting.google.com>
Source record: 105640

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031030183542.05882.00000031@mb-m02.aol.com>...
> >
> >I could buy that to an extent I guess. But say if you had a top loaded
> >vertical, with linear current distribution, the current across the
> >coil should be appx equal no matter where the coil is placed. But if
> >no top loading, maybe so.. MK
> >
>
> Top loaded vertical does not have LINEAR current distribution, that is another
> simplification, fallacy. Current in the radiator has cosine distribution.

It's still fairly constant. But the degree would depend on the height
of the vertical vs the length of the top hat wires. If the hat is too
small, I doubt you would see as steady a distribution up the radiator.

At
> the base, there is not much difference, just like in cosine of the angle
> corresponding to the electrical length of radiator at that point.

I'm not sure what you mean by this. Do you mean the current across the
coil would be more steady than if the coil were higher? Does this
include using the top loading wires?
>
> Again, this subject of current distribution is important in optimizing the
> antenna design by fine tuning the position of the loading coil in the antenna,
> combination with top loading etc. Morew current flowing in the radiating part
> of the antenna - the stronger the field and louder signal.

Sure. But this is old news. I beat Reg's vertload program to death
finding the best overall coil height for my mobile antenna. Basically
I ended up putting it as high as I could. Which ended up a center load
at 5 ft up, with a 10 ft whip. Or 8 ft up on a 13 ft whip when parked,
and using the "Super" mode...:)
>
> The "linear" current distribution mentioned in ARRL Compendium and Antenna Book
> is the simplification propagated from Belrose's 1955 QST article. It is close,
> but not exact and introduces confusion as it is demonstrated by the flat earth
> society.

Dunno, I've never read it. Maybe calling the distribution as "linear"
is the wrong term, but the current is still fairly steady along the
radiator in the case of the vertical with the large top hat. I'm
looking at a model of one now. The current distribution is almost like
a twin tower standing next to the vertical. There is a slight decrease
from bottom to top, but it's very small. It's still my view that the

difference in current at each end of the coil used in such a case is fairly small. No matter where the coil was mounted.
I've never said they would be exactly the same. Seems to me I started off by saying they could vary a bit depending on the antenna. So if you are saying they would be close, but not exact, you seem to be saying the same thing I said to begin with, which seems to be the same thing Cecil is saying. ??? Crap, I'm becoming confused.... I'm not good at playing these type games. That's why I didn't even bother reading the "current war" over on e-ham. *Sounds* like a 598 thread nit pick contest just judging from what I've heard... It's not "that" important to me, being I don't see what it would do for me, even if I found there to be a fairly large difference from each end. If you have pertinent info which shows the current is not even close to being constant across the coil, please enlighten us. "I guess you are attempting to" But at this point, I think everyone is starting to chase their tales and bark at the moon.
I'm not really seeing the point, being the art of improving current distribution in short verticals using coil placement is old news. MK

3475. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:03:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnsjdi$2f5$1@hercules.btinternet.com>
Source record: 105641
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

The only difference in performance between a cage antenna and an ordinary thin-wire dipole is a modest increase in bandwidth. There is no increase in radiating/receiving efficience.

The increase in bandwidth is much less than is popularly supposed and may not be considered worth the extra construction costs and inconvenience.

To predict resonant frequency, bandwidth and a few other characteristics from overall length, number of cage wires from 1 to N, and wire diameter, download program DIPCAGE from website below.

Download DIPCAGE in a few seconds, no unzipping inconvenience, run immediately.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3476. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:23:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1d665$1_8@corp.newsgroups.com>
Source record: 105642

Reg Edwards wrote:
> What happens when the coil is a flat pancake ?

Don't you have a program for predicting the electrical
characteristics of a flat pancake coil? :-) Seriously,
what are those characteristics? Is there a formula?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3477. Re: Should I unplug my HF antenna during solar storm?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:29:53 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <qll3qv8d6s22tr8p2hu8e3etp1d0kenvsu@4ax.com>
Source record: 105643

On Thu, 30 Oct 2003 18:53:05 -0600, 'Doc <w5lz@cwis.net> wrote:

> Yes! Otherwise you will get an ugly mess of photons
>all over the floor.

I don't even unplug mine during thunderstorms.
Course the one lighting hit (I get about 3 a year) blew off all the coax seal and I did end up with water running out of my 2-meter rig onto the top of the desk...and floor. That was when I decided to replace all the 9913 with LMR-400.

BTW, the rig still worked.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

> 'Doc
>
>
>private wrote:
>>
>> ...

3478. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:32:44 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <6tl3qvg552arfa1e8ed4b33jugvq7fb00o@4ax.com>
Source record: 105644

On Thu, 30 Oct 2003 22:46:57 -0000, dplatt@radagast.org (Dave Platt)
wrote:

>>> I need an antenna that will get me on the channels above 27.3. My Galaxy
>>> goes to 32 mhz.
>
>>Simply shorten your coax 2.01734695436248538129 feet.
>
<snip>
>the cable. Typically, a 1-penny nail is of the correct length and
>diameter. For small-diameter cable, try a carpet tack.
>
Pins work just as well and aren't nearly as unsightly.
<snip>
>I have not actually tested this procedure with a Galaxy radio - your
>results may differ, and (as with any homebrew electronics or antenna
>modifications) they're done entirely at your own risk.

Disclaimers are always good in this day-and-age.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

3479. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:35:41 UTC
From: Ed <ed@nospam.com>
Message-ID: <tdCdnVTsMI0DRTyiRVn-tA@comcast.com>
Source record: 105645

Ahhhhhhhhh, the first speculator. They can never resist the chance to lead
a good thread astray with unsubstantiated info.

Ed

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20031030175922.01033.00000014@mb-m03.aol.com...
> >Anyone here with some hands-on experience (i.e. not speculation, thanks)
> >able to share their observations on this unit ?
>
> Ed, I don't think you will find any hands-on experience because it is a
new
> product and they haven't sold any yet. Probably have to wait a few months
to
> get an answer to your question.
> 73 Gary N4AST

3480. Caution to message supposedly coming from Microsoft or the like

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:50:38 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fa1dbfe$0$20515$ba620e4c@reader1.news.skynet.be>
Source record: 105646

Pay attention to this kind of messages. Microsoft will never send any update through mail or news.

73 de ON5MJ.

3481. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:52:19 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031030225219.06042.00000029@mb-m02.aol.com>
Source record: 105647

>NM5K:

> At
>> the base, there is not much difference, just like in cosine of the angle
>> corresponding to the electrical length of radiator at that point.
>
>I'm not sure what you mean by this. Do you mean the current across the
>coil would be more steady than if the coil were higher? Does this
>include using the top loading wires?
>>

It is roughly like this: Consider quarter wave vertical (90 degree radiator), no coils or loading, you will get current max at the base and then diminishing towards the end to zero. Distribution is in the form of cosine function, nice cosine curve. Now if you would insert the coil anywhere in that radiator and shorten it and tune it back to resonance, the current distribution accross the coil would correspond to the "missing" portion of the radiator that coil replaces. Efficiency of the antenna is roughly proportional to the area under the curve. ON4UN pictures show that. Appears that the best compromise position for the loading coil is about 2/3 from the base. Having top loading, it "stretches" the high current carrying portion of the radiator. The lower the loading coil is, the less difference in current drop accross the coil (cosine function) but shortening of the more current carrying radiator - less efficiency.

>> Again, this subject of current distribution is important in optimizing the
>> antenna design by fine tuning the position of the loading coil in the
>antenna,
>> combination with top loading etc. Morew current flowing in the radiating
>part
>> of the antenna - the stronger the field and louder signal.
>
>Sure. But this is old news. I beat Reg's vertload program to death
>finding the best overall coil height for my mobile antenna. Basically
>I ended up putting it as high as I could. Which ended up a center load
>at 5 ft up, with a 10 ft whip. Or 8 ft up on a 13 ft whip when parked,
>and using the "Super" mode...:)
>>

That perhaps points to some error in validity of the formula, and confirms our findings. Experience and W5DXP reported shootout results point to reverse dimensions, 10 feet mast and 5 ft whip, coil about 2/3 up the antenna. You want to have as much as possible the mast length and then best compromise between the coil inductance (properties) and remaining whip (and hat).

>> The "linear" current distribution mentioned in ARRL Compendium and Antenna
>Book
>> is the simplification propagated from Belrose's 1955 QST article. It is
>close,
>> but not exact and introduces confusion as it is demonstrated by the flat
>earth
>> society.
>
>Dunno, I've never read it. Maybe calling the distribution as "linear"
>is the wrong term, but the current is still fairly steady along the
>radiator in the case of the vertical with the large top hat. I'm
>looking at a model of one now. The current distribution is almost like
>a twin tower standing next to the vertical. There is a slight decrease
>from bottom to top, but it's very small. It's still my view that the
>difference in current at each end of the coil used in such a case is
>fairly small. No matter where the coil was mounted.
>I've never said they would be exactly the same. Seems to me I started
>off by saying they could vary a bit depending on the antenna. So if
>you are saying they would be close, but not exact, you seem to be
>saying the same thing I said to begin with, which seems to be the same
>thing Cecil is saying. ??? Crap, I'm becoming confused.... I'm not
>good at playing these type games. That's why I didn't even bother
>reading the "current war" over on e-ham. *Sounds* like a 598 thread
>nit pick contest just judging from what I've heard... It's not "that"
>important to me, being I don't see what it would do for me, even if I
>found there to be a fairly large difference from each end. If you have
>pertinent info which shows the current is not even close to being
>constant across the coil, please enlighten us. "I guess you are
>attempting to" But at this point, I think everyone is starting to
>chase their tales and bark at the moon.
>I'm not really seeing the point, being the art of improving current
>distribution in short verticals using coil placement is old news. MK

Well, looking at fairly simple example of typical 40m loaded mobile model antenna, as W9UCW used, having current vary 40 to 60% is significant, measured differences in field strength are in order of 10 dB and that is significant. I guess it must be like religion, you believe what you want and if the reality doesn't matter, than let everybody be happy. But this has tremendous impact on modeling especially in loaded parasitic arrays. If W8JI showed that Eznec calculated current to be different by fractions and the measurements show around 50% difference, then we have huge discrepancy and warning not to rely on results like that.

There is too much reliance now going on modeling program results, ignoring some realities. Some people are becoming "experts" on antennas based on modeling results, without building one. But, even lightbulb can radiate and make some people happy, but it is not my intention to argue with those. My goal is to maximize the performance of the antenna and take advantage of propagation modes for maximum results in the contests, where every fraction of dB counts.

It just amazes me that some people go to great length to speculate, calculate, rather than go and verify the measurements and see what it REALY is. You can

see that in the threads after the articles.

What I was looking for is to see 1. if anyone else MEASURED the current in loading coils, and what results they arrived at (and if we are wrong, then where did we go wrong). 2. If this is right than to have modeling software implement it with least error. I would like to use that for optimizing, say, loaded elements for receiving arrays on low bands, optimizing mobile antennas, loaded multielement beams, etc.

Yuri, K3BU/m

3482. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 03:54:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1dd8a$1_8@corp.newsgroups.com>
Source record: 105648

Mark Keith wrote:
> I've never said they would be exactly the same. Seems to me I started
> off by saying they could vary a bit depending on the antenna. So if
> you are saying they would be close, but not exact, you seem to be
> saying the same thing I said to begin with, which seems to be the same
> thing Cecil is saying. ???

Nope, not what I am saying at all. I'm saying the magnitude of the forward current doesn't change much through the coil and the magnitude of the reflected current doesn't change much through the coil. That satisfies Kirchhoff. But the net current, which is the superposition of those two currents, can change drastically because of the relative phase differences on each side of the coil.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3483. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 04:07:15 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnsn5r$ee8v$1@news3.infoave.net>
Source record: 105649

Re: Current through a coil in an antenna.

If we feed an antenna at the current point, the current decreases as the voltage increases along the antenna element from feed point to end..

That being said, a coil replacing a segment of an antenna (in order to physically shorten it) will exhibit the same properties (relating to currents) as the segment it replaced.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:e9c3qvce8s6345551dd9lfcmndul6hrste@4ax.com...
> On 30 Oct 2003 22:59:26 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> wrote:
>
> >If we suppose the loading coil is heating up equally
>
> Hi Yuri,
>
> You have already testified twice that it does not - so why IF it
> around?
> 1.)
> >>If you trasmit for short period of time (not
> >>enough for heat to equalize) and feel it, or use thermal strips to check
> >>temperature, you would see the taper in the current from bottom to top.
It is
> >>in order of 50%, not negligible.
> 2.)
> >>Put 500W to it for longer period and watch the heatshrink tubing
> >>shrivel from the bottom up.
>
> 73's
> Richard Clark, KB7QHC

3484. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 04:20:41 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnsnv0$eeiq$1@news3.infoave.net>
Source record: 105650
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Might I suggest electric fence wire, a 1/4 mile spool is under $8.00. 19 AWG
and designed for outdoor use.

I have used cage dipoles for years and it has worked well for me. I normally
use 6 wires and slices of 12" diameter plastic sewer pipe cut to 1/4 inch
thickness and 6 holes drilled every 60 degrees(slightly larger than your
wire). on 80 meters I use 4 rings per side equally spaced. the rings are
held in place by winding a short piece of wire around the plastic and
twisting it on each side of the ring to the antenna element.

"SpamLover" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0310301758.36f161ad@posting.google.com...
> Right!
>
> >> the big improvement in broadbanding seems to be going
> >> from 1 to 2-3 wires.
> Rather, from 1 to a lot of wires OR to 2 or 3 THICK self supporting
> masts.
>
> > More wires, smoother passband. Less wires, more mismatches.
> I have checked a couple of things:
>
> 1) Land based cage monopoles. Typically:
> - height: .24 lambda at the lowest frequency
> - max diameter: .18 lambda at almost half height
> - up to 24 / 36 wires
> - ground plane with at least 24 wires
> - bandwidth easily 7:1
>
> 2) Pix of dipoles spotted atop Russian embassies, eyeballed based on
> height of balcony railings
> - 6 conductors
> - spacers approx. 1 m diameter, every 3 m
> - poles typically 10-12 m each
>
> If you
> > No free lunches at the Maxwell Cafe.
> Whence the success of the Maxwell House brand.
>
> > http://www.eznec.com/
> No free lunch there either. The demo only does 20 elements. If I did
> an 8-wire cage in decent sized diameter stainless steel rope, it would
> set me back in the 100s at my local prices, so I might as well buy the
> SW and learn to use it.

>
> The copperclad steel MIG continuous welding wire I was testing has
> rusted in ONE NIGHT under the fall rain. I'll look for a source of
> stainless welding wire. I have a single wire sloper up for the last 4
> years and it looks absolutely new - courtesy of the head of mechanical
> maintenance at a cement factory I did consulting at.

3485. No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 04:29:28 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <Eylob.2530$un.1050@bignews6.bellsouth.net>
Source record: 105651

As *some* of you know, I build and sell the Carolina Cyclone line of screwdriver antennas. Sometimes I run into some "doosies". I don't (normally) do installs because they are more trouble than they are worth. But.....I was recently persuaded to install a "used" screwdriver in trade for an Icom 735 transceiver. Hmmmm, I needed a base rig, so.....I reluctantly agreed. I spent the better of a day drilling holes, chasing cables, and, finally, checking everything to assure that it worked. We put up our tools and the customer (ham) left and shortly checked into a net. I had a very nice IC735 for my trouble. Couple days later, his signal was almost non-existant, and he was not too responsive to my efforts to troubleshoot the problem from a distance (100 miles to his QTH). It seemed that he blamed ME for his trouble (which often happens when non-experienced hams buy antennas) and wanted me to drive to ********, NC to fix his antenna. Upon my arrival, to show him that the antenna was not at fault, I put the screwdriver on my pickup and it resonated FB. Put it on his, it received but the SWR was WAY off. I performed several checks, including criticizing a PL 259 he had changed, nothing. As I inspected another thing, he piped up, "Um, would this jack cause trouble?"

What? Jack? What jack.

"Uh, the one that I left loose; it fell over on the wall of the van". It was touching against (barely) the inside of the ball mount and creating an intermittent short. As the van hit bumps, the jack would vibrate and alternately short, alternately not. Once we got it out of the way, the antenna was fine. (I remember asking him in the beginning to take it to the Chrysler place and remount the jack, but he hadn't got round to it). This "fixed" it. He checked into a net loud and clear. One hour's work, and 4 hours driving..all for lunch and gas money. Point? Now you know why I don't do installs! If I did, I would be trouble-shooting and working 12 hour days for hams that have no idea what they are doing.

What does it have to do with no code? Not much, except to say that it seems to me that we dread to do anything that we deem to be drudgery, only want to yak yak on a radio. We memorize answers, learn formulas, then forget about them once we get that little paper in our hand; the books go onto the bookshelf never to be seen again (until the next yard sale). The key is LEARNING at least some of what we have studied (?) whether it be code or the formula for a radiowave in

free space. It is a form of discipline. Maybe code isn't
necessary anymore, but I do wonder what will be next
to go. Will we one day take a pill to memorize the questions/answers because
we no long want to do ANY-
thing to learn what we are doing? Will learning become
obsolete?

We all have to start somewhere, and I am willing to help
in any way I can, but the ones that burn me up are the ones who expect
someone else to do it all and just refuse to learn anything. Then assume
that a problem is the fault of someone else.

Learning CW is not a matter of "I did it, so should you". It is somewhat
like licking a tart-tasting lollipop to get down to the more enticing
center--the meat of the thing. Doing
CW was, for me, a price I had to pay to get down to the
sweet center. Then, along the way, I found out that I
LIKED that sucker, and the outer candy was as sweet, or sweeter, than the
center!

So when I see people "diss" code, and then, in turn, have to go help someone
who "won't" try to help themselves,
it just makes me wonder.....

73

Jerry
K4KWH

3486. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 04:31:55 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnsok3$eer5$1@news3.infoave.net>
Source record: 105652
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Reg, in A/B tests with a standard dipole, the cage was "quieter". That is, I am able to hear weaker signals with less noise. Anecdotal at best, but keeps me using one.

I am under 2:1 from 3575 to 3925 with no tuner. I suspect that if I were using copper Vs the fence wire the Q would be higher and the results more in agreement with your cage program.

Besides it gives me a warm fuzzy feeling and impresses the neighbors.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bnsjdi$2f5$1@hercules.btinternet.com...
> The only difference in performance between a cage antenna and an ordinary
> thin-wire dipole is a modest increase in bandwidth. There is no increase in
> radiating/receiving efficience.
>
> The increase in bandwidth is much less than is popularly supposed and may
> not be considered worth the extra construction costs and inconvenience.
>
> To predict resonant frequency, bandwidth and a few other characteristics
> from overall length, number of cage wires from 1 to N, and wire diameter,
> download program DIPCAGE from website below.
>
> Download DIPCAGE in a few seconds, no unzipping inconvenience, run
> immediately.
> ----
> ========================
> Regards from Reg, G4FGQ
> For Free Radio Design Software
> go to http://www.g4fgq.com
> ========================
>
>

3487. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 04:41:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1e8ad$1_3@corp.newsgroups.com>
Source record: 105653

w4jle wrote:
> Re: Current through a coil in an antenna.
>
> If we feed an antenna at the current point, the current decreases as the
> voltage increases along the antenna element from feed point to end..
>
> That being said, a coil replacing a segment of an antenna (in order to
> physically shorten it) will exhibit the same properties (relating to
> currents) as the segment it replaced.

Yep, if the feedpoint impedances are the same and both are lossless,
that has to be true.

Here's a repeat of a diagram I drew earlier.

```
-----y----------x-----FP-----x----------y----- 1/2WL dipole

-----coil-----FP-----coil----- loaded dipole
```

Assume the physical length of the loaded dipole is 1/4WL.

Each coil replaces the section between 'x' and 'y'. The currents
at 'x' and 'y' are quite different, being 1/8WL apart.

Consider an 8 foot center-loaded 75m mobile antenna. 87% of the
electrical length of the antenna is in the coil.
--
73, Cecil http://www.qsl.net/w5dxp

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3488. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 05:14:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa1f07e$1_5@corp.newsgroups.com>
Source record: 105654

Yuri Blanarovich wrote:
> What I was looking for is to see 1. if anyone else MEASURED the current in
> loading coils, and what results they arrived at (and if we are wrong, then
> where did we go wrong). 2. If this is right than to have modeling software
> implement it with least error. I would like to use that for optimizing, say,
> loaded elements for receiving arrays on low bands, optimizing mobile antennas,
> loaded multielement beams, etc.

Hi Yuri, try this out for your argument in the other group. Using EZNEC:

Example 1: 102' CF dipole with loading coils in the center of each arm
to cause the antenna to resonate on 3.76 MHz. I get XL=j335 ohms.

Example 2: Replace the above loading coils with series inductive stubs
hanging down. Ten foot stubs with six inch spacing between the wires is
what I used. What happens to the current across that six inch gap is obvious
from the current plot using EZNEC. Hint: There is a step function across
that six inch gap just as there will be with a six inch coil.

Then ask: Why doesn't EZNEC treat these two cases the same way?
--
73, Cecil http://www.qsl.net/w5dxp

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------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3489. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 05:24:45 UTC
From: Charlie <cb49er@yahoo.com>
Message-ID: <xmmob.52625$ao4.146080@attbi_s51>
Source record: 105655
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Go here
rec.radio.amateur.boatanchors

good luck

"SpamLover" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0310291540.ef21d63@posting.google.com...
> Goal:
> * Minimum fuss 3-30MHz operation, mostly on 5-15MHz.
> * Will use step-dowm RF transformer between antenna and low impedance
> coax
> * May use autotuner on TX
> * Like the wirecage antennas still today seen on many a military
> vessel.
>
> Available on roof:
> - 25ft steel structure (like piramid base for power line)
> - about 100 feet space in one direction
> -...to abandoned flue chimney, 100ft away and 10 feet lower than base
> of steel structure
> - roof covered with alu plates on tar (could be all arc welded
> together, perhaps.
>
> THIS LOOKS PRETTY MUCH LIKE A SHIP TO ME cept its' 120ft aboveground.
>
> I want to build a wire cage monopole
> - sloping down from steel tower
> - using tower as counterpoise
> - feedpoint at top of sloper, via stepdown rf transfomrer, grounded to
> tower
> - coax cable lead, with rf choke coils and surge suppressors.
>
> Questions:
> - what kind of cage antenna?
> - how many wires?
> - what spreaders, how large?
> - ideal wire?
>
> Current plan config:
> - length 14 m = 2 x 4m straight sections, + 2 x 3m truncated cubes
> - spreaders at 3-7-11 m
> - 140 cm dia. spreaders, each made with two waterproofed bamboo
> triangles in "star of David" configuration; wire kept parallel at 70cm
> distance from each orther.

> - material: .8mm copperclad, abt. 90 m (270 ft) total.
>
> Any hints, like more/fewer parallel wires, broader / smaller
> spreaders, different materials, dirrerent antenna wire, RF
> downtransformer, whatever?
>
> Filippo

3490. Re: Caution to message supposedly coming from Microsoft or the like

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 05:26:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnsrqv$9n6$1@hercules.btinternet.com>
Source record: 105656

Don't you mean "pay NO attention".

They contain viruses.

3491. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 06:33:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnsvoh$g2v$1@sparta.btinternet.com>
Source record: 105657
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Dear W4JLE

I think you should be aware that, as perceived at the receiver end, the characteristics of the feedline, its length and SWR, and tuner can have at least as great an effect on operating bandwidth as the antenna constuction itself. Antenna height above ground can seriously affect bandwidth. Lowering height can increase bandwidth more than changing from from a thin wire to big fat cage.

There's far too much attention paid to the subject of wire diameter by the gurus who have heard a rumour that wire diameter increases bandwidth and can't resist repeating the story on every possible occasion. I produced the program to put the matter into quantitative perspective.

As for a fat antenna's remarkable ability to distinguish favourably between signals and noise I can suggest only that your A-B tests were not quite what you thought they were. Displacement, orientation, noise in a null, different receiver?

With MY neighbours the only warm fuzzy feelings have to be alcohol-assisted.

Reg
==========

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message news:bnsok3$eer5$1@news3.infoave.net...
> Reg, in A/B tests with a standard dipole, the cage was "quieter". That is, I
> am able to hear weaker signals with less noise. Anecdotal at best, but keeps
> me using one.
>
> I am under 2:1 from 3575 to 3925 with no tuner. I suspect that if I were
> using copper Vs the fence wire the Q would be higher and the results more in
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> Besides it gives me a warm fuzzy feeling and impresses the neighbors.
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bnsjdi$2f5$1@hercules.btinternet.com...
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increase
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> > The increase in bandwidth is much less than is popularly supposed and
may
> > not be considered worth the extra construction costs and inconvenience.
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> > To predict resonant frequency, bandwidth and a few other characteristics
> > from overall length, number of cage wires from 1 to N, and wire
diameter,
> > download program DIPCAGE from website below.
> >
> > Download DIPCAGE in a few seconds, no unzipping inconvenience, run
> > immediately.
> > ----
> > ========================
> > Regards from Reg, G4FGQ
> > For Free Radio Design Software
> > go to http://www.g4fgq.com
> > ========================
> >
> >
>
>

3492. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 11:12:28 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0310310312.43ecc917@posting.google.com>
Source record: 105658
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

SpamLover,

http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm

http://www2.arrl.org/news/stories/2001/05/03/2/

http://www.pust-norden.de/oloog/oloog-2_gr.jpg

http://www.qsl.net/wa2tvs/antennas/archive17.htm

http://www.antenna.be/tel-ave0640.html

iane ~ RHF
.
.
= = = n1jpr@hotmail.com (SpamLover)
= = = wrote in message news:<95a201e0.0310291540.ef21d63@posting.google.com>...
> Goal:
> * Minimum fuss 3-30MHz operation, mostly on 5-15MHz.
> * Will use step-dowm RF transformer between antenna and low impedance
> coax
> * May use autotuner on TX
> * Like the wirecage antennas still today seen on many a military
> vessel.
>
> Available on roof:
> - 25ft steel structure (like piramid base for power line)
> - about 100 feet space in one direction
> -...to abandoned flue chimney, 100ft away and 10 feet lower than base
> of steel structure
> - roof covered with alu plates on tar (could be all arc welded
> together, perhaps.
>
> THIS LOOKS PRETTY MUCH LIKE A SHIP TO ME cept its' 120ft aboveground.
>
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> - feedpoint at top of sloper, via stepdown rf transfomrer, grounded to
> tower
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> Questions:
> - what kind of cage antenna?
> - how many wires?

> - what spreaders, how large?
> - ideal wire?
>
> Current plan config:
> - length 14 m = 2 x 4m straight sections, + 2 x 3m truncated cubes
> - spreaders at 3-7-11 m
> - 140 cm dia. spreaders, each made with two waterproofed bamboo
> triangles in "star of David" configuration; wire kept parallel at 70cm
> distance from each orther.
> - material: .8mm copperclad, abt. 90 m (270 ft) total.
>
> Any hints, like more/fewer parallel wires, broader / smaller
> spreaders, different materials, dirrerent antenna wire, RF
> downtransformer, whatever?
>
> Filippo

3493. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 11:57:42 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <W6sob.9165$r63.66685022@newssvr21.news.prodigy.com>
Source record: 105659
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
news:16218d3a.0310301733.2b405e5@posting.google.com...
> Are you feeling OK Chuck?
>
> No one is being anti-american. We are all just tired of your and
> Daniel's racist remarks on a radio newsgroup.

Who is this "we" supposed to be? You and Osama Ben Laden?

Again, you can call my remarks "racist" all you like, but that will not
change the facts. My posts all stand on their own merit.

>
> Stop posting on here already and leave us all alone!

I've been posting here for close to ten years, so far. Do us all a favor,
and hold your breath until I stop posting here.

Charles Brabham, N5PVL

3494. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 12:59:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa25d67_6@corp.newsgroups.com>
Source record: 105660

Yuri Blanarovich wrote:
> There is too much reliance now going on modeling program results, ignoring some
> realities.

Yuri, here is a modeling result that you might like. :-) I took a 102' dipole and loaded it in the center of each leg with an inductive stub that made the dipole resonant on 3.76 MHz. I added a one ohm series 'load' to each side of the stub. Drawing one leg of the dipole, it looks like this:

```
----------R2-+ +-R1----------FP--- ... other half
| |
| | inductive
| | stub
+-+
```

EZNEC reports 0.85 amps through R1 and 0.57 amps through R2, a difference of 33%. If one could model the inductive loading reactance as an actual physical coil instead of a lumped single point impedance, results would be similar to the above.

Now here is something that might blow some minds. The inductive stub above is ten feet long. That's about 1/8WL on 20m. A 1/8WL shorted stub equals +jZ0. The results of running the above antenna on 20m is that the current through R1 is 185 degrees out of phase with the current through R2. At the time when the current through R2 is flowing toward the end of the antenna, the current through R1 is flowing toward the feedpoint. Wonder what Kirchhoff would say about that. If you replace the stub with a coil of the same reactance, not much changes.

Tell W8JI to stop using lumped circuit analysis when he should be using distributed circuit analysis. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3495. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 13:13:32 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <0etob.51412$mZ5.313034@attbi_s54>
Source record: 105661

In the USA it is a violation of Federal Law to operate on frequencies
outside the authorized 11 meter Citizen's Band.

Be advised that all frequencies between 28.000 and 29.700 MHz are
reserved internationally, worldwide, for communication ONLY by licensed
operators and licensed stations.

Deacon Dave, W1MCE

Twistedhed wrote:

> I need an antenna that will get me on the channels above 27.3. My Galaxy
> goes to 32 mhz.
>
> twistedhed@webtv.net
>
> =-
> Article poste via Voila News - http://www.news.voila.fr
> Le : Thu Oct 30 04:10:27 2003 depuis l'IP : ac8d51fc.ipt.aol.com [VIP 532284301978]

3496. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 13:19:37 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031031081937.12972.00000043@mb-m14.aol.com>
Source record: 105662

Thank you Cecil and Fred!
(Where is Roy? We could use expert guidance in modeling the case.)

I will post your comments on eHam.net.

The analogy using stubs is excellent. That brings the question of using nice coils, vs. stubs, vs. toroids in shortened antennas. But we will save that for another thread with proper name.

Now watch for W8JI twisting into: "I said that all along" see him changing his web page and become a guru who "discovered" that current accross the loading coil in the antenna is significantly different and Yuri (et al) will remain the idiot who can't get the things right :-)....
Happened many times before :-(

Thanks again!

Yuri, K3BU/m

As Ken, K7GCO keeps saying: "Don't they get tired of being wrong?"

3497. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 13:20:13 UTC
From: derswede@aol.comspam.com
Message-ID: <20031031082013.24415.00000028@mb-m29.aol.com>
Source record: 105663

<< Sometimes I run
into some "doosies". >>
<< I was
recently persuaded to install a "used" screwdriver in trade
for an Icom 735 transceiver. >>
<< It seemed that he
blamed ME for his trouble (which often happens when non-experienced hams buy
antennas) >>
<< "Uh, the one that I left loose; it fell over on the wall of the van". >>
<< What does it have to do with no code? >>

Absolutely nothing. Stereotyping only irritates people. Was the person who purchased the antenna a technician class licensee? I doubt it, as the screwdriver is an HF antenna. What was he.... General, Advanced or Extra? THERE is where you should concentrate your comments...on those who HAVE gained some level of license and yet can't even figure out a dipole or simple install. Best RF engineer I know is a tech class licensee. Disciplined? He's got 2 advanced degrees..he's working on CW also to upgrade, but his time is limited. I know a Tech who has fixed several installs for Extras and Advanced class licensees...OTs who have been licensed for years.

I know this is useless trying to explain this...but if you try to shove something down one's throat they will most likely resent the action. Denigration only makes the denigrator look foolish. First rule of sales...make it appealing. Not sugar coated, not "dumbed down." Make it appealing, a challenge! "See ya on CW"

Most of the "I had to do it, you've got to or you're stupid" comments show how the commentator actually resented that he had it shoved down HIS throat. Psych 101. Jerry, you've made good comments, just targeted the wrong attitude. Most (but obviously not all) Tech class licensees would probably want to upgrade, but some of the vocal minority who snub and insult Techs basically are just looking to start a fight. I liked your comment ref. working at CW....once again, make it a CHALLENGE....don't use it as a bludgeon. And don't stereotype!

A

3498. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 14:56:04 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fa27645.675100625@news.galilei.com>
Source record: 105664

Hi Jerry

It seems like your comparing apples to oranges in your post!

But I would like to make a comment about your observation on learning and retaining information.

I was a not to shabby chip level service technician for a moderately large entertainment company for several years. Although the technology advances so fast and quarterly seminars must be attended to keep up, basic electronic theory virtually never changes.

I had to take off work due to an illness in the family, unfortunately this illness lingered for a few years.
Being his ace tech, the boss had the doors wide open for me to return to work any time I needed my job back.
Well, the day came that I decided to go back to work. But it was futile, not the new technology currently in use, I couldn't even fix a simple analog power supply.
Sometime during that short span off work, I completely lost it. Not just the technical, but the most simplistic of everyday electronic repair tasks.
There is something to the phrase 'use it or lose it' that really hit home with me!

TTUL
Gary

3499. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 15:11:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa27bab_2@127.0.0.1>
Source record: 105665

Yuri Blanarovich wrote:
> Thank you Cecil and Fred!
> (Where is Roy? We could use expert guidance in modeling the case.)

I sent Roy a copy of the EZNEC file that I sent to you. Anyone else
who wants a copy of those files, send me an email.

> I will post your comments on eHam.net.

Which forum/topic?
--
73, Cecil, W5DXP

3500. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 15:18:30 UTC
From: tdonaly@aol.com
Message-ID: <20031031101830.19661.00000048@mb-m01.aol.com>
Source record: 105666

```
Cecil wrote,
>
>Tell W8JI to stop using lumped circuit analysis when he should be using
>distributed circuit analysis. :-)
>--
>73, Cecil http://www.qsl.net/w5dxp
>

You know, it's against the law to kill people, Cecil. I
almost choked to death on my morning cup of
Bo Lee when I read that. :-)
73,
Tom Donaly, KA6RUH
```

3501. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 15:24:48 UTC
From: Robert Spooner <rls19@psu.edu>
Message-ID: <bntus0$1ng6$1@f04n12.cac.psu.edu>
Source record: 105667
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

What kind of bandwidth do you get with that?

Bob AD3K

w4jle wrote:
> Might I suggest electric fence wire, a 1/4 mile spool is under $8.00. 19 AWG
> and designed for outdoor use.
>
> I have used cage dipoles for years and it has worked well for me. I normally
> use 6 wires and slices of 12" diameter plastic sewer pipe cut to 1/4 inch
> thickness and 6 holes drilled every 60 degrees(slightly larger than your
> wire). on 80 meters I use 4 rings per side equally spaced. the rings are
> held in place by winding a short piece of wire around the plastic and
> twisting it on each side of the ring to the antenna element.

3502. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 15:54:44 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0310310754.225dc867@posting.google.com>
Source record: 105668

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031030225219.06042.00000029@mb-m02.aol.com>...
> >NM5K:
>
> > At
> >> the base, there is not much difference, just like in cosine of the angle
> >> corresponding to the electrical length of radiator at that point.
> >
> >I'm not sure what you mean by this. Do you mean the current across the
> >coil would be more steady than if the coil were higher? Does this
> >include using the top loading wires?
> >>
>
> It is roughly like this: Consider quarter wave vertical (90 degree radiator),
> no coils or loading, you will get current max at the base and then diminishing
> towards the end to zero. Distribution is in the form of cosine function, nice
> cosine curve. Now if you would insert the coil anywhere in that radiator and
> shorten it and tune it back to resonance, the current distribution accross the
> coil would correspond to the "missing" portion of the radiator that coil
> replaces. Efficiency of the antenna is roughly proportional to the area under
> the curve. ON4UN pictures show that. Appears that the best compromise position
> for the loading coil is about 2/3 from the base. Having top loading, it
> "stretches" the high current carrying portion of the radiator. The lower the
> loading coil is, the less difference in current drop accross the coil (cosine
> function) but shortening of the more current carrying radiator - less
> efficiency.

This would apply to a non top loaded antenna, but I wonder about a top
loaded "large hat" antenna. The current distribution is fairly steady
up the whip, even without using a coil.
>
> >> Again, this subject of current distribution is important in optimizing the
> >> antenna design by fine tuning the position of the loading coil in the
> antenna,
> >> combination with top loading etc. Morew current flowing in the radiating
> part
> >> of the antenna - the stronger the field and louder signal.
> >
> >Sure. But this is old news. I beat Reg's vertload program to death
> >finding the best overall coil height for my mobile antenna. Basically
> >I ended up putting it as high as I could. Which ended up a center load
> >at 5 ft up, with a 10 ft whip. Or 8 ft up on a 13 ft whip when parked,
> >and using the "Super" mode...:)
> >>

>
> That perhaps points to some error in validity of the formula, and confirms our
> findings. Experience and W5DXP reported shootout results point to reverse
> dimensions, 10 feet mast and 5 ft whip, coil about 2/3 up the antenna. You want
> to have as much as possible the mast length and then best compromise between
> the coil inductance (properties) and remaining whip (and hat).

But the coil placement on mine was mechanically limited. Yes, 2/3 up
is the best appx place, but I can't do that, except when parked. With
the 10 ft "stock" version, the upper 5 ft is stinger whip. I don't
have a sturdy support for the coil any higher than 5 ft up. Besides,
I'd hang the coil up on too many tree branches. The base of my antenna
is about 4.5 ft off the ground. My coil is nearly 10 ft in the air as
it is. Thats why I only use the lower extender mast only when parked.
My coil is then nearly 13 ft in the air. And the stinger still 5 ft
higher than that.
This is why I do add a lower 3 ft mast when I'm parked. I then do
approach the 2/3 level. There was no error involved. I just can't do
everything I'd like when it comes to that antenna. If I'm working 75m,
and I'm doing say 10 over 9 to someone with the 10 ft version,
switching to the 13 ft version will usually bump me up to 15 over 9.
Thats the usual difference I see in the real world.

>
> >> The "linear" current distribution mentioned in ARRL Compendium and Antenna
> Book
> >> is the simplification propagated from Belrose's 1955 QST article. It is
> close,
> >> but not exact and introduces confusion as it is demonstrated by the flat
> earth
> >> society.
> >

>
> Well, looking at fairly simple example of typical 40m loaded mobile model
> antenna, as W9UCW used, having current vary 40 to 60% is significant, measured
> differences in field strength are in order of 10 dB and that is significant.

What does this refer to? The comparison of current at each end of the
coil, or the overall antenna performance changes due to varying the
height of the coil?
If this is total performance increase from raising the coil, I don't
doubt it.
But thats not what this is really about. We are talking about the
differences in current at each end of the coil, and the ramifications
IF it's proven that the current drops off a good bit at the upper end
of the coil, compared to the lower end. I contend that even if you
prove that there is a major current difference at each end of the
coil, it will have no real impact on the design of short verticals. We
are already using the optimum coil heights, whether the current
difference is large, or not.

I
> guess it must be like religion, you believe what you want and if the reality
> doesn't matter, than let everybody be happy. But this has tremendous impact on
> modeling especially in loaded parasitic arrays.

Yes, maybe modeling, but not the design of the antennas as I use them.
I don't use modeling to design short verticals in general. I never do
for mobile antennas. I prefer to calculate using a program like
vertload. I don't consider vertload as "modeling". I consider it a
calculator program. The only time I model short verticals is if I'm
adding a top hat, and this would usually be something like a large
160m antenna for home use. I like to model it to get an idea of the
current distribution. But I don't rely on that model to calculate
efficiency.
If W8JI showed that Eznec
> calculated current to be different by fractions and the measurements show
> around 50% difference, then we have huge discrepancy and warning not to rely on
> results like that.

Well, that is fine. I hope the "correct" answer is known sooner or
later. But I don't rely on modeling when designing short verticals, so
I really doubt the "correct" answer will effect me much one way or the
other. It's not really an issue to me, being I already know the best
appx coil placement heights to use. And this was determined quite a
few years ago, before modeling was even common.
>
> There is too much reliance now going on modeling program results, ignoring some
> realities. Some people are becoming "experts" on antennas based on modeling
> results, without building one.

I've built all mine. "different coil heights" And like I said, I
don't use modeling for mobile antennas. I use "calculator" programs.
But, even lightbulb can radiate and make some
> people happy, but it is not my intention to argue with those. My goal is to
> maximize the performance of the antenna and take advantage of propagation modes
> for maximum results in the contests, where every fraction of dB counts.

I agree, and do the same thing. I wouldn't bother totally rebuilding
my mobile antenna if this were not the case. My old coil was only 2 ft
up..:(
>
> It just amazes me that some people go to great length to speculate, calculate,
> rather than go and verify the measurements and see what it REALY is. You can
> see that in the threads after the articles.

I'm not really set up to measure this accurately. I'd have to rig up
some gear/couplers, whatever, to do that. Besides, I've never really
worried about it much. I don't think it would have any effect on how I
build my short verticals.
>
> What I was looking for is to see 1. if anyone else MEASURED the current in
> loading coils, and what results they arrived at (and if we are wrong, then

> where did we go wrong).

I haven't done that. I'm just going by other related real world
observations I see.

2. If this is right than to have modeling software
> implement it with least error. I would like to use that for optimizing, say,
> loaded elements for receiving arrays on low bands, optimizing mobile antennas,
> loaded multielement beams, etc.

I have no problems with that, if indeed it does cause a modeling
error.

MK

3503. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 15:57:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa2864f_2@127.0.0.1>
Source record: 105519

Tdonaly wrote:

> Cecil wrote,
>>Tell W8JI to stop using lumped circuit analysis when he should be using
>>distributed circuit analysis. :-)
>
> You know, it's against the law to kill people, Cecil. I
> almost choked to death on my morning cup of
> Bo Lee when I read that. :-)

I apologize for that, Tom. If you had choked to death, would
there have been enough evidence to convict me? :-)
--
73, Cecil, W5DXP

3504. Re: Caution to message supposedly coming from Microsoft or the like

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 16:02:43 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fa2dc6b$0$1869$ba620e4c@reader0.news.skynet.be>
Source record: 105536

Hi Reg,

I just mean there are a lot of spams coming by e-mail and news and containing viruses. On this news group there is presently a spam sent supposedly by Microsoft (presented as a corrective pack for Internetr Explorer) and containing a virus. Just check, it's very close to this message. Don't open the bundled file and delete the message.

73 de Jacques - ON5MJ

3505. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 16:50:14 UTC
From: tdonaly@aol.com
Message-ID: <20031031115014.19661.00000051@mb-m01.aol.com>
Source record: 105520

Cecil wrote,
>
>I apologize for that, Tom. If you had choked to death, would
>there have been enough evidence to convict me? :-)
>--
>73, Cecil, W5DXP
>

Not in California, Cecil. It would have been the
perfect crime.
73,
Tom Donaly, KA6RUH

3506. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 18:44:11 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <%3yob.15857$FI2.3002@newsread1.news.atl.earthlink.net>
Source record: 105521
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:W6sob.9165$r63.66685022@newssvr21.news.prodigy.com...
>
> "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> news:16218d3a.0310301733.2b405e5@posting.google.com...
> > Are you feeling OK Chuck?
> >
> > No one is being anti-american. We are all just tired of your and
> > Daniel's racist remarks on a radio newsgroup.
>
> Who is this "we" supposed to be? You and Osama Ben Laden?
>
> Again, you can call my remarks "racist" all you like, but that will not
> change the facts. My posts all stand on their own merit.
>
> >
> > Stop posting on here already and leave us all alone!
>
> I've been posting here for close to ten years, so far. Do us all a favor,
> and hold your breath until I stop posting here.
>
> Charles Brabham, N5PVL
>
>

I too could care less what he calls it. I don't consider calling someone a
raghead racist. If he does, thats HIS PROBLEM.

I too have been on here a LONG time. It will take a whole lot more that
that Canadian Commie has to run me off.

Take your best shot....raghead.

Dan/W4NTI

3507. Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:16:00 UTC
From: dan9125@aol.com
Message-ID: <90dcbbbd.0310311116.3faf797c@posting.google.com>
Source record: 105522

Im going to be installing a Larson KG450UDPL 450-470mhz glass mount antenna on my 2004 Dodge Ram pick up and i was wondering if anyone knew the best spot to place this antenna. I have read about glass with tint causing problems.The rear window (where i want to put it) has a light tint,how will know if this will make my antenna performance suffer? Are some tints worse than others? I hate to stick it there and have not work then have to scrape it off. The windshield is clear but who wants an antenna on the windshield?

Thanks alot Dan9125@aol.com

3508. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:37:24 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <MRyob.115321$La.99982@fed1read02>
Source record: 105523

"W7TI" <noway@nohow.com> wrote in message
news:377vpvs9psja61ceepmqv739niuq1al7gs@4ax.com...
> On 28 Oct 2003 16:18:17 -0800, wizard12342002@yahoo.com (jj) wrote:
>
> >Does anyone have a good description for what a radio
> >wave really is?
>
> --
>
> The short answer is "no". Many people confuse the measurement of things
> with having an understanding of them.
>
> Scientists are very good at measuring things; less good at understanding
> what they measure. For example, gravity is measurable down to a gnat's
> eyelash, but nobody knows what it really "is".
>
> --
> Bill, W7TI
>

It would be more accurate to say that we can measure gravity's effect, not that we can measure gravity itself. Same for an electromagnetic field. We have great models for predicting the effects; some models are so good we call them Laws.

Beyond that, before you know exactly what a field is, do you really know what ANYTHING really is? How about a copper wire? What really is copper? Will you find the answer if you can look smaller & smaller? Will you eventually disturb the observation just by observing? How do we know anything?

Questions like this are best treated with beer.

Ed
wb6wsn

3509. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:40:43 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <rrdunb-oha.ln@p400bob.lse.com.au>
Source record: 105524

Interesting how mostly you made personal judgments and gave mis-information rather than answer the question. You must all be mind readers to get that from a dozen or so words.

No wonder the world is such an unhappy place.. I wonder who makes it that way?

3510. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:47:38 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <u%yob.55978$9E1.247721@attbi_s52>
Source record: 105525

You took a story about a lazy SOB of at least general class and turned it into a pro code rant. So, the obvious conclusion from this would be that the more code you know, the stupider you get. Was that your point?

"Jerry" <joxendi@bellsouth.net> wrote in message news:Eylob.2530$un.1050@bignews6.bellsouth.net...
> As *some* of you know, I build and sell the Carolina Cyclone line of
> screwdriver antennas. Sometimes I run
> into some "doosies". I don't (normally) do installs because
> they are more trouble than they are worth. But.....I was

3511. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:51:30 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Z2zob.115322$La.36881@fed1read02>
Source record: 105526
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"gwatts" <gwatts@frontiernet.net> wrote in message
news:3FA02CF7.3010808@frontiernet.net...
> Dan/W4NTI wrote:
> > In todays climate many countries are not worth getting too friendly
with.
> > We are at war. Govern yourself accordingly. Know your enemy.
> >
> > Dan/W4NTI
>
> 'We have seen the enemy, and he is us!'
>
> -Bill Mauldin
>

Not quite. That was Walt Kelly, via Pogo.

Bill Mauldin gave us such gems as:

Is there a view like this for the enlisted men?
I got a target for ya, but ya gotta be patient!
A movin' foxhole attracts the eye!
Don't startle the Kraut; he's got a full bottle!
I'm an expert on European dirt!
The Benevolent & Protective Association of Them What Has Been Shot At.

Ed
wb6wsn

3512. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:51:40 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <g3zob.52798$mZ5.320428@attbi_s54>
Source record: 105527

It is not up to individuals to decide what laws to obey. The majority of
people will not willingly aid in the commission of a crime, as you saw here.

"Bob" <bcnntp@optusnet.com.au> wrote in message
news:rrdunb-oha.ln@p400bob.lse.com.au...
> Interesting how mostly you made personal judgments and gave
mis-information
> rather than answer the question. You must all be mind readers to get that
> from a dozen or so words.
>
> No wonder the world is such an unhappy place.. I wonder who makes it that
> way?
>

3513. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 19:53:37 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <45mdnXEX6fxZID-iRVn-iw@crocker.com>
Source record: 105528

"Bob" <bcnntp@optusnet.com.au> wrote in message
news:rrdunb-oha.ln@p400bob.lse.com.au...
> Interesting how mostly you made personal judgments and gave
mis-information
> rather than answer the question. You must all be mind readers to get that
> from a dozen or so words.
>
> No wonder the world is such an unhappy place.. I wonder who makes it that
> way?
>
criminals like freebanders???? just think how happy we would all be without
any criminals!

3514. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 20:05:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bnuf9s$1ge$1@sparta.btinternet.com>
Source record: 105529

"Mark Keith" < wrote
> I beat Reg's vertload program to death
> finding the best overall coil height for my mobile antenna. Basically
> I ended up putting it as high as I could. Which ended up a center load
> at 5 ft up, with a 10 ft whip.

==========

There are 3 losses - coil loss resistance, ground loss resistance and radiation resistance.

To calculate and maximise efficiency all 3 values must be transformed to a common point - the base feedpoint.

The length of radiator between coil and base behaves is a transmission line transformer which transforms the coil loss resistance (XL/Q) to another value at the base. Would-be modellers should take this into account.

The Cosine current distribution along the radiator is a direct consequence of its behaviour as a lossy line. (Actually, it is not an exact cosine shape because of end-effect)

Efficiency = Rrad / (Rrad+Rcoil+Rground).

Rground is constant. For short antennas Rrad is the smallest of the 3 resistances.

As the coil is moved further up the antenna both Rrad and Rcoil increase.

But even if the coil is located at the extreme top of the antenna, radiation resistance cannot increase to more than 4 times the radiation resistance when the coil is located at the base feedpoint. Usually it is considerably less than 4.

So the rapidly increasing coil loss resistance very soon overtakes the increase in radiation resistance. Even if coil Q remains constant, coil loss resistance increases just by virtue of its necessary increase in inductive reactance.

To maintain resonance coil inductance increases inversely proportional to the length of the whip above it. So when the coil is located 95% of the way to the top of the antenna its loss resistance is TWENTY times greater than that of a base loading coil even when Q is unchanged. In practice, a coil having 20 times the inductance but with the same overall dimensions will very likely have a lower Q and an even higher resistance.

Its easy to see the fixed value of Rground in the above efficiency formula has the following effects -

When coil loss is less than ground loss, higher radiating efficiency is achieved by placing the coil nearer to the top of the antenna.

And vice-versa.

When ground loss is very small (zero if antenna is a pair of two back-to-back radiators to form a dipole) efficiency is relatively high anyway, maximumum efficiency perhaps occurring with the coil located in the lower half of the antenna. The slight improvement relative to base loading (as part of a tuner) may not then be worth the mechanical inconvience of fitting a coil in the antenna anyway.

An important factor, not considered quantitatively by anybody, is that a mobile antenna is not just a loaded vertical - the vehicle body, just by looking at it, obviously forms the major portion of the antenna and is floating above ground. The vehicle body plus loaded whip should be considered to be an off-centre-fed, short, 1/2-wave resonant vertical dipole and modelled as such.

Regarding antenna modelling - program LOADCOIL considers all 3 parts parts of the antenna, the mast, loading coil and whip, as consecutive lengths of transmission line each with its own Zo and loss resistance. It is obliged to do this because it covers actual antenna heights approaching 1/4-wavelength as may be erected in your backyard.

And it continues to do this for very short antennas with very short loading coils even where there would be negligible error by assuming the current going into one end of the coil is the as what comes out of the other.

There's a companion program TOPHAT2. There's no coil in it.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

3515. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 20:16:41 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Aqzob.115324$La.18304@fed1read02>
Source record: 105530
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:NnTnb.38062$IA2.1285265@twister.southeast.rr.com...
> How could things have gone any worse? We still don't have Osama, and guys
> are still dying in Afghanistan even though the news acts like it's fallen
> off the earth.
>
> As far as Sadam, what, specifically, did he have to do with 9/11? When
it
> comes down to it, he was probably more of an ally against militant Islamic
> terrorists than any other.

The only unfortunate thing about knocking off Sadaam was that he was hated by Al Queda, and, in return, did his best to exterminate them. The enemy of my enemy isn't always my friend. It's quite possible to have two differing enemies. And sometimes, it's wisest to let you and him fight. I think it will be enormously ironic if we ultimately find that Sadaam sealed his destiny by being a great bluffer.

Sadaam earned his fate by attacking our economic lifeline, and being a generally de-stabilizing force in a region quite important to the USA. Yes, it is about the oil! Just how many Grannys in Schenectady have to freeze to death because they can't afford heat until we recognize that our economy is totally dependent on oil availability & pricing?

Temporarily, we work with despicable foreigners who despise us, because we are dependent on them in some way. The industrial world's dependence on oil has caused the worst economic imbalance we could imagine, giving economic power to many who are unfit to govern a bucket of shit.

The best thing we could do for America would be to greatly reduce our economy's dependence on foreign oil. OTOH, I don't expect this to happen in my lifetime.

Ed
wb6wsn

3516. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 20:32:43 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <LFzob.72858$e01.251495@attbi_s02>
Source record: 105531

It was hardly a rant. I agree that he stretched to make the connection with code, but the point was quite clear. The major premise (and, I am NOT commenting pro or con on this) is simply that learning code is an exercise in discipline. The minor premise is that discipline is a Good Thing for Hams.

I'd love to get a Car. Cyclone, but need someone to install it for me. Since Jerry seems against doing that ... <grin>

Paul AB0SI

"CW" <clinton.magers@comcast.net> wrote in message
news:u%yob.55978$9E1.247721@attbi_s52...
> You took a story about a lazy SOB of at least general class and turned it
> into a pro code rant. So, the obvious conclusion from this would be that
the
> more code you know, the stupider you get. Was that your point?
>
>
> "Jerry" <joxendi@bellsouth.net> wrote in message
> news:Eylob.2530$un.1050@bignews6.bellsouth.net...
> > As *some* of you know, I build and sell the Carolina Cyclone line of
> > screwdriver antennas. Sometimes I run
> > into some "doosies". I don't (normally) do installs because
> > they are more trouble than they are worth. But.......I was
>
>

3517. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 20:33:35 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <ubmdnfOVxqeTWj-iRVn-gw@comcast.com>
Source record: 105532

"Dan" <dan9125@aol.com> wrote in message
news:90dcbbbd.0310311116.3faf797c@posting.google.com...
> Im going to be installing a Larson KG450UDPL 450-470mhz glass mount
> antenna on my 2004 Dodge Ram pick up and i was wondering if anyone
> knew the best spot to place this antenna. I have read about glass with
> tint causing problems.The rear window (where i want to put it) has a
> light tint,how will know if this will make my antenna performance
> suffer? Are some tints worse than others? I hate to stick it there and
> have not work then have to scrape it off. The windshield is clear but
> who wants an antenna on the windshield?

You can ask the dealer, but they may not know.
My expedition is similar, and I have no problems with the two I'm running.
They tune nicely, and radiate as well as I expected them to.

3518. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 21:01:06 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <m4Aob.15983$FI2.5600@newsread1.news.atl.earthlink.net>
Source record: 105533

Ed:

[snip]
> Questions like this are best treated with beer.
>
> Ed
> wb6wsn
[snip]

I prefer to treat those questions with Don Julio tequilla "on the rocks".
After a couple of Don Julio's *I* understand everything!

--
Peter K1PO
Indialantic By-the-Sea, FL

3519. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 21:30:27 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <39g5qvs66v8cop5rbtl9qg8enih7uhq7gk@4ax.com>
Source record: 105534

On Fri, 31 Oct 2003 19:47:38 GMT, "CW" <clinton.magers@comcast.net>
wrote:

First...To clarify, I don't care if some one has to learn the code to
get on the air or not. Nor do I care if it's a qualification, but...
I do see it as many things are going today, where people want more for
less.

>You took a story about a lazy SOB of at least general class and turned it
>into a pro code rant. So, the obvious conclusion from this would be that the
>more code you know, the stupider you get. Was that your point?

How could you come to that conclusion. Unless the ham in question had
been licensed for a while at most he'd have had to do was 5 wpm.

Learning has absolutely nothing to do with character.
As the old saying goes, "Send a jackass to college and what do you
get? An educated Jackass".

The amateur radio *service* (defined as a service by the FCC) has a
place for the technically oriented, the mechanically oriented, and the
"communicator". Each can be an asset to the service and often a
person proficient in one may not be proficient in one of, or any of
the others.

For instance, I can weld, I've built my own transmitter, amps, and
antennas in the past. I'm fairly proficient with a lathe and milling
machine. I'm a pilot with over 1300 hours total and over a 1000 in
high performance, complex retracts and I'm instrument rated. I
installed my current antenna system,
http://www.rogerhalstead.com/tower.htm and I still do my own tower
climbing. I quite work at age 47 and went back to college to get a
degree in Computer Science... And yes I have the Extra with 20 WPM
passed, BUT with all that I can't saw a board in two and get it back
together straight.

Personally I see about as much connection with the CW and technical
ability as I do with my degree, or Extra class license and my
inability to get that board back together straight. Rather I see a
symptom of society today where people want and expect more, but expect
to exert less effort to get it.

Even if the licensing structure were changed to require every one to
pass the CW test at some arbitrary speed, it would not change the
character of those people one bit. With or without CW the individual
is going to have the same character traits before and after the test.

Some of the worst offenders on the bands are Extras. I think they expected some kind of recognition for reaching the goal and when they didn't receive it, they demanded attention in the only way they knew how. They never realized the

Some individuals are success oriented (always setting new goals and do things for the sake of doing them), some are object oriented (working to acquire more toys), and some are recognition oriented (do things for public recognition). That list is in descending order when it comes to desirable character traits. There are other character traits, both desirable and undesirable, but the CW requirement is not going to change them either. To some CW is seen as a challenge, to some a chore, and to some it is to be avoided.

Just as music is often first learned mechanically, with practice it becomes automatic. You see the note(s) and your fingers automatically press the right key, or pick and hold the right string. So too in flying. You practice until muscle memory takes over, or with ice skating, or typing. I don't have to think where my fingers are going while I type this. I don't have to think about an A being didah, or a B as dadididit. When writhing it down you have to learn how to spell as you hear word sounds, not individual letters.

So too as in music, skating, or flying, not everyone has the capability, or coordination to master the art. That the art is only a portion of the whole should not keep them out. OTOH if the inability is due to lack of ambition....forcing them to memorize the code is not going to miraculously turn them into the epitome of ambition either.

A certain percent of the population is going to be blessed (or cursed) with any specific character trait. With or without CW a percent of those are going to end up in our ranks. They always have and most likely will continue to do so.

OTOH, as the Extra is mainly a prestige license any way, I'd like to see them put the speed for the Extra back up to 20 WPM. <:-))
After all, I had to do it so why not them >:-))

'Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S#I CD-2)
>
>
>"Jerry" <joxendi@bellsouth.net> wrote in message
>news:Eylob.2530$un.1050@bignews6.bellsouth.net...
>> As *some* of you know, I build and sell the Carolina Cyclone line of
>> screwdriver antennas. Sometimes I run
>> into some "doosies". I don't (normally) do installs because
>> they are more trouble than they are worth. But.......I was
>

3520. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 21:44:48 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA2D7CD.989F5E1C@cwis.net>
Source record: 105535

Dan,
Tinting causes problems because some tints contain
metal. Very few of the tints available in the US have
metal in them. Mount the antenna and forget it.
'Doc

3521. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 22:21:27 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <20o5qvg2v9sbe62dn4uomef8qraki67jk2@4ax.com>
Source record: 105537

On Fri, 31 Oct 2003 21:44:48 GMT, 'Doc <w5lz@cwis.net> wrote:

>Dan,
> Tinting causes problems because some tints contain
>metal. Very few of the tints available in the US have

An example would be the rear window in a Transam. It has a metallic coating that breaks up into circular dots as you move away from the top. Once you get away from the solid area, but over the dots the Larsen glass mount works well.

Like Doc, I've seen few other US manufactured cars with the metal coating on the windows.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S/N CD-2)

>metal in them. Mount the antenna and forget it.
> 'Doc

3522. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 22:57:15 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <tMBob.6625$un.188@bignews6.bellsouth.net>
Source record: 105538
Body handling: HTML body converted to readable text

"paulfriedman@comcast.net" wrote in message
news:LFzob.72858$e01.251495@attbi_s02...
> It was hardly a rant. I agree that he stretched to make the connection
with
> code, but the point was quite clear. The major premise (and, I am NOT
> commenting pro or con on this) is simply that learning code is an exercise
> in discipline. The minor premise is that discipline is a Good Thing for
> Hams.
>
> I'd love to get a Car. Cyclone, but need someone to install it for me.
Since
> Jerry seems against doing that ...
>
> Paul AB0SI

It'd be a bit far from NC to "0* land, don't ya think. ;)

Usually I don't do installs for the reasons stated. It has gotten so that
the "learning" part of ham radio has become
more memorize-the-answers-so-I-can-pass-the-test than
REALLY learning something about what is going on.
Incidently, the antennas come with clear instructions how to install and
maintain them.

Cheers :-)

Jerry
>
>
> "CW" wrote in message
> news:u%yob.55978$9E1.247721@attbi_s52...
> > You took a story about a lazy SOB of at least general class and turned
it
> > into a pro code rant. So, the obvious conclusion from this would be that
> the
> > more code you know, the stupider you get. Was that your point?
> >
> >
> > "Jerry" wrote in message
> > news:Eylob.2530$un.1050@bignews6.bellsouth.net...
> > > As *some* of you know, I build and sell the Carolina Cyclone line of
> > > screwdriver antennas. Sometimes I run
> > > into some "doosies". I don't (normally) do installs because
> > > they are more trouble than they are worth. But.......I was

> >
> >
>
>

3523. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 23:02:49 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <HRBob.6690$un.2580@bignews6.bellsouth.net>
Source record: 105539

"David Robbins" <noone@nowhere.com> wrote in message
news:45mdnXEX6fxZID-iRVn-iw@crocker.com...
>
> "Bob" <bcnntp@optusnet.com.au> wrote in message
> news:rrdunb-oha.ln@p400bob.lse.com.au...
> > Interesting how mostly you made personal judgments and gave
> mis-information
> > rather than answer the question. You must all be mind readers to get
that
> > from a dozen or so words.
> >
> > No wonder the world is such an unhappy place.. I wonder who makes it
that
> > way?
> >
> criminals like freebanders???? just think how happy we would all be
without
> any criminals!

Um....some of those victims would be alive instead of having some of those
criminals on the streets?

I know, I know "freebanding" isn't a capital offense.

Jerry
>
>

3524. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 23:17:01 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <N3Cob.16134$FI2.2173@newsread1.news.atl.earthlink.net>
Source record: 105540
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:Aqzob.115324$La.18304@fed1read02...
>
> "Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> news:NnTnb.38062$IA2.1285265@twister.southeast.rr.com...
> > How could things have gone any worse? We still don't have Osama, and
guys
> > are still dying in Afghanistan even though the news acts like it's
fallen
> > off the earth.
> >
> > As far as Sadam, what, specifically, did he have to do with 9/11? When
> it
> > comes down to it, he was probably more of an ally against militant
Islamic
> > terrorists than any other.
>
> The only unfortunate thing about knocking off Sadaam was that he was hated
> by Al Queda, and, in return, did his best to exterminate them. The enemy
of
> my enemy isn't always my friend. It's quite possible to have two differing
> enemies. And sometimes, it's wisest to let you and him fight. I think it
> will be enormously ironic if we ultimately find that Sadaam sealed his
> destiny by being a great bluffer.
>
> Sadaam earned his fate by attacking our economic lifeline, and being a
> generally de-stabilizing force in a region quite important to the USA.
Yes,
> it is about the oil! Just how many Grannys in Schenectady have to freeze
to
> death because they can't afford heat until we recognize that our economy
is
> totally dependent on oil availability & pricing?
>
> Temporarily, we work with despicable foreigners who despise us, because we
> are dependent on them in some way. The industrial world's dependence on
oil
> has caused the worst economic imbalance we could imagine, giving economic
> power to many who are unfit to govern a bucket of shit.
>
> The best thing we could do for America would be to greatly reduce our

> economy's dependence on foreign oil. OTOH, I don't expect this to happen
in
> my lifetime.
>
> Ed
> wb6wsn
>
>
Good idea Ed. How is this to be accomplished?

Everytime a 'plan' comes up the left wing invironemental waco's jump up and down. Maybe we can start burning trees that are not eaten by the pine beetle. Oh...that wont work either will it?

See my point?

Dan/W4NTI

3525. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-10-31 23:58:22 UTC
From: luigi_fatchenelli_125@hotmail.com
Message-ID: <16218d3a.0310311558.5a5f66d@posting.google.com>
Source record: 105541
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Both of you racists keep posting this crap on a Radio newsgroup!

You two clowns need some serious help.

http://www.joebly.com/5c-p_sad-clown.jpg

Luigi

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<%3yob.15857$FI2.3002@newsread1.news.atl.earthlink.net>...
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:W6sob.9165$r63.66685022@newssvr21.news.prodigy.com...
> >
> > "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> > news:16218d3a.0310301733.2b405e5@posting.google.com...
> > > Are you feeling OK Chuck?
> > >
> > > No one is being anti-american. We are all just tired of your and
> > > Daniel's racist remarks on a radio newsgroup.
> >
> > Who is this "we" supposed to be? You and Osama Ben Laden?
> >
> > Again, you can call my remarks "racist" all you like, but that will not
> > change the facts. My posts all stand on their own merit.
> >
> > >
> > > Stop posting on here already and leave us all alone!
> >
> > I've been posting here for close to ten years, so far. Do us all a favor,
> > and hold your breath until I stop posting here.
> >
> > Charles Brabham, N5PVL
> >
> >
>
> I too could care less what he calls it. I don't consider calling someone a
> raghead racist. If he does, thats HIS PROBLEM.
>
> I too have been on here a LONG time. It will take a whole lot more that
> that Canadian Commie has to run me off.
>
> Take your best shot....raghead.

>
> Dan/W4NTI

3526. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 00:21:26 UTC
From: jimmy_b909@hotmail.com
Message-ID: <3b7f049c.0310311621.276cb11b@posting.google.com>
Source record: 105542
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Luigi don't bother with these two fools. They are both probably
married to their sisters anyway. I also saw their posts and we all
know how un-American and racist they are.

Jimmy Baker

"Even a stopped clock gives the right time twice a day"

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<%3yob.15857$FI2.3002@newsread1.news.atl.earthlink.net>...
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:W6sob.9165$r63.66685022@newssvr21.news.prodigy.com...
> >
> > "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> > news:16218d3a.0310301733.2b405e5@posting.google.com...
> > > Are you feeling OK Chuck?
> > >
> > > No one is being anti-american. We are all just tired of your and
> > > Daniel's racist remarks on a radio newsgroup.
> >
> > Who is this "we" supposed to be? You and Osama Ben Laden?
> >
> > Again, you can call my remarks "racist" all you like, but that will not
> > change the facts. My posts all stand on their own merit.
> >
> > >
> > > Stop posting on here already and leave us all alone!
> >
> > I've been posting here for close to ten years, so far. Do us all a favor,
> > and hold your breath until I stop posting here.
> >
> > Charles Brabham, N5PVL
> >
> >
>
> I too could care less what he calls it. I don't consider calling someone a
> raghead racist. If he does, thats HIS PROBLEM.
>
> I too have been on here a LONG time. It will take a whole lot more that
> that Canadian Commie has to run me off.
>
> Take your best shot....raghead.

>
> Dan/W4NTI

3527. 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 00:30:49 UTC
From: w4udx@bellsouth.net
Message-ID: <g8Dob.3961$ns.3957@bignews4.bellsouth.net>
Source record: 105543

Hi group,
just wondering.... can I take a 40M delta loop and add an 80M dipole to it?
Will there be interaction?
SWR problems?

Mark W4UDX

3528. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 00:33:17 UTC
From: w4udx@bellsouth.net
Message-ID: <AaDob.3969$ns.1903@bignews4.bellsouth.net>
Source record: 105544

would somebody please tell me what any of this has to do with amateur antennas?

3529. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 00:40:43 UTC
From: jgboyles@aol.com
Message-ID: <20031031194043.18396.00000080@mb-m14.aol.com>
Source record: 105545

>Ahhhhhhhhh, the first speculator. They can never resist the chance to lead
>a good thread astray with unsubstantiated info.

No, I thought I was trying to help. It's not speculation to state that you
are not going to get hands-on reports on a product that has not been released
for sale. I got the substantiated info from MFJ.
If you get some hands-on reports on the 974H they are speculation or
fabrication. You are certainly free to believe what you wish.
What does Ahhhhhhhhhhhhhh, mean or imply in the English Language?

73 Gary N4AST

3530. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 00:46:22 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0310311646.92fce0e@posting.google.com>
Source record: 105546
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
= = = "Ed Price" <edprice@cox.net>
= = = wrote in message news:<Z2zob.115322$La.36881@fed1read02>...
> "gwatts" <gwatts@frontiernet.net> wrote in message
> news:3FA02CF7.3010808@frontiernet.net...
> > Dan/W4NTI wrote:
> > > In todays climate many countries are not worth getting too friendly
> with.
> > > We are at war. Govern yourself accordingly. Know your enemy.
> > >
> > > Dan/W4NTI
> >
> > 'We have seen the enemy, and he is us!'
> >
> > -Bill Mauldin
> >
>

> Not quite. That was Walt Kelly, via Pogo.

Hey, some of us remember Pogo and Albert :o)

>
> Bill Mauldin gave us such gems as:
>
> Is there a view like this for the enlisted men?
> I got a target for ya, but ya gotta be patient!
> A movin' foxhole attracts the eye!
> Don't startle the Kraut; he's got a full bottle!
> I'm an expert on European dirt!
> The Benevolent & Protective Association of Them What Has Been Shot At.
>
> Ed
> wb6wsn
```

3531. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 01:28:37 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA30C45.B920A4CD@cwis.net>
Source record: 105547

Mark,
Yes, to both.
'Doc

3532. Re: Need recommendation: 2M antenna for motorcycle

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 01:29:40 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA30C84.452F4818@cwis.net>
Source record: 105548

Bill,
Almost any 2 meter antenna will work on a motorcycle.
'Doc

PS - forget the beams, too hard to guy.

3533. Re: Need recommendation: 2M antenna for motorcycle

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:01:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa314cc_7@corp.newsgroups.com>
Source record: 105549

Bill wrote:
> Looking to go 2M mobile on the motorcycle and am looking for
> input on 2M antennas that are suitable for that use?
> What say you?

I had good performance with a Larsen 5/8WL mag mount on the luggage
rack of my Kawasaki Z1-B. I suspect a 1/4WL would work well.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3534. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:07:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa31608_7@corp.newsgroups.com>
Source record: 105550

w4udx@bellsouth.net wrote:
> just wondering.... can I take a 40M delta loop and add an 80M dipole to it?
> Will there be interaction? SWR problems?

Actually, that should work pretty well. A loop has a very high
impedance on half its design frequency. Another thing to consider
is breaking the 40m loop opposite the feedpoint for operation on
80m. 1WL on 40m = 1/2WL on 80m.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3535. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:10:55 UTC
From: Ed <ed@nospam.com>
Message-ID: <mLKdne3iGJOqiz6iRVn-iQ@comcast.com>
Source record: 105551

They told you that it would be a few months before anyone could actually get one and comment on it ?

Aaahhhhhhhh, I didn't think so.

Theres a million other open threads on the newsgroups tonight. Maybe you can go foul another thread and leave this one for those of us that are interested in real information. If theres no information to be had, theres no need to waste everyones time by being "helpful"

run along please.

"JGBOYLES" <jgboyles@aol.com> speculated in message news:20031031194043.18396.00000080@mb-m14.aol.com...
> >>
> No, I thought I was trying to help.
>
> 73 Gary N4AST
>
>Probably have to wait a few months to
> get an answer to your question.

3536. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:21:48 UTC
From: Ross Archer <archer@topnow.com>
Message-ID: <3FA318BC.55C2DBB5@topnow.com>
Source record: 105552
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Ed Price wrote:
[snip]
>
> The only unfortunate thing about knocking off Sadaam was that he was hated
> by Al Queda, and, in return, did his best to exterminate them. The enemy of
> my enemy isn't always my friend. It's quite possible to have two differing
> enemies. And sometimes, it's wisest to let you and him fight. I think it
> will be enormously ironic if we ultimately find that Sadaam sealed his
> destiny by being a great bluffer.

Far from ironic, it was probably part of a deliberate and relatively clever strategy that went awry for this tyrant.

I intend to show (again) why the argument "Saddam Hussein wouldn't thwart the inspections unless he was hiding large amounts of WMDs" is profoundly ignorant. He would thwart the inspections regardless. Let me explain why.

Say, for the sake of argument, that Saddam had MASSIVE stockpiles of WMDs. It would stand to reason he would thwart the inspection process in every way possible, to postpone or avoid their discovery. This much is obvious.

Now say, for the sake of argument, that Saddam's WMD arsenal was decimated in 1991, and he could NOT overcome the inspection regime, the surveillance, and the no-fly zone enforcement to rebuild his arsenal significantly. What would he do? He would thwart the inspection process in every way possible. Why? Because once it came out, that Saddam couldn't outfox the West, it would make Saddam look weak and reduce his intimidation power drastically. Megalomaniacs simply don't do that.

As background, it's perfectly obvious that Saddam Hussein is/was a demagogue with intentions of expanding his influence to rule the Arab world. Does anyone seriously doubt his megalomania? Just look at the cult of personality he's created, if you remain doubtful. He loves (loved?) worship. Now, if you're a megalomaniac dictator, with aspirations to power and influence, who personally gains pleasure from the worship and fear of others, how would YOU act?

First, by "standing up" to the inspections, Israel, or whatever rabidy anti-Western Arabs hate, his popularity among rabidly anti-Western Arabs (of which I hear there are a few) skyrockets. He looks strong and therefore an attractive candidate for leading them. Perhaps even better than Osama bin Laden, his chief competitor to that aspiration. This feeds right into his megalomania. He wants power and followers, and by "standing up to" the allies, and Israel by proxy, he gains major political capital that might have been useful once Saddam had successfully rebuilt his conventional military. A weak nation could be conquered and "Saddamized" rather easily with nothing more than his strong conventional military and an indigenous population of committed sympathetic radicals.

Second, by seeming to have WMDs, he intimidates us more. He uses our stupidity, namely "Why else would he thwart the inspection process at every turn if he wasn't hiding weapons?", against us. Saddam figured the allied forces would think twice before striking at him given the potential for mayhem our soliders would face from these (assumed whether real or not) WMDs. So bluffing at having WMDs was a free deterrent he thought would protect his power. A classic poker bluff.

So it's not very hard to see why he would pretend to have weapons that were blasted to dust in 1991 that he couldn't rebuild.

Where it went wrong for Saddam was he underestimated the single-mindedness of the US Administration to remove him from power. This was something Wolfowitz, Perle, Rumsfeldt, and others had wanted to do for years (cf. PNAC).

With the mounting failures to find any evidence of WMDs in Iraq, the only thing to do for an Administration committed to war was to cook the junk evidence and rush to war at maximum possible speed. And that's precisely what they did.

We achieved the result of pissing off our allies, who understood that removing Saddam was a US political objective that had nothing to do with security of the USA or much of anyone (except Israel, which gains obvious benefits). They openly criticized us and the quality of our evidence. It was junk evidence. They knew it. Everybody knew it except the American and British people, evidently, because they both were the targets of a thinly-disguised sales job.

To bolster the case for going to war, they even went to Iraqi dissidents for threat assessments. The Iraqi dissidents had every reason to co-operate in any scheme to unseat Saddam, and CIA internal documents show they did not consider this source to be reliable at all. Yet their

known-unreliable statements were often repeated
as a justification for war against Iraq. They also
selectively grabbed the minority of evidence bolstering the
position that Saddam had stockpiles of WMDs we just couldn't
find, and ignored the rest, in their making a case for war.

What went wrong for the Bush Administration, is more and
more of the American people (and even more of the British)
are seeing that we were sold a bill of goods by a cabal of
explicitly dishonest manipulators and their dupes.

What went wrong for the American people is we're losing
soldiers virtually every day in a country that posed no
significant threat to our security interests, prior to
invasion.

I said two things before, and history proved me right on
both. First, Saddam didn't have significant WMDs. They
will never be found, because they aren't there. Second, the
Bush Administration is one of the most incompetent and
dishonest we've seen in our history. As the facts emerge
(and it will take quite some time given this is by far the
most secretive Administration in our history), eventually
Bush's Administration will win the mendacity crown from
Richard Milhous Nixon.

>
> Sadaam earned his fate by attacking our economic lifeline, and being a
> generally de-stabilizing force in a region quite important to the USA. Yes,
> it is about the oil! Just how many Grannys in Schenectady have to freeze to
> death because they can't afford heat until we recognize that our economy is
> totally dependent on oil availability & pricing?

Jimmy Carter tried very hard to get alternative energy
programs underway. As you can imagine, it was primarily oil
and gas interests that lobbied -- and eventually succeeded
-- in killing subsidies to their competitors. Though some
falsely claim it was environmentalists who were to blame,
this appears only to be true in the nuclear energy case,
where in fact environmentalists did great harm by forcing
the use of dirty coal instead of at-least-cleaner nuclear
energy.

But show me where environmentalists engaged in a concerted
successful effort to block government subsidies for wind and
solar research in a significant way, and I'll buy you lunch.

>
> Temporarily, we work with despicable foreigners who despise us, because we
> are dependent on them in some way. The industrial world's dependence on oil
> has caused the worst economic imbalance we could imagine, giving economic
> power to many who are unfit to govern a bucket of shit.

Saddam wasn't fit to rule the viruses in the bucket of shit.
I'm glad he's gone, but the US economy will suffer for
decades due to the foolish idiocy and dishonesty of this
horrible and corrupt secretive Administration.
>
> The best thing we could do for America would be to greatly reduce our
> economy's dependence on foreign oil. OTOH, I don't expect this to happen in
> my lifetime.

Probably not. Until the entrenched energy interests figure
out a way to get government money for research, or how to
make a profit, or when reserves finally push gasoline up to
$5 a gallon or so. Then the tune will change by necessity.
Market forces will eventually compel the use of alternatives
to oil and gas. Whether it's in 10 years or 200, I can't
honestly guess. Could just as easily be either.

-- Ross

>
> Ed
> wb6wsn

3537. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:41:19 UTC
From: Jim <NN7K@Reno.Rmci.Net>
Message-ID: <vq67af351fkcca@corp.supernews.com>
Source record: 105554

Time to drag out the Florescent PAINT FOR ANTENNAS, again!! Worked well for CB! (at least for a SELLING POINT !), and could sell TONS now to the no codes!! Reason? Well, when you hold a neon lamp to a antenna, while xmitting, and you see the PURPLE COLOR--, If you could SEE the RADIO WAVE , that is the COLOR IT WOULD BE! , So, paint your antenna with MY RF ENHANCEING, Purple Florescent paint, and watch your RADIATION from your antenna improve, exponentially!! :>) Jim NN7K

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message news:39g5qvs66v8cop5rbtl9qg8enih7uhq7gk@4ax.com...
> On Fri, 31 Oct 2003 19:47:38 GMT, "CW" <clinton.magers@comcast.net>
> wrote:
>
> First...To clarify, I don't care if some one has to learn the code to
> get on the air or not. Nor do I care if it's a qualification, but...
> I do see it as many things are going today, where people want more for
> less.

3538. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:42:16 UTC
From: jgboyles@aol.com
Message-ID: <20031031214216.18396.00000083@mb-m14.aol.com>
Source record: 105553

>They told you that it would be a few months before anyone could actually get
>one and comment on it ?
>
>Aaahhhhhhhh, I didn't think so.
>

Yes, they did say it was not out. You are not logical or reasonable. You
want information that is not out. What does Ahhhhhhhhhh, mean.
73 Gary N4AST

3539. Re: Need recommendation: 2M antenna for motorcycle

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:57:49 UTC
From: Jim <NN7K@Reno.Rmci.Net>
Message-ID: <vq68993o5gp616@corp.supernews.com>
Source record: 105555

If you look carefully at Cops bikes, the antennas THEY use are Coaxial Antennas-- 1/4 wave piece of pipe, (aprox 19 inch long,) capped, with either a 1/4, or 5/8 wave antenna mounted on top of the cap. These can even be mounted to plastic, and still provide great counter-poise , relative to just a 1/4 wave whip, mounted anywhere to a bike-- as info, Jim NN7K

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fa314cc_7@corp.newsgroups.com...
> Bill wrote:
> > Looking to go 2M mobile on the motorcycle and am looking for
> > input on 2M antennas that are suitable for that use?
> > What say you?
>
> I had good performance with a Larsen 5/8WL mag mount on the luggage
> rack of my Kawasaki Z1-B. I suspect a 1/4WL would work well.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3540. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 02:57:51 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031031215751.10716.00000109@mb-m17.aol.com>
Source record: 105556

NM5K snip, snip and...

> Besides, I've never really
>worried about it much. I don't think it would have any effect on how I
>build my short verticals.

Good for you :-)
Granted, we are close to optimum with mobile verticals.
If I understand how and why things work, I can do better job on optimizing and maximizing the performance of the antennas, especially when it comes to more element loaded arrays. You would see significant difference in designing/optimizing say 3 element loaded beam. Modeling software uses currents in elements and calculates mutual interaction between the elements. If the current distribution and magnitude are off by 50% then we have major problem.

Yuri

3541. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 03:01:34 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031031220134.10716.00000111@mb-m17.aol.com>
Source record: 105557

>
>I sent Roy a copy of the EZNEC file that I sent to you. Anyone else
>who wants a copy of those files, send me an email.
>

I didn't get it, for direct mail take noSaddam out :-)

>> I will post your comments on eHam.net.
>
>Which forum/topic?
>--
>73, Cecil, W5DXP

The article and follow up comments are at:

http://www.eham.net/articles/6512

Yuri, www.K3BU.us

3542. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 03:32:50 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031031223250.10716.00000112@mb-m17.aol.com>
Source record: 105558

G4FGQ:

>When ground loss is very small (zero if antenna is a pair of two
>back-to-back radiators to form a dipole) efficiency is relatively high
>anyway, maximumum efficiency perhaps occurring with the coil located in the
>lower half of the antenna. The slight improvement relative to base loading
>(as part of a tuner) may not then be worth the mechanical inconvience of
>fitting a coil in the antenna anyway.
>

But not in the far field, affecting low angle radiation. Practical results and measurements show that it is worth the mechanical inconvinience to place the coils where they belong. Just ask Cecil about results of mobile antenna shootouts.

>An important factor, not considered quantitatively by anybody, is that a
>mobile antenna is not just a loaded vertical - the vehicle body, just by
>looking at it, obviously forms the major portion of the antenna and is
>floating above ground.

At this time it is "bad" enough to look at this one aspect of loaded antennas. Of course in mobile antennas, the vehicle plays important role. W9UCW excluded that, used "perfect" radial field ground to eliminate other variables in order to have a closer look at the current distribution.

Another interesting finding was that there was almost negligible difference in Q of coils. When they compared "perfect" loading coil (Bugcatcher type) with "poor" coil of Webster Bandspanner, thay saw fractions of dB difference.

Yuri, K3BU/m

3543. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 03:37:06 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031031223706.10716.00000113@mb-m17.aol.com>
Source record: 105559

G4FGQ:
>
>The only difference in performance between a cage antenna and an ordinary
>thin-wire dipole is a modest increase in bandwidth. There is no increase in
>radiating/receiving efficience.
>

Measurements by K8CFU found "surprising" increase in signal strenght from
folded dipole/cage vs. straight radiator.

- another subject for unbelievers, measure it and see what it really is.

Yuri, www.K3BU.us

3544. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 04:01:30 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <teGob.75082$e01.255079@attbi_s02>
Source record: 105560

"Dan" <dan9125@aol.com> wrote in message
news:90dcbbbd.0310311116.3faf797c@posting.google.com...
> Im going to be installing a Larson KG450UDPL 450-470mhz glass mount
> antenna on my 2004 Dodge Ram pick up and i was wondering if anyone
> knew the best spot to place this antenna. I have read about glass with
> tint causing problems.The rear window (where i want to put it) has a
> light tint,how will know if this will make my antenna performance
> suffer? Are some tints worse than others? I hate to stick it there and
> have not work then have to scrape it off. The windshield is clear but
> who wants an antenna on the windshield?
>
> Thanks alot Dan9125@aol.com

Dan -

The On-Glass FAQ on the AS/ Andrew web site is a good reference -
for these style of installations.
http://www.antenna.com/faqs/faqs_ongl.html

w9gb

3545. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 04:10:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa332f1$1_5@corp.newsgroups.com>
Source record: 105561

Yuri Blanarovich wrote:
> Practical results and
> measurements show that it is worth the mechanical inconvinience to place the
> coils where they belong. Just ask Cecil about results of mobile antenna
> shootouts.

I feel the same way, Yuri, but at a shootout, +2dB is worth it's weight in
tachyons. +2dB may or may not be noticeable during normal operation. I use
a screwdriver even though I know how to do better.
--
73, Cecil http://www.qsl.net/w5dxp

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3546. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 04:16:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa33465_5@corp.newsgroups.com>
Source record: 105562

Yuri Blanarovich wrote:
> The article and follow up comments are at:
>
> http://www.eham.net/articles/6512

Egads, did I get the last word? (so far) That's proof of action
at a distance. I'm a thorn in the side of hams who are not even
on the same newsgroup as I. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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3547. Re: Need recommendation: 2M antenna for motorcycle

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 04:49:22 UTC
From: "R. Scott" <washingtonham@yahoo.com>
Message-ID: <nqe6qvk4h0dt1dr01mermgnp77uoes316f@4ax.com>
Source record: 105563

>Looking to go 2M mobile on the motorcycle and am looking for
>input on 2M antennas that are suitable for that use?
>What say you?
>
>Thanks,
>Bill

http://marc-hq.org/

All the info about motorcycling and Amateur Radio.

Scotty N7HJ
(PNW MARC Member)

3548. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 04:56:00 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bnvedj$fl14$1@news3.infoave.net>
Source record: 105564
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Thus the reason they make chocolate and vanilla, we all get a choice.

I choose the cage, don't confuse me with the facts.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bnsvoh$g2v$1@sparta.btinternet.com...
> Dear W4JLE
>
> I think you should be aware that, as perceived at the receiver end, the
> characteristics of the feedline, its length and SWR, and tuner can have at
> least as great an effect on operating bandwidth as the antenna constuction
> itself. Antenna height above ground can seriously affect bandwidth.
> Lowering height can increase bandwidth more than changing from from a thin
> wire to big fat cage.
>

3549. Re: No-codes and no-nos

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 07:45:45 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <IwJob.76259$e01.257058@attbi_s02>
Source record: 105565

And another idiot gets plonked.

"Jim" <NN7K@Reno.Rmci.Net> wrote in message
news:vq67af351fkcca@corp.supernews.com...
> Time to drag out the Florescent PAINT FOR ANTENNAS, again!! Worked well
for
> CB! (at least for a SELLING POINT !), and could sell TONS now to the no
> codes!! Reason? Well, when you hold a neon lamp to a antenna, while
> xmitting, and you see the PURPLE COLOR--, If you could SEE the RADIO WAVE
,
> that is the COLOR IT WOULD BE! , So, paint your antenna with MY RF
> ENHANCEING, Purple Florescent paint, and watch your RADIATION from your
> antenna improve, exponentially!! :>) Jim NN7K
>
>
>
>
> "Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
> news:39g5qvs66v8cop5rbtl9qg8enih7uhq7gk@4ax.com...
> > On Fri, 31 Oct 2003 19:47:38 GMT, "CW" <clinton.magers@comcast.net>
> > wrote:
> >
> > First...To clarify, I don't care if some one has to learn the code to
> > get on the air or not. Nor do I care if it's a qualification, but...
> > I do see it as many things are going today, where people want more for
> > less.
>
>

3550. Re: Luigi talks to himself as Jimmy Baker (formerly "Private")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 10:58:11 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <7lMob.11738$lb7.5963@newssvr14.news.prodigy.com>
Source record: 105566
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Jay" <jsouter@REMOVEbellsouth.net> wrote in message
news:1tDob.6075$BX.3844@bignews5.bellsouth.net...
>
> On 31 Oct 2003 16:21:26 -0800, Jimmy Baker <jimmy_b909@hotmail.com> wrote:
> > Luigi don't bother with these two fools. They are both probably
> > married to their sisters anyway. I also saw their posts and we all
> > know how un-American and racist they are.
> >
> > Jimmy Baker
>
> Edmonton is full of towel-heads, isn't it?

No, this person is just a lone sicko. It was fun yanking his chain for a
while but now I'm getting bored with him. It's sad but I've noticed that
these sicko types are inevitably very bored, very boring people. I suppose
that's why it doesn't bother them to repeat themselves. After all, they have
no real expectation of ever saying anything interesting or relevant. - or
on topic, for that matter.

Charles Brabham, N5PVL

3551. Re: Freeband Antenna Help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 12:03:59 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <QMGdndZ9JPeuPD6iRVn-vg@crocker.com>
Source record: 105567

"Jerry" <joxendi@bellsouth.net> wrote in message
news:HRBob.6690$un.2580@bignews6.bellsouth.net...
>
> "David Robbins" <noone@nowhere.com> wrote in message
> news:45mdnXEX6fxZID-iRVn-iw@crocker.com...
> >
> > "Bob" <bcnntp@optusnet.com.au> wrote in message
> > news:rrdunb-oha.ln@p400bob.lse.com.au...
> > > Interesting how mostly you made personal judgments and gave
> > mis-information
> > > rather than answer the question. You must all be mind readers to get
> that
> > > from a dozen or so words.
> > >
> > > No wonder the world is such an unhappy place.. I wonder who makes it
> that
> > > way?
> > >
> > criminals like freebanders???? just think how happy we would all be
> without
> > any criminals!
>
> Um....some of those victims would be alive instead of having some of those
> criminals on the streets?
>
> I know, I know "freebanding" isn't a capital offense.
>
maybe it should be!

3552. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 12:29:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo08vkjuv1@titan.btinternet.com>
Source record: 105568

```
"Yuri Blanarovich" wrote
> >Reg Edwards wrote
> >The only difference in performance between a cage antenna and an ordinary
> >thin-wire dipole is a modest increase in bandwidth. There is no increase
in
> >radiating/receiving efficience.
> >
>
> Measurements by K8CFU found "surprising" increase in signal strenght from
> folded dipole/cage vs. straight radiator.
>
> - another subject for unbelievers, measure it and see what it really is.
>
==================================

Emotional systems of measurement are becoming fashionable on this newsgroup.

How many Centibels are there in one Surprise?

How many Surprises are there in one Heart Attack?

Frederick Emmons is turning over.
```

3553. FS:REPLACEMENT POWERCORDS IC706

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 12:30:33 UTC
From: kb9igg@aol.com
Message-ID: <20031101073033.18732.00000055@mb-m03.aol.com>
Source record: 105569

CORDS ARE NEW WITH INLINE FUSES FUSED AT 20 AMPS FOR RED AND BLACK.LENGTH IS 8
FT.FOR MOST NEWER TYPE RIGS ALINCO ICOM KENWOOD RCI 2970 5450.IT COMES WITH 2
-6 PIN CONNECTORS.$12+SHIPPING

3554. FS Vy Low Cost - TA-33M - UPS Shippable

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 13:03:02 UTC
From: JS <wd1v@removethisamsat.org>
Message-ID: <0111200308030039 74%wd1v@removethisamsat.org>
Source record: 105570

Hear them and they hear you - with very popular tribander TA-33M

http://www.google.com/search?hl=en&ie=UTF-8&q=Mosley+TA-33M&spell=1

in Manchester, NH - from a private estate collection - in 2 shipping boxes with manual and all hardware. Great shape. UPS Shippable to any of the 48 states. $125.00 - includes shipping.

Email to

wd1v@amsat.org

for my full address for your money order or bank check payment and your full address for shipment.

73,

John WD1V

3555. FS: Manual for Racal RA6790GM Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 13:44:17 UTC
From: AL KA5JGV <ABurzynski@nojunk.satx.rr.com>
Message-ID: <RMOob.15584$qo4.2556@twister.austin.rr.com>
Source record: 105572

I know this has nothing to do with antennas but I have seen posts here from some that have this receiver. I'm not out to make a killer profit (as you can see by the price) just providing a hard to find item for some.

For Sale:
Technical Manual TM RA6790/GM-3 for Racal HF Receiver type RA6790/GM-3 dated December 1991. This is an original manual, not a photo copy. Manual is in very good condition, no pages missing (that I am aware of) with occasional pencil tic marks on some of the schematics. It's yours for $10US with free shipping in US.

If interested contact me at:

ABurzynski at satx dot rr dot com

Al KA5JGV

--

3556. Re: LDG RT-11/AT-11MP

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 13:50:08 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <kSOob.119714$ox6.1724981@twister.tampabay.rr.com>
Source record: 105573

i had the RT11 for awhile
email direct if you wish to ask anything
k4oxg@tampabay.rr.com

3557. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:03:01 UTC
From: Ed <ed@nospam.com>
Message-ID: <ysudnUnMaZq_ID6iRVn-iQ@comcast.com>
Source record: 105574

Aaaahhhhhhh, another speculator who can't resist fouling a good thread and wasting bandwidth in these groups. You and the other guy know nothing and feel the need to prove it here for some reason. Now that you've done that please run along. There are people checking this thread for information and all they find is your uninformative crap. You have nothing to add so please go back to posting in your porn NG's or whatever it is you like to do. And while your posting in alt.whack.whack.whack consider this - not everyone of these units goes out the "front door" - people get them as evaluation units and they may get them before the readers of alt.whack.whack.whack such as yourself get them. If no one has any information on it - thats OK too - I'm not worried.

Now seriously ... GO AWAY.

"Bob Miller" <bxmiller@texas.netNOSPAM> speculated that : <blah, blah, blah>

3558. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:17:19 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0311010617.1fbe8649@posting.google.com>
Source record: 105575
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

Thank you all again for the deluge of tips & links!
This is getting seriously fun!

Quick update on my trials with copperclad (maybe just copperflashed)
metal-inert-gas continuous welding steelwire:

- This stuff solders like heaven! Steel disperses heat less than
copper, and capillarity is amazing. Hot solder joints catch deep
between twisted wires.

- Steel is quite springy and retains shape. My spool is small (~5"
dia.) but if I release the wire it falls into 15" loops.

- I made a 20' dia. loop with 3+ rounds of this wire, and soldered it
at 6 spots all round. Very light and elastic.

You know where I'm heading. I would like to try a lightweight soldered
all-steel cage, and rustproof it with one of those steel-blackening
nitric acid paints.

As a trial, I'd do a short cage with two 20" rings, maybe 2' between
them, and 3' end cones, paint it all, and hang it out in the elements,
weight-loaded.

The INEVITABLE QUESTION
===> Do cage spreaders HAVE to be insulating? <===

Uneducated guess: as VHF/UHF discones are made out of either radials
or sheet metal, I'd say that shorting spacers should be OK.

3559. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:22:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101092257.10368.00000107@mb-m10.aol.com>
Source record: 105576

Reg, G4FGQ shines with:

>Emotional systems of measurement are becoming fashionable on this newsgroup.
>How many Centibels are there in one Surprise?
>How many Surprises are there in one Heart Attack?
>Frederick Emmons is turning over.
>

Snotty remarks are even more fashionable on this and other newsgroups.

Why would you say that? Do you know who K8CFU is? Do you know what kind of work has he and associates done? Did you read his articles about some findings? Did you talked to him about some stuff that was not published?

Do you know EVERYTHING and have programs to calculate it RIGHT?
Are you another W8JI who "knows" everything and ridicules others?
Now measurements by someone else are wrong, but speculations based on limited knowledge are the "law"?
So did you unemotionaly measure any of that stuff yet, or you "know" it?

I gladly discuss and argue about technical or other stuff, but I don't take a crap and I bite back. Some would have figured that by now and adjusted their way of communicating.

You seem to jump up without doing the homework and then missing the point and may end up looking foolish.

Yuri, K3BU/m

3560. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:35:08 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101093508.10368.00000108@mb-m10.aol.com>
Source record: 105577

>
>The INEVITABLE QUESTION
>===> Do cage spreaders HAVE to be insulating? <===

YES for sure, for sure. The cage should be really folded dipole, one "wire" going up (support, and grounded at the bottom) the other wire on the outside (cage) coming down and fed against the ground or radials. Unless you just want to make it fat radiator, then it doesn't matter.

When working with welding wire, try not to scratch it. It has very thin copper layer, easy to scratch and then start corrosion and destruction of the wire. You might want to put some coat of paint over it if you intend to keep it for long. Epoxy paints or marine varnish are the best.

Yuri, K3BU

3561. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:49:08 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311010649.20b73101@posting.google.com>
Source record: 105578

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fa33465_5@corp.newsgroups.com>...
> Yuri Blanarovich wrote:
> > The article and follow up comments are at:
> >
> > http://www.eham.net/articles/6512
>
> Egads, did I get the last word? (so far) That's proof of action
> at a distance. I'm a thorn in the side of hams who are not even
> on the same newsgroup as I. :-)

Dunno...I finally got up enuff courage to wade thru a bunch of that myself. Both had some decent points..But....Just using my built in "BS" filter only, which rarely seems to fails me, and ignoring all other influences, I still have to side with Tom. I still think the current is fairly constant. But not perfectly so, and can vary due to the antenna and it's mount, etc. I guess I'll just wait until the smoke clears to see how far off I am. This will be a good test of my filter unit. :) As far as who wins, I could care less. Nothing personal either way...But I have learned never to ignore my BS filter, so I'm going with it. :) MK

3562. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 14:53:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo0hd8$7s8$1@sparta.btinternet.com>
Source record: 105579

Wow! Did I do sump'n wrong?

3563. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 15:21:47 UTC
From: Spurious Noise <HDA@zilch.com>
Message-ID: <fcQob.49224$gi2.32648@fed1read01>
Source record: 105580

I understand it is the tinting with metalic particles that can cause
problems -- also known as passivated glass -- check with your auto dealer.

--
73 From ANON
===============
"Dan" <dan9125@aol.com> wrote in message
news:90dcbbbd.0310311116.3faf797c@posting.google.com...
> Im going to be installing a Larson KG450UDPL 450-470mhz glass mount
> antenna on my 2004 Dodge Ram pick up and i was wondering if anyone
> knew the best spot to place this antenna. I have read about glass with
> tint causing problems.The rear window (where i want to put it) has a
> light tint,how will know if this will make my antenna performance
> suffer? Are some tints worse than others? I hate to stick it there and
> have not work then have to scrape it off. The windshield is clear but
> who wants an antenna on the windshield?
>
> Thanks alot Dan9125@aol.com

3564. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 15:35:46 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101103546.10368.00000109@mb-m10.aol.com>
Source record: 105581

>>But....Just using my built in
"BS" filter only, which rarely seems to fails me, and ignoring all
other influences, I still have to side with Tom. I still think the
current is fairly constant.<<

>Nothing
>personal either way...But I have learned never to ignore my BS filter,
>so I'm going with it. :) MK
>

Same here,
did your filter filtered out W5DXP pudding? The "theoretical" proof is right
there. Or are you drinking the same coolaide as Tom? :-)

Yuri

Reality vs. Speculations? Duuuh?

3565. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 15:40:27 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101104027.10368.00000110@mb-m10.aol.com>
Source record: 105582

>
>Wow! Did I do sump'n wrong?
>
>
>

Fuggetaboutit!

3566. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 15:59:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa3d914_3@corp.newsgroups.com>
Source record: 105583

Mark Keith wrote:
> Dunno...I finally got up enuff courage to wade thru a bunch of that
> myself. Both had some decent points..But....Just using my built in
> "BS" filter only, which rarely seems to fails me, and ignoring all
> other influences, I still have to side with Tom. I still think the
> current is fairly constant.

The key to understanding is to realize that the net current is the phasor sum of the forward current and reflected current (on a standing-wave antenna). Assume a 10 degree phase delay through the coil on the frequency of operation. Ifwd-in and Iref-out are on the same side of the coil. Ifwd-out and Iref-out are on the other side of the coil.

```
Ifwd-in--> coil Ifwd-out-->
----------------------//////////-------------------------
<--Iref-out <--Iref-in
```

Assume that |Ifwd-in| = |Ifwd-out| which satisfies Kirchhoff

Assume that |Iref-in| = |Iref-out| which satisfies Kirchhoff

Ifwd-in + Iref-out = net current on left side of the coil

Ifwd-out + Iref-in = net current on right side of the coil

Ifwd-out lags Ifwd-in by 10 degrees

Iref-out lags Iref-in by 10 degrees (Iref-in leads Iref-out)

Now let's assume that Ifwd-in and Iref-out are in phase. So current on the left side of the coil equals Ifwd-in at zero degrees plus Iref-out at zero degrees which is a current maximum point.

Ask yourself: Can we have a current maximum point on both sides of the coil? I trust that answer is obvious.

Ifwd-out lags Ifwd-in by 10 degrees. Iref-in leads Iref-out by 10 degrees. So current on the right side of the coil equals Ifwd-out at -10 degrees plus Iref-in at +10 degrees, NOT a current maximum point.

Therefore, in this example, net current on the left side of the coil cannot possibly be equal to net current on the right side of the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3567. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 16:08:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa3db4b$1_3@corp.newsgroups.com>
Source record: 105584

Yuri Blanarovich wrote:
> Same here,
> did your filter filtered out W5DXP pudding? The "theoretical" proof is right
> there. Or are you drinking the same coolaide as Tom? :-)

Yuri, my latest posting sheds more light. Apparently, W8JI doesn't
realize that there are two superposing currents phasor-adding together
to get the net current and the phase distribution between those two
current waves are opposite because they are traveling in opposite
directions. This is a characteristic of standing-wave antennas.

See what happens when one tries to ignore the component waves?

Because the two currents are traveling in opposite directions, any phase
delay through the coil shifts the phase of the two currents IN OPPOSITE
DIRECTIONS. Thus the total relative phase shift effect through a 10 degree
coil is 20 degrees.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3568. Wanted: 23cms preamp and linear amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 16:31:38 UTC
From: Al Bolton <al.bolton@ntlworld.com>
Message-ID: <KdRob.743$u9.705@newsfep1-gui.server.ntli.net>
Source record: 105585
Cross-posted to: uk.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Wanted: A 23cms preamplifier, prefer an RF switched type. Well made home brew example is fine, so long as it works properly!

Also wanted: A linear amplifier for 23cms, approximately 1.5 Watts input, minimum of 15 Watts output required. Again, good home brew example is fine.

Can collect (located near Reading, Berkshire,U.K.) or will pay postage. I have a PayPal account available to speed things up.

Please e-mail me if you can help.

Thanks,
Al, G4VSQ

3569. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 16:37:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101113701.10454.00000109@mb-m10.aol.com>
Source record: 105586

>
>Therefore, in this example, net current on the left side of the coil
>cannot possibly be equal to net current on the right side of the coil.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

Thanks for another gem,
I apologize to Reflected Waves, for they are important and I will treat them with greater respect. I still don't like them in the feedlines, but I love them in the radiators :-)

Yuri, www.K3BU.us

3570. Re: FS: Manual for Racal RA6790GM Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 16:49:07 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <duo7qvcob0toqp9lmesdd68qd60a5hcj0a@4ax.com>
Source record: 105587

On Sat, 01 Nov 2003 13:44:17 GMT, "AL KA5JGV"
<ABurzynski@nojunk.satx.rr.com> wrote:

>I know this has nothing to do with antennas but I have seen posts here from
>some that have this receiver. I'm not out to make a killer profit (as you
>can see by the price) just providing a hard to find item for some.
>
>For Sale:
>Technical Manual TM RA6790/GM-3 for Racal HF Receiver type RA6790/GM-3 dated
>December 1991. This is an original manual, not a photo copy. Manual is in
>very good condition, no pages missing (that I am aware of) with occasional
>pencil tic marks on some of the schematics. It's yours for $10US with free
>shipping in US.
>
>If interested contact me at:
>
>ABurzynski at satx dot rr dot com
>
>Al KA5JGV

Geeze Al, that's nice. Now I want the receiver to go with the manual.

Russ - kf4wxd

3571. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 17:50:12 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <onSob.329$Oo4.274@newsread1.news.atl.earthlink.net>
Source record: 105588
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

And just what are you, a Canadian pussy, going to do about it? Bring your
arse down here and we can find out.

You got my address Private.

Dan/W4NTI

"luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
news:16218d3a.0310311558.5a5f66d@posting.google.com...
> Both of you racists keep posting this crap on a Radio newsgroup!
>
> You two clowns need some serious help.
>
> http://www.joebly.com/5c-p_sad-clown.jpg
>
> Luigi
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<%3yob.15857$FI2.3002@newsread1.news.atl.earthlink.net>...
> > "charlesb" <n5pvl@sbcglobal.net> wrote in message
> > news:W6sob.9165$r63.66685022@newssvr21.news.prodigy.com...
> > >
> > > "luigi" <luigi_fatchenelli_125@hotmail.com> wrote in message
> > > news:16218d3a.0310301733.2b405e5@posting.google.com...
> > > > Are you feeling OK Chuck?
> > > >
> > > > No one is being anti-american. We are all just tired of your and
> > > > Daniel's racist remarks on a radio newsgroup.
> > >
> > > Who is this "we" supposed to be? You and Osama Ben Laden?
> > >
> > > Again, you can call my remarks "racist" all you like, but that will
not
> > > change the facts. My posts all stand on their own merit.
> > >
> > > >
> > > > Stop posting on here already and leave us all alone!
> > >
> > > I've been posting here for close to ten years, so far. Do us all a
favor,
> > > and hold your breath until I stop posting here.

> > >
> > > Charles Brabham, N5PVL
> > >
> > >
> >
> > I too could care less what he calls it. I don't consider calling
someone a
> > raghead racist. If he does, thats HIS PROBLEM.
> >
> > I too have been on here a LONG time. It will take a whole lot more that
> > that Canadian Commie has to run me off.
> >
> > Take your best shot....raghead.
> >
> > Dan/W4NTI

3572. Re: Luigi talks to himself as Jimmy Baker (formerly "Private")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 17:52:24 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <spSob.330$Oo4.306@newsread1.news.atl.earthlink.net>
Source record: 105589
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:7lMob.11738$Ib7.5963@newssvr14.news.prodigy.com...
>
> "Jay" <jsouter@REMOVEbellsouth.net> wrote in message
> news:1tDob.6075$BX.3844@bignews5.bellsouth.net...
> >
> > On 31 Oct 2003 16:21:26 -0800, Jimmy Baker <jimmy_b909@hotmail.com>
wrote:
> > > Luigi don't bother with these two fools. They are both probably
> > > married to their sisters anyway. I also saw their posts and we all
> > > know how un-American and racist they are.
> > >
> > > Jimmy Baker
> >
> > Edmonton is full of towel-heads, isn't it?
>
> No, this person is just a lone sicko. It was fun yanking his chain for a
> while but now I'm getting bored with him. It's sad but I've noticed that
> these sicko types are inevitably very bored, very boring people. I suppose
> that's why it doesn't bother them to repeat themselves. After all, they
have
> no real expectation of ever saying anything interesting or relevant. - or
> *on topic*, for that matter.
>
> Charles Brabham, N5PVL
>
>

Good point Charles.

Dan/W4NTI

3573. JVP Argentina antennas - performance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 18:13:12 UTC
From: "Eike Lantzsch, ZP6CGE" <eikelan@gmx.net>
Message-ID: <slrnbq7tto.39t.eikelan@ID-77364.user.uni-berlin.de>
Source record: 105590

Hi:

Has anybody around here experience with the antennas made by
JVP Rosario, Argentina? I am especially interested in the
JVP250, JVP440 which look like the Sommer antennas - at least
at the first sight. The principle seems to be similar. No traps
and all elements phase fed.
I also would like to know if the manufacturer is responsive/helpful
when one needs spare parts.
The antenna design looks promising, as well electrically as
mechanically.

Kind regards, Eike

3574. Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 19:13:15 UTC
From: larry_jefferies@yahoo.com
Message-ID: <61ed6067.0311011113.764a2a12@posting.google.com>
Source record: 105591
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I cannot belive this is actually not moderated out of this group
somehow. Is there anyway we can kick these two losers off of this
group?

If anyone knows let me know.

Larry

> These two racists make me sick!!!!
>
> Daniel L. Jeswald (W4NTI)
> 89 Wildman Road
> Anniston AL
> 36201
>
> Charles D. Brabham (N5PVL)
> Rt 2 Box 46
> Lyford TX
> 78569
> Phone: 956-347-3612
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > Guess what "Private"...two can play that game. I just sicked my buddy on
> > you. He works for the Feds. They track down pedofiles and such. He is
> > making you a 'special' case.
> >
> > See you in the funny papers.....payback is a mo fo...bro.
> >
> > Dan/W4NTI
> >
> > > I cannot believe these two clowns are still at it. I found some of
> > > their original comments and sure enough they are as racist as they
> > > come. People have a right not be discriminated against or abused
> > > because of color, race and religion etc....
> > >
> > > If they don't stop making racist posts on this "RADIO" newsgroup I am
> > > sure people in their own town will find out about them. They will be
> > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > up....
> > >
> > >

> > > > Charles D. Braham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
> > > > 78569
> > > > >
> > > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > > raghead fanatics with very few casualties (sound familiar?) , the
> Israeli
> > > > > general agreed to give the reporter the exclusive secret to his
> > > > > unprecedented military success...
> > > > > >
> > > > > "Fight Arabs." he said.
> > > > > >
> > > > > Charles Brabham, N5PVL
> > > >
> > >
> > > Daniel L. Jeswald
> > > 89 Wildman Road
> > > Anniston AL
> > > 36201
> > > >
> > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq would
> turn
> > > > into a quagmire. Unfortunatly for those fighting the fight, it is
> serving a
> > > > purpose. It is keeping the ragheads 'occupied'. And its not in Boise
> > > > Idaho.
> > > > >
> > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > party left me when they turned it over to NOW and Phyliss.
> > > > >
> > > > That does NOT mean I support Baby Bush 100%. However lets see how
> things
> > > > go.
> > > > >
> > > > Dan/W4NTI

3575. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 19:27:33 UTC
From: mwelch@madbbs.com
Message-ID: <39385c80.0311011127.f45dc3d@posting.google.com>
Source record: 105592
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Hi Ross, I entirely agree with your assessment of the pathogenesis of the current episode of war fever. This war is the neoconservatives' war. Soon to be the American people's war if it can be conflated, after the fact, with the so-called War On Terror. If the occupation can be made to draw in Al Quaeda and other insurgents and the witting or unwitting participation of other states in the region, then presto, we have the perfect post hoc justification for the invasion in the first place and the perfect pretext for toppling the next domino, so the neocons desire.

But in their overweening certainty and their impetuous rush to war they overlooked the need for international troops to man the occupation and the innate hostility and justifiable suspicion of the Iraqi people. If coalition forces do not find themselves in a quagmire, at the very least they find themselves taking first steps in a long hard slog (an uncharacteristic moment of honest introspection by Rumsfeld or a deliberate leak to better position himself in the internecine blame game now playing out within the administration?). Bogged down as they are in a police action which is dispiriting and not their brief, our troops cannot be cycled out to go onto bigger and better things. If the neocons in charge had played their hand more adroitly, had awaited a season of inspections and won over full international cooperation as did Bush the Elder, then perhaps even now they would be spurring their destriers into Damascas or even into Tehran. The trick now is to bite off more than we can chew, get into grave difficulty, and rally the American people around the troops. Then take another bite. The neocons have repeatedly claimed that the WMD's are buried in the sands of the Bekaa valley, that is why they are nowhere to be found in Iraq. Perhaps this is the next bite of the apple gleaming in their eye. Events, mostly of their own making, have overtaken their resources, not their ambition. If regional war can be achieved, look for a call to resurrect the Draft.

I have read that Rummy and crew established their own little intelligence agency within the civilian side of the Pentagon which examined the raw data collected by the traditional spooks and culled out only the bits which gave credence to a pro-war assessment, even, as you say, going so far as to rely upon the unsupportable evidence presented by unreliable characters such as Chalabi (sic), a member of the diaspora for forty years, and others. Having made their own assessment in their own way, they injected it high up into the national security brief presented to Bush without having it vetted

through the Intelligence chain of command. This is how all the dubious claims about Saddam's WMD's and hostile intentions came to be included in the President's speeches, and how the Niger uranium claim, based on crudely forged documents and widely discredited within the CIA and the State Department, seemed to take on a half-life of its own. The neocon chefs cooked the intelligence books. I have also read that Sharon has his own little rump intelligence agency which is mistrusted by the Mossad.

I wouldn't give Bush too much credit for deviousness. Nixon he is not. I think what happened after 9/11 is that the neocons played to Bush's exchatological leanings. I think they duped him and they duped the American people. Maybe now, with the continuing difficulties we face in subduing Iraq, he is wising up and reevaluating how we got into this mess in the first place.

Regards,

Grumpus

Ross Archer <archer@topnow.com> wrote in message news:<3FA318BC.55C2DBB5@topnow.com>...
> Ed Price wrote:
> [snip]
> >
> > The only unfortunate thing about knocking off Sadaam was that he was hated
> > by Al Queda, and, in return, did his best to exterminate them. The enemy of
> > my enemy isn't always my friend. It's quite possible to have two differing
> > enemies. And sometimes, it's wisest to let you and him fight. I think it
> > will be enormously ironic if we ultimately find that Sadaam sealed his
> > destiny by being a great bluffer.
>
> Far from ironic, it was probably part of a deliberate and
> relatively clever strategy that went awry for this tyrant.
>
> I intend to show (again) why the argument "Saddam Hussein
> wouldn't thwart the inspections unless he was hiding large
> amounts of WMDs" is profoundly ignorant. He would thwart the
> inspections regardless. Let me explain why.
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> Say, for the sake of argument, that Saddam had MASSIVE
> stockpiles of WMDs. It would stand to reason he would
> thwart the inspection process in every way possible, to
> postpone or avoid their discovery. This much is obvious.
>
> Now say, for the sake of argument, that Saddam's WMD arsenal
> was decimated in 1991, and he could NOT overcome the
> inspection regime, the surveillance, and the no-fly zone
> enforcement to rebuild his arsenal significantly. What
> would he do? He would thwart the inspection process in
> every way possible. Why? Because once it came out, that
> Saddam couldn't outfox the West, it would make Saddam look

> weak and reduce his intimidation power drastically.
> Megalomaniacs simply don't do that.
>
> As background, it's perfectly obvious that Saddam Hussein
> is/was a demagogue with intentions of expanding his
> influence to rule the Arab world. Does anyone seriously
> doubt his megalomania? Just look at the cult of personality
> he's created, if you remain doubtful. He loves (loved?)
> worship. Now, if you're a megalomaniac dictator, with
> aspirations to power and influence, who personally gains
> pleasure from the worship and fear of others, how would YOU
> act?
>
> First, by "standing up" to the inspections, Israel, or
> whatever rabidy anti-Western Arabs hate, his popularity
> among rabidly anti-Western Arabs (of which I hear there are
> a few) skyrockets. He looks strong and therefore an
> attractive candidate for leading them. Perhaps even better
> than Osama bin Laden, his chief competitor to that
> aspiration. This feeds right into his megalomania. He
> wants power and followers, and by "standing up to" the
> allies, and Israel by proxy, he gains major political
> capital that might have been useful once Saddam had
> successfully rebuilt his conventional military. A weak
> nation could be conquered and "Saddamized" rather easily
> with nothing more than his strong conventional military and
> an indigenous population of committed sympathetic radicals.
>
> Second, by seeming to have WMDs, he intimidates us more. He
> uses our stupidity, namely "Why else would he thwart the
> inspection process at every turn if he wasn't hiding
> weapons?", against us. Saddam figured the allied forces
> would think twice before striking at him given the potential
> for mayhem our soliders would face from these (assumed
> whether real or not) WMDs. So bluffing at having WMDs was a
> free deterrent he thought would protect his power. A
> classic poker bluff.
>
> So it's not very hard to see why he would pretend to have
> weapons that were blasted to dust in 1991 that he couldn't
> rebuild.
>
> Where it went wrong for Saddam was he underestimated the
> single-mindedness of the US Administration to remove him
> from power. This was something Wolfowitz, Perle, Rumsfeldt,
> and others had wanted to do for years (cf. PNAC).
>
> With the mounting failures to find any evidence of WMDs in
> Iraq, the only thing to do for an Administration committed
> to war was to cook the junk evidence and rush to war at

> maximum possible speed. And that's precisely what they did.
>
> We achieved the result of pissing off our allies, who
> understood that removing Saddam was a US political objective
> that had nothing to do with security of the USA or much of
> anyone (except Israel, which gains obvious benefits). They
> openly criticized us and the quality of our evidence. It was
> junk evidence. They knew it. Everybody knew it except the
> American and British people, evidently, because they both
> were the targets of a thinly-disguised sales job.
>
> To bolster the case for going to war, they even went to
> Iraqi dissidents for threat assessments. The Iraqi
> dissidents had every reason to co-operate in any scheme to
> unseat Saddam, and CIA internal documents show they did not
> consider this source to be reliable at all. Yet their
> known-unreliable statements were often repeated
> as a justification for war against Iraq. They also
> selectively grabbed the minority of evidence bolstering the
> position that Saddam had stockpiles of WMDs we just couldn't
> find, and ignored the rest, in their making a case for war.
>
> What went wrong for the Bush Administration, is more and
> more of the American people (and even more of the British)
> are seeing that we were sold a bill of goods by a cabal of
> explicitly dishonest manipulators and their dupes.
>
> What went wrong for the American people is we're losing
> soldiers virtually every day in a country that posed no
> significant threat to our security interests, prior to
> invasion.
>
> I said two things before, and history proved me right on
> both. First, Saddam didn't have significant WMDs. They
> will never be found, because they aren't there. Second, the
> Bush Administration is one of the most incompetent and
> dishonest we've seen in our history. As the facts emerge
> (and it will take quite some time given this is by far the
> most secretive Administration in our history), eventually
> Bush's Administration will win the mendacity crown from
> Richard Milhous Nixon.
>
> >
> > Sadaam earned his fate by attacking our economic lifeline, and being a
> > generally de-stabilizing force in a region quite important to the USA. Yes,
> > it is about the oil! Just how many Grannys in Schenectady have to freeze to
> > death because they can't afford heat until we recognize that our economy is
> > totally dependent on oil availability & pricing?
>
> Jimmy Carter tried very hard to get alternative energy

> programs underway. As you can imagine, it was primarily oil
> and gas interests that lobbied -- and eventually succeeded
> -- in killing subsidies to their competitors. Though some
> falsely claim it was environmentalists who were to blame,
> this appears only to be true in the nuclear energy case,
> where in fact environmentalists did great harm by forcing
> the use of dirty coal instead of at-least-cleaner nuclear
> energy.
>
> But show me where environmentalists engaged in a concerted
> successful effort to block government subsidies for wind and
> solar research in a significant way, and I'll buy you lunch.
>
> >
> > Temporarily, we work with despicable foreigners who despise us, because we
> > are dependent on them in some way. The industrial world's dependence on oil
> > has caused the worst economic imbalance we could imagine, giving economic
> > power to many who are unfit to govern a bucket of shit.
>
> Saddam wasn't fit to rule the viruses in the bucket of shit.
> I'm glad he's gone, but the US economy will suffer for
> decades due to the foolish idiocy and dishonesty of this
> horrible and corrupt secretive Administration.
> >
> > The best thing we could do for America would be to greatly reduce our
> > economy's dependence on foreign oil. OTOH, I don't expect this to happen in
> > my lifetime.
>
> Probably not. Until the entrenched energy interests figure
> out a way to get government money for research, or how to
> make a profit, or when reserves finally push gasoline up to
> $5 a gallon or so. Then the tune will change by necessity.
> Market forces will eventually compel the use of alternatives
> to oil and gas. Whether it's in 10 years or 200, I can't
> honestly guess. Could just as easily be either.
>
> -- Ross
>
> >
> > Ed
> > wb6wsn

3576. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 21:00:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa41fb0$1_5@corp.newsgroups.com>
Source record: 105593
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Larry wrote:
> I cannot belive this is actually not moderated out of this group
> somehow. Is there anyway we can kick these two losers off of this
> group?

The powers that be do kick binaries off this newsgroup but I
assume that is an automated process.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3577. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 21:03:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa4205b$1_5@corp.newsgroups.com>
Source record: 105594

Yuri Blanarovich wrote:
> I apologize to Reflected Waves, for they are important and I will treat them
> with greater respect. I still don't like them in the feedlines, but I love them
> in the radiators :-)

Yuri, to be perfectly consistent, you would need to change all your
standing-wave antennas to traveling-wave antennas. I've got some
non-inductive terminating resistors for sale at the right price. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3578. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 21:08:12 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <0hVob.588$Fy4.260@newssvr25.news.prodigy.com>
Source record: 105595
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Larry" <larry_jefferies@yahoo.com> wrote in message
news:61ed6067.0311011113.764a2a12@posting.google.com...
> I cannot belive this is actually not moderated out of this group
> somehow. Is there anyway we can kick these two losers off of this
> group?

No, but you can always go away, if you can't handle it.

Charlers Brabham, N5PVL

3579. Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 21:38:32 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <sJVob.595$aL4.375@newssvr25.news.prodigy.com>
Source record: 105596
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Don't you just hate it when some racist commie thinks your ham radio newsgroup is his soap-box?

Trolls are insects, best ignored.

Charles Brabham, N5PVL

3580. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 22:19:25 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031101171925.03692.00000074@mb-m06.aol.com>
Source record: 105597

>
>Yuri, to be perfectly consistent, you would need to change all your
>standing-wave antennas to traveling-wave antennas. I've got some
>non-inductive terminating resistors for sale at the right price. :-)
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

Well, I've been thinking on those sleepless nights, how to turn standing wave Yagis or Quads into traveling wave ones, with no back lobes. Got recipe? I've got resistors.

Yuri

3581. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 23:51:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <6GXob.730$Oo4.467@newsread1.news.atl.earthlink.net>
Source record: 105598
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

See what happens when you read Witch Hillary's book.....you get all gooey
inside....bring on that VAST RIGHTWING CONSPIRACY.

In a word ... balderdash.

Dan/W4NTI

"grumpus" <mwelch@madbbs.com> wrote in message
news:39385c80.0311011127.f45dc3d@posting.google.com...
> Hi Ross, I entirely agree with your assessment of the pathogenesis of
> the current episode of war fever. This war is the neoconservatives'
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> first place and the perfect pretext for toppling the next domino, so
> the neocons desire.
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> they overlooked the need for international troops to man the
> occupation and the innate hostility and justifiable suspicion of the
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> they would be spurring their destriers into Damascas or even into
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> grave difficulty, and rally the American people around the troops.
> Then take another bite. The neocons have repeatedly claimed that the
> WMD's are buried in the sands of the Bekaa valley, that is why they
> are nowhere to be found in Iraq. Perhaps this is the next bite of the
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> Regards,
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> > that had nothing to do with security of the USA or much of
> > anyone (except Israel, which gains obvious benefits). They
> > openly criticized us and the quality of our evidence. It was
> > junk evidence. They knew it. Everybody knew it except the
> > American and British people, evidently, because they both
> > were the targets of a thinly-disguised sales job.
> >
> > To bolster the case for going to war, they even went to
> > Iraqi dissidents for threat assessments. The Iraqi
> > dissidents had every reason to co-operate in any scheme to
> > unseat Saddam, and CIA internal documents show they did not
> > consider this source to be reliable at all. Yet their
> > known-unreliable statements were often repeated
> > as a justification for war against Iraq. They also
> > selectively grabbed the minority of evidence bolstering the
> > position that Saddam had stockpiles of WMDs we just couldn't
> > find, and ignored the rest, in their making a case for war.
> >
> > What went wrong for the Bush Administration, is more and
> > more of the American people (and even more of the British)
> > are seeing that we were sold a bill of goods by a cabal of
> > explicitly dishonest manipulators and their dupes.
> >
> > What went wrong for the American people is we're losing
> > soldiers virtually every day in a country that posed no
> > significant threat to our security interests, prior to
> > invasion.
> >
> > I said two things before, and history proved me right on

> > both. First, Saddam didn't have significant WMDs. They
> > will never be found, because they aren't there. Second, the
> > Bush Administration is one of the most incompetent and
> > dishonest we've seen in our history. As the facts emerge
> > (and it will take quite some time given this is by far the
> > most secretive Administration in our history), eventually
> > Bush's Administration will win the mendacity crown from
> > Richard Milhous Nixon.
> >
> > >
> > > Sadaam earned his fate by attacking our economic lifeline, and being a
> > > generally de-stabilizing force in a region quite important to the USA.
Yes,
> > > it is about the oil! Just how many Grannys in Schenectady have to
freeze to
> > > death because they can't afford heat until we recognize that our
economy is
> > > totally dependent on oil availability & pricing?
> >
> > Jimmy Carter tried very hard to get alternative energy
> > programs underway. As you can imagine, it was primarily oil
> > and gas interests that lobbied -- and eventually succeeded
> > -- in killing subsidies to their competitors. Though some
> > falsely claim it was environmentalists who were to blame,
> > this appears only to be true in the nuclear energy case,
> > where in fact environmentalists did great harm by forcing
> > the use of dirty coal instead of at-least-cleaner nuclear
> > energy.
> >
> > But show me where environmentalists engaged in a concerted
> > successful effort to block government subsidies for wind and
> > solar research in a significant way, and I'll buy you lunch.
> >
> > >
> > > Temporarily, we work with despicable foreigners who despise us,
because we
> > > are dependent on them in some way. The industrial world's dependence
on oil
> > > has caused the worst economic imbalance we could imagine, giving
economic
> > > power to many who are unfit to govern a bucket of shit.
> >
> > Saddam wasn't fit to rule the viruses in the bucket of shit.
> > I'm glad he's gone, but the US economy will suffer for
> > decades due to the foolish idiocy and dishonesty of this
> > horrible and corrupt secretive Administration.
> > >
> > > The best thing we could do for America would be to greatly reduce our
> > > economy's dependence on foreign oil. OTOH, I don't expect this to
happen in

> > > my lifetime.
> >
> > Probably not. Until the entrenched energy interests figure
> > out a way to get government money for research, or how to
> > make a profit, or when reserves finally push gasoline up to
> > $5 a gallon or so. Then the tune will change by necessity.
> > Market forces will eventually compel the use of alternatives
> > to oil and gas. Whether it's in 10 years or 200, I can't
> > honestly guess. Could just as easily be either.
> >
> > -- Ross
> >
> > >
> > > Ed
> > > wb6wsn

3582. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-01 23:55:33 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <VJXob.743$Oo4.620@newsread1.news.atl.earthlink.net>
Source record: 105599
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Go ahead Larry, make my day.

Take your best shot.

Put your best foot forward.

All it proves is you can dish it out, but you can't take it.

For your INFORMATION, if you care. Neither myself or Charles started this.
I recommend you throw off the Canadian goof, you know the one...your buddy
'Private', Luigi or whatever dumb name he uses.

You see I use my real name and standby what I say. If you think it's
racist, I call you a dumbass.

See how it works?

I would love to drop this subject. Tell you what...tell your buddy to shut
the hell up and I bet that works.

Dan/W4NTI

"Larry" <larry_jefferies@yahoo.com> wrote in message
news:61ed6067.0311011113.764a2a12@posting.google.com...
> I cannot belive this is actually not moderated out of this group
> somehow. Is there anyway we can kick these two losers off of this
> group?
>
> If anyone knows let me know.
>
> Larry
>
> > These two racists make me sick!!!!
> >
> > Daniel L. Jeswald (W4NTI)
> > 89 Wildman Road
> > Anniston AL
> > 36201
> >
> > Charles D. Brabham (N5PVL)
> > Rt 2 Box 46
> > Lyford TX
> > 78569
> > Phone: 956-347-3612

> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > > Guess what "Private"...two can play that game. I just sicked my buddy
on
> > > you. He works for the Feds. They track down pedofiles and such. He
is
> > > making you a 'special' case.
> > >
> > > See you in the funny papers.....payback is a mo fo...bro.
> > >
> > > Dan/W4NTI
> > >
> > > > I cannot believe these two clowns are still at it. I found some of
> > > > their original comments and sure enough they are as racist as they
> > > > come. People have a right not be discriminated against or abused
> > > > because of color, race and religion etc....
> > > >
> > > > If they don't stop making racist posts on this "RADIO" newsgroup I
am
> > > > sure people in their own town will find out about them. They will b
e
> > > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > > up....
> > > >
> > > >
> > > > > Charles D. Braham (N5PVL)
> > > > > Rt 2 Box 46
> > > > > Lyford TX
> > > > > 78569
> > > > > >
> > > > > > Asked about his astounding success in mowing down thousands of
> > screaming
> > > > > > raghead fanatics with very few casualties (sound familiar?) ,
the
> > Israeli
> > > > > > general agreed to give the reporter the exclusive secret to his
> > > > > > unprecedented military success...
> > > > > >
> > > > > > "Fight Arabs." he said.
> > > > > >
> > > > > > Charles Brabham, N5PVL
> > > > >
> > > > >
> > > > > Daniel L. Jeswald
> > > > > 89 Wildman Road
> > > > > Anniston AL
> > > > > 36201
> > > > >
> > > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq

would
> > turn
> > > > > > into a quagmire. Unfortunatly for those fighting the fight, it
is
> > serving a
> > > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
Boise
> > > > > > Idaho.
> > > > > >
> > > > > > As for your political commentary. As far as I'm concerned the
> > Democratic
> > > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > >
> > > > > > That does NOT mean I support Baby Bush 100%. However lets see
how
> > things
> > > > > > go.
> > > > > >
> > > > > > Dan/W4NTI

3583. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 00:03:54 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <KRXob.755$Oo4.440@newsread1.news.atl.earthlink.net>
Source record: 105600

Nothing. Since I have been accused of being a racist. I have a right to respond. Tell the idiot that started it, the Canadian goofball, to stop and I'll be more than happy to oblige.

Or....now here is a though....Don't read them.

Duuuuuuuu

Dan/W4NTI

<w4udx@bellsouth.net> wrote in message
news:AaDob.3969$ns.1903@bignews4.bellsouth.net...
> would somebody please tell me what any of this has to do with amateur
> antennas?
>
>

3584. MFJ-993

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 00:09:14 UTC
From: Tom - KS5x <ks5x@cox.net>
Message-ID: <KWXob.39229$Rd4.2010@fed1read07>
Source record: 105601

Looking for hand's on evaluation using the balanced feed.

--
Tom ks5x@cox.net

3585. Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 00:21:05 UTC
From: antswitch@tomochka.com
Message-ID: <47c89a30.0311011621.f847850@posting.google.com>
Source record: 105602

Please reply to the list or directly to me: shack AT tomochka DOT com.

Hello antenna mavens,

Searching high and low today for examples of feeding a rotating antenna with ladder/window/open feed line. My idea would be to use a standoff near the tower top (say, 3-4' perpendicular to the tower) and drape a large loop of window line from the feedpoint to this standoff, then route the remainder of the feed line down and away from the tower using standoffs as necessary.

Anyone have experience with this sort of setup or can you suggest a better one? Is there a rule of thumb for how large the loop should be to accomodate a 450 degree turn?

I would imagine using a stranded conductor feed line would be preferable given the amount of flex that may be inherent. How would one stiffen the overall draped loop though to prevent it being blown near metal in a breeze?

TIA es 73.

Please reply to the list or directly to me: shack AT tomochka DOT com.

- Casey

3586. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 00:38:22 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <aak8qvcltopia5l7tmctrvivc7l8738olf@4ax.com>
Source record: 105571

On Fri, 31 Oct 2003 21:10:55 -0500, "Ed" <ed@nospam.com> wrote:

>They told you that it would be a few months before anyone could actually get
>one and comment on it ?
>
>Aaahhhhhhhh, I didn't think so.
>
>Theres a million other open threads on the newsgroups tonight. Maybe you
>can go foul another thread and leave this one for those of us that are
>interested in real information. If theres no information to be had, theres
>no need to waste everyones time by being "helpful"
>
>run along please.
>

YOur snide, smart-alecky attitude aside, you might watch the product
reviews on eham.net. Things typically get reviewed there fairly
quickly. 'Course, if the tuner isn't out yet (first ad I saw was in
the mfj catalog that came with latest qst) -- you're not gonna get
much feedback.

Now, you, run along, please...

Bob
k5qwg

>
>"JGBOYLES" <jgboyles@aol.com> speculated in message
>news:20031031194043.18396.00000080@mb-m14.aol.com...
>> >>
>> No, I thought I was trying to help.
>>
>> 73 Gary N4AST
>>
>>Probably have to wait a few months to
>> get an answer to your question.
>
>
>

3587. "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 01:35:51 UTC
From: todjk@pdclink.com
Message-ID: <c641b886.0311011735.e539c7c@posting.google.com>
Source record: 105603

I am needing to find a "non-evasive" (no drilling) solution for mounting a 144/440 mobile antenna in my 2003 Chevy Blazer.

I am trying to see if there is some kind of solution that does not involve magnetic roof mounts.

Does a mount exist where the mount clamps to either the glass or the metal of the rear hatch of the Blazer?

Any advice is appreciated.

Todd N9ZWY

3588. MFJ 993 Auto Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 01:48:17 UTC
From: Tom - KS5x <ks5x@cox.net>
Message-ID: <BnZob.39241$Rd4.19255@fed1read07>
Source record: 105604

Any recommendations? Positive or Negative? I plan to use to feed a balanced line to my 80 meter folded dipole.

--
Tom ks5x@cox.net

3589. Re: "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 01:50:02 UTC
From: derswede@aol.comspam.com
Message-ID: <20031101205002.16581.00000050@mb-m27.aol.com>
Source record: 105605

<< "non-evasive" >>

Think you mean "non-invasive"?? "Non-evasive" is what you should be when the blue lights come on behind you....

<< Does a mount exist where the mount clamps to either the glass or the metal of the rear hatch of the Blazer? >>

Try the Diamond website...they have a nice mount which I'm looking at for a Ford Escape....the 400 series, I believe. It is adjustable for angle, which is important for my install. Not too pricey, and Diamond seems to make decent mounts.

Good luck with it!
A

3590. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 01:59:02 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA464E6.FAFE852D@cwis.net>
Source record: 105606

Casey,
'Slip-rings' is one way. Several of the older
handbooks have pictures of them.
'Doc

3591. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 02:02:44 UTC
From: mwelch@madbbs.com
Message-ID: <39385c80.0311011802.1787b4ee@posting.google.com>
Source record: 105607
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

You must have me confused with somebody else. Just today, two more
soldiers of ours KIA, and our forces involved in a firefight which
left ten Iraqi noncombatants dead. Tell me, how long will they love
us at this rate? How long before the patience of the average Iraqi
runs out? We are up against the clock friend. We didn't get into
this predicament by accident, we deliberately stepped in it.

Regards,

Grumpus

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<6GXob.730$Oo4.467@newsread1.news.atl.earthlink.net>...
> See what happens when you read Witch Hillary's book.....you get all gooey
> inside....bring on that VAST RIGHTWING CONSPIRACY.
>
> In a word ... balderdash.
>
> Dan/W4NTI
>
> "grumpus" <mwelch@madbbs.com> wrote in message
> news:39385c80.0311011127.f45dc3d@posting.google.com...
> > Hi Ross, I entirely agree with your assessment of the pathogenesis of
> > the current episode of war fever. This war is the neoconservatives'
> > war. Soon to be the American people's war if it can be conflated,
> > after the fact, with the so-called War On Terror. If the occupation
> > can be made to draw in Al Quaeda and other insurgents and the witting
> > or unwitting participation of other states in the region, then presto,
> > we have the perfect post hoc justification for the invasion in the
> > first place and the perfect pretext for toppling the next domino, so
> > the neocons desire.
> >
> > But in their overweening certainty and their impetuous rush to war
> > they overlooked the need for international troops to man the
> > occupation and the innate hostility and justifiable suspicion of the
> > Iraqi people. If coalition forces do not find themselves in a
> > quagmire, at the very least they find themselves taking first steps in
> > a long hard slog (an uncharacteristic moment of honest introspection
> > by Rumsfeld or a deliberate leak to better position himself in the
> > internecine blame game now playing out within the administration?).
> > Bogged down as they are in a police action which is dispiriting and
> > not their brief, our troops cannot be cycled out to go onto bigger and

> > better things. If the neocons in charge had played their hand more
> > adroitly, had awaited a season of inspections and won over full
> > international cooperation as did Bush the Elder, then perhaps even now
> > they would be spurring their destriers into Damascas or even into
> > Tehran. The trick now is to bite off more than we can chew, get into
> > grave difficulty, and rally the American people around the troops.
> > Then take another bite. The neocons have repeatedly claimed that the
> > WMD's are buried in the sands of the Bekaa valley, that is why they
> > are nowhere to be found in Iraq. Perhaps this is the next bite of the
> > apple gleaming in their eye. Events, mostly of their own making, have
> > overtaken their resources, not their ambition. If regional war can be
> > achieved, look for a call to resurrect the Draft.
> >
> > I have read that Rummy and crew established their own little
> > intelligence agency within the civilian side of the Pentagon which
> > examined the raw data collected by the traditional spooks and culled
> > out only the bits which gave credence to a pro-war assessment, even,
> > as you say, going so far as to rely upon the unsupportable evidence
> > presented by unreliable characters such as Chalabi (sic), a member of
> > the diaspora for forty years, and others. Having made their own
> > assessment in their own way, they injected it high up into the
> > national security brief presented to Bush without having it vetted
> > through the Intelligence chain of command. This is how all the
> > dubious claims about Saddam's WMD's and hostile intentions came to be
> > included in the President's speeches, and how the Niger uranium claim,
> > based on crudely forged documents and widely discredited within the
> > CIA and the State Department, seemed to take on a half-life of its
> > own. The neocon chefs cooked the intelligence books. I have also
> > read that Sharon has his own little rump intelligence agency which is
> > mistrusted by the Mossad.
> >
> > I wouldn't give Bush too much credit for deviousness. Nixon he is
> > not. I think what happened after 9/11 is that the neocons played to
> > Bush's exchatological leanings. I think they duped him and they duped
> > the American people. Maybe now, with the continuing difficulties we
> > face in subduing Iraq, he is wising up and reevaluating how we got
> > into this mess in the first place.
> >
> > Regards,
> >
> > Grumpus
> >
> >
> >
> > Ross Archer <archer@topnow.com> wrote in message
> news:<3FA318BC.55C2DBB5@topnow.com>...
> > > Ed Price wrote:
> > > [snip]
> > > >
> > > > The only unfortunate thing about knocking off Sadaam was that he was

> hated
> > > > by Al Queda, and, in return, did his best to exterminate them. The
> enemy of
> > > > my enemy isn't always my friend. It's quite possible to have two
> differing
> > > > enemies. And sometimes, it's wisest to let you and him fight. I think
> it
> > > > will be enormously ironic if we ultimately find that Sadaam sealed his
> > > > destiny by being a great bluffer.
> > >
> > > Far from ironic, it was probably part of a deliberate and
> > > relatively clever strategy that went awry for this tyrant.
> > >
> > > I intend to show (again) why the argument "Saddam Hussein
> > > wouldn't thwart the inspections unless he was hiding large
> > > amounts of WMDs" is profoundly ignorant. He would thwart the
> > > inspections regardless. Let me explain why.
> > >
> > > Say, for the sake of argument, that Saddam had MASSIVE
> > > stockpiles of WMDs. It would stand to reason he would
> > > thwart the inspection process in every way possible, to
> > > postpone or avoid their discovery. This much is obvious.
> > >
> > > Now say, for the sake of argument, that Saddam's WMD arsenal
> > > was decimated in 1991, and he could NOT overcome the
> > > inspection regime, the surveillance, and the no-fly zone
> > > enforcement to rebuild his arsenal significantly. What
> > > would he do? He would thwart the inspection process in
> > > every way possible. Why? Because once it came out, that
> > > Saddam couldn't outfox the West, it would make Saddam look
> > > weak and reduce his intimidation power drastically.
> > > Megalomaniacs simply don't do that.
> > >
> > > As background, it's perfectly obvious that Saddam Hussein
> > > is/was a demagogue with intentions of expanding his
> > > influence to rule the Arab world. Does anyone seriously
> > > doubt his megalomania? Just look at the cult of personality
> > > he's created, if you remain doubtful. He loves (loved?)
> > > worship. Now, if you're a megalomaniac dictator, with
> > > aspirations to power and influence, who personally gains
> > > pleasure from the worship and fear of others, how would YOU
> > > act?
> > >
> > > First, by "standing up" to the inspections, Israel, or
> > > whatever rabidy anti-Western Arabs hate, his popularity
> > > among rabidly anti-Western Arabs (of which I hear there are
> > > a few) skyrockets. He looks strong and therefore an
> > > attractive candidate for leading them. Perhaps even better
> > > than Osama bin Laden, his chief competitor to that
> > > aspiration. This feeds right into his megalomania. He

> > > wants power and followers, and by "standing up to" the
> > > allies, and Israel by proxy, he gains major political
> > > capital that might have been useful once Saddam had
> > > successfully rebuilt his conventional military. A weak
> > > nation could be conquered and "Saddamized" rather easily
> > > with nothing more than his strong conventional military and
> > > an indigenous population of committed sympathetic radicals.
> > >
> > > Second, by seeming to have WMDs, he intimidates us more. He
> > > uses our stupidity, namely "Why else would he thwart the
> > > inspection process at every turn if he wasn't hiding
> > > weapons?", against us. Saddam figured the allied forces
> > > would think twice before striking at him given the potential
> > > for mayhem our soliders would face from these (assumed
> > > whether real or not) WMDs. So bluffing at having WMDs was a
> > > free deterrent he thought would protect his power. A
> > > classic poker bluff.
> > >
> > > So it's not very hard to see why he would pretend to have
> > > weapons that were blasted to dust in 1991 that he couldn't
> > > rebuild.
> > >
> > > Where it went wrong for Saddam was he underestimated the
> > > single-mindedness of the US Administration to remove him
> > > from power. This was something Wolfowitz, Perle, Rumsfeldt,
> > > and others had wanted to do for years (cf. PNAC).
> > >
> > > With the mounting failures to find any evidence of WMDs in
> > > Iraq, the only thing to do for an Administration committed
> > > to war was to cook the junk evidence and rush to war at
> > > maximum possible speed. And that's precisely what they did.
> > >
> > > We achieved the result of pissing off our allies, who
> > > understood that removing Saddam was a US political objective
> > > that had nothing to do with security of the USA or much of
> > > anyone (except Israel, which gains obvious benefits). They
> > > openly criticized us and the quality of our evidence. It was
> > > junk evidence. They knew it. Everybody knew it except the
> > > American and British people, evidently, because they both
> > > were the targets of a thinly-disguised sales job.
> > >
> > > To bolster the case for going to war, they even went to
> > > Iraqi dissidents for threat assessments. The Iraqi
> > > dissidents had every reason to co-operate in any scheme to
> > > unseat Saddam, and CIA internal documents show they did not
> > > consider this source to be reliable at all. Yet their
> > > known-unreliable statements were often repeated
> > > as a justification for war against Iraq. They also
> > > selectively grabbed the minority of evidence bolstering the
> > > position that Saddam had stockpiles of WMDs we just couldn't

> > > find, and ignored the rest, in their making a case for war.
> > >
> > > What went wrong for the Bush Administration, is more and
> > > more of the American people (and even more of the British)
> > > are seeing that we were sold a bill of goods by a cabal of
> > > explicitly dishonest manipulators and their dupes.
> > >
> > > What went wrong for the American people is we're losing
> > > soldiers virtually every day in a country that posed no
> > > significant threat to our security interests, prior to
> > > invasion.
> > >
> > > I said two things before, and history proved me right on
> > > both. First, Saddam didn't have significant WMDs. They
> > > will never be found, because they aren't there. Second, the
> > > Bush Administration is one of the most incompetent and
> > > dishonest we've seen in our history. As the facts emerge
> > > (and it will take quite some time given this is by far the
> > > most secretive Administration in our history), eventually
> > > Bush's Administration will win the mendacity crown from
> > > Richard Milhous Nixon.
> > >
> > > > >
> > > > Sadaam earned his fate by attacking our economic lifeline, and being a
> > > > generally de-stabilizing force in a region quite important to the USA.
> Yes,
> > > > it is about the oil! Just how many Grannys in Schenectady have to
> freeze to
> > > > death because they can't afford heat until we recognize that our
> economy is
> > > > totally dependent on oil availability & pricing?
> > > >
> > > > Jimmy Carter tried very hard to get alternative energy
> > > > programs underway. As you can imagine, it was primarily oil
> > > > and gas interests that lobbied -- and eventually succeeded
> > > > -- in killing subsidies to their competitors. Though some
> > > > falsely claim it was environmentalists who were to blame,
> > > > this appears only to be true in the nuclear energy case,
> > > > where in fact environmentalists did great harm by forcing
> > > > the use of dirty coal instead of at-least-cleaner nuclear
> > > > energy.
> > > >
> > > > But show me where environmentalists engaged in a concerted
> > > > successful effort to block government subsidies for wind and
> > > > solar research in a significant way, and I'll buy you lunch.
> > > >
> > > > > >
> > > > Temporarily, we work with despicable foreigners who despise us,
> because we
> > > > > are dependent on them in some way. The industrial world's dependence

> on oil
> > > > has caused the worst economic imbalance we could imagine, giving
> economic
> > > > power to many who are unfit to govern a bucket of shit.
> > >
> > > Saddam wasn't fit to rule the viruses in the bucket of shit.
> > > I'm glad he's gone, but the US economy will suffer for
> > > decades due to the foolish idiocy and dishonesty of this
> > > horrible and corrupt secretive Administration.
> > > >
> > > > The best thing we could do for America would be to greatly reduce our
> > > > economy's dependence on foreign oil. OTOH, I don't expect this to
> happen in
> > > > my lifetime.
> > >
> > > Probably not. Until the entrenched energy interests figure
> > > out a way to get government money for research, or how to
> > > make a profit, or when reserves finally push gasoline up to
> > > $5 a gallon or so. Then the tune will change by necessity.
> > > Market forces will eventually compel the use of alternatives
> > > to oil and gas. Whether it's in 10 years or 200, I can't
> > > honestly guess. Could just as easily be either.
> > >
> > > -- Ross
> > >
> > > >
> > > > Ed
> > > > wb6wsn

3592. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 02:20:11 UTC
From: larry_jefferies@yahoo.com
Message-ID: <61ed6067.0311011820.c8b041f@posting.google.com>
Source record: 105608
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

No wonder everyone is complaining about you two! I have been to
Canada lots of times and have never met anyone half as stupid as you
two.

Posting racial slurs and including your call signs?, what the heck did
you think would happen. Capital "L" loser....

Larry

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<VJXob.743$Oo4.620@newsread1.news.atl.earthlink.net>...
> Go ahead Larry, make my day.
>
> Take your best shot.
>
> Put your best foot forward.
>
> All it proves is you can dish it out, but you can't take it.
>
> For your INFORMATION, if you care. Neither myself or Charles started this.
> I recommend you throw off the Canadian goof, you know the one...your buddy
> 'Private', Luigi or whatever dumb name he uses.
>
> You see I use my real name and standby what I say. If you think it's
> racist, I call you a dumbass.
>
> See how it works?
>
> I would love to drop this subject. Tell you what...tell your buddy to shut
> the hell up and I bet that works.
>
> Dan/W4NTI
>
>
>
> "Larry" <larry_jefferies@yahoo.com> wrote in message
> news:61ed6067.0311011113.764a2a12@posting.google.com...
> > I cannot belive this is actually not moderated out of this group
> > somehow. Is there anyway we can kick these two losers off of this
> > group?
> >
> > If anyone knows let me know.

> >
> > Larry
> >
> > > These two racists make me sick!!!!
> > >
> > > Daniel L. Jeswald (W4NTI)
> > > 89 Wildman Road
> > > Anniston AL
> > > 36201
> > >
> > > Charles D. Brabham (N5PVL)
> > > Rt 2 Box 46
> > > Lyford TX
> > > 78569
> > > Phone: 956-347-3612
> > >
> > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > > > Guess what "Private"...two can play that game. I just sicked my buddy
> on
> > > > you. He works for the Feds. They track down pedofiles and such. He
> is
> > > > making you a 'special' case.
> > > >
> > > > See you in the funny papers.....payback is a mo fo...bro.
> > > >
> > > > Dan/W4NTI
> > > >
> > > > > I cannot believe these two clowns are still at it. I found some of
> > > > > their original comments and sure enough they are as racist as they
> > > > > come. People have a right not be discriminated against or abused
> > > > > because of color, race and religion etc....
> > > > >
> > > > > If they don't stop making racist posts on this "RADIO" newsgroup I
> am
> > > > > sure people in their own town will find out about them. They will b
> e
> > > > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > > > up....
> > > > >
> > > > >
> > > > > > Charles D. Braham (N5PVL)
> > > > > > Rt 2 Box 46
> > > > > > Lyford TX
> > > > > > 78569
> > > > > > >
> > > > > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > > > > raghead fanatics with very few casualties (sound familiar?) ,
> the

> Israeli
> > > > > > > general agreed to give the reporter the exclusive secret to his
> > > > > > > unprecedented military success...
> > > > > > >
> > > > > > > "Fight Arabs." he said.
> > > > > > >
> > > > > > > Charles Brabham, N5PVL
> > > > > >
> > > > > >
> > > > > > Daniel L. Jeswald
> > > > > > 89 Wildman Road
> > > > > > Anniston AL
> > > > > > 36201
> > > > > >
> > > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
> would
> turn
> > > > > > into a quagmire. Unfortunatly for those fighting the fight, it
> is
> serving a
> > > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
> Boise
> > > > > > Idaho.
> > > > > >
> > > > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > >
> > > > > > That does NOT mean I support Baby Bush 100%. However lets see
> how
> things
> > > > > > go.
> > > > > >
> > > > > > Dan/W4NTI

3593. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 02:26:04 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311011826.71f4c47f@posting.google.com>
Source record: 105609

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031101103546.10368.00000109@mb-m10.aol.com>...
> >>But....Just using my built in
> "BS" filter only, which rarely seems to fails me, and ignoring all
> other influences, I still have to side with Tom. I still think the
> current is fairly constant.<<
>
> >Nothing
> >personal either way...But I have learned never to ignore my BS filter,
> >so I'm going with it. :) MK
> >
>
> Same here,
> did your filter filtered out W5DXP pudding? The "theoretical" proof is right
> there. Or are you drinking the same coolaide as Tom? :-)
>
> Yuri
>
> Reality vs. Speculations? Duuuh?''

Oh, purely speculation on my part. I have no easy way of really
knowing the reality. There is a small part that keeps bugging me, but
I'd have to see for sure where he is measuring the currents. I missed
the pix on the site. I'll assume for now he measured at each end of
the coil, pretty much at the connection to the mast or whip. The part
the bugs me is a possible stunting of the current at the top of the
coil due to the capacitance it is looking at, at the end of the coil.
To my thinking, once you leave the coil, even right at the end, you
should see a reduction of current, compared to say even a turn or two
from the top of the coil. I'm just wondering if this may be giving a
false indication of the true currents within the coil,if he is
measuring slightly outside of the coil. I'd be more satisfied if he
could measure a few turns from each end "using a large, many turns,
coil for 80 or 160" to get a general view within the windings
themselves. But I realize this could be very difficult. You all may be
totally correct. I'd just like to be a little better convinced before
I totally agree. I expect a slight decrease in current at the top vs
bottom. But I don't expect it to be large. I also don't expect the
bottom of the coil to be "hot", with a radical current taper on the
upper windings. The main thing I see to causing a reduction of
current , is the stinger on top of the coil. "capacitance" I wonder if
he is seeing the effects of that capacitance in his lower measurement?
Only the shadow knows for sure....:/
As far as the reverse currents Cecil mentions, I'd have to ponder that

a while.
Seems to me that could wildly vary from antenna to antenna depending on height, coil positions, any top loading, etc..Although it looks good on paper, I smell a hook. So I'd have to think about that more. BTW, this amount of current in the coil, is something I've also thought about myself. I've just come to the "different" conclusion it's fairly constant through the coil. I could always be wrong. Wouldn't be the first time.. But I need to see/hear a bit more to be convinced. MK

3594. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 02:31:51 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311011831.6b079715@posting.google.com>
Source record: 105610
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna,rec.boats.electronics

SL,

For a Cage Antenna 'using' Metal (conductive) "Spacers" for VHF and
UHF just may work.

But... Everything I have seen for HF (MW/SW) has non-conductive
spacers.
- - - wood, plastic, tie-off-ropes, etc.

* * * Here is an alternative idea:
Three-Five small 24" Hula-Hoops with 8-12 holes drilled into them for
the copperclad wire. Would be a quick and easy trial (proto-type)
model.
- Three to Five Feet (3Ft-5Ft) Top and Bottom "Cones".
- - Three to Five Feet (3Ft-5Ft) "Space" between the Hula-Hoops.
- - - Eight to Twelve (8-12) Wires 12Ft-30Ft Long.
- - - - Vertically Mounted with a Bottom Feed Point.

Note: Flexiable 1/2", 3/4" or 1" Black PVC Tubing that is designed
for Garden Watering Systems. Could be used for smaller circular
"Spacer" Loops. Form them to size and use a Wood Plug and Stapes to
join the ends. Then Drill the holes for the wires.

TIP: Simple Practial Considerations
- - - The "Rule-of-Thumb" in dealing with Mechanical Realities :o)

* Divide the Diameter of the Loops by Two(2) to 'determine' the
maximum "Number" of Wires that will fit around the perimeter of the
Loop.

* Multiply the Diameter by Five(5) to determine the appropriate
"Space" between the Loops.

EXAMPLES:
6" Loop = Three(3) Wires and Two Foot Spacing between the Loops.
8" Loop = Four(4) Wires and Three Foot Spacing between the Loops.
12" Loop = Six(6) Wires and Five Foot Spacing between the Loops.
16" Loop = Eight(8) Wires and Seven Foot Spacing between the Loops.
18" Loop = Nine(9) Wires and Eight Foot Spacing between the Loops.
20" Loop = Ten(6) Wires and Nine Foot Spacing between the Loops.
24" Loop = Twelve(12) Wires and Ten Foot Spacing between the Loops.

iane ~ RHF
.
.
OBTW: Visit the "SWL Antennas and AM & FM Antennas" which is

"Open-To-All" to Read and Post at YAHOO! eGroups.
GoTo=> http://groups.yahoo.com/group/SWL-AM-FM-Antenna/
- - - This is my Antenna ~Golbewym~ [My Web Log].
.
.
= = =n1jpr@hotmail.com (SpamLover)
= = = wrote in message news:<95a201e0.0311010617.1fbe8649@posting.google.com>...
> Thank you all again for the deluge of tips & links!
> This is getting seriously fun!
>
> Quick update on my trials with copperclad (maybe just copperflashed)
> metal-inert-gas continuous welding steelwire:
>
> - This stuff solders like heaven! Steel disperses heat less than
> copper, and capillarity is amazing. Hot solder joints catch deep
> between twisted wires.
>
> - Steel is quite springy and retains shape. My spool is small (~5"
> dia.) but if I release the wire it falls into 15" loops.
>
> - I made a 20' dia. loop with 3+ rounds of this wire, and soldered it
> at 6 spots all round. Very light and elastic.
>
> You know where I'm heading. I would like to try a lightweight soldered
> all-steel cage, and rustproof it with one of those steel-blackening
> nitric acid paints.
>
> As a trial, I'd do a short cage with two 20" rings, maybe 2' between
> them, and 3' end cones, paint it all, and hang it out in the elements,
> weight-loaded.
>
> The INEVITABLE QUESTION
> ===> Do cage spreaders HAVE to be insulating? <===
>
> Uneducated guess: as VHF/UHF discones are made out of either radials
> or sheet metal, I'd say that shorting spacers should be OK.
>

3595. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 03:11:14 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311011911.f5e01a3@posting.google.com>
Source record: 105611

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031101103546.10368.00000109@mb-m10.aol.com>...
> >>But....Just using my built in
> "BS" filter only, which rarely seems to fails me, and ignoring all
> other influences, I still have to side with Tom. I still think the
> current is fairly constant.<<
>
> >Nothing
> >personal either way...But I have learned never to ignore my BS filter,
> >so I'm going with it. :) MK
> >
>
> Same here,
> did your filter filtered out W5DXP pudding? The "theoretical" proof is right
> there. Or are you drinking the same coolaide as Tom? :-)
>
> Yuri
>
> Reality vs. Speculations? Duuuh?

I found this comment interesting. Note this is from one that actually
has tried measuring the current in coils. This was from the site you
mention...

>>>>>>>>>quote>>
I once had an occasion where the bottom of a coil did get warm, while
the top did not. Yet my RF ammeters showed the same current on both
ends. What was going on?

I ultimately determined that the soldered connection from the coil to
the lower antenna mast (for experimentation, it was copper) was adding
some undesireable resistance. Solder is not a particularly good
conductor of electricity. I copper-plated over the solder joint. Not
only did the bottom section of the coil no longer get warm, but the
two RF ammeters both showed about 20% more current flowing in the
antenna. And my far-field instruments showed a 1.5dB increase in field
strength.

>>>>>>>>>>>>unquote>>

This is one example of being fooled....If you took coil temp at face
value, you would think the current taper was quite steep, judging from
the temp's of the windings. But nope...A resistive connection seemed
to be the culprit. Note that his meters showed the same current on
both ends. :/ You can see why I'm afraid of that "hook" that usually
is lurking ready to bite at a moments notice.

Don't worry, if you are right, it will come out in the end. But that hook...Ouch.. MK

3596. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 04:11:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo2051cvs1@titan.btinternet.com>
Source record: 105612

> How would
> one stiffen the overall draped loop though to prevent it being blown
> near metal in a breeze?
>
==========

What's the matter with metal, steel, aluminium ?

Are they not good, low-loss conductors?

No harm in running, if you must, balanced lines near to metal structures for
a few inches.

3597. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 04:30:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo21a2gvq1@sparta.btinternet.com>
Source record: 105613

Radio amateurs and just as many professionals suffer from delusions of
accuracy where RF measurements are concerned.

Especially HF current and power measurememts.

Far too much importance is attached to names like GR and HP and Fluke rather
than their own abilitity to assess and sum the accumulation of measuring
errors.

--
=======================
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
=======================
"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0311011826.71f4c47f@posting.google.com...
> k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031101103546.10368.00000109@mb-m10.aol.com>...
> > >>But....Just using my built in
> > "BS" filter only, which rarely seems to fails me, and ignoring all
> > other influences, I still have to side with Tom. I still think the
> > current is fairly constant.<<
> >
> > >Nothing
> > >personal either way...But I have learned never to ignore my BS filter,
> > >so I'm going with it. :) MK
> > >
> >
> > Same here,
> > did your filter filtered out W5DXP pudding? The "theoretical" proof is
right
> > there. Or are you drinking the same coolaide as Tom? :-)
> >
> > Yuri
> >
> > Reality vs. Speculations? Duuuh?''
>
> Oh, purely speculation on my part. I have no easy way of really
> knowing the reality. There is a small part that keeps bugging me, but
> I'd have to see for sure where he is measuring the currents. I missed
> the pix on the site. I'll assume for now he measured at each end of
> the coil, pretty much at the connection to the mast or whip. The part
> the bugs me is a possible stunting of the current at the top of the
> coil due to the capacitance it is looking at, at the end of the coil.

> To my thinking, once you leave the coil, even right at the end, you
> should see a reduction of current, compared to say even a turn or two
> from the top of the coil. I'm just wondering if this may be giving a
> false indication of the true currents within the coil,if he is
> measuring slightly outside of the coil. I'd be more satisfied if he
> could measure a few turns from each end "using a large, many turns,
> coil for 80 or 160" to get a general view within the windings
> themselves. But I realize this could be very difficult. You all may be
> totally correct. I'd just like to be a little better convinced before
> I totally agree. I expect a slight decrease in current at the top vs
> bottom. But I don't expect it to be large. I also don't expect the
> bottom of the coil to be "hot", with a radical current taper on the
> upper windings. The main thing I see to causing a reduction of
> current , is the stinger on top of the coil. "capacitance" I wonder if
> he is seeing the effects of that capacitance in his lower measurement?
> Only the shadow knows for sure....:/
> As far as the reverse currents Cecil mentions, I'd have to ponder that
> a while.
> Seems to me that could wildly vary from antenna to antenna depending
> on height, coil positions, any top loading, etc..Although it looks
> good on paper, I smell a hook. So I'd have to think about that more.
> BTW, this amount of current in the coil, is something I've also
> thought about myself. I've just come to the "different" conclusion
> it's fairly constant through the coil. I could always be wrong.
> Wouldn't be the first time.. But I need to see/hear a bit more to be
> convinced. MK

3598. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 04:34:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa48a19_4@corp.newsgroups.com>
Source record: 105614

Mark Keith wrote:
> As far as the reverse currents Cecil mentions, I'd have to ponder that
> a while.

While you are pondering, here is a quote from _Antenna_Theory_, by Balanis.

"Standing wave antennas, such as the dipole, can be analyzed as traveling wave antennas with waves propagating in opposite directions (forward and backward) and represented by traveling wave currents 'If' and 'Ib' in Figure 10.1(a)."

Standing wave antennas necessarily have standing waves caused by forward waves and reflected waves. Analyze any coil subjected to forward current and reflected current and you will be forced to agree that the current at one end of the coil is not the same as the current at the other end of the coil. W8JI is thinking lumped circuits when he should be thinking distributed networks. The phase shift through the coil changes the phase relationship between the forward current and reflected current, so of course, their superposed value will be different at each end of the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3599. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 05:21:39 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102002139.18720.00000078@mb-m29.aol.com>
Source record: 105615

Reg finally figured it out:
>
>Radio amateurs and just as many professionals suffer from delusions of
>accuracy where RF measurements are concerned.
>
>Especially HF current and power measurememts.
>
>Far too much importance is attached to names like GR and HP and Fluke rather
>than their own abilitity to assess and sum the accumulation of measuring
>errors.

Thank goodness we have your formulas, failproof programs and variety of speculations. Gentlemen, case is solved, closed. We can't measure it, we are all bunch of dumb delusional morons with faulty instruments who don't know how to use them. Current must be the same in the coil according to Rauch, Kirchoff, Ohm, Reg. So now make your antennas out of coils, you will have constant current radiator tip to tip with 300% efficiency and you can throw your instruments away. Reg has the formula for it, use it!

Seriously, I thank you Cecil, Fred and few others who enlightened our case, that's what I was hoping for and found it here. It will be the springboard for further development, it already gave me some ideas how to improve efficiency of loaded aerials. The others from the flat earth society showed their colors and they ain't pretty. Just like democRATs, when they are deficient in arguments they triviliarize and ridicule.
We are planning mobile antenna shootout here on east coast in the spring, so get your wares ready and see who is da king koil.

Yuri, da BU/m

3600. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 05:35:07 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102003507.18720.00000079@mb-m29.aol.com>
Source record: 105616

>I once had an occasion where the bottom of a coil did get warm, while
>the top did not. Yet my RF ammeters showed the same current on both
>ends. What was going on?
>

What was he measuring, where was the coil?
W9UCW used 100 mA at the bottom, I doubt that this would "cook" the coil. You see the pictures, they are good quality coils and he use two meters and flippped the coil to eliminate possible error as described here.

>I ultimately determined that the soldered connection from the coil to
>the lower antenna mast (for experimentation, it was copper) was adding
>some undesireable resistance. Solder is not a particularly good
>conductor of electricity. I copper-plated over the solder joint. Not
>only did the bottom section of the coil no longer get warm, but the
>two RF ammeters both showed about 20% more current flowing in the
>antenna. And my far-field instruments showed a 1.5dB increase in field
>strength.
>

Again, put on the fricken Hustler 80m resonator, feed it 100W and feel it! No meters, no hokus pokus, just "naked" antenna.

>
>This is one example of being fooled....If you took coil temp at face
>value, you would think the current taper was quite steep, judging from
>the temp's of the windings. But nope...A resistive connection seemed
>to be the culprit. Note that his meters showed the same current on
>both ends. :/ You can see why I'm afraid of that "hook" that usually
>is lurking ready to bite at a moments notice.
>Don't worry, if you are right, it will come out in the end. But that
>hook...Ouch.. MK
>

One insufficiently described measurement is enough to throw rest out of the window? W9UCW has shown data from various measurements and positions of the coil (pictures how it was done) and W5DXP backed it up with explanation of reflected wave and simulation and comparison with loading stub. It came out, this is the ned. If you choose not to believe, its a free country :-)

Yuri

3601. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 06:10:17 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102011017.05775.00000111@mb-m27.aol.com>
Source record: 105617

More pudding!

I added picture of current distribution when using inductance in the form of loading stub as described earlier and from Eznec file supplied by Cecil. It is at the end of the article at

http://www.k3bu.us/loadingcoils.htm

It shows the jump accross the stub, but when replaced by lumped inductor, the Eznec shows constant current accross the coil.

Yuri

3602. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 07:02:27 UTC
From: robert_king@usa.com
Message-ID: <66dbd28a.0311012302.82cd9c2@posting.google.com>
Source record: 105618
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

You said it brother. Myself and a couple of the regulars are checking into a way to remove all their racist posts. I will keep you all posted.

Bob

> > > > Daniel L. Jeswald (W4NTI)
> > > > 89 Wildman Road
> > > > Anniston AL
> > > > 36201
> > > >
> > > > Charles D. Brabham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
> > > > 78569
> > > > Phone: 956-347-3612

larry_jefferies@yahoo.com (Larry) wrote in message news:<61ed6067.0311011820.c8b041f@posting.google.com>...
> No wonder everyone is complaining about you two! I have been to
> Canada lots of times and have never met anyone half as stupid as you
> two.
>
> Posting racial slurs and including your call signs?, what the heck did
> you think would happen. Capital "L" loser....
>
> Larry
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message news:<VJXob.743$Oo4.620@newsread1.news.atl.earthlink.net>...
> > Go ahead Larry, make my day.
> >
> > Take your best shot.
> >
> > Put your best foot forward.
> >
> > All it proves is you can dish it out, but you can't take it.
> >
> > For your INFORMATION, if you care. Neither myself or Charles started this.
> > I recommend you throw off the Canadian goof, you know the one...your buddy
> > 'Private', Luigi or whatever dumb name he uses.

> >
> > You see I use my real name and standby what I say. If you think it's
> > racist, I call you a dumbass.
> >
> > See how it works?
> >
> > I would love to drop this subject. Tell you what...tell your buddy to shut
> > the hell up and I bet that works.
> >
> > Dan/W4NTI
> >
> >
> >
> > "Larry" <larry_jefferies@yahoo.com> wrote in message
> > news:61ed6067.0311011113.764a2a12@posting.google.com...
> > > I cannot belive this is actually not moderated out of this group
> > > somehow. Is there anyway we can kick these two losers off of this
> > > group?
> > >
> > > If anyone knows let me know.
> > >
> > > Larry
> > >
> > > > These two racists make me sick!!!!
> > > >
> > > > Daniel L. Jeswald (W4NTI)
> > > > 89 Wildman Road
> > > > Anniston AL
> > > > 36201
> > > >
> > > > Charles D. Brabham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
> > > > 78569
> > > > Phone: 956-347-3612
> > > >
> > > > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<7zSnb.9052$X22.8274@newsread2.news.atl.earthlink.net>...
> > > > > Guess what "Private"...two can play that game. I just sicked my buddy
> on
> > > > > you. He works for the Feds. They track down pedofiles and such. He
> is
> > > > > making you a 'special' case.
> > > > >
> > > > > See you in the funny papers.....payback is a mo fo...bro.
> > > > >
> > > > > Dan/W4NTI
> > > > >
> > > > > > I cannot believe these two clowns are still at it. I found some of
> > > > > > their original comments and sure enough they are as racist as they

> > > > > > come. People have a right not be discriminated against or abused
> > > > > > because of color, race and religion etc....
> > > > > >
> > > > > > If they don't stop making racist posts on this "RADIO" newsgroup I
> am
> > > > > > sure people in their own town will find out about them. They will b
> e
> > > > > > very embarassed very soon. Keep it up Charlie and Danny... Keep it
> > > > > > up....
> > > > > > >
> > > > > > >
> > > > > > > > Charles D. Braham (N5PVL)
> > > > > > > > Rt 2 Box 46
> > > > > > > > Lyford TX
> > > > > > > > 78569
> > > > > > > > >
> > > > > > > > > Asked about his astounding success in mowing down thousands of
> screaming
> > > > > > > > > raghead fanatics with very few casualties (sound familiar?) ,
> > the
> > Israeli
> > > > > > > > > general agreed to give the reporter the exclusive secret to his
> > > > > > > > > unprecedented military success...
> > > > > > > > >
> > > > > > > > > "Fight Arabs." he said.
> > > > > > > > >
> > > > > > > > > Charles Brabham, N5PVL
> > > > > > > > >
> > > > > > > > >
> > > > > > > > > Daniel L. Jeswald
> > > > > > > > > 89 Wildman Road
> > > > > > > > > Anniston AL
> > > > > > > > > 36201
> > > > > > > > >
> > > > > > > > > Wouldn't surprise me a bit. I thought from the git-go that Iraq
> > would
> > turn
> > > > > > > > > into a quagmire. Unfortunatly for those fighting the fight, it
> > is
> > serving a
> > > > > > > > > purpose. It is keeping the ragheads 'occupied'. And its not in
> Boise
> > > > > > > > > Idaho.
> > > > > > > > >
> > > > > > > > > As for your political commentary. As far as I'm concerned the
> Democratic
> > > > > > > > > party left me when they turned it over to NOW and Phyliss.
> > > > > > > > >
> > > > > > > > > That does NOT mean I support Baby Bush 100%. However lets see
> > how

> > things
> > > > > > > > > go.
> > > > > > > > >
> > > > > > > > > Dan/W4NTI

3603. Re: "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 07:19:25 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <ffb9qv0tufi0ofstrk5lv5qgl931gc2eg3@4ax.com>
Source record: 105469

On 02 Nov 2003 01:50:02 GMT, derswede@aol.comspam.com (AA) wrote:

><< "non-evasive" >>
>
>Think you mean "non-invasive"?? "Non-evasive" is what you should be when the
>blue lights come on behind you....
>
><< Does a mount exist where the mount clamps to either the glass or the
>metal of the rear hatch of the Blazer? >>
>
>Try the Diamond website...they have a nice mount which I'm looking at for a
>Ford Escape....the 400 series, I believe. It is adjustable for angle, which is
>important for my install. Not too pricey, and Diamond seems to make decent
>mounts.
>
>Good luck with it!
>A
>
The Diamond K400 is what I use and am pleased with it. It does have
adjustment for angle in two axis so with a bit of fiddling you'll be
able to maintain the antenna in a vertical position. The (short) coax
lead is about 1/8-inch diameter so you should be able to route it into
the vehicle without much fuss. The mount is available with an SO-239
or NMO mount.

Howard

3604. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 11:09:45 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>
Source record: 105470
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Robert King" <robert_king@usa.com> wrote in message
news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> You said it brother. Myself and a couple of the regulars are checking
> into a way to remove all their racist posts. I will keep you all
> posted.

There is no way to remove racist posts by "Private" or "Larry". Sorry!

The "regulars" here have been using usenet for years, and do not have to speculate as to whether posts can be "removed" from usenet. They already know better.

Amazing how consistently ignorant the little "racist" group that has invaded this newsgroup is.

Sooner or later they will all take a hike, and we can get back to discussing amateur radio.

Charles Brabham, N5PVL

3605. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 11:28:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa4eafc_1@corp.newsgroups.com>
Source record: 105471

Yuri Blanarovich wrote:
> Current must be the same in the coil according to Rauch, Kirchoff,
> Ohm, Reg.

Kirchhoff and Ohm were not wrong. For a lossless coil, the forward current magnitude must be the same in the coil and the reflected current magnitude must be the same in the coil. But the net current is the sum of those two component waves which have phase angles rotating in opposite directions. The basic problem is using lumped circuit calculations for a distributed network problem, a well known no-no.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3606. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 11:44:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vq9rg8inqgbmdb@corp.supernews.com>
Source record: 105472

I haven't had the time to participate in this, but in a brief look, it looks pretty silly. Of course EZNEC shows no current difference across a load. The EZNEC model of a load has zero length, so the current at both terminals has to be the same. You will see a current change over the length of a model of a conductor, because it does have length. The coil in the web site pictures certainly has length, so why should you be surprised to find a current change over its length? Did the experimenter perhaps do the same test with the meters placed the same distance apart with just a conductor in between? Would there be some great revelation in finding that the current was different at the two points?

I was intrigued by the claim that a toroid measured significantly different from one end to the other. I wonder if the tester tried reversing the meters to verify that he got the same reading in both cases. If he did, I'd be interested in learning more details.

Unfortunately, the main objective of the web site seems to be to insult Tom, W8JI, rather than to be objective. So in my mind that leaves the possibility open that the experimenter is more interested in finding evidence that would disprove Tom than in presenting carefully measured and objective data.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
> More pudding!
>
> I added picture of current distribution when using inductance in the form of
> loading stub as described earlier and from Eznec file supplied by Cecil. It is
> at the end of the article at
>
> http://www.k3bu.us/loadingcoils.htm
>
> It shows the jump accross the stub, but when replaced by lumped inductor, the
> Eznec shows constant current accross the coil.
>
> Yuri

3607. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 11:57:57 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <9j6pb.12413$zr.9745@newssvr14.news.prodigy.com>
Source record: 105473
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Oh, we gotta be shaking in our boots NOW! Haw Haw Hawr! :D

A bity of history on: Fighting Arabs

That reminds me of an interview that occurred back in 1967, right after the Israeli 6-day war. Israel had been attacked on all sides by a number of raghead states, who were determined to murder every Israeli man, woman, and child in Israel. (According to the raghead newspapers of the time.)

Of course we all know what happened. Despite having almost no outside support, and with only a few obsolete old French aircraft, the Israelis thoroughly kicked every one of those ragheads countries' asses, taking some of their land from them instead, just to teach the uncivilized scum a little lesson.

Asked about his astounding success in mowing down thousands of screaming raghead fanatics with very few casualties (sound familiar?) , the Israeli general agreed to give the reporter the exclusive secret to his unprecedented military success...

"Fight Arabs." he said.

As for being called a "bigot" by an apologist for ragheads, I couldn't work up too much concern over that.

Historical note: Almost every african who was ever captured and sold in the americas to slavery was captured by arab slavers who had been infesting the congo basin for more than five hundred years. They were there centuries before the brief opening of the market for slaves in america, and were there long after it closed.

The arab slavers would typically take an entire village at a time, murdering anybody who was either strong enough to resist, or too weak to make the long walk on a long, heavy chain to market. Pregnant women and small children were typically murdered because they did not travel well. There is documented evidence of arab slave-raids in the congo basin going on as late as the mid-1950's. The great majority of the african natives captured over those centuries were of course used by the arabs themselves.

The progeny of the africans who were sent to the americas are living free lives in a free country today. As far as can be seen, there are no surviving progeny from the much greater number of africans who did not go to the americas but instead were used by the arabs. Perhaps this is so because

castration of slaves has always been a common practice among the arabs.

... So when an apologist for this uncivilized, backward and violent tribal culture calls me a "bigot", I can't help but smile at the irony there.

So the anonymous anti-american Trolls alternately whine and threaten, just like a coy dog.

(Yawn)

Charles Brabham, N5PVL

3608. Re: "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 14:45:27 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <bM8pb.85725$Tr4.211935@attbi_s03>
Source record: 105474

Look at Larsen through the glass.

Todjk wrote:
> I am needing to find a "non-evasive" (no drilling) solution for
> mounting a 144/440 mobile antenna in my 2003 Chevy Blazer.
>
> I am trying to see if there is some kind of solution that does not
> involve magnetic roof mounts.
>
> Does a mount exist where the mount clamps to either the glass or the
> metal of the rear hatch of the Blazer?
>
> Any advice is appreciated.
>
> Todd N9ZWY

3609. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 14:51:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa51aac$1_3@corp.newsgroups.com>
Source record: 105475

Roy Lewallen wrote:
> I haven't had the time to participate in this, but in a brief look, it
> looks pretty silly. Of course EZNEC shows no current difference across a
> load. The EZNEC model of a load has zero length, so the current at both
> terminals has to be the same.

It appears that EZNEC also doesn't account for phase shifts across
a zero length coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3610. Re: MFJ 993 Auto Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 16:05:18 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA52B3E.CF5C9107@cwis.net>
Source record: 105476

Tom,
I think they need to sell a few first.
'Doc

3611. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 16:06:25 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311020806.35ac1a8d@posting.google.com>
Source record: 105477

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031102003507.18720.00000079@mb-m29.aol.com>...
> >I once had an occasion where the bottom of a coil did get warm, while
> >the top did not. Yet my RF ammeters showed the same current on both
> >ends. What was going on?
> >
>
> What was he measuring, where was the coil?
> W9UCW used 100 mA at the bottom, I doubt that this would "cook" the coil. You
> see the pictures, they are good quality coils and he use two meters and
> flippped the coil to eliminate possible error as described here.

NO , I didn't see the pictures. Like I said, they didn't load on that
site. All the pix load except his.
>
> >I ultimately determined that the soldered connection from the coil to
> >the lower antenna mast (for experimentation, it was copper) was adding
> >some undesireable resistance. Solder is not a particularly good
> >conductor of electricity. I copper-plated over the solder joint. Not
> >only did the bottom section of the coil no longer get warm, but the
> >two RF ammeters both showed about 20% more current flowing in the
> >antenna. And my far-field instruments showed a 1.5dB increase in field
> >strength.
> >
>
> Again, put on the fricken Hustler 80m resonator, feed it 100W and feel it! No
> meters, no hokus pokus, just "naked" antenna.

What would that mean? The hustler coil is known to be flawed, and
makes a poor coil to be tested in this manner. The effects of it's
metal end caps, and overall design problems are fairly well known. I
refuse to use such a lousy coil. You can feed my homebrew coil 100w
all day long, and you won't feel anything except the finger on the
mike button hand start to go numb from holding the key down.

>
> >
> >This is one example of being fooled....If you took coil temp at face
> >value, you would think the current taper was quite steep, judging from
> >the temp's of the windings. But nope...A resistive connection seemed
> >to be the culprit. Note that his meters showed the same current on
> >both ends. :/ You can see why I'm afraid of that "hook" that usually
> >is lurking ready to bite at a moments notice.
> >Don't worry, if you are right, it will come out in the end. But that
> >hook...Ouch.. MK

> >
>
> One insufficiently described measurement is enough to throw rest out of the
> window?

No, it's just a good example of why you have to watch out for that
"hook" when doing measurments like this.

W9UCW has shown data from various measurements and positions of the
> coil (pictures how it was done) and W5DXP backed it up with explanation of
> reflected wave and simulation and comparison with loading stub. It came out,
> this is the ned. If you choose not to believe, its a free country :-)

Yep, it sure is. I sure as hell won't have anything shoved down my
throat. I'm sorry, but you all haven't convinced me yet that your
measurements are any more accurate than the one I quoted on that same
web page. And the one I quoted did give a fairly good description of
how he went about it. The guy I quoted said he saw constant current
across the coil. How do you explain that? Should I automatically
dismiss his findings just because you all have a web page and a bunch
of pictures? How do I know who did the more accurate test? I DON'T!!!
So I will trust neither of you until I have further info. Thats life
in the big city, and like I said before, nothing personal. I'd subject
anyone else to the same rigid standards. Go ask the poor suckers
building EH antennas if I cut them any slack...:/ I imagine they hate
my guts the way I talk about their antenna.
I can take all the time I want to decide who is right. I'm in no big
hurry. You can't rush something like this when only a few even have
the gear set up to properly measure this. Like I said before, you all
may be perfectly correct. I have no problem with that. But I'm not
totally convinced yet that you may not be seeing the effects of some
measurement error. I just don't have enough info on the "hooks"
involved in doing a test like that. I've never done them. Obviously,
judging from the other guys results,and many other comments, there are
a few hooks lurking. He said he saw constant current across the coil,
and explained why he saw hot lower windings. And his explaination made
perfect sense to me. I give his test just as much weight as I do
yours at this point. Either one of you could be correct, and I have no
way of telling who is at this point. MK

3612. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 16:25:54 UTC
From: robert_king@usa.com
Message-ID: <66dbd28a.0311020825.a5dc994@posting.google.com>
Source record: 105478
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Nice try Charles Brabham, we all know who the racists are around here.
In fact anyone who has been on this newsgroup over the past month
knows about the crap you and Daniel have been spreading.

Captial "L" loser, the noose is closing..... Enjoy....

Bob

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...

> Asked about his astounding success in mowing down thousands of screaming
> raghead fanatics with very few casualties (sound familiar?) , the Israeli
> general agreed to give the reporter the exclusive secret to his
> unprecedented military success...
>
> "Fight Arabs." he said.
>
> Charles Brabham, N5PVL

> > > > Daniel L. Jeswald (W4NTI)
> > > > 89 Wildman Road
> > > > Anniston AL
> > > > 36201
> > > >
> > > > Charles D. Brabham (N5PVL)
> > > > Rt 2 Box 46
> > > > Lyford TX
> > > > 78569
> > > > Phone: 956-347-3612

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>...
> "Robert King" <robert_king@usa.com> wrote in message
> news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> > You said it brother. Myself and a couple of the regulars are checking
> > into a way to remove all their racist posts. I will keep you all
> > posted.
>
> There is no way to remove racist posts by "Private" or "Larry". Sorry!
>
> The "regulars" here have been using usenet for years, and do not have to
> speculate as to whether posts can be "removed" from usenet. They already

> know better.
>
> Amazing how consistently ignorant the little "racist" group that has invaded
> this newsgroup is.
>
> Sooner or later they will all take a hike, and we can get back to discussing
> amateur radio.
>
> Charles Brabham, N5PVL

3613. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 16:30:46 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311020830.5a06d482@posting.google.com>
Source record: 105480

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fa48a19_4@corp.newsgroups.com>...
> Mark Keith wrote:
> > As far as the reverse currents Cecil mentions, I'd have to ponder that
> > a while.
>
> While you are pondering, here is a quote from _Antenna_Theory_, by Balanis.
>
> "Standing wave antennas, such as the dipole, can be analyzed as traveling
> wave antennas with waves propagating in opposite directions (forward and
> backward) and represented by traveling wave currents 'If' and 'Ib' in
> Figure 10.1(a)."
>
> Standing wave antennas necessarily have standing waves caused by forward
> waves and reflected waves. Analyze any coil subjected to forward current
> and reflected current and you will be forced to agree that the current
> at one end of the coil is not the same as the current at the other end
> of the coil. W8JI is thinking lumped circuits when he should be thinking
> distributed networks. The phase shift through the coil changes the
> phase relationship between the forward current and reflected current, so
> of course, their superposed value will be different at each end of the coil.

How much though? What would be an average ratio difference you would
be likely to see on a 8 ft center loaded whip? Or lets go one
better...What would be a likely "worse case" scenario? Will this vary
from antenna to antenna? I would think so. I've never said there would
not be a difference. I actually expect a small difference. But I still
don't think it would be a large amount. Will this change in value be
enough to cause large errors in modeling these antennas? It's already
obvious to me that any info I may gleen from these tests will have no
impact on the position of my loading coils, being I already use them
at the optimum heights. Or as close as physically possible anyway. So
any info gleaned from these tests would only be useful from a modeling
aspect. And I'm not in a position to really comment on that too much.
I don't design modeling engines. Is it your opinion that the modeling
we now see with these antennas and coils is quite flawed? It's obvious
Yuri seems to think so. Myself, I really don't know at this point.
I've never worried about it too much. I don't model shorter than 1/4
wave verticals. MK

3614. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 17:03:28 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102120328.23201.00000123@mb-m20.aol.com>
Source record: 105481

>
>I haven't had the time to participate in this, but in a brief look, it
>looks pretty silly. Of course EZNEC shows no current difference across a
>load. The EZNEC model of a load has zero length, so the current at both
>terminals has to be the same. You will see a current change over the
>length of a model of a conductor, because it does have length. The coil
>in the web site pictures certainly has length, so why should you be
>surprised to find a current change over its length?

W8JI used it as a "proof" that current in the loading coil is virtually the same at both ends. We were not surprised, but W8JI was insisting that it is, used Eznec to prove it (go see his web site) and ridiculed us.

>Did the experimenter
>perhaps do the same test with the meters placed the same distance apart
>with just a conductor in between? Would there be some great revelation
>in finding that the current was different at the two points?

Not to us, but see W8JI arguments speculating and "knowing" that current must be the same.

>I was intrigued by the claim that a toroid measured significantly
>different from one end to the other. I wonder if the tester tried
>reversing the meters to verify that he got the same reading in both
>cases. If he did, I'd be interested in learning more details.

I believe he did use the same method, and W9UCW can answer that. Looks like you are also not getting the main point of the argument. Appears that the rule is: "loading inductance (whatever form) inserted in the radiating element exhibits current magnitudes at its ends corresponding to the current in the length of radiator in electrical degrees that it replaces." Replacing inductance with piece of wire won't do the simulation, it has to have properties of inductor (replacing radiator's segment in degrees, inductance). Toroid, loading stub, and lumped inductors do the same thing.

>Unfortunately, the main objective of the web site seems to be to insult
>Tom, W8JI, rather than to be objective. So in my mind that leaves the
>possibility open that the experimenter is more interested in finding
>evidence that would disprove Tom than in presenting carefully measured
>and objective data.

Not so, first I posted on eHam.net fact that current is different at the ends of loading coil. To which W8JI rode in with his "answers" and ridiculed me in public (I don't know the laws, didn't read the books, etc.) to which I responded in kind, provided proof and defended my (and others) position. Because this has happened about fifth time (he did it to others too) I simply

will not take the crap and bite back. He is parading as a knowitall guru and pontificating with sometimes erroneous information. If anyone questions or challenges that, he does his routine. If you read the trail from the start you would get the picture. If he discussed the matters in a civil manner, there would be no problem, we can exchange arguments, learn something and mainly give a credit where is due. That's what professionals do. He first argues wrong, then goes away for a while and then emerges with change as a guru or inventor. That does not give hams good name and is poor example for those no-coders coming into ham radio.
From the past postings, you could probably see that I can discuss the subjects in a civil manner, but when someone who is wrong starts pulling out smart ass remarks and ridicule, the gloves are off and I will defend the truth to the end. It is not just proving Tom wrong, it is to set the record straight, to bring aspect of antenna engineering to light (after 50 years of perpetuation of wrong in some antenna books), to alert software designers to the problem so they can accommodate the proper procedure or workarounds. I hope you can see how inaccurate results will EZnec produce if you simply inserted 0 size inductors in elements of 3 el. 80m shortened parasitic beam. Magnitudes and current distribution will be off, producing skewed results. Optimizing programs will be chasing wrong tail.

Again, I apologize for the tone, but I will not give in to the bully. If he doesn't learn and shape up, I will be at his case, pointing out the wrongs that he is disseminating (he has some more on his web site).

We were hoping that you were around, following the discussions, helping to point where we are wrong, suggest workarounds or proper procedure for modeling and we are willing to help with testing and verifications. Cecil brought some insight from the theoretical side, I (and W9UCW?) can do measurements and all this can bring greater understanding of the phenomena, rather than propagating misconceptions and wrong ideas.
I found a lot more help and expertise on this NG than on eHam.net no-code flat earth society, for which I am grateful.

Can we now look at the modeling problems? Seems that Cecil's way of substituting the lumped inductance with loading stubs allows closer approximation of configuration for the modeling programs. But this can still distort the true picture. I would like to point out, that W6?? replaced loading stubs in 3 el. 80m KLM beam with coils and the performance of the beam, especially pattern improved tremendously. So it looks like loading wires and radiation from them (folded along the element) upset the current distribution and resulting deterioration of performance. (So much for nice, low loss loading.) This was done, tested, measured and verified, no speculations. Is there better way of modeling the case, can we use cosine of degree of electrical length of wire that coil replaces?

>Roy Lewallen, W7EL

Yuri, K3BU

3615. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 17:09:08 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <p04aqv4t37jljmdsta5uvj9rkr72clpkl9@4ax.com>
Source record: 105482

On Sun, 02 Nov 2003 03:44:03 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

|I haven't had the time to participate in this, but in a brief look, it
|looks pretty silly. Of course EZNEC shows no current difference across a
|load. The EZNEC model of a load has zero length, so the current at both
|terminals has to be the same. You will see a current change over the
|length of a model of a conductor, because it does have length. The coil
|in the web site pictures certainly has length, so why should you be
|surprised to find a current change over its length? Did the experimenter
|perhaps do the same test with the meters placed the same distance apart
|with just a conductor in between? Would there be some great revelation
|in finding that the current was different at the two points?

I too have been lurking and while I didn't spend any time reading the
eham stuff what was going on here got me looking at a model of this
situation.

I used MultiNEC to invoke EZNEC for all calculations. I modeled a
shorter-than-quarter-wavelength vertical, loaded with an inductor, all
of this over perfect ground. Using MultiNEC, I used equations to
change the length of the radiator, the position of the inductor, keep
the segment length as short as guidelines allow and resonate the
result after each change.

Nothing I did solved this argument but I did make a couple of slightly
related observations. Unless I'm mistaken (always a distinct
possibility):

1) When the radiator is electrically very short and near resonant the
current does not follow the classic patterns shown in most of the ham
literature, i.e. nearly constant below the inductor and close to a
straight line taper above. The current actually peaks at the inductor;
in other words, the highest current point on the structure is at the
inductor.

Hanson's paper (Robert C. Hanson, "Optimum Inductive Loading of Short
Whip Antennas", IEEE Transactions On Vehicular Technology, Vol VT-24,
No. 2, May 1975, pp 21-29) shows this, although his graphs show a
steady decrease in current from the feedpoint to where the peaking
begins. I did not see that, but instead a steadly increasing current
from the feedpoint to the current peak.

Not only that, the peaking is almost independent of inductor Q.
"Almost" meaning that my model shows that the current is actually
slightly higher in a lower Q inductor.

2) The structure Q, defined as the change in reactance with respect to frequency, is independent of inductor Q.

3) For a give length radiator, gain is unaffected by where the inductor is located along the length of the radiator and by inductor Q.

If 3 is correct then I can remove the inductor from the radiator without effecting the gain and place it before the feedpoint to resonate the structure. Once out of the radiator, the current through the inductor is constant. Just like it is in the antenna if it has zero length.

By now you're all saying, "Huh?" But remember, this is for an antenna over perfect (zero loss) ground.

So instead of worrying about perfecting our antennas, we should be trying to perfect ground and/or zero length loading coils.

|
|I was intrigued by the claim that a toroid measured significantly
|different from one end to the other. I wonder if the tester tried
|reversing the meters to verify that he got the same reading in both
|cases. If he did, I'd be interested in learning more details.

Considering that *anything* inserted in the structure upsets the current distribution, as Roy says above, why wouldn't the answer be different. Even the toroid, or the distance between the insertion points, have *some* length.
|
|Unfortunately, the main objective of the web site seems to be to insult
|Tom, W8JI, rather than to be objective. So in my mind that leaves the
|possibility open that the experimenter is more interested in finding
|evidence that would disprove Tom than in presenting carefully measured
|and objective data.

Eureka!

Wes Stewart N7WS

3616. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 17:23:16 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102122316.23201.00000124@mb-m20.aol.com>
Source record: 105483

Mike,
the differences in current are in order of 40 - 60%, that is significant. The lower the band, the shorter the antenna, the bigger the effect, the more important where the coil is. It will vary from antenna to antenna, depending on the coil "shortening" factor. If the coil is closer to the feedpoint, the current difference is lees, but efficiency suffers most. As you move coil up the radiator, turns increase, current difference increases and effciency goes up. If you replace (part of) coil with top loading, current differences decrease (0 difference at 0 deg. long coil) and your efficiency goes up. Efficiency or radiated power of loaded antenna is roughly proportional to the area under the corresponding current curve of the remaining (straight) radiator. Coil "eats" part of the radiator and its current carrying (radiating) capabilities, this is why the current will be significantly different at the ends of the coil. I hope this illustrates the situation?

As Cecil showed, modeling is not accounting for the effect and now that Roy is on, we hope to sort things out and come up with ways to best implement the phenomena in modeling programs. Right now, it appears that the best way to approximate the effect is to use loading stubs of the same inductance as intended coil.

Barry and Cecil agreed to cooperate on the article describing in detail (and in civil manner :-) this subject and we hope that Roy will join us adding the modeling aspect to it.

Yuri, K3BU/m

3617. MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 17:40:10 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fa5416a$0$22179$ba620e4c@reader3.news.skynet.be>
Source record: 105484

Hi there,

I want to buy an antenna analyser HF and/or VHF. Could be MFJ or Autek. But I don't have experience with theses equipments. Following you what could be the best one ?

73 de ON5MJ - Jacques.

3618. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 18:14:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102131401.23201.00000128@mb-m20.aol.com>
Source record: 105485

>NM5K:

>NO , I didn't see the pictures. Like I said, they didn't load on that
>site. All the pix load except his.
>>

Then you are missing a lot.
I don't know what the problem with eHam.net site is, I uploaded all the pictures the same way, some showed, some not. This is why I posted link to my page
http://www.k3bu.us/loadingcoils.htm
which has the pictures, also RIGHT drawings from ON4UN book, latest modeling of W5DXP stub loaded G5RV and some selected comments explaining the phenomena. Check it out.

>> Again, put on the fricken Hustler 80m resonator, feed it 100W and feel it!
>>No meters, no hokus pokus, just "naked" antenna.
>
>What would that mean? The hustler coil is known to be flawed, and
>makes a poor coil to be tested in this manner. The effects of it's
>metal end caps, and overall design problems are fairly well known. I
>refuse to use such a lousy coil. You can feed my homebrew coil 100w
>all day long, and you won't feel anything except the finger on the
>mike button hand start to go numb from holding the key down.
>

Another "very well known fact" from W8JI's teachings? Metal caps are at both ends, top would feel the same then, it doesn't. Hustler coil is "lousy" because uses aluminum wire to achieve "match" through some loss and that is additional loss. But from the point of view as inductor, it is uniformly wound solenoid, same wire and diameter, so according to I2R law, the heat developed in it is proportional to the square of current. If there is more heat at the bottom, then irrefutably there is more current flowing at the bottom.

Here is the shocker:
When W9UCW bunch was measuring various coils, they also compared that perfect coil as you and I have (heavy wire, proper form factor, good connections) to "lousy" Webster Banspanner sliding coil (aka cheap screwdriver) they found negligible difference in measured signal strength. They rechecked everything scratched their heads, but that was it. So another myth about the quality of coil (resistance of course applies, but is minuscule) importance. Now when we look at it from the point of view of effect of the coil on the efficiency of antenna, it is explanatory. Coil replaces portion of radiator that is not there anymore, so the significance of its quality is not as important as the position of the coil on the radiator (area under current curve). Of course the ohmic losses are a factor, but that is minuscule (ohms or two) versus reduction in

current flowing in remaining radiator. I like and have big fat coils, but looks like they can be optimized better, perhaps heavier wire in first few turns, slimmer construction, less wind load, but placed higher up on the mast. So there is another one you don't have to believe, I sure was surprised. Measure it!!!

>Yep, it sure is. I sure as hell won't have anything shoved down my
>throat. I'm sorry, but you all haven't convinced me yet that your
>measurements are any more accurate than the one I quoted on that same
>web page. And the one I quoted did give a fairly good description of
>how he went about it. The guy I quoted said he saw constant current
>across the coil. How do you explain that? Should I automatically
>dismiss his findings just because you all have a web page and a bunch
>of pictures? How do I know who did the more accurate test? I DON'T!!!

I am not a salesman, I will not try to convince you of anything. I can elaborate and answer some questions and it is up to you to believe it or not. You can believe engineers with education, their experience and results, or you can believe some "technical impostor" as K7GCO phrased it.

You could see almost constant current across the coil if the coil is at the base of quarter wave radiator, has heavy windings and is replacing relatively short electrical length of the radiator. Did he mention what coil, where was the coil placed? We have methods and pictures of W9UCW tests on various bands at different positions, we have yet to get objections or pointed out errors in his setup. We don't know much about the other one. W8JI said that he measured thousands of loading coils, modeled them and found no difference. He is obviously lying. He has yet to tell us about ONE measurement I asked him to do. You believe what you want. As I mentioned we will write concise article on the subject and you can take it from there or stick with Rauchians.

I sure enjoyed this exercise, learned from it a thing or two and I am looking forward to implement some of the stuff (measure it too) in the design of new loaded mobile and low band antennas. As they say on FreeRepublic.com, this is series and hugh :-)

Yuri, K3BU

3619. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 18:14:57 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <BQbpb.2409$Oo4.848@newsread1.news.atl.earthlink.net>
Source record: 105486
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:9j6pb.12413$zr.9745@newssvr14.news.prodigy.com...
> Oh, we gotta be shaking in our boots NOW! Haw Haw Hawr! :D
>
> A bity of history on: Fighting Arabs
>
> That reminds me of an interview that occurred back in 1967, right after
the
> Israeli 6-day war. Israel had been attacked on all sides by a number of
> raghead states, who were determined to murder every Israeli man, woman,
and
> child in Israel. (According to the raghead newspapers of the time.)
>
> Of course we all know what happened. Despite having almost no outside
> support, and with only a few obsolete old French aircraft, the Israelis
> thoroughly kicked every one of those ragheads countries' asses, taking
some
> of their land from them instead, just to teach the uncivilized scum a
little
> lesson.
>
> Asked about his astounding success in mowing down thousands of screaming
> raghead fanatics with very few casualties (sound familiar?) , the
Israeli
> general agreed to give the reporter the exclusive secret to his
> unprecedented military success...
>
> "Fight Arabs." he said.
>
> --
>
> As for being called a "bigot" by an apologist for ragheads, I couldn't
work
> up too much concern over that.
>
> Historical note: Almost every african who was ever captured and sold in
the
> americas to slavery was captured by arab slavers who had been infesting
the
> congo basin for more than five hundred years. They were there centuries
> before the brief opening of the market for slaves in america, and were
there

> long after it closed.
>
> The arab slavers would typically take an entire village at a time,
murdering
> anybody who was either strong enough to resist, or too weak to make the
long
> walk on a long, heavy chain to market. Pregnant women and small children
> were typically murdered because they did not travel well. There is
> documented evidence of arab slave-raids in the congo basin going on as
late
> as the mid-1950's. The great majority of the african natives captured over
> those centuries were of course used by the arabs themselves.
>
> The progeny of the africans who were sent to the americas are living free
> lives in a free country today. As far as can be seen, there are no
surviving
> progeny from the much greater number of africans who did not go to the
> americas but instead were used by the arabs. Perhaps this is so because
> castration of slaves has always been a common practice among the arabs.
>
> ... So when an apologist for this uncivilized, backward and violent tribal
> culture calls me a "bigot", I can't help but smile at the irony there.
>
> So the anonymous anti-american Trolls alternately whine and threaten, just
> like a coy dog.
>
> (Yawn)
>
> Charles Brabham, N5PVL
>
>
>

Yeah buddy....I'm all lathered up by the same guy, using different names.

Dan/W4NTI

3620. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 18:40:25 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102134025.23201.00000130@mb-m20.aol.com>
Source record: 105487

>N7WS:
>
>I used MultiNEC to invoke EZNEC for all calculations. I modeled a
>shorter-than-quarter-wavelength vertical, loaded with an inductor, all
>of this over perfect ground.

How did you model inductor, as physical zero length inductance?
Did you try substituting (coil) inductor with equal inductance loading stub?
Did you try one of the situations (band, antenna/coil size) that W9UCW
describes in his measurements?
He used almost "perfect" ground of 60 radials for measurement. Results will be
offest by some amount due to varying ground conditions (at very low angles),
but in the same way and this is not the subject of the argument.

>>The current actually peaks at the inductor;
in other words, the highest current point on the structure is at the
inductor.<<

That's what W8JI calculated in EZnec, does it make sense? Like 2+2 is 4.5? Why
would inductor "suck" the current up? We should then use "those" inductors to
suck the current all the way to the top of the whip - perfect antenna?
Cecil, can you 'splain that?

>>3) For a give length radiator, gain is unaffected by where the
inductor is located along the length of the radiator and by inductor
Q. <<

(If the inductor is zero length?)
This should be huge screaming flag that there is something drastically wrong
with your whole approach. Look at any mobile shootout results and you will see
10 - 20 dB differences, ask Cecil, he wittnessed them.

Looks like we exhausted reasoning, facts, measurements, found what we wanted,
unless there is breakthrough in capturing the effect in modeling software we
are at the end of the rope.
Yea, Eureka!
Thanks!

Yuri, K3BU/m

3621. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 18:49:17 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311021049.7738292b@posting.google.com>
Source record: 105488

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031102003507.18720.00000079@mb-m29.aol.com>...
> >I once had an occasion where the bottom of a coil did get warm, while
> >the top did not. Yet my RF ammeters showed the same current on both
> >ends. What was going on?
> >
>
> What was he measuring, where was the coil?
> W9UCW used 100 mA at the bottom, I doubt that this would "cook" the coil. You
> see the pictures, they are good quality coils and he use two meters and
> flippped the coil to eliminate possible error as described here.

OK, I found the other website and saw the pictures. But this leads me
back to my previous post, which no one has commented on yet. To me,
the upper meter is actually measuring a point above the coil. But it
hard to tell from the pix exactly where the coupler is mounted. The
main question I would like answered is, would the presence of the
capacitive whip above the coil effect the current reading you got,
being you seem to be measuring slightly above the coil? To me, it
seems it would being you are not measuring inside the coil windings
themselves, but slightly above the coil. If this capacitance is the
cause of the decreased reading, then yes, it would be totally normal
to see the same results if you flipped the coil and meters. MK

3622. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 18:54:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa553ac_6@corp.newsgroups.com>
Source record: 105489

Mark Keith wrote:
> The guy I quoted said he saw constant current
> across the coil. How do you explain that?

Constant current across the coil is one of the possiblities.
Increasing current across the coil is one of the possibilities.
Decreasing current across the coil is one of the possibilities.
It all depends upon where the coil is inserted in the antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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3623. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 19:11:26 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102141126.23287.00000158@mb-m20.aol.com>
Source record: 105490

>But this leads me
>back to my previous post, which no one has commented on yet. To me,
>the upper meter is actually measuring a point above the coil. But it
>hard to tell from the pix exactly where the coupler is mounted. The
>main question I would like answered is, would the presence of the
>capacitive whip above the coil effect the current reading you got,
>being you seem to be measuring slightly above the coil? To me, it
>seems it would being you are not measuring inside the coil windings
>themselves, but slightly above the coil. If this capacitance is the
>cause of the decreased reading, then yes, it would be totally normal
>to see the same results if you flipped the coil and meters. MK
>

There is no coupler involved. Meter is inserted between the end of the coil and remaining mast or whip. Thermocouple meters have negligible insertion effect, they act as perhaps an inch of wire inserted in the circuit, which is easily compensated for by retuning either the antenna or moving the frequency. Their meter mechanism is virtually immune to any RF field distortion. They are specially designed to measure the RF current with minimum impact on the measured circuit and to be interfered with. If you can grab one at the flea market get it!
You could measure current on each turn if you managed to cut it and insert the ammeter. It would show cosine curve decrease across the coil. Measuring it at the first turn, end of the coil or inch or two above or below the coil produces virtually the same results, difference in the current there is really minuscule.

Another close way of measuring the current is to fashion the current probe/coupler made of (split) ferrite ring, have few turns of pickup wire, rectifier and small meter. (There is a description on one of G something web pages.) You could slide this contraption up and down the radiator and measure the current. Of course you have to back off and not to touch anything in vicinity, otherwise you will detune the antenna setup and get erroneous results. The most accurate and practical way is the way W9UCW did it, he read the meters with binoculars from the distance.

Yet another way is to use thermal effect, use thermal strips, paste it along the coil, put some power to it and watch the colors change. Not terribly accurate, but proof that meters do not disturb the circuit or distort the measurements.
You can't use probes, scopes or anything with wires attached to it, it detunes the antenna and gives useless results

Yuri, K3BU.us

3624. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 19:23:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa55a53$1_6@corp.newsgroups.com>
Source record: 105491

Mark Keith wrote:
> How much though? What would be an average ratio difference you would
> be likely to see on a 8 ft center loaded whip?

A lot on 75m. Not much on 12m.

> Or lets go one
> better...What would be a likely "worse case" scenario?

The worse case I can think of is a short center-loaded whip
on 160m. :-) The coil is almost all of the necessary 1/4WL.

> Will this vary from antenna to antenna? I would think so.

Of course. It is all capable of being calculated.

> Is it your opinion that the modeling
> we now see with these antennas and coils is quite flawed?

The antenna current reported by EZNEC is inaccurate because of
simplified assumptions. EZNEC assumes that the current doesn't
change through the single point inductive load. Therefore, EZNEC
cannot be used to prove that the current doesn't change.
--
73, Cecil http://www.qsl.net/w5dxp

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------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3625. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 19:34:08 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Q_cpb.88450$e01.291010@attbi_s02>
Source record: 105492

I have only used the MFJ 259B. It meets all my needs.

Capabilities as listed in manual:

VSWR, coaxloss, capacitance, inductance, impedance [magnitude], return loss, reflection coefficient, distance to fault, resonance mode, percentage of transmitted power, test of stubs, velocity factor, Zo of transmission lines, beverage antennas, adjust tuners, adjust matching networks, test rf transformers, test baluns, test rf chokes.

Deacon Dave, W1MCE

3626. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 19:39:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa55e42_6@corp.newsgroups.com>
Source record: 105493

Yuri Blanarovich wrote:
> in other words, the highest current point on the structure is at the
> inductor.<<
>
> That's what W8JI calculated in EZnec, does it make sense? Like 2+2 is 4.5? Why
> would inductor "suck" the current up? We should then use "those" inductors to
> suck the current all the way to the top of the whip - perfect antenna?
> Cecil, can you 'splain that?

Again, the current can either stay the same, increase, or decrease through
an inductor depending upon where it is located. Has that statement sunk
in on anyone? If you install a coil 1/8WL up on a 1/2WL vertical, the
current through the coil will *INCREASE*. If you install it in the center,
the current magnitude will be the same in and out of the coil and opposite
in phase. If you install it 1/8WL from the top, the current will decrease
through the coil like it does on a 1/4WL mobile antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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3627. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 20:54:54 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031102155454.08069.00000067@mb-m07.aol.com>
Source record: 105494

>
>Again, the current can either stay the same, increase, or decrease through
>an inductor depending upon where it is located. Has that statement sunk
>in on anyone?

Yes,
to be more precise, we are actualy arguing about the case of resonant quarter wave vertical, as a typical mobile antenna.

Other losses, such as ground conditions, poor contacts, color of eyes are not considered here.

Yuri

3628. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 21:02:01 UTC
From: n3umh@hotmail.com
Message-ID: <3e7bb082.0311021302.66c87aeb@posting.google.com>
Source record: 105495

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bo2051cvs1@titan.btinternet.com>...
> > How would
> > one stiffen the overall draped loop though to prevent it being blown
> > near metal in a breeze?
> >
> ========================
>
> What's the matter with metal, steel, aluminium ?
>
> Are they not good, low-loss conductors?
>
> No harm in running, if you must, balanced lines near to metal structures for
> a few inches.

I have seen a method which involves inductive coupling between a pair
of single turn loops. I guess the idea is that you have a loop on the
tower and a loop on the mast (possibly both self resonant to present
the proper impedance to the ladder line). You make them coplanar and
close together so that they couple to each other, and connect the
ladder line to their terminals.

This, of course, only works for monobanders...

73,

Dan, N3UMH

3629. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 21:04:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqasbk6kgrtpd3@corp.supernews.com>
Source record: 105496

Of course it doesn't account for phase shifts of current, since there aren't any. It does account for voltage phase shift. It uses the same equations I learned in freshman circuits class. Perhaps they taught those same equations in Texas, too, but I can't be sure.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I haven't had the time to participate in this, but in a brief look, it
>> looks pretty silly. Of course EZNEC shows no current difference across
>> a load. The EZNEC model of a load has zero length, so the current at
>> both terminals has to be the same.
>
>
> It appears that EZNEC also doesn't account for phase shifts across
> a zero length coil.

3630. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 21:48:19 UTC
From: Ed <ed@nospam.com>
Message-ID: <XNCdnZMfrdk55jiiRVn-ig@comcast.com>
Source record: 105497

feel better now ? good

now please go away. you have nothing to contribute and have proved it
several times now.

"Bob Miller" <bxmiller@texas.netNOSPAM> wasted more bandwidth in a personal
attack news:5hkbqvgb5k6bdqvibfhbgpisk4r2hcfbga@4ax.com...
>> You really are a jerk. And that is not speculation.
>
> Bob
> k5qwg
>
>
>

3631. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 22:14:28 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <7pvaqvsm7b8u04i5qgnancnkup7j6cmotc@4ax.com>
Source record: 105498

On 02 Nov 2003 18:40:25 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

|>N7WS:
|>
|>I used MultiNEC to invoke EZNEC for all calculations. I modeled a
|>shorter-than-quarter-wavelength vertical, loaded with an inductor, all
|>of this over perfect ground.
|
|How did you model inductor, as physical zero length inductance?

Yes.

|Did you try substituting (coil) inductor with equal inductance loading stub?

Yes. No difference.

|Did you try one of the situations (band, antenna/coil size) that W9UCW
|describes in his measurements?

No. I only skimmed the other web sites. Didn't see anything there to
make me change my mind. A couple of ammeters separated by 10% of the
radiator length doesn't work for me. Might as well put one at the
bottom and one at the top.

|He used almost "perfect" ground of 60 radials for measurement. Results will be
|offest by some amount due to varying ground conditions (at very low angles),
|but in the same way and this is not the subject of the argument.

Perfect ground is perfect. Any number of radials doesn't approach
perfect ground.

|
|>>The current actually peaks at the inductor;
|in other words, the highest current point on the structure is at the
|inductor.<<
|
|That's what W8JI calculated in EZnec, does it make sense?

Yes.

|Like 2+2 is 4.5? Why
|would inductor "suck" the current up?

It doesn't "suck it up." Haven't you ever hear of circulating
current?

|We should then use "those" inductors to
|suck the current all the way to the top of the whip - perfect antenna?
|Cecil, can you 'splain that?
|
|>>3) For a give length radiator, gain is unaffected by where the
|inductor is located along the length of the radiator and by inductor
|Q. <<
|
|(If the inductor is zero length?)

Yes

|This should be huge screaming flag that there is something drastically wrong
|with your whole approach. Look at any mobile shootout results and you will see
|10 - 20 dB differences, ask Cecil, he wittnessed them.

Remember...perfect ground. Mobile antennas have almost no ground.
|
|Looks like we exhausted reasoning, facts, measurements, found what we wanted,
|unless there is breakthrough in capturing the effect in modeling software we
|are at the end of the rope.

My results compare more closely with Hansen's than anything else I've
seen put forward. I rest my case.

Wes Stewart N7WS

Later, I'm back to NASCAR at PIR.

3632. Numbnut Dumbass 8 Vomit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 23:00:10 UTC
From: "Ohio Ham"
Message-ID: <vqb33q7ofmd8f9@corp.supernews.com>
Source record: 105499
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

Is a disgrace to the Amateur Radio Community, and needs to be retired from operating in the amateur spectrum.

3633. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-02 23:11:03 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311021511.29ae8c7f@posting.google.com>
Source record: 105500

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031102131401.23201.00000128@mb-m20.aol.com>...
> >NM5K:
>
> >NO , I didn't see the pictures. Like I said, they didn't load on that
> >site. All the pix load except his.
> >>
>
> Then you are missing a lot.
> I don't know what the problem with eHam.net site is, I uploaded all the
> pictures the same way, some showed, some not. This is why I posted link to my
> page
> http://www.k3bu.us/loadingcoils.htm
> which has the pictures, also RIGHT drawings from ON4UN book, latest modeling of
> W5DXP stub loaded G5RV and some selected comments explaining the phenomena.
> Check it out.

I found them earlier...
>
> >> Again, put on the fricken Hustler 80m resonator, feed it 100W and feel it!
> >>No meters, no hokus pokus, just "naked" antenna.
> >
> >What would that mean? The hustler coil is known to be flawed, and
> >makes a poor coil to be tested in this manner. The effects of it's
> >metal end caps, and overall design problems are fairly well known. I
> >refuse to use such a lousy coil. You can feed my homebrew coil 100w
> >all day long, and you won't feel anything except the finger on the
> >mike button hand start to go numb from holding the key down.
> >
>
> Another "very well known fact" from W8JI's teachings?

No, just personal experiences. But I never had a heat issue with a
hustler. I never used one long enough to develop any heat...:/
Metal caps are at both
> ends, top would feel the same then, it doesn't. Hustler coil is "lousy" because
> uses aluminum wire to achieve "match" through some loss and that is additional
> loss.

Well that also. But I think the windings are also overly tight.
But from the point of view as inductor, it is uniformly wound
solenoid,
> same wire and diameter, so according to I2R law, the heat developed in it is
> proportional to the square of current. If there is more heat at the bottom,
> then irrefutably there is more current flowing at the bottom.

Well, not irrefutably. Obviously the other guy that tested had a case
that was excess resistence at the base of the coil. I'm not saying
this was a problem in your case, but he seemed to have no more heating
issues after he fixed the connection.
>
> Here is the shocker:
> When W9UCW bunch was measuring various coils, they also compared that perfect
> coil as you and I have (heavy wire, proper form factor, good connections) to
> "lousy" Webster Banspanner sliding coil (aka cheap screwdriver) they found
> negligible difference in measured signal strength. They rechecked everything
> scratched their heads, but that was it.

Actually, thats fairly old news. I had heard of that test months ago.
Maybe from more than one person. I think others have found the same
thing. And it doesn't surprise me one bit when mobiles are involved.
Ground losses almost always overshadow coil losses on a mobile.

So another myth about the quality of
> coil (resistance of course applies, but is minuscule) importance.

Well, it's not totally a myth. Coil losses can eat your lunch if you
want first rate performance. The hustler coils are a case in point.
They are pathetic compared to my coils. The difference on the air is
like night and day. But! If you have so much ground loss that it
overshadows the coil loss, even in that case, a better coil won't help
much.
In other words, the better the ground system, the more any coil
deficiencies will show up.

Now when we
> look at it from the point of view of effect of the coil on the efficiency of
> antenna, it is explanatory. Coil replaces portion of radiator that is not there
> anymore, so the significance of its quality is not as important as the position
> of the coil on the radiator (area under current curve). Of course the ohmic
> losses are a factor, but that is minuscule (ohms or two) versus reduction in
> current flowing in remaining radiator. I like and have big fat coils, but looks
> like they can be optimized better, perhaps heavier wire in first few turns,
> slimmer construction, less wind load, but placed higher up on the mast. So
> there is another one you don't have to believe, I sure was surprised.
> Measure it!!!

I have. I've been building different homemade mobile coils for about
13 years. I've come to the conclusion wire size is generally not very
important at all, AS LONG as the proper pitch/winding ratio is used.
Don't wind them too close together. My current coil uses thinner wire
than my old one. I much prefer a lighter coil. But I'm fairly sure it
actually works as well if not better than the heavier old one. It is
wider than the old one. "3 inch vs 2 inch"
>
>

>
> I am not a salesman, I will not try to convince you of anything. I can

> elaborate and answer some questions and it is up to you to believe it or not.
> You can believe engineers with education, their experience and results, or you
> can believe some "technical impostor" as K7GCO phrased it.

I'm not believing anyone. I'm going by my own experiences, and my own
gut hunches. "BS filter" :) W8JI has very little to do with any of my
ideas. His was just one viewpoint out of many.

>
> You could see almost constant current across the coil if the coil is at the
> base of quarter wave radiator, has heavy windings and is replacing relatively
> short electrical length of the radiator. Did he mention what coil, where was
> the coil placed? We have methods and pictures of W9UCW tests on various bands
> at different positions, we have yet to get objections or pointed out errors in
> his setup.

I think a lot of that is only a few lurking on there actually know
how, or have the equipment to make an accurate measurement. So most
wouldn't know if the setup could cause problems or not. I don't say
this lightly, as it appears to be quite a "hook" prone undertaking. I
sure don't have the setup to do it, or have even tried something like
that. I do know from messing around with fluorescent tubes and the
mobile antennas, that the electric field around the coil seems to be
very steady across, and abruptly decreases once the stinger begins.
This while quite possibly an erroneous assumption, led me to believe
the current across the coil is also fairly constant in direct relation
to that.

> You believe what you want. As I mentioned we will write concise article on the
> subject and you can take it from there or stick with Rauchians.

Why do you keep involving Tom in this? I have nothing to do with him.
Frankly, I find comments like "Raunchians" and "Flat Earthers" etc,
kind of tacky. So far I haven't accused you all of any "voodoo"
antenna magic, like I do say the EH bunch. I just want to make sure
all the bases are covered as far as the accuracy of the measurments,
and also the exact locations of the couplers. I still question the
accuracy of hooking the top coupler on the lower end of the stinger.
No matter how close the coil is....
>
> I sure enjoyed this exercise, learned from it a thing or two and I am looking
> forward to implement some of the stuff (measure it too) in the design of new
> loaded mobile and low band antennas. As they say on FreeRepublic.com, this is
> series and hugh :-)

There is no doubt that elevating the coil on a low band antenna
improves the current distribution. I've tested it many times, over and
over again. BUT! This will not model worth a hoot if you look at gain
numbers alone. Note Wes's recent post. If I remember right, most
programs will leave the gain pretty much the same, as you vary coil
height. They sure don't show the real world increases anyway...But you
want to include top loading if you want the best of the best. Omit

that, and it'll never happen. BTW, to my thinking, the capacitance is what draws the current through the coil. And I haven't tested it, but I bet the current taper above the coil is much more abrupt with a short stinger, than a longer one. There is no doubt a short stinger does a poor job of drawing current through the coil. Thats what kills the average ham sticks with the short stubby stingers. There is little capacitance to draw current through the coil. A large enough top hat will give you a fairly steady current distribution up the whip, regardless of the coil placement. Raising the coil in addition to the hat helps a bit more. But I think less so than with a non hatted antenna. Coil placement is critical if you run the low bands, and don't use a top hat. But thats nothing really new to people that fart with mobile antennas all the time. I think what you are doing is a good thing, and worthwhile. But I'd chill as far as Tom is concerned. You seem to be taking his criticisms a bit personal, and respond in kind. This all distracts greatly from the original point of the excercise. It's like the parasitic thing with the amps between him and Measures. Even after all the bickering, I'm still not totally sure what to believe as far as parasitic bangs in tube amps. The best answers seemed to get bogged down in the quagmire of constant bickering. :/ If I'm doing something I *think* is right, and someone disagrees, I'll assess it, and if I still think I'm right, I just ignore them. I think that would be your best course. It's his right to disagree with you. Nothing you can really do about it, and no point wasting energy, or stirring discontent over it. MK

3634. Re: What Exactly is a Radio Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 00:14:39 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <9e7bqvkvj7t5edeo3t2uf43u2lq7pseo45@4ax.com>
Source record: 105501

On Thu, 30 Oct 2003 15:48:01 +0100, "Thierry" <Thierry, see
http://www.astrosurf.com/lombry/> wrote:

>Hi,
>
>Here is an excellent website with explanations, full of animations:
>http://users.telenet.be/educypedia/electronics/javarf.htm
>
>My webiste also contain an explanation but it is written in French in
>section devoted to quantum physics.

I thought all quantum physics was written in "Greek"

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>

3635. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 00:23:34 UTC
From: jgboyles@aol.com
Message-ID: <20031102192334.23938.00000098@mb-m26.aol.com>
Source record: 105502

>You really are a jerk. And that is not speculation.

Bob, this guy is obviously a mental case, and there is nothing to be gained
getting our blood pressure up trying to reason with him. I am not.
73 Gary N4AST

3636. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 00:24:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa5a0fa$1_4@corp.newsgroups.com>
Source record: 105503

Roy Lewallen wrote:
> Of course it doesn't account for phase shifts of current, since there
> aren't any. It does account for voltage phase shift. It uses the same
> equations I learned in freshman circuits class. Perhaps they taught
> those same equations in Texas, too, but I can't be sure.

Roy,
We are talking about distributed networks. Of course, there is a phase
shift in the current as well as the voltage. You and W8JI seem to be
using lumped circuit analysis when you should be using distributed
network analysis. The center loading coil for a 75m mobile antenna
is an appreciable percentage of an electrical wavelength so you cannot
use your lumped circuit analysis without introducing errors.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3637. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 00:54:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo48vlcfr1@titan.btinternet.com>
Source record: 105504

```
--
=======================
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
=======================
"N3UMH" <n3umh@hotmail.com> wrote in message
news:3e7bb082.0311021302.66c87aeb@posting.google.com...
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bo2051$cvs$1@titan.btinternet.com>...
> > > How would
> > > one stiffen the overall draped loop though to prevent it being blown
> > > near metal in a breeze?
> > >
> > =========================
> >
> > What's the matter with metal, steel, aluminium ?
> >
> > Are they not good, low-loss conductors?
> >
> > No harm in running, if you must, balanced lines near to metal structures
for
> > a few inches.
>
> I have seen a method which involves inductive coupling between a pair
> of single turn loops. I guess the idea is that you have a loop on the
> tower and a loop on the mast (possibly both self resonant to present
> the proper impedance to the ladder line). You make them coplanar and
> close together so that they couple to each other, and connect the
> ladder line to their terminals.
>
> This, of course, only works for monobanders...
>
> 73,
>
> Dan, N3UMH

=======================

Dan, you are quite right of course. I am incited to go further.

I was concerned with the long-lived popular misconception, plagiarised by
old wives like Yuri who have never thought about it, that running balanced
lines very near to metal structures is the worst possible thing to do
because it is 'lossy'. But nobody ever states how much more lossy it is.
```

(Lord Kelvin.)

In fact, if you MUST run a balanced line, even wide-open-wire stuff, near to an expanse of some material then the metals copper and aluminium are the best materials to run it near to. No significant extra loss occurs in the line - the only effect at HF is a slight reduction in line Zo due to an increase in line capacitance the length of line involved. There's no more radiation than what occurs from the line when it is isolated in space. Perhaps less. And as Cecil has observed, nobody knows what the Zo of nominal 450-ohm ladder-line actually is within +/- 15 percent anyway, although it has a serious effect on the performace of G5RV's and similar (hopefully no tuner) multiband antennas.

The small currents induced in the adjacent 'foreign' metal run TRANSVERSELY on the metal surface over a distance equal to the line conductor spacing and are harmless. The other old-wives story that the line should be twisted may in fact spoil the effect and do more harm than good. It also spoils the cosmetics.

The usual example is when bringing an open-wire or ladder-line into the shack. No harm occurs when bringing the line wires together for a few inches and drawing them through a single oversize hole drilled in a steel or aluminium window frame. A liitle more increase in insulation thicknes is advisable for high power transmitters.

It is pointless to convert to a pair of short coaxial lines drawn through TWO spaced holes. That causes a much larger lump of capacitance across the line although even then, at HF, it will be harmless - equivalent to an unnoticeable readjustment of a tuner capacitor setting.

The problem needs more thought when bringing an open-wire line through a timber, brickwork or concrete wall. Those materials ARE lossy (dielectric loss) and should be avoided. They may heat up when on continuous high power with standing waves located at a voltage (not current) maximum.

A few more icons demolished, eh Roy? ;o)
Reg, G4FGQ

3638. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:14:16 UTC
From: Ed <ed@nospam.com>
Message-ID: <1KGdndOXZIl3Njii4p2dnA@comcast.com>
Source record: 105505

Go back and read the posts. The jerk comment belongs to "Bob" so you apparently believe that Bob is a mental case.

How about if the both of you go insult each other elsewhere and leave the thread alone so the many folks following the thread will eventually get some good information on this tuner and not have to read through all of your nonsense ? Please.

Ed

"JGBOYLES" <jgboyles@aol.com> wrote in message news:20031102192334.23938.00000098@mb-m26.aol.com...
> >You really are a jerk. And that is not speculation.
>
> Bob, this guy is obviously a mental case, and there is nothing to be gained
> getting our blood pressure up trying to reason with him. I am not.
> 73 Gary N4AST

3639. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:23:36 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <s6ipb.7186$P%1.6144218@newssvr28.news.prodigy.com>
Source record: 105506

What's to follow.. You asked about a product not released yet, people informed you (whether you knew yet or not) that it wasn't released yet, then you proceeded to act the ass and tell them they're speculating (even though they were attempting to not speculate on the product). Seems fairly easy to follow to me. And besides, there's still no information on said tuner.

Seems to me you posted this thread as trollbait, because you're one of those twisted individuals who gets his rocks off calling people names and holding the "high" ground.

Go lay down by your bowl.

-SSB

Ed wrote:

> Go back and read the posts. The jerk comment belongs to "Bob" so you
> apparently believe that Bob is a mental case.
>
> How about if the both of you go insult each other elsewhere and leave the
> thread alone so the many folks following the thread will eventually get some
> good information on this tuner and not have to read through all of your
> nonsense ? Please.
>
> Ed
>
>
> "JGBOYLES" <jgboyles@aol.com> wrote in message
> news:20031102192334.23938.00000098@mb-m26.aol.com...
>
>>>You really are a jerk. And that is not speculation.
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>
>>getting our blood pressure up trying to reason with him. I am not.
>>73 Gary N4AST
>
>
>

3640. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:27:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo4au0$b34$1@hercules.btinternet.com>
Source record: 105507

> "N3UMH" wrote -
> > "Reg Edwards" wrote -
> > > > one stiffen the overall draped loop though to prevent it being blown
> > > > near metal in a breeze?
> > > >
> > > ========================
> > >
> > > What's the matter with metal, steel, aluminium ?
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> > > a few inches.
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> > of single turn loops. I guess the idea is that you have a loop on the
> > tower and a loop on the mast (possibly both self resonant to present
> > the proper impedance to the ladder line). You make them coplanar and
> > close together so that they couple to each other, and connect the
> > ladder line to their terminals.
> >
> > This, of course, only works for monobanders...
> >
> > 73,
> >
> > Dan, N3UMH
>
> ======================
>
> Dan, you are quite right of course. I am incited to go further.
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> I was concerned with the long-lived popular misconception, plagiarised by
> old wives like Yuri who have never thought about it, that running balanced
> lines very near to metal structures is the worst possible thing to do
> because it is 'lossy'. But nobody ever states how much more lossy it is.
> (Lord Kelvin.)
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> In fact, if you MUST run a balanced line, even wide-open-wire stuff, near
to
> an expanse of some material then the metals copper and aluminium are the
> best materials to run it near to. No significant extra loss occurs in the
> line - the only effect at HF is a slight reduction in line Zo due to an

> increase in line capacitance the length of line involved. There's no more
> radiation than what occurs from the line when it is isolated in space.
> Perhaps less. And as Cecil has observed, nobody knows what the Zo of
> nominal 450-ohm ladder-line actually is within +/- 15 percent anyway,
> although it has a serious effect on the performace of G5RV's and similar
> (hopefully no tuner) multiband antennas.
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power
> with standing waves located at a voltage (not current) maximum.
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> A few more icons demolished, eh Roy? ;o)
> Reg, G4FGQ

3641. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:29:12 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <Ibipb.68755$9E1.301048@attbi_s52>
Source record: 105508

plonk.

"Ed" <ed@nospam.com> wrote in message
news:ysudnUnMaZq_ID6iRVn-iQ@comcast.com...
> Aaaahhhhhhh, another speculator who can't resist fouling a good thread and
> wasting bandwidth in these groups. You and the other guy know nothing and
> feel the need to prove it here for some reason. Now that you've done that
> please run along. There are people checking this thread for information
and
> all they find is your uninformative crap. You have nothing to add so
please
> go back to posting in your porn NG's or whatever it is you like to do.
And
> while your posting in alt.whack.whack.whack consider this - not everyone
of
> these units goes out the "front door" - people get them as evaluation
units
> and they may get them before the readers of alt.whack.whack.whack such as
> yourself get them. If no one has any information on it - thats OK too -
I'm
> not worried.
>
> Now seriously ... GO AWAY.
>
>
> "Bob Miller" <bxmiller@texas.netNOSPAM> speculated that : <blah, blah,
blah>
>
>

3642. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:33:31 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <Lfipb.65741$mZ5.399488@attbi_s54>
Source record: 105509

There is this really great feature in Outlook (not Express). When plonk someone, it removes all traces of him from the thread.
Bob, plonk this guy. You are arguing with an idiot.

"Bob Miller" <bxmiller@texas.netNOSPAM> wrote in message news:5hkbqvgb5k6bdqvibfhbgpisk4r2hcfbga@4ax.com...
> On Sat, 1 Nov 2003 09:03:01 -0500, "Ed" <ed@nospam.com> wrote:
>
>
> >
> >Now seriously ... GO AWAY.
> >
> You really are a jerk. And that is not speculation.
>
> Bob
> k5qwg
>
>
>

3643. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 01:59:22 UTC
From: jackiew1@37.com
Message-ID: <12329882.0311021759.4eb43015@posting.google.com>
Source record: 105510
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Too funny. I hope you can get those two racist pigs off. Charles and
Daniel have been jacking around for months now.

Now that their addresses are being posted I am sure someone will blow
the whistle on them.

Jackie

robert_king@usa.com (Robert King) wrote in message
news:<66dbd28a.0311020825.a5dc994@posting.google.com>...
> Nice try Charles Brabham, we all know who the racists are around here.
> In fact anyone who has been on this newsgroup over the past month
> knows about the crap you and Daniel have been spreading.
>
> Captial "L" loser, the noose is closing..... Enjoy....
>
> Bob
>
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
>
> > Asked about his astounding success in mowing down thousands of screaming
> > raghead fanatics with very few casualties (sound familiar?) , the Israeli
> > general agreed to give the reporter the exclusive secret to his
> > unprecedented military success...
> >
> > "Fight Arabs." he said.
> >
> > Charles Brabham, N5PVL
>
> > > > > > Daniel L. Jeswald (W4NTI)
> > > > > > 89 Wildman Road
> > > > > > Anniston AL
> > > > > > 36201
> > > > > >
> > > > > > Charles D. Brabham (N5PVL)
> > > > > > Rt 2 Box 46
> > > > > > Lyford TX
> > > > > > 78569
> > > > > > Phone: 956-347-3612
>
> "charlesb" <n5pvl@sbcglobal.net> wrote in message

news:<ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>...
> > "Robert King" <robert_king@usa.com> wrote in message
> > news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> > > You said it brother. Myself and a couple of the regulars are checking
> > > into a way to remove all their racist posts. I will keep you all
> > > posted.
> >
> > There is no way to remove racist posts by "Private" or "Larry". Sorry!
> >
> > The "regulars" here have been using usenet for years, and do not have to
> > speculate as to whether posts can be "removed" from usenet. They already
> > know better.
> >
> > Amazing how consistently ignorant the little "racist" group that has invaded
> > this newsgroup is.
> >
> > Sooner or later they will all take a hike, and we can get back to discussing
> > amateur radio.
> >
> > Charles Brabham, N5PVL

3644. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 02:25:26 UTC
From: Ed <ed@nospam.com>
Message-ID: <QdWdnb0I778FITiiRVn-jA@comcast.com>
Source record: 105511

So Gary calls Bob a jerk yet they still have *no* information.
CW and SSB also chime in with *no* information. Is your buddy "RTTY" going
to chime in with *no* information also ?

Are your lives so empty you need to respond to a post where you have nothing
to contribute ?

If you don't think anyone has access to the tuner (more of your speculation)
than just don't respond - the thread will die by itself. You're wasting
the time of everyone following the thread who is hoping that someone will
post a review as soon as they get their hands on one.

So go away - please. Theres no one trolling here other than you
know-it-all's (i.e. speculate-on-everything's).

You all speculate that no one has their hands on yet but you don't know this
for a fact. Why not just
"sideband" <AINO8SPAMW@cac.net> wrote in message
news:s6ipb.7186$P%1.6144218@newssvr28.news.prodigy.com...
> What's to follow.. You asked about a product not released yet, people
> informed you (whether you knew yet or not) that it wasn't released
> yet, then you proceeded to act the ass and tell them they're
> speculating (even though they were attempting to not speculate on the
> product). Seems fairly easy to follow to me. And besides, there's
> still no information on said tuner.
>
> Seems to me you posted this thread as trollbait, because you're one of
> those twisted individuals who gets his rocks off calling people names
> and holding the "high" ground.
>
> Go lay down by your bowl.
>
> -SSB
>
> Ed wrote:
>
> > Go back and read the posts. The jerk comment belongs to "Bob" so you
> > apparently believe that Bob is a mental case.
> >
> > How about if the both of you go insult each other elsewhere and leave
the
> > thread alone so the many folks following the thread will eventually get
some
> > good information on this tuner and not have to read through all of your
> > nonsense ? Please.

> >
> > Ed
> >
> >
> > "JGBOYLES" <jgboyles@aol.com> wrote in message
> > news:20031102192334.23938.00000098@mb-m26.aol.com...
> >
> >>>You really are a jerk. And that is not speculation.
> >>
> >>Bob, this guy is obviously a mental case, and there is nothing to be
> >
> > gained
> >
> >>getting our blood pressure up trying to reason with him. I am not.
> >>73 Gary N4AST
> >
> >
> >
>

3645. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 02:49:43 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com>
Source record: 105512

Ed wrote:

> So Gary calls Bob a jerk yet they still have *no* information.
> CW and SSB also chime in with *no* information. Is your buddy "RTTY" going
> to chime in with *no* information also ?
>
> Are your lives so empty you need to respond to a post where you have nothing
> to contribute ?
>

is yours so empty you have to start a thread just so you can insult
people?

> If you don't think anyone has access to the tuner (more of your speculation)
> than just don't respond - the thread will die by itself. You're wasting
> the time of everyone following the thread who is hoping that someone will
> post a review as soon as they get their hands on one.
>
> So go away - please. Theres no one trolling here other than you
> know-it-all's (i.e. speculate-on-everything's).
>

Look! The troll is calling someone else a troll. Go figure. Guess it
takes one to know one. Want to throw any more elementary school yard
tactics around?

Bad Dog. No Biscuit.

-SSB

3646. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:02:32 UTC
From: Ed <ed@nospam.com>
Message-ID: <i8Wdnb8JzqbWWDiiRVn-iA@comcast.com>
Source record: 105513

Can't resist can you ?

Go back and check carefully who's calling names ... no need to reply, your apology is accepted.

Now *please* go away and stop wasting the time of everyone following the thread who is interested in the tuner.

Thanks

"sideband" <AINO8SPAMW@cac.net> wrote in message news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>
>
> Ed wrote:
>
> > So Gary calls Bob a jerk yet they still have *no* information.
> > CW and SSB also chime in with *no* information. Is your buddy "RTTY" going
> > to chime in with *no* information also ?
> >
> > Are your lives so empty you need to respond to a post where you have nothing
> > to contribute ?
> >
>
> is yours so empty you have to start a thread just so you can insult
> people?
>
> > If you don't think anyone has access to the tuner (more of your speculation)
> > than just don't respond - the thread will die by itself. You're wasting
> > the time of everyone following the thread who is hoping that someone will
> > post a review as soon as they get their hands on one.
> >
> > So go away - please. Theres no one trolling here other than you
> > know-it-all's (i.e. speculate-on-everything's).
> >
>
> Look! The troll is calling someone else a troll. Go figure. Guess it
> takes one to know one. Want to throw any more elementary school yard
> tactics around?
>

> Bad Dog. No Biscuit.
>
> -SSB
>

3647. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:05:15 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com>
Source record: 105514

What apology? The one you owe JG, Bob, and now me? You started this..
You can't resist replying with your vitriol. And guess what? If you
stop, the thread stops. So why don't you just stop. No need to reply,
YOUR apology is not going to be accepted.

A troll is a troll is a troll, even if it's name is Ed.

-SSB

Ed wrote:

> Can't resist can you ?
>
> Go back and check carefully who's calling names ... no need to reply, your
> apology is accepted.
>
> Now *please* go away and stop wasting the time of everyone following the
> thread who is interested in the tuner.
>
> *Thanks*
>
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>
>>
>>Ed wrote:
>>
>>
>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>
> going
>
>>>to chime in with *no* information also ?
>>>
>>>Are your lives so empty you need to respond to a post where you have
>
> nothing
>
>>>to contribute ?
>>>
>>
>>is yours so empty you have to start a thread just so you can insult

>>people?
>>
>>
>>>If you don't think anyone has access to the tuner (more of your
>
> speculation)
>
>>>than just don't respond - the thread will die by itself. You're
>
> wasting
>
>>>the time of everyone following the thread who is hoping that someone
>
> will
>
>>>post a review as soon as they get their hands on one.
>>>
>>>So go away - please. Theres no one trolling here other than you
>>>know-it-all's (i.e. speculate-on-everything's).
>>>
>>
>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>takes one to know one. Want to throw any more elementary school yard
>>tactics around?
>>
>>Bad Dog. No Biscuit.
>>
>>-SSB
>>
>
>
>

3648. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:10:01 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <dGjpb.7391$P%1.6168229@newssvr28.news.prodigy.com>
Source record: 105515

Besides, those who are interested in the tuner can hit
http://www.mfjenterprises.com/products.php?prodid=MFJ-974H and learn
most everything that's readily available to learn about the tuner, so
sit down, shut up, and enjoy the ride.

-SSB

Ed wrote:

> Can't resist can you ?
>
> Go back and check carefully who's calling names ... no need to reply, your
> apology is accepted.
>
> Now *please* go away and stop wasting the time of everyone following the
> thread who is interested in the tuner.
>
> *Thanks*
>
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>
>>
>>Ed wrote:
>>
>>
>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>
> going
>
>>>to chime in with *no* information also ?
>>>
>>>Are your lives so empty you need to respond to a post where you have
>
> nothing
>
>>>to contribute ?
>>>
>>
>>is yours so empty you have to start a thread just so you can insult
>>people?
>>

>>
>>>If you don't think anyone has access to the tuner (more of your
>
> speculation)
>
>>>than just don't respond - the thread will die by itself. You're
>
> wasting
>
>>>the time of everyone following the thread who is hoping that someone
>
> will
>
>>>post a review as soon as they get their hands on one.
>>>
>>>So go away - please. Theres no one trolling here other than you
>>>know-it-all's (i.e. speculate-on-everything's).
>>>
>>
>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>takes one to know one. Want to throw any more elementary school yard
>>tactics around?
>>
>>Bad Dog. No Biscuit.
>>
>>-SSB
>>
>
>
>

3649. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:17:54 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311021917.28d4156d@posting.google.com>
Source record: 105516

Mark,
This term of reactance "sucking" or "drawing"
current up the antenna,
I have never heard of reactances described
like this before.
Has an article been written lately with these terms
since I saw another poster use the same terminology?
Regards
Art

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0311021511.29ae8c7f@posting.google.com>...
> k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031102131401.23201.00000128@mb-m20.aol.com>...
> > >NM5K:
>
> > >NO , I didn't see the pictures. Like I said, they didn't load on that
> > >site. All the pix load except his.
> > >>
> >
> > Then you are missing a lot.
> > I don't know what the problem with eHam.net site is, I uploaded all the
> > pictures the same way, some showed, some not. This is why I posted link to my
> > page
> > http://www.k3bu.us/loadingcoils.htm
> > which has the pictures, also RIGHT drawings from ON4UN book, latest modeling of
> > W5DXP stub loaded G5RV and some selected comments explaining the phenomena.
> > Check it out.
>
> I found them earlier...
> >
> > >> Again, put on the fricken Hustler 80m resonator, feed it 100W and feel it!
> > >>No meters, no hokus pokus, just "naked" antenna.
> > >
> > >What would that mean? The hustler coil is known to be flawed, and
> > >makes a poor coil to be tested in this manner. The effects of it's
> > >metal end caps, and overall design problems are fairly well known. I
> > >refuse to use such a lousy coil. You can feed my homebrew coil 100w
> > >all day long, and you won't feel anything except the finger on the
> > >mike button hand start to go numb from holding the key down.
> > >
> >
> > Another "very well known fact" from W8JI's teachings?
>

> No, just personal experiences. But I never had a heat issue with a
> hustler. I never used one long enough to develop any heat...:/
> Metal caps are at both
> > ends, top would feel the same then, it doesn't. Hustler coil is "lousy" because
> > uses aluminum wire to achieve "match" through some loss and that is additional
> > loss.
>
> Well that also. But I think the windings are also overly tight.
> But from the point of view as inductor, it is uniformly wound
> solenoid,
> > same wire and diameter, so according to I2R law, the heat developed in it is
> > proportional to the square of current. If there is more heat at the bottom,
> > then irrefutably there is more current flowing at the bottom.
>
> Well, not irrefutably. Obviously the other guy that tested had a case
> that was excess resistence at the base of the coil. I'm not saying
> this was a problem in your case, but he seemed to have no more heating
> issues after he fixed the connection.
> >
> > Here is the shocker:
> > When W9UCW bunch was measuring various coils, they also compared that perfect
> > coil as you and I have (heavy wire, proper form factor, good connections) to
> > "lousy" Webster Banspanner sliding coil (aka cheap screwdriver) they found
> > negligible difference in measured signal strength. They rechecked everything
> > scratched their heads, but that was it.
>
> Actually, thats fairly old news. I had heard of that test months ago.
> Maybe from more than one person. I think others have found the same
> thing. And it doesn't surprise me one bit when mobiles are involved.
> Ground losses almost always overshadow coil losses on a mobile.
>
> So another myth about the quality of
> > coil (resistance of course applies, but is minuscule) importance.
>
> Well, it's not totally a myth. Coil losses can eat your lunch if you
> want first rate performance. The hustler coils are a case in point.
> They are pathetic compared to my coils. The difference on the air is
> like night and day. But! If you have so much ground loss that it
> overshadows the coil loss, even in that case, a better coil won't help
> much.
> In other words, the better the ground system, the more any coil
> deficiencies will show up.
>
> Now when we
> > look at it from the point of view of effect of the coil on the efficiency of
> > antenna, it is explanatory. Coil replaces portion of radiator that is not there
> > anymore, so the significance of its quality is not as important as the position
> > of the coil on the radiator (area under current curve). Of course the ohmic
> > losses are a factor, but that is minuscule (ohms or two) versus reduction in
> > current flowing in remaining radiator. I like and have big fat coils, but looks

> > like they can be optimized better, perhaps heavier wire in first few turns,
> > slimmer construction, less wind load, but placed higher up on the mast. So
> > there is another one you don't have to believe, I sure was surprised.
> > Measure it!!!
>
> I have. I've been building different homemade mobile coils for about
> 13 years. I've come to the conclusion wire size is generally not very
> important at all, AS LONG as the proper pitch/winding ratio is used.
> Don't wind them too close together. My current coil uses thinner wire
> than my old one. I much prefer a lighter coil. But I'm fairly sure it
> actually works as well if not better than the heavier old one. It is
> wider than the old one. "3 inch vs 2 inch"
> >
> >
>
> >
> > I am not a salesman, I will not try to convince you of anything. I can
> > elaborate and answer some questions and it is up to you to believe it or not.
> > You can believe engineers with education, their experience and results, or you
> > can believe some "technical impostor" as K7GCO phrased it.
>
> I'm not believing anyone. I'm going by my own experiences, and my own
> gut hunches. "BS filter" :) W8JI has very little to do with any of my
> ideas. His was just one viewpoint out of many.
>
> >
> > You could see almost constant current across the coil if the coil is at the
> > base of quarter wave radiator, has heavy windings and is replacing relatively
> > short electrical length of the radiator. Did he mention what coil, where was
> > the coil placed? We have methods and pictures of W9UCW tests on various bands
> > at different positions, we have yet to get objections or pointed out errors in
> > his setup.
>
> I think a lot of that is only a few lurking on there actually know
> how, or have the equipment to make an accurate measurement. So most
> wouldn't know if the setup could cause problems or not. I don't say
> this lightly, as it appears to be quite a "hook" prone undertaking. I
> sure don't have the setup to do it, or have even tried something like
> that. I do know from messing around with fluorescent tubes and the
> mobile antennas, that the electric field around the coil seems to be
> very steady across, and abruptly decreases once the stinger begins.
> This while quite possibly an erroneous assumption, led me to believe
> the current across the coil is also fairly constant in direct relation
> to that.
>
>
> > You believe what you want. As I mentioned we will write concise article on the
> > subject and you can take it from there or stick with Rauchians.
>
> Why do you keep involving Tom in this? I have nothing to do with him.

> Frankly, I find comments like "Raunchians" and "Flat Earthers" etc,
> kind of tacky. So far I haven't accused you all of any "voodoo"
> antenna magic, like I do say the EH bunch. I just want to make sure
> all the bases are covered as far as the accuracy of the measurments,
> and also the exact locations of the couplers. I still question the
> accuracy of hooking the top coupler on the lower end of the stinger.
> No matter how close the coil is....
> >
> > I sure enjoyed this exercise, learned from it a thing or two and I am looking
> > forward to implement some of the stuff (measure it too) in the design of new
> > loaded mobile and low band antennas. As they say on FreeRepublic.com, this is
> > series and hugh :-)
>
> There is no doubt that elevating the coil on a low band antenna
> improves the current distribution. I've tested it many times, over and
> over again. BUT! This will not model worth a hoot if you look at gain
> numbers alone. Note Wes's recent post. If I remember right, most
> programs will leave the gain pretty much the same, as you vary coil
> height. They sure don't show the real world increases anyway...But you
> want to include top loading if you want the best of the best. Omit
> that, and it'll never happen. BTW, to my thinking, the capacitance is
> what draws the current through the coil. And I haven't tested it, but
> I bet the current taper above the coil is much more abrupt with a
> short stinger, than a longer one. There is no doubt a short stinger
> does a poor job of drawing current through the coil. Thats what kills
> the average ham sticks with the short stubby stingers. There is little
> capacitance to draw current through the coil. A large enough top hat
> will give you a fairly steady current distribution up the whip,
> regardless of the coil placement. Raising the coil in addition to the
> hat helps a bit more. But I think less so than with a non hatted
> antenna. Coil placement is critical if you run the low bands, and
> don't use a top hat. But thats nothing really new to people that fart
> with mobile antennas all the time. I think what you are doing is a
> good thing, and worthwhile. But I'd chill as far as Tom is concerned.
> You seem to be taking his criticisms a bit personal, and respond in
> kind. This all distracts greatly from the original point of the
> excercise. It's like the parasitic thing with the amps between him and
> Measures. Even after all the bickering, I'm still not totally sure
> what to believe as far as parasitic bangs in tube amps. The best
> answers seemed to get bogged down in the quagmire of constant
> bickering. :/ If I'm doing something I *think* is right, and someone
> disagrees, I'll assess it, and if I still think I'm right, I just
> ignore them. I think that would be your best course. It's his right to
> disagree with you. Nothing you can really do about it, and no point
> wasting energy, or stirring discontent over it. MK

3650. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:24:26 UTC
From: Ed <ed@nospam.com>
Message-ID: <IMidnX_hdfbxVziiRVn-jw@comcast.com>
Source record: 105517

Can't resist can you ?

On behalf of everyone, you're apology is accepted for wasting their time.

If you have the MFJ-974H tuner in your possesion, please let us all know
what you think of it so far. Otherwise *please* go away.

If you think I'm a troll thats your delusion ... go back and read the posts.

Regardless, go away please.

"sideband" <AINO8SPAMW@cac.net> wrote in message
news:LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com...
> What apology? The one you owe JG, Bob, and now me? You started this..
> You can't resist replying with your vitriol. And guess what? If you
> stop, the thread stops. So why don't you just stop. No need to reply,
> YOUR apology is not going to be accepted.
>
> A troll is a troll is a troll, even if it's name is Ed.
>
> -SSB
>
> Ed wrote:
>
> > Can't resist can you ?
> >
> > Go back and check carefully who's calling names ... no need to reply,
your
> > apology is accepted.
> >
> > Now *please* go away and stop wasting the time of everyone following the
> > thread who is interested in the tuner.
> >
> > *Thanks*
> >
> >
> >
> > "sideband" <AINO8SPAMW@cac.net> wrote in message
> > news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
> >
> >>
> >>Ed wrote:
> >>
> >>
> >>So Gary calls Bob a jerk yet they still have *no* information.
> >>CW and SSB also chime in with *no* information. Is your buddy "RTTY"

> >
> > going
> >
> >>>to chime in with *no* information also ?
> >>>
> >>>Are your lives so empty you need to respond to a post where you have
> >
> > nothing
> >
> >>>to contribute ?
> >>>
> >>
> >>is yours so empty you have to start a thread just so you can insult
> >>people?
> >>
> >>
> >>>If you don't think anyone has access to the tuner (more of your
> >
> > speculation)
> >
> >>>than just don't respond - the thread will die by itself. You're
> >
> > wasting
> >
> >>>the time of everyone following the thread who is hoping that someone
> >
> > will
> >
> >>>post a review as soon as they get their hands on one.
> >>>
> >>>So go away - please. Theres no one trolling here other than you
> >>>know-it-all's (i.e. speculate-on-everything's).
> >>>
> >>
> >>Look! The troll is calling someone else a troll. Go figure. Guess it
> >>takes one to know one. Want to throw any more elementary school yard
> >>tactics around?
> >>
> >>Bad Dog. No Biscuit.
> >>
> >>-SSB
> >>
> >
> >
> >
>

3651. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:26:40 UTC
From: Ed <ed@nospam.com>
Message-ID: <Y6adnYIwRe9vVziiRVn-sQ@comcast.com>
Source record: 105518

Read the initial post looking for people with hands-on experience.

Now go *please* go away troll and stop wasting everyones time.

"sideband" <AINO8SPAMW@cac.net> wrote in message
news:dGjpb.7391$P%1.6168229@newssvr28.news.prodigy.com...
> Besides, those who are interested in the tuner can hit
> http://www.mfjenterprises.com/products.php?prodid=MFJ-974H and learn
> most everything that's readily available to learn about the tuner, so
> sit down, shut up, and enjoy the ride.
>
> -SSB
>
> Ed wrote:
>
> > Can't resist can you ?
> >
> > Go back and check carefully who's calling names ... no need to reply,
your
> > apology is accepted.
> >
> > Now *please* go away and stop wasting the time of everyone following the
> > thread who is interested in the tuner.
> >
> > *Thanks*
> >
> >
> >
> > "sideband" <AINO8SPAMW@cac.net> wrote in message
> > news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
> >
> >>
> >>Ed wrote:
> >>
> >>
> >>>So Gary calls Bob a jerk yet they still have *no* information.
> >>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
> >
> > going
> >
> >>>to chime in with *no* information also ?
> >>>
> >>>Are your lives so empty you need to respond to a post where you have
> >
> > nothing

> >
> >>>to contribute ?
> >>>
> >>
> >>is yours so empty you have to start a thread just so you can insult
> >>people?
> >>
> >>
> >>>If you don't think anyone has access to the tuner (more of your
> >
> > speculation)
> >
> >>>than just don't respond - the thread will die by itself. You're
> >
> > wasting
> >
> >>>the time of everyone following the thread who is hoping that someone
> >
> > will
> >
> >>>post a review as soon as they get their hands on one.
> >>>
> >>>So go away - please. Theres no one trolling here other than you
> >>>know-it-all's (i.e. speculate-on-everything's).
> >>>
> >>
> >>Look! The troll is calling someone else a troll. Go figure. Guess it
> >>takes one to know one. Want to throw any more elementary school yard
> >>tactics around?
> >>
> >>Bad Dog. No Biscuit.
> >>
> >>-SSB
> >>
> >
> >
> >
>

3652. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:34:27 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <71kpb.7399$P%1.6173301@newssvr28.news.prodigy.com>
Source record: 105419

Ya know, I don't have anything to do until about 5:30 tomorrow
morning.. I can keep this up all night, if you'd like.

Until you decide to give it up, and wait for someone to actually get
one of these tuners to use it, or go buy one yourself, you're probably
not going to get what you've asked for, especially after your
particular "fractenna" way of dealing with the people who have
responded to your initial post.

So, if you'd care to stop, then you'll stop wasting everyone's time
and bandwidth.

So, Ed, what's your callsign anyway?

-SSB

Ed wrote:

> Read the initial post looking for people with hands-on experience.
>
> Now go *please* go away troll and stop wasting everyones time.
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:dGjpb.7391$P%1.6168229@newssvr28.news.prodigy.com...
>
>>Besides, those who are interested in the tuner can hit
>>http://www.mfjenterprises.com/products.php?prodid=MFJ-974H and learn
>>most everything that's readily available to learn about the tuner, so
>>sit down, shut up, and enjoy the ride.
>>
>>-SSB
>>
>>Ed wrote:
>>
>>
>>>Can't resist can you ?
>>>
>>>Go back and check carefully who's calling names ... no need to reply,
>
> your
>
>>>apology is accepted.
>>>
>>>Now *please* go away and stop wasting the time of everyone following the
>>>thread who is interested in the tuner.

>>>
>>>*Thanks*
>>>
>>>
>>>
>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>>>
>>>
>>>>Ed wrote:
>>>>
>>>>
>>>>
>>>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>>>
>>>going
>>>
>>>
>>>>>to chime in with *no* information also ?
>>>>>
>>>>>Are your lives so empty you need to respond to a post where you have
>>>
>>>nothing
>>>
>>>
>>>>>to contribute ?
>>>>>
>>>>
>>>>is yours so empty you have to start a thread just so you can insult
>>>>people?
>>>>
>>>>
>>>>
>>>>>If you don't think anyone has access to the tuner (more of your
>>>
>>>speculation)
>>>
>>>
>>>>>than just don't respond - the thread will die by itself. You're
>>>
>>>wasting
>>>
>>>
>>>>>the time of everyone following the thread who is hoping that someone
>>>
>>>will
>>>
>>>
>>>>>post a review as soon as they get their hands on one.

>>>>>
>>>>>So go away - please. Theres no one trolling here other than you
>>>>>know-it-all's (i.e. speculate-on-everything's).
>>>>>
>>>>
>>>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>>>takes one to know one. Want to throw any more elementary school yard
>>>>tactics around?
>>>>
>>>>Bad Dog. No Biscuit.
>>>>
>>>>-SSB
>>>>
>>>
>>>
>>>
>
>

3653. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:36:35 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <73kpb.7401$P%1.6173773@newssvr28.news.prodigy.com>
Source record: 105420

What apology? I'm sure most people who are following this "thread" are chuckling at the way I'm pointing out what a fool you are. So stop replying to my posts, and this can all end.

I believe it's you who can't resist. I'm just having fun showing the world what an idiot you are, asking for information that maybe 10 people in the US who don't work for MFJ have. Now out of those 10, how many of them do you think even read this newsgroup?

Who's the fool?

What's your callsign, anyway, Ed?

-SSB

Ed wrote:

> Can't resist can you ?
>
> On behalf of everyone, you're apology is accepted for wasting their time.
>
> If you have the MFJ-974H tuner in your possesion, please let us all know
> what you think of it so far. Otherwise *please* go away.
>
> If you think I'm a troll thats your delusion ... go back and read the posts.
>
> Regardless, go away please.
>
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com...
>
>>What apology? The one you owe JG, Bob, and now me? You started this..
>>You can't resist replying with your vitriol. And guess what? If you
>>stop, the thread stops. So why don't you just stop. No need to reply,
>>YOUR apology is not going to be accepted.
>>
>>A troll is a troll is a troll, even if it's name is Ed.
>>
>>-SSB
>>
>>Ed wrote:
>>
>>
>>>Can't resist can you ?

>>>
>>>Go back and check carefully who's calling names ... no need to reply,
>
> your
>
>>>apology is accepted.
>>>
>>>Now *please* go away and stop wasting the time of everyone following the
>>>thread who is interested in the tuner.
>>>
>>>*Thanks*
>>>
>>>
>>>
>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>>>
>>>
>>>>Ed wrote:
>>>>
>>>>
>>>>
>>>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>>>
>>>going
>>>
>>>
>>>>>to chime in with *no* information also ?
>>>>>
>>>>>Are your lives so empty you need to respond to a post where you have
>>>
>>>nothing
>>>
>>>
>>>>>to contribute ?
>>>>>
>>>>
>>>>is yours so empty you have to start a thread just so you can insult
>>>>people?
>>>>
>>>>
>>>>
>>>>>If you don't think anyone has access to the tuner (more of your
>>>
>>>speculation)
>>>
>>>
>>>>>than just don't respond - the thread will die by itself. You're
>>>

>>>wasting
>>>
>>>
>>>>>the time of everyone following the thread who is hoping that someone
>>>
>>>will
>>>
>>>
>>>>>post a review as soon as they get their hands on one.
>>>>>
>>>>>So go away - please. Theres no one trolling here other than you
>>>>>know-it-all's (i.e. speculate-on-everything's).
>>>>>
>>>>
>>>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>>>takes one to know one. Want to throw any more elementary school yard
>>>>tactics around?
>>>>
>>>>Bad Dog. No Biscuit.
>>>>
>>>>-SSB
>>>>
>>>
>>>
>>>
>
>

3654. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:41:51 UTC
From: Ed <ed@nospam.com>
Message-ID: <NsSdneD4y5McUziiRVn-sw@comcast.com>
Source record: 105421

Can't resist responding and name calling, eh troll ? Tsk, tsk.

"sideband" <AINO8SPAMW@cac.net> wrote in message
news:73kpb.7401$P%1.6173773@newssvr28.news.prodigy.com...
> What apology? I'm sure most people who are following this "thread" are
> chuckling at the way I'm pointing out what a fool you are. So stop
> replying to my posts, and this can all end.
>
> I believe it's you who can't resist. I'm just having fun showing the
> world what an idiot you are, asking for information that maybe 10
> people in the US who don't work for MFJ have. Now out of those 10, how
> many of them do you think even read this newsgroup?
>
> Who's the fool?
>
> What's your callsign, anyway, Ed?
>
> -SSB
>
> Ed wrote:
>
> > Can't resist can you ?
> >
> > On behalf of everyone, you're apology is accepted for wasting their
time.
> >
> > If you have the MFJ-974H tuner in your possesion, please let us all know
> > what you think of it so far. Otherwise *please* go away.
> >
> > If you think I'm a troll thats your delusion ... go back and read the
posts.
> >
> > Regardless, go away please.
> >
> >
> >
> > "sideband" <AINO8SPAMW@cac.net> wrote in message
> > news:LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com...
> >
> >>What apology? The one you owe JG, Bob, and now me? You started this..
> >>You can't resist replying with your vitriol. And guess what? If you
> >>stop, the thread stops. So why don't you just stop. No need to reply,
> >>YOUR apology is not going to be accepted.
> >>

> >>A troll is a troll is a troll, even if it's name is Ed.
> >>
> >>-SSB
> >>
> >>Ed wrote:
> >>
> >>
> >>>Can't resist can you ?
> >>>
> >>>Go back and check carefully who's calling names ... no need to reply,
> >
> > your
> >
> >>>apology is accepted.
> >>>
> >>>Now *please* go away and stop wasting the time of everyone following
the
> >>>thread who is interested in the tuner.
> >>>
> >>>*Thanks*
> >>>
> >>>
> >>>
> >>>"sideband" <AINO8SPAMW@cac.net> wrote in message
> >>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
> >>>
> >>>
> >>>Ed wrote:
> >>>>
> >>>>
> >>>>
> >>>>So Gary calls Bob a jerk yet they still have *no* information.
> >>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
> >>>
> >>>going
> >>>
> >>>
> >>>>to chime in with *no* information also ?
> >>>>
> >>>>Are your lives so empty you need to respond to a post where you have
> >>>
> >>>nothing
> >>>
> >>>
> >>>>to contribute ?
> >>>>
> >>>>
> >>>>is yours so empty you have to start a thread just so you can insult
> >>>>people?
> >>>>

> >>>>
> >>>>
> >>>>>If you don't think anyone has access to the tuner (more of your
> >>>
> >>>speculation)
> >>>
> >>>
> >>>>>than just don't respond - the thread will die by itself. You're
> >>>
> >>>wasting
> >>>
> >>>
> >>>>>the time of everyone following the thread who is hoping that someone
> >>>
> >>>will
> >>>
> >>>
> >>>>>post a review as soon as they get their hands on one.
> >>>>>
> >>>>>So go away - please. Theres no one trolling here other than you
> >>>>>know-it-all's (i.e. speculate-on-everything's).
> >>>>>
> >>>>
> >>>>Look! The troll is calling someone else a troll. Go figure. Guess it
> >>>>takes one to know one. Want to throw any more elementary school yard
> >>>>tactics around?
> >>>>
> >>>>Bad Dog. No Biscuit.
> >>>>
> >>>>-SSB
> >>>>
> >>>
> >>>
> >>>
> >
> >
>

3655. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:42:20 UTC
From: Ed <ed@nospam.com>
Message-ID: <weudneyzEuwDUziiRVn-hg@comcast.com>
Source record: 105422

Can't resist responding, wasting eveyones time and name calling, eh troll ?
Tsk, tsk.

"sideband" <AINO8SPAMW@cac.net> wrote in message
news:71kpb.7399$P%1.6173301@newssvr28.news.prodigy.com...
> Ya know, I don't have anything to do until about 5:30 tomorrow
> morning.. I can keep this up all night, if you'd like.
>
> Until you decide to give it up, and wait for someone to actually get
> one of these tuners to use it, or go buy one yourself, you're probably
> not going to get what you've asked for, especially after your
> particular "fractenna" way of dealing with the people who have
> responded to your initial post.
>
> So, if you'd care to stop, then you'll stop wasting everyone's time
> and bandwidth.
>
> So, Ed, what's your callsign anyway?
>
> -SSB
>
> Ed wrote:
>
> > Read the initial post looking for people with hands-on experience.
> >
> > Now go *please* go away troll and stop wasting everyones time.
> >
> >
> > "sideband" <AINO8SPAMW@cac.net> wrote in message
> > news:dGjpb.7391$P%1.6168229@newssvr28.news.prodigy.com...
> >
> > >>Besides, those who are interested in the tuner can hit
> > >>http://www.mfjenterprises.com/products.php?prodid=MFJ-974H and learn
> > >>most everything that's readily available to learn about the tuner, so
> > >>sit down, shut up, and enjoy the ride.
> > >>
> > >>-SSB
> > >>
> > >>Ed wrote:
> > >>
> > >>
> > >>>>Can't resist can you ?
> > >>>
> > >>>Go back and check carefully who's calling names ... no need to reply,

> >
> > your
> >
> >>>apology is accepted.
> >>>
> >>>Now *please* go away and stop wasting the time of everyone following
the
> >>>thread who is interested in the tuner.
> >>>
> >>>*Thanks*
> >>>
> >>>
> >>>
> >>>"sideband" <AINO8SPAMW@cac.net> wrote in message
> >>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
> >>>
> >>>
> >>>Ed wrote:
> >>>>
> >>>>
> >>>>
> >>>>So Gary calls Bob a jerk yet they still have *no* information.
> >>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
> >>>
> >>>going
> >>>
> >>>
> >>>to chime in with *no* information also ?
> >>>>
> >>>>Are your lives so empty you need to respond to a post where you have
> >>>
> >>>nothing
> >>>
> >>>
> >>>to contribute ?
> >>>>
> >>>>
> >>>>is yours so empty you have to start a thread just so you can insult
> >>>>people?
> >>>>
> >>>>
> >>>>
> >>>>If you don't think anyone has access to the tuner (more of your
> >>>
> >>>speculation)
> >>>
> >>>
> >>>than just don't respond - the thread will die by itself. You're
> >>>
> >>>wasting

> >>>
> >>>
> >>>>>the time of everyone following the thread who is hoping that someone
> >>>
> >>>will
> >>>
> >>>
> >>>>>post a review as soon as they get their hands on one.
> >>>>>
> >>>>>So go away - please. Theres no one trolling here other than you
> >>>>>know-it-all's (i.e. speculate-on-everything's).
> >>>>>
> >>>>
> >>>>Look! The troll is calling someone else a troll. Go figure. Guess it
> >>>>takes one to know one. Want to throw any more elementary school yard
> >>>>tactics around?
> >>>>
> >>>>Bad Dog. No Biscuit.
> >>>>
> >>>>-SSB
> >>>>
> >>>
> >>>
> >>>
> >
> >
>

3656. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:42:32 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <I8kpb.7405$P%1.6174869@newssvr28.news.prodigy.com>
Source record: 105423

I see you're still too chicken to drop your callsign.. Do you behave
this way on air?

Oh, and I do post my callsign with every post, so don't even try that
tactic.. Like Monty Python, I don't like spam. You figure it out

-SSB

Ed wrote:

> Can't resist responding and name calling, eh troll ? Tsk, tsk.
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:73kpb.7401$P%1.6173773@newssvr28.news.prodigy.com...
>
>>What apology? I'm sure most people who are following this "thread" are
>>chuckling at the way I'm pointing out what a fool you are. So stop
>>replying to my posts, and this can all end.
>>
>>I believe it's you who can't resist. I'm just having fun showing the
>>world what an idiot you are, asking for information that maybe 10
>>people in the US who don't work for MFJ have. Now out of those 10, how
>>many of them do you think even read this newsgroup?
>>
>>Who's the fool?
>>
>>What's your callsign, anyway, Ed?
>>
>>-SSB
>>
>>Ed wrote:
>>
>>
>>>Can't resist can you ?
>>>
>>>On behalf of everyone, you're apology is accepted for wasting their
>
> time.
>
>>>If you have the MFJ-974H tuner in your possesion, please let us all know
>>>what you think of it so far. Otherwise *please* go away.
>>>
>>>If you think I'm a troll thats your delusion ... go back and read the
>

> posts.
>
>>>Regardless, go away please.
>>>
>>>
>>>
>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>news:LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com...
>>>
>>>
>>>>What apology? The one you owe JG, Bob, and now me? You started this..
>>>>You can't resist replying with your vitriol. And guess what? If you
>>>>stop, the thread stops. So why don't you just stop. No need to reply,
>>>>YOUR apology is not going to be accepted.
>>>>
>>>>A troll is a troll is a troll, even if it's name is Ed.
>>>>
>>>>-SSB
>>>>
>>>>Ed wrote:
>>>>
>>>>
>>>>
>>>>>Can't resist can you ?
>>>>>
>>>>>Go back and check carefully who's calling names ... no need to reply,
>>>
>>>your
>>>
>>>
>>>>>apology is accepted.
>>>>>
>>>>>Now *please* go away and stop wasting the time of everyone following
>
> the
>
>>>>>thread who is interested in the tuner.
>>>>>
>>>>>*Thanks*
>>>>>
>>>>>
>>>>>
>>>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>>>>>
>>>>>
>>>>>
>>>>>>Ed wrote:
>>>>>>
>>>>>>

>>>>>>
>>>>>>
>>>>>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>>>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>>>>>
>>>>>going
>>>>>
>>>>>
>>>>>
>>>>>>>to chime in with *no* information also ?
>>>>>>>
>>>>>>>Are your lives so empty you need to respond to a post where you have
>>>>>
>>>>>nothing
>>>>>
>>>>>
>>>>>
>>>>>>>to contribute ?
>>>>>>>
>>>>>>
>>>>>>is yours so empty you have to start a thread just so you can insult
>>>>>>people?
>>>>>>
>>>>>>
>>>>>>
>>>>>>
>>>>>>>If you don't think anyone has access to the tuner (more of your
>>>>>
>>>>>speculation)
>>>>>
>>>>>
>>>>>
>>>>>>>than just don't respond - the thread will die by itself. You're
>>>>>
>>>>>wasting
>>>>>
>>>>>
>>>>>
>>>>>>>the time of everyone following the thread who is hoping that someone
>>>>>
>>>>>will
>>>>>
>>>>>
>>>>>
>>>>>>>post a review as soon as they get their hands on one.
>>>>>>>
>>>>>>>So go away - please. Theres no one trolling here other than you
>>>>>>>know-it-all's (i.e. speculate-on-everything's).
>>>>>>>
>>>>>>

>>>>>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>>>>>takes one to know one. Want to throw any more elementary school yard
>>>>>>tactics around?
>>>>>>
>>>>>>Bad Dog. No Biscuit.
>>>>>>
>>>>>>-SSB
>>>>>>
>>>>>
>>>>>
>>>>>
>>>
>
>

3657. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:44:04 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <8akpb.7406$P%1.6175264@newssvr28.news.prodigy.com>
Source record: 105424

You're the one wasting everyone's time asking for information not
readily available to more than certain MFJ employees and perhaps 10
others (an estimate) outside the company. You're also the one who
started calling names. We have a complete history of this so-called
thread right here in front of us.

You're the troll, now go back under your bridge.

-SSB

Ed wrote:

> Can't resist responding, wasting eveyones time and name calling, eh troll ?
> Tsk, tsk.
>
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:71kpb.7399$P%1.6173301@newssvr28.news.prodigy.com...
>
>>Ya know, I don't have anything to do until about 5:30 tomorrow
>>morning.. I can keep this up all night, if you'd like.
>>
>>Until you decide to give it up, and wait for someone to actually get
>>one of these tuners to use it, or go buy one yourself, you're probably
>>not going to get what you've asked for, especially after your
>>particular "fractenna" way of dealing with the people who have
>>responded to your initial post.
>>
>>So, if you'd care to stop, then you'll stop wasting everyone's time
>>and bandwidth.
>>
>>So, Ed, what's your callsign anyway?
>>
>>-SSB
>>
>>Ed wrote:
>>
>>
>>>Read the initial post looking for people with hands-on experience.
>>>
>>>Now go *please* go away troll and stop wasting everyones time.
>>>
>>>
>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>news:dGjpb.7391$P%1.6168229@newssvr28.news.prodigy.com...

>>>
>>>
>>>>Besides, those who are interested in the tuner can hit
>>>>http://www.mfjenterprises.com/products.php?prodid=MFJ-974H and learn
>>>>most everything that's readily available to learn about the tuner, so
>>>>sit down, shut up, and enjoy the ride.
>>>>
>>>>-SSB
>>>>
>>>>Ed wrote:
>>>>
>>>>
>>>>
>>>>>Can't resist can you ?
>>>>>
>>>>>Go back and check carefully who's calling names ... no need to reply,
>>>
>>>your
>>>
>>>
>>>>>apology is accepted.
>>>>>
>>>>>Now *please* go away and stop wasting the time of everyone following
>
> the
>
>>>>>thread who is interested in the tuner.
>>>>>
>>>>>*Thanks*
>>>>>
>>>>>
>>>>>
>>>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
>>>>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
>>>>>
>>>>>
>>>>>
>>>>>>Ed wrote:
>>>>>>
>>>>>>
>>>>>>
>>>>>>
>>>>>>>So Gary calls Bob a jerk yet they still have *no* information.
>>>>>>>CW and SSB also chime in with *no* information. Is your buddy "RTTY"
>>>>>
>>>>>going
>>>>>
>>>>>
>>>>>
>>>>>>to chime in with *no* information also ?

>>>>>>>
>>>>>>>Are your lives so empty you need to respond to a post where you have
>>>>>
>>>>>nothing
>>>>>
>>>>>
>>>>>
>>>>>>>to contribute ?
>>>>>>>
>>>>>>
>>>>>>is yours so empty you have to start a thread just so you can insult
>>>>>>people?
>>>>>>
>>>>>>
>>>>>>
>>>>>>
>>>>>>>If you don't think anyone has access to the tuner (more of your
>>>>>
>>>>>speculation)
>>>>>
>>>>>
>>>>>
>>>>>>>than just don't respond - the thread will die by itself. You're
>>>>>
>>>>>wasting
>>>>>
>>>>>
>>>>>
>>>>>>>the time of everyone following the thread who is hoping that someone
>>>>>
>>>>>will
>>>>>
>>>>>
>>>>>
>>>>>>>post a review as soon as they get their hands on one.
>>>>>>>
>>>>>>>So go away - please. Theres no one trolling here other than you
>>>>>>>know-it-all's (i.e. speculate-on-everything's).
>>>>>>>
>>>>>>
>>>>>>Look! The troll is calling someone else a troll. Go figure. Guess it
>>>>>>takes one to know one. Want to throw any more elementary school yard
>>>>>>tactics around?
>>>>>>
>>>>>>Bad Dog. No Biscuit.
>>>>>>
>>>>>>-SSB
>>>>>>
>>>>>
>>>>>

>>>>>
>>>
>
>

3658. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:55:41 UTC
From: Ed <ed@nospam.com>
Message-ID: <KJKdnUvUBLpcTDiiRVn-gg@comcast.com>
Source record: 105425

Gee, you win. You're too smart for me troll. Now you can go tell all your
friends.

bye !

"sideband" <AINO8SPAMW@cac.net> wrote in message
news:I8kpb.7405$P%1.6174869@newssvr28.news.prodigy.com...
> I see you're still too chicken to drop your callsign.. Do you behave
> this way on air?
>
> Oh, and I do post my callsign with every post, so don't even try that
> tactic.. Like Monty Python, I don't like spam. You figure it out
>
> -SSB
>
> Ed wrote:
>
> > Can't resist responding and name calling, eh troll ? Tsk, tsk.
> >
> >
> > "sideband" <AINO8SPAMW@cac.net> wrote in message
> > news:73kpb.7401$P%1.6173773@newssvr28.news.prodigy.com...
> >
> >>What apology? I'm sure most people who are following this "thread" are
> >>chuckling at the way I'm pointing out what a fool you are. So stop
> >>replying to my posts, and this can all end.
> >>
> >>I believe it's you who can't resist. I'm just having fun showing the
> >>world what an idiot you are, asking for information that maybe 10
> >>people in the US who don't work for MFJ have. Now out of those 10, how
> >>many of them do you think even read this newsgroup?
> >>
> >>Who's the fool?
> >>
> >>What's your callsign, anyway, Ed?
> >>
> >>-SSB
> >>
> >>Ed wrote:
> >>
> >>
> >>>Can't resist can you ?
> >>>
> >>>On behalf of everyone, you're apology is accepted for wasting their
> >

> > time.
> >
> >>>If you have the MFJ-974H tuner in your possesion, please let us all
know
> >>>what you think of it so far. Otherwise *please* go away.
> >>>
> >>>If you think I'm a troll thats your delusion ... go back and read the
> >
> > posts.
> >
> >>>Regardless, go away please.
> >>>
> >>>
> >>>
> >>>"sideband" <AINO8SPAMW@cac.net> wrote in message
> >>>news:LBjpb.7390$P%1.6167209@newssvr28.news.prodigy.com...
> >>>
> >>>
> >>>>What apology? The one you owe JG, Bob, and now me? You started this..
> >>>>You can't resist replying with your vitriol. And guess what? If you
> >>>>stop, the thread stops. So why don't you just stop. No need to reply,
> >>>>YOUR apology is not going to be accepted.
> >>>>
> >>>>A troll is a troll is a troll, even if it's name is Ed.
> >>>>
> >>>>-SSB
> >>>>
> >>>>Ed wrote:
> >>>>
> >>>>
> >>>>
> >>>>>Can't resist can you ?
> >>>>>
> >>>>>Go back and check carefully who's calling names ... no need to reply,
> >>>
> >>>your
> >>>
> >>>
> >>>>>apology is accepted.
> >>>>>
> >>>>>Now *please* go away and stop wasting the time of everyone following
> >
> > the
> >
> >>>>>thread who is interested in the tuner.
> >>>>>
> >>>>>>*Thanks*
> >>>>>
> >>>>>
> >>>>>

> >>>>>"sideband" <AINO8SPAMW@cac.net> wrote in message
> >>>>>news:bnjpb.7386$P%1.6163222@newssvr28.news.prodigy.com...
> >>>>>
> >>>>>
> >>>>>
> >>>>>>Ed wrote:
> >>>>>>
> >>>>>>
> >>>>>>
> >>>>>>
> >>>>>>>So Gary calls Bob a jerk yet they still have *no* information.
> >>>>>>>CW and SSB also chime in with *no* information. Is your buddy
"RTTY"
> >>>>>
> >>>>>going
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>to chime in with *no* information also ?
> >>>>>>>
> >>>>>>>Are your lives so empty you need to respond to a post where you
have
> >>>>>
> >>>>>nothing
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>to contribute ?
> >>>>>>>
> >>>>>>
> >>>>>>is yours so empty you have to start a thread just so you can insult
> >>>>>>people?
> >>>>>>
> >>>>>>
> >>>>>>
> >>>>>>
> >>>>>>>If you don't think anyone has access to the tuner (more of your
> >>>>>
> >>>>>speculation)
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>than just don't respond - the thread will die by itself. You're
> >>>>>
> >>>>>wasting
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>the time of everyone following the thread who is hoping that
someone

> >>>>>
> >>>>>will
> >>>>>
> >>>>>
> >>>>>
> >>>>>>>post a review as soon as they get their hands on one.
> >>>>>>>
> >>>>>>>So go away - please. Theres no one trolling here other than you
> >>>>>>>know-it-all's (i.e. speculate-on-everything's).
> >>>>>>>
> >>>>>>
> >>>>>>Look! The troll is calling someone else a troll. Go figure. Guess it
> >>>>>>takes one to know one. Want to throw any more elementary school yard
> >>>>>>tactics around?
> >>>>>>
> >>>>>>Bad Dog. No Biscuit.
> >>>>>>
> >>>>>>-SSB
> >>>>>>
> >>>>>
> >>>>>
> >>>>>
> >>>
> >
> >
>

3659. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 03:58:22 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5hkbqvgb5k6bdqvibfhbgpisk4r2hcfbga@4ax.com>
Source record: 105479

On Sat, 1 Nov 2003 09:03:01 -0500, "Ed" <ed@nospam.com> wrote:

>
>Now seriously ... GO AWAY.
>
You really are a jerk. And that is not speculation.

Bob
k5qwg

3660. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 04:00:21 UTC
From: Ed <ed@nospam.com>
Message-ID: <m9Odnf8RyPFFTzii4p2dnA@comcast.com>
Source record: 105426

Gee, you win. You're too smart for me troll. Now you can go tell all your friends.

bye !

"sideband" <AINO8SPAMW@cac.net> wrote in message news:8akpb.7406$P%1.6175264@newssvr28.news.prodigy.com...
> and perhaps 10 others (more speculation on my part) outside the company.

3661. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 04:07:07 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <Lvkpb.7409$P%1.6180782@newssvr28.news.prodigy.com>
Source record: 105427

I did? That's funny.. you're still posting.

How's life near Trenton, NJ anyway?

You never did post your callsign...

Wonder how many emails I'm going to have in the morning?

Go crawl back under your bridge, and quit wasting everyone's time. You
sound just like Chip.

Ed wrote:

> Gee, you win. You're too smart for me troll. Now you can go tell all your
> friends.
>
> bye !
>
> "sideband" <AINO8SPAMW@cac.net> wrote in message
> news:8akpb.7406$P%1.6175264@newssvr28.news.prodigy.com...
>
>>and perhaps 10 others (more speculation on my part) outside the company.
>
>
>

3662. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 04:09:38 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <6ykpb.7411$P%1.6181335@newssvr28.news.prodigy.com>
Source record: 105428

...or is it Eatontown? Easy to get these things mixed up, especially
in the New England states.

-SSB

sideband wrote:

> I did? That's funny.. you're still posting.
>
> How's life near Trenton, NJ anyway?
>
> You never did post your callsign...
>
> Wonder how many emails I'm going to have in the morning?
>
> Go crawl back under your bridge, and quit wasting everyone's time. You
> sound just like Chip.
>
> Ed wrote:
>
>> Gee, you win. You're too smart for me troll. Now you can go tell all
>> your
>> friends.
>>
>> bye !
>>
>> "sideband" <AINO8SPAMW@cac.net> wrote in message
>> news:8akpb.7406$P%1.6175264@newssvr28.news.prodigy.com...
>>
>>> and perhaps 10 others (more speculation on my part) outside the
>>> company.
>>
>>
>>
>>
>>
>

3663. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 04:33:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa5db54_1@corp.newsgroups.com>
Source record: 105429

Roy Lewallen wrote:
> Of course it doesn't account for phase shifts of current, since there
> aren't any.

You seem to be disagreeing with John Devoldere's "Bible" - "ON4UN's Low Band DXing", 3rd Edition, on page 9-34 at:

http://www.k3bu.us/loadingcoils.htm

A little thought should prove there is a current phase shift (delay) through the coil. Let's look at an 8 foot long center-loaded mobile antenna for 75m. The 4 feet below the coil gives a phase shift of about 5 degrees. Assume zero phase shift through the coil. The 4 feet above the coil gives a phase shift of another 5 degrees for a total of 10 degrees at the end reflection point. It's an open circuit, so a 180 degree phase shift takes place. That puts the reflected current at 190 degrees. Add the 10 degrees coming back and we see the reflected current arrives mostly out of phase with the forward current at the feedpoint. Since the feedpoint impedance is known to be around 15 ohms, these superposed currents cannot possibly be out of phase and must necessarily be in phase.

The phase shift (delay) of the current simply cannot be the same with and without the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3664. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 04:43:24 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <bo4mei$18dbp4$1@ID-105647.news.uni-berlin.de>
Source record: 105431

I only have experience with the MFJ, I have an older 259. Very happy with
it, so much so that at some point I'd like to "upgrade" to the 269.

73's

Robert / N4IXT

"ON5MJ" <on5mj_no_more _spam_in_stock_sorry_@skynet.be> wrote in message
news:3fa5416a$0$22179$ba620e4c@reader3.news.skynet.be...
> Hi there,
>
> I want to buy an antenna analyser HF and/or VHF. Could be MFJ or Autek.
But
> I don't have experience with theses equipments. Following you what could
be
> the best one ?
>
> 73 de ON5MJ - Jacques.
>
>

3665. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 05:18:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqbpa9borauecf@corp.supernews.com>
Source record: 105430

I use lumped circuit analysis when dealing with lumped circuits, and distributed circuit analysis when dealing with distributed circuits. EZNEC's loads are lumped elements, so when you're talking about EZNEC loads, you're talking about lumped elements.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Of course it doesn't account for phase shifts of current, since there
>> aren't any. It does account for voltage phase shift. It uses the same
>> equations I learned in freshman circuits class. Perhaps they taught
>> those same equations in Texas, too, but I can't be sure.
>
>
> Roy,
> We are talking about distributed networks. Of course, there is a phase
> shift in the current as well as the voltage. You and W8JI seem to be
> using lumped circuit analysis when you should be using distributed
> network analysis. The center loading coil for a 75m mobile antenna
> is an appreciable percentage of an electrical wavelength so you cannot
> use your lumped circuit analysis without introducing errors.

3666. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 08:31:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqc4iorfd6dvad@corp.supernews.com>
Source record: 105432

Yes, I disagree with that.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Of course it doesn't account for phase shifts of current, since there
>> aren't any.
>
>
> You seem to be disagreeing with John Devoldere's "Bible" - "ON4UN's Low
> Band DXing", 3rd Edition, on page 9-34 at:
>
> http://www.k3bu.us/loadingcoils.htm
>
> A little thought should prove there is a current phase shift (delay)
> through
> the coil. Let's look at an 8 foot long center-loaded mobile antenna for
> 75m.
> The 4 feet below the coil gives a phase shift of about 5 degrees. Assume
> zero
> phase shift through the coil. The 4 feet above the coil gives a phase shift
> of another 5 degrees for a total of 10 degrees at the end reflection point.
> It's an open circuit, so a 180 degree phase shift takes place. That puts
> the
> reflected current at 190 degrees. Add the 10 degrees coming back and we see
> the reflected current arrives mostly out of phase with the forward current
> at the feedpoint. Since the feedpoint impedance is known to be around 15
> ohms,
> these superposed currents cannot possibly be out of phase and must
> necessarily
> be in phase.
>
> The phase shift (delay) of the current simply cannot be the same with and
> without the coil.

3667. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 08:38:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqc50v5ascon85@corp.supernews.com>
Source record: 105433

The "simplified assumptions" made by EZNEC (and NEC in general) are the same ones you'll find in any circuit analysis or electromagnetics text. EZNEC includes a model of a lumped inductor (or "load"), which is accurately represented. It also includes an accurate model of a straight conductor which has physical length. If you could build an antenna from straight conductors and lumped inductors, the result would be very close to EZNEC's predictions.

EZNEC does not have a model of a coil which has physical length. Neither the straight wire model nor the lumped inductor model can or should be expected to behave exactly like a coil which has physical length. As I've mentioned before, a useful approximation can be made by inserting one or more lumped inductor models into a model wire. I don't have any measurements to assess the accuracy of that approximation, however.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> The antenna current reported by EZNEC is inaccurate because of
> simplified assumptions. EZNEC assumes that the current doesn't
> change through the single point inductive load. Therefore, EZNEC
> cannot be used to prove that the current doesn't change.

3668. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 08:44:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqc5bnlilciha7@corp.supernews.com>
Source record: 105434

Tell us, Cecil, at steady state at one frequency, can a lumped inductor (presumably like the experimenter's toroid) tell whether it's at the base of an antenna or simply in series between a generator and load impedance?

Yes_____

No______

If you answered "yes", please explain how and why, and how we'd calculate the current through and voltage across the inductor. If we moved it an inch up the transmission line from the antenna base, can it still tell?

If you answered "no", please write us the equations showing just how much the current should be expected to be different from one end of the inductor to the other. And where those coulombs are going, that go into one end and don't come out the other. Going to the fourth dimension as virtual photons, perhaps?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> in other words, the highest current point on the structure is at the
>> inductor.<<
>>
>> That's what W8JI calculated in EZnec, does it make sense? Like 2+2 is
>> 4.5? Why
>> would inductor "suck" the current up? We should then use "those"
>> inductors to
>> suck the current all the way to the top of the whip - perfect antenna?
>> Cecil, can you 'splain that?
>
>
> Again, the current can either stay the same, increase, or decrease through
> an inductor depending upon where it is located. Has that statement sunk
> in on anyone? If you install a coil 1/8WL up on a 1/2WL vertical, the
> current through the coil will *INCREASE*. If you install it in the center,
> the current magnitude will be the same in and out of the coil and opposite
> in phase. If you install it 1/8WL from the top, the current will decrease
> through the coil like it does on a 1/4WL mobile antenna.

3669. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 14:04:22 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <9uncqvon6v85ul5aek1qu3s5tosqpn8aid@4ax.com>
Source record: 105435

On Sun, 02 Nov 2003 15:14:28 -0700, I <n7ws@_arrl.net> made a booboo:

[snip]
|It doesn't "suck it up." Haven't you ever hear of circulating
|current?
|

I meant to type, "heard of circulating current".

3670. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 14:16:21 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <Vqtpb.52160$v82.2540947@twister.southeast.rr.com>
Source record: 105436
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Zogby.com has compiled some polls on this issue. Here's an interesting
article: http://www.zogby.com/Soundbites/ReadClips.dbm?ID=6164

Regards,
Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"grumpus" <mwelch@madbbs.com> wrote in message
news:39385c80.0311011802.1787b4ee@posting.google.com...
> You must have me confused with somebody else. Just today, two more
> soldiers of ours KIA, and our forces involved in a firefight which
> left ten Iraqi noncombatants dead. Tell me, how long will they love
> us at this rate? How long before the patience of the average Iraqi
> runs out? We are up against the clock friend. We didn't get into
> this predicament by accident, we deliberately stepped in it.
>
> Regards,
>
> Grumpus
>
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:<6GXob.730$Oo4.467@newsread1.news.atl.earthlink.net>...
> > See what happens when you read Witch Hillary's book.....you get all
gooey
> > inside....bring on that VAST RIGHTWING CONSPIRACY.
> >
> > In a word ... balderdash.
> >
> > Dan/W4NTI
> >
> > "grumpus" <mwelch@madbbs.com> wrote in message
> > news:39385c80.0311011127.f45dc3d@posting.google.com...
> > > Hi Ross, I entirely agree with your assessment of the pathogenesis of
> > > the current episode of war fever. This war is the neoconservatives'
> > > war. Soon to be the American people's war if it can be conflated,
> > > after the fact, with the so-called War On Terror. If the occupation
> > > can be made to draw in Al Quaeda and other insurgents and the witting
> > > or unwitting participation of other states in the region, then presto,

> > > we have the perfect post hoc justification for the invasion in the
> > > first place and the perfect pretext for toppling the next domino, so
> > > the neocons desire.
> > >
> > > But in their overweening certainty and their impetuous rush to war
> > > they overlooked the need for international troops to man the
> > > occupation and the innate hostility and justifiable suspicion of the
> > > Iraqi people. If coalition forces do not find themselves in a
> > > quagmire, at the very least they find themselves taking first steps in
> > > a long hard slog (an uncharacteristic moment of honest introspection
> > > by Rumsfeld or a deliberate leak to better position himself in the
> > > internecine blame game now playing out within the administration?).
> > > Bogged down as they are in a police action which is dispiriting and
> > > not their brief, our troops cannot be cycled out to go onto bigger and
> > > better things. If the neocons in charge had played their hand more
> > > adroitly, had awaited a season of inspections and won over full
> > > international cooperation as did Bush the Elder, then perhaps even now
> > > they would be spurring their destriers into Damascas or even into
> > > Tehran. The trick now is to bite off more than we can chew, get into
> > > grave difficulty, and rally the American people around the troops.
> > > Then take another bite. The neocons have repeatedly claimed that the
> > > WMD's are buried in the sands of the Bekaa valley, that is why they
> > > are nowhere to be found in Iraq. Perhaps this is the next bite of the
> > > apple gleaming in their eye. Events, mostly of their own making, have
> > > overtaken their resources, not their ambition. If regional war can be
> > > achieved, look for a call to resurrect the Draft.
> > >
> > > I have read that Rummy and crew established their own little
> > > intelligence agency within the civilian side of the Pentagon which
> > > examined the raw data collected by the traditional spooks and culled
> > > out only the bits which gave credence to a pro-war assessment, even,
> > > as you say, going so far as to rely upon the unsupportable evidence
> > > presented by unreliable characters such as Chalabi (sic), a member of
> > > the diaspora for forty years, and others. Having made their own
> > > assessment in their own way, they injected it high up into the
> > > national security brief presented to Bush without having it vetted
> > > through the Intelligence chain of command. This is how all the
> > > dubious claims about Saddam's WMD's and hostile intentions came to be
> > > included in the President's speeches, and how the Niger uranium claim,
> > > based on crudely forged documents and widely discredited within the
> > > CIA and the State Department, seemed to take on a half-life of its
> > > own. The neocon chefs cooked the intelligence books. I have also
> > > read that Sharon has his own little rump intelligence agency which is
> > > mistrusted by the Mossad.
> > >
> > > I wouldn't give Bush too much credit for deviousness. Nixon he is
> > > not. I think what happened after 9/11 is that the neocons played to
> > > Bush's exchatological leanings. I think they duped him and they duped
> > > the American people. Maybe now, with the continuing difficulties we
> > > face in subduing Iraq, he is wising up and reevaluating how we got

> > > into this mess in the first place.
> > >
> > > Regards,
> > >
> > > Grumpus
> > >
> > >
> > >
> > > Ross Archer <archer@topnow.com> wrote in message
> > news:<3FA318BC.55C2DBB5@topnow.com>...
> > > > Ed Price wrote:
> > > > [snip]
> > > > >
> > > > > The only unfortunate thing about knocking off Sadaam was that he
was
> > hated
> > > > > by Al Queda, and, in return, did his best to exterminate them. The
> > enemy of
> > > > > my enemy isn't always my friend. It's quite possible to have two
> > differing
> > > > > enemies. And sometimes, it's wisest to let you and him fight. I
think
> > it
> > > > > will be enormously ironic if we ultimately find that Sadaam sealed
his
> > > > > destiny by being a great bluffer.
> > > >
> > > > Far from ironic, it was probably part of a deliberate and
> > > > relatively clever strategy that went awry for this tyrant.
> > > >
> > > > I intend to show (again) why the argument "Saddam Hussein
> > > > wouldn't thwart the inspections unless he was hiding large
> > > > amounts of WMDs" is profoundly ignorant. He would thwart the
> > > > inspections regardless. Let me explain why.
> > > >
> > > > Say, for the sake of argument, that Saddam had MASSIVE
> > > > stockpiles of WMDs. It would stand to reason he would
> > > > thwart the inspection process in every way possible, to
> > > > postpone or avoid their discovery. This much is obvious.
> > > >
> > > > Now say, for the sake of argument, that Saddam's WMD arsenal
> > > > was decimated in 1991, and he could NOT overcome the
> > > > inspection regime, the surveillance, and the no-fly zone
> > > > enforcement to rebuild his arsenal significantly. What
> > > > would he do? He would thwart the inspection process in
> > > > every way possible. Why? Because once it came out, that
> > > > Saddam couldn't outfox the West, it would make Saddam look
> > > > weak and reduce his intimidation power drastically.
> > > > Megalomaniacs simply don't do that.
> > > >

> > > > As background, it's perfectly obvious that Saddam Hussein
> > > > is/was a demagogue with intentions of expanding his
> > > > influence to rule the Arab world. Does anyone seriously
> > > > doubt his megalomania? Just look at the cult of personality
> > > > he's created, if you remain doubtful. He loves (loved?)
> > > > worship. Now, if you're a megalomaniac dictator, with
> > > > aspirations to power and influence, who personally gains
> > > > pleasure from the worship and fear of others, how would YOU
> > > > act?
> > > >
> > > > First, by "standing up" to the inspections, Israel, or
> > > > whatever rabidy anti-Western Arabs hate, his popularity
> > > > among rabidly anti-Western Arabs (of which I hear there are
> > > > a few) skyrockets. He looks strong and therefore an
> > > > attractive candidate for leading them. Perhaps even better
> > > > than Osama bin Laden, his chief competitor to that
> > > > aspiration. This feeds right into his megalomania. He
> > > > wants power and followers, and by "standing up to" the
> > > > allies, and Israel by proxy, he gains major political
> > > > capital that might have been useful once Saddam had
> > > > successfully rebuilt his conventional military. A weak
> > > > nation could be conquered and "Saddamized" rather easily
> > > > with nothing more than his strong conventional military and
> > > > an indigenous population of committed sympathetic radicals.
> > > >
> > > > Second, by seeming to have WMDs, he intimidates us more. He
> > > > uses our stupidity, namely "Why else would he thwart the
> > > > inspection process at every turn if he wasn't hiding
> > > > weapons?", against us. Saddam figured the allied forces
> > > > would think twice before striking at him given the potential
> > > > for mayhem our soliders would face from these (assumed
> > > > whether real or not) WMDs. So bluffing at having WMDs was a
> > > > free deterrent he thought would protect his power. A
> > > > classic poker bluff.
> > > >
> > > > So it's not very hard to see why he would pretend to have
> > > > weapons that were blasted to dust in 1991 that he couldn't
> > > > rebuild.
> > > >
> > > > Where it went wrong for Saddam was he underestimated the
> > > > single-mindedness of the US Administration to remove him
> > > > from power. This was something Wolfowitz, Perle, Rumsfeldt,
> > > > and others had wanted to do for years (cf. PNAC).
> > > >
> > > > With the mounting failures to find any evidence of WMDs in
> > > > Iraq, the only thing to do for an Administration committed
> > > > to war was to cook the junk evidence and rush to war at
> > > > maximum possible speed. And that's precisely what they did.
> > > >
> > > > We achieved the result of pissing off our allies, who

> > > > understood that removing Saddam was a US political objective
> > > > that had nothing to do with security of the USA or much of
> > > > anyone (except Israel, which gains obvious benefits). They
> > > > openly criticized us and the quality of our evidence. It was
> > > > junk evidence. They knew it. Everybody knew it except the
> > > > American and British people, evidently, because they both
> > > > were the targets of a thinly-disguised sales job.
> > > >
> > > > To bolster the case for going to war, they even went to
> > > > Iraqi dissidents for threat assessments. The Iraqi
> > > > dissidents had every reason to co-operate in any scheme to
> > > > unseat Saddam, and CIA internal documents show they did not
> > > > consider this source to be reliable at all. Yet their
> > > > known-unreliable statements were often repeated
> > > > as a justification for war against Iraq. They also
> > > > selectively grabbed the minority of evidence bolstering the
> > > > position that Saddam had stockpiles of WMDs we just couldn't
> > > > find, and ignored the rest, in their making a case for war.
> > > >
> > > > What went wrong for the Bush Administration, is more and
> > > > more of the American people (and even more of the British)
> > > > are seeing that we were sold a bill of goods by a cabal of
> > > > explicitly dishonest manipulators and their dupes.
> > > >
> > > > What went wrong for the American people is we're losing
> > > > soldiers virtually every day in a country that posed no
> > > > significant threat to our security interests, prior to
> > > > invasion.
> > > >
> > > > I said two things before, and history proved me right on
> > > > both. First, Saddam didn't have significant WMDs. They
> > > > will never be found, because they aren't there. Second, the
> > > > Bush Administration is one of the most incompetent and
> > > > dishonest we've seen in our history. As the facts emerge
> > > > (and it will take quite some time given this is by far the
> > > > most secretive Administration in our history), eventually
> > > > Bush's Administration will win the mendacity crown from
> > > > Richard Milhous Nixon.
> > > >
> > > > >
> > > > > Sadaam earned his fate by attacking our economic lifeline, and
being a
> > > > > generally de-stabilizing force in a region quite important to the
USA.
> > Yes,
> > > > > > it is about the oil! Just how many Grannys in Schenectady have to
> > freeze to
> > > > > > death because they can't afford heat until we recognize that our
> > economy is
> > > > > > totally dependent on oil availability & pricing?

> > > >
> > > > Jimmy Carter tried very hard to get alternative energy
> > > > programs underway. As you can imagine, it was primarily oil
> > > > and gas interests that lobbied -- and eventually succeeded
> > > > -- in killing subsidies to their competitors. Though some
> > > > falsely claim it was environmentalists who were to blame,
> > > > this appears only to be true in the nuclear energy case,
> > > > where in fact environmentalists did great harm by forcing
> > > > the use of dirty coal instead of at-least-cleaner nuclear
> > > > energy.
> > > >
> > > > But show me where environmentalists engaged in a concerted
> > > > successful effort to block government subsidies for wind and
> > > > solar research in a significant way, and I'll buy you lunch.
> > > >
> > > > >
> > > > > Temporarily, we work with despicable foreigners who despise us,
> > because we
> > > > > are dependent on them in some way. The industrial world's
dependence
> > on oil
> > > > > has caused the worst economic imbalance we could imagine, giving
> > economic
> > > > > power to many who are unfit to govern a bucket of shit.
> > > > >
> > > > Saddam wasn't fit to rule the viruses in the bucket of shit.
> > > > I'm glad he's gone, but the US economy will suffer for
> > > > decades due to the foolish idiocy and dishonesty of this
> > > > horrible and corrupt secretive Administration.
> > > > >
> > > > > The best thing we could do for America would be to greatly reduce
our
> > > > > economy's dependence on foreign oil. OTOH, I don't expect this to
> > happen in
> > > > > my lifetime.
> > > > >
> > > > Probably not. Until the entrenched energy interests figure
> > > > out a way to get government money for research, or how to
> > > > make a profit, or when reserves finally push gasoline up to
> > > > $5 a gallon or so. Then the tune will change by necessity.
> > > > Market forces will eventually compel the use of alternatives
> > > > to oil and gas. Whether it's in 10 years or 200, I can't
> > > > honestly guess. Could just as easily be either.
> > > >
> > > > -- Ross
> > > >
> > > > >
> > > > > Ed
> > > > > wb6wsn

3671. Re: Numbnut Dumbass 8 Vomit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 14:44:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA669E1.37E05913@cwis.net>
Source record: 105437

"Ohio Ham" wrote:
>
> Is a disgrace to the Amateur Radio Community, and needs to be retired from
> operating in the amateur spectrum.

And 'cross-posting' is ill mannered...
'Doc

3672. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 14:49:35 UTC
From: richardharrison@webtv.net
Message-ID: <16839-3FA66AFF-13@storefull-2314.public.lawson.webtv.net>
Source record: 105438

Roy, W7EL addressed several provocative questions to Cecil. Anyone can comment, so I will.

Roy wrote:
"And where those coulombs are going that go into one end of the inductor and don`t come out the other."

Coulombs travel back and forth in an inductor and may go actually nowhere. Their movement in an unshielded inductance may result in radiation and certainly produces some heat.

The purpose of a loading coil in a short loaded vertical antenna is often to add to the existing degrees of antenna length to reach a resonant length of 90-degrees, as shown in Fig 9-22 of ON4UN`s "Low-Band DXing", and included on Yuri`s web pages.

Fig 9-22 is illustrative. First, a full-size 90-degree vertical is shown. Current is maximum at the base and zero at the top. This is also true for what Kraus calls a "normal-mode helical antenna". A normal-mode helical antenna has its principal radiation at right-angles to the axis of the helix.

The normal-mode helix is fed from a generator with two terminals. One terminal feeds the base end of the helix directly. The other generator terminal feeds the ground end of a capacitance between the ground, various turns, and the tip end of the helix.

The impedance is only a few ohms at the ground end of the helix and perhaps several thousand ohms at the tip end of the helix. This means a lot more amps at the ground end of the helix than at the tip end, though the power flow through the generator`s terminals is the same in either terminal.

Best regards, Richard Harrison, KB5WZI

3673. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 14:55:54 UTC
From: arrow146@aol.com
Message-ID: <20031103095554.19613.00000242@mb-m01.aol.com>
Source record: 105439

<< I only have experience with the MFJ, I have an older 259. Very happy with it, so much so that at some point I'd like to "upgrade" to the 269. >>

Not sure the 269 is much of an upgrade. I have had two, first one I sent back because the UHF part did not work right. The second was exactly the same. I know of others that had the same problem.

The older 259 had problems with the selector switch.

The 259B fixed that problem. I like the 259B, works just fine.

The Autek is ok, a little harder to use, I think.
Needs a new battery every time I go to use it.
The switches takes a little getting use to.

73 Al Lowe N0IMW

3674. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 15:21:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6731a_6@corp.newsgroups.com>
Source record: 105440

Roy Lewallen wrote:
> Yes, I disagree with that.

Then you disagree with Balanis.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3675. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 15:26:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6744c_6@corp.newsgroups.com>
Source record: 105441

Roy Lewallen wrote:
> If you could build an antenna from
> straight conductors and lumped inductors, the result would be very close
> to EZNEC's predictions.

Hard to prove since lumped inductors are impossible in reality. Why
does EZNEC show so much difference between lumped inductors and stub
inductors? The difference in coils Vs stubs in reality is virtually
nill.
--
73, Cecil http://www.qsl.net/w5dxp

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3676. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 15:46:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031103104601.05983.00000217@mb-m13.aol.com>
Source record: 105442

>
>Can you post a link to this so I know what it is that you think I
>said, or what I said that I don't remember saying?
>
>Wes Stewart N7WS
>

You are right. It wasn't you, it was and credit belongs to Richard Clark, KB7QHC.
I apologize for the error, which was caused by my confusion between two of you 7's.
Now that you made posting on eHam.net I went back to the archives and found the posting and its rightful author.
Sorry if it caused any problems and made you to jump to conclusion that I am making things up. I will be more careful with references.

Yuri, K3BU.us

3677. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 15:48:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6798e_6@corp.newsgroups.com>
Source record: 105443

Roy Lewallen wrote:
> Tell us, Cecil, at steady state at one frequency, can a lumped inductor
> (presumably like the experimenter's toroid) tell whether it's at the
> base of an antenna or simply in series between a generator and load
> impedance?

This question proves you don't understand the problem. The inductor
cannot tell if it is installed in an antenna or transmission line.

So I will turn the question around: Does a standing wave antenna
have standing waves? Reference _Antenna_Theory- by Balanis, page 17,
section 1.4 Current Distrubution on a Thin Wire Antenna. Is Balanis
correct when he says: "If the diameter of each wire is very small,
the ideal standing wave pattern of the current along the arms of
the (1/2WL) dipole is sinusoidal with a null at the end."

This is after he takes an unterminated transmission line, discusses
standing waves, and then slowly opens up the ends of the transmission
line to create a 1/2WL dipole.

I took Balanis' antenna course at ASU in 1995. I asked a lot of
questions about inductively loaded antennas. The current and
standing wave pattern on each side of a loading coil is NOT the same.
--
73, Cecil http://www.qsl.net/w5dxp

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3678. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 16:01:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa67ca3_6@corp.newsgroups.com>
Source record: 105444

Roy Lewallen wrote:
> If you answered "yes", please explain how and why, and how we'd
> calculate the current through and voltage across the inductor. If we
> moved it an inch up the transmission line from the antenna base, can it
> still tell?

Forget about an inductor becoming conscious. The impedance looking
into a six foot whip is the same whether the coil is there or not.
The impedance looking into the bottom of the coil is certainly not
the same as looking into the six foot whip. I suspect this can be
proven by modeling a mobile antenna and then moving the source point
from just under the coil to just above the coil.

> If you answered "no", please write us the equations showing just how
> much the current should be expected to be different from one end of the
> inductor to the other.

The current will be approximately the same as at the two points
of wire it replaces in the antenna without the inductor. I earlier
asked you a question that you seem to have missed. Do you agree
or disagree with Fig 9-22 of ON4UN`s "Low-Band DXing", included
on Yuri`s web pages.?

> And where those coulombs are going, that go into
> one end and don't come out the other.

You can answer your own question. Where do the coulombs go that enter
one end of a 1/4WL stub and don't exit the other end? Please stop
using lumped circuit analysis on distributed network problems. You
know and I know that it doesn't work.
--
73, Cecil http://www.qsl.net/w5dxp

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3679. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 16:06:12 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <hsucqv4rhogvkic3dolvkbvuv75t3df9kp@4ax.com>
Source record: 105445

On 03 Nov 2003 15:46:01 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

|>
|>Can you post a link to this so I know what it is that you think I
|>said, or what I said that I don't remember saying?
|>
|>Wes Stewart N7WS
|>
|
|You are right. It wasn't you, it was and credit belongs to Richard Clark,
|KB7QHC.
|I apologize for the error, which was caused by my confusion between two of you
|7's.
|Now that you made posting on eHam.net I went back to the archives and found the
|posting and its rightful author.

Why did it take my posting on eHam to get you do do this? The quote
above was directed to you in this forum days ago.

|Sorry if it caused any problems and made you to jump to conclusion that I am
|making things up. I will be more careful with references.

Okay. Thanks.

3680. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 16:08:18 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <49vcqvg9vl5lj4qpebsskiro8ua954oii8@4ax.com>
Source record: 105446

On Mon, 03 Nov 2003 09:26:05 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

|Roy Lewallen wrote:
|> If you could build an antenna from
|> straight conductors and lumped inductors, the result would be very close
|> to EZNEC's predictions.
|
|Hard to prove since lumped inductors are impossible in reality. Why
|does EZNEC show so much difference between lumped inductors and stub
|inductors?

I see no such difference in my model.

|The difference in coils Vs stubs in reality is virtually
|nill.

3681. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 16:57:13 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031103115713.05983.00000220@mb-m13.aol.com>
Source record: 105447

N7WS:
>
>Why did it take my posting on eHam to get you do do this? The quote
>above was directed to you in this forum days ago.
>

I thought it was you, didn't make much of it. If it was so important and you accused me of making things up, implying that article was misleading, I investigated Google search options and found the proper posting by KB7QHC and posted the correction. Ju's human me, sorry.

Yuri

3682. dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 17:00:58 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <eRvpb.204144$0v4.16043402@bgtnsc04-news.ops.worldnet.att.net>
Source record: 105448
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

www.fwt.niat.net

This dielectric embedded antennas are smaller than naturally occurs and yet
have a net gain

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vpuio3mta1gaad@corp.supernews.com...
> If the antenna is in close proximity to water, the water's dielectric
> constant of about 80 will have a profound effect, as will its very high
> loss.
>
> Roy Lewallen, W7EL
>
> Wayne Shanks wrote:
> > Will Reeve wrote:
> >
> >> Hi,
> >>
> >> I have an interesting project! I am using a RF receiver device which
> >> has a
> >> 50 Ohm RF input. I want to use a PCB printed antenna on FR4 board, not
> >> unusual you say. but I need to pot the whole PCB in resin to make it
> >> waterproof. The receiver only needs to work when floating on water! Has
> >> anyone any experience in PCB antenna who would be so kind to comment
> >> on the
> >> effects, and possible actions to counter any effects, of the potting.
The
> >> resin is much like araldite.
> >>
> >>
> >>
> >> Any thoughts much appreciated.
> >>
> >>
> >>
> >> Will
> >>
> >>
> >
> >
> > The potting compound will act as a dielectric load. My bet is that the
> > dielectric constant will be about 3. Your antenna will have to shrink.
> > If you know the dielectric properties of the potting compound, and your
> > antenna is simple, then I might be able to run a simulation (and

> > optimization) for you with IE3D.... I work with 900 MHz antennas on FR4
> > every day :)
> >
> > Wayne Shanks
> > Senior RF and Antenna Engineer, Matrics Inc.
> >
>

3683. Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 17:19:07 UTC
From: johnbartley@email.com
Message-ID: <f90c7f43.0311030919.ca37a58@posting.google.com>
Source record: 105449

FRACTAL-SHAPED TILES DEVELOPED FOR NEW BROADBAND ANTENNA CLASS
Penn State engineers have developed innovative design methods for a new class of antennas composed of an array of fractal-shaped tiles that offer anywhere from a 4:1 to 8:1 improvement in bandwidth compared to their conventional counterparts. Douglas H. Werner, professor of electrical engineering and senior scientist in Penn State's Applied Research Laboratory, recently described the new antennas at a conference on wireless communication technology in Hawaii. While fractal concepts have been used previously in antenna design, Werner and his research team are the first to introduce a design approach for broadband phased array antenna systems that combines aspects of tiling theory with fractal geometry.
Read the full story at http://live.psu.edu/story/4373

3684. Need Hamstick ZL-Special (or similar phased array) help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 17:48:17 UTC
From: NQ4S@arrl.net
Message-ID: <51ea6238.0311030948.1df1210c@posting.google.com>
Source record: 105450

I've run into a problem designing a compact antenna and could really use some more experienced help.

Due to CCR I'm not allowed to have any permanent antenna structures outside. Currently there are 2 HF and 2 VHF/UHF antennas crammed in my attic. The HF antennas work to a point, but they are not overly efficient. Beyond Europe and South America, most DX stations come across as just a whisper.

Over the weekend I did some research on a compact antenna for the back yard of my town home. The goal was to come up with something on 20M which is compact, light, and easy to put up and take down.

While going through the ARRL antenna book my attention came across a chart of field strengths for various combinations of phased arrays. One that really had my interest were the ones at only 1/8 wavelength. At 20M this is only about 8 feet, which is very doable with some PVC pipe for a mount on top of a 30 foot telescoping pole.

Spending a couple of hours playing with EZNEC I figured out that an 8 foot separation between two dipoles running about 140-degrees out of phase would give a pretty good gain at about a 30-degree takeoff angle when mounted 30 feet off the ground. It looks like a really nice improvement over a single dipole.

Being that a full dipole would run over 30 feet in length (longer than my entire back yard), my natural idea was to use a couple of hamsticks. I'm already using two hamstick equivalents for a dipole in my attic. It works, and is nice and compact. Using two Hamstick dipoles on the 8 foot boom would give a turning radius of around 8 feet. Very doable.

Now we reach the point where I'm running into trouble. What would be the best way to feed this antenna? My first thought was to run a piece of coax up to the first dipole and then a piece from there to the second dipole to provide the 140 degree delay. I'm running the dipole in my attic without any sort of matching network, and it works fine. Will running two dipoles in the same way be close enough to 50 ohms impedance or am I really missing the boat here?

Another variant I've considered is running coax up to the top of the pole and into a 1:1 balun to stop any RF coming back down the cable. The balun would be close attached to the first dipole. From there a piece of 300-ohm ladder could be used as a phasing line running from the balun to the 2nd dipole. I'm less confident that this would work due to the impedance mismatch.

My hope is to use a MFJ 33' telescoping pole and a cheap radio shack rotator to hoist and spin this light weight antenna. Having the extra gain from a phased array might finally let me work some of those far off DX stations that I can never seem to hear.

One variant of the idea I'm considering turned up this morning. The ZL-Special is two dipoles 1/8 wave apart with one dipole flipped over and connected by a 1/8 wave connection. The combination of the flip and the line provides an effective 135 degrees of phase delay. Very close to what I came up with doing the computer modeling. The problem I started seeing with the ZL-Special is that most designs show complex matching networks or building folded dipoles to get the right impedance.

I've pretty well hit the wall on my knowledge of matching antennas to feedlines. The ARRL Antenna Book has been of help, but I feel like I'm missing something in there that just isn't letting me finish the idea.

Any information on this would be very helpful. Suggestions on how to proceed would be most welcome.

Thanks.

73 de NQ4S

3685. Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:06:21 UTC
From: mBird <no@spam.com>
Message-ID: <xOwpb.44636$ZC4.36714@twister.nyroc.rr.com>
Source record: 105451

I got a YAGI antenna and put it in my attic -- helped me get rid of FM static problem I had been experiencing with just the basic dipole antenna I was using.

But I was wondering ...
is there any issues with lightning like if the antenna was outside or is the fact that the antenna is in the attic and covered completely by roof make that a non-issue

Thanks for any info (p.s. I know some people are probably laughing at this as a dumb question -- but I figure better to ask then take a chance on toasting my house!)

Thank you

3686. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:20:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa69d10$1_2@corp.newsgroups.com>
Source record: 105452

Wes Stewart wrote:
> On Mon, 03 Nov 2003 09:26:05 -0600, Cecil Moore
> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
> |Roy Lewallen wrote:
> |> If you could build an antenna from
> |> straight conductors and lumped inductors, the result would be very close
> |> to EZNEC's predictions.
> |
> |Hard to prove since lumped inductors are impossible in reality. Why
> |does EZNEC show so much difference between lumped inductors and stub
> |inductors?
>
> I see no such difference in my model.

There shouldn't be a lot of difference. I have modeled two short dipoles,
one loaded with a lumped inductive reactance and one modeled with the
same reactance using an inductive stub. EZNEC reports the following:

Inductance lumped j335 10'stub

current in segment just before the coil .8374 amp .8384 amp

current in segment just after the coil .7971 amp .5642 amp

The relative difference just before the coil is quite small, 0.12%.

The relative difference just after the coil is quite large, 41.28%.

There just cannot be that amount of difference between a coil and a
stub.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3687. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:21:31 UTC
From: antswitch@tomochka.com
Message-ID: <47c89a30.0311031021.2b6dc1f3@posting.google.com>
Source record: 105453

Reg,

Thanks for the demolition work! HI. I guess I was less concerned with losses than detuning of the antenna system by an inadvertent reconfiguration of the feedline should it come close to metal or itself. Not so much per usage/session at the rig, but in the case of doing a large turn of the antenna or in a high breeze situation that would necessitate re-tuning between QSOs or mid-QSO. Or, at the very least not distract me with large variances of SWR whilst I'm transmitting. Still haven't looked into the slip ring method, but it seems to me a good stiff ladder line or twinlead shouldn't pose too great a problem in a rotary situation.

73,

Casey, KS7J

3688. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:29:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa69f46$1_2@corp.newsgroups.com>
Source record: 105454

Richard Harrison wrote:
> The purpose of a loading coil in a short loaded vertical antenna is
> often to add to the existing degrees of antenna length to reach a
> resonant length of 90-degrees, as shown in Fig 9-22 of ON4UN`s "Low-Band
> DXing", and included on Yuri`s web pages.

In order for a current maximum to exist at the feedpoint of a shortened (less than 1/4WL) vertical, the forward current must undergo a phase shift of 90 degrees, followed by the 180 degree phase shift from being reflected by an open circuit, followed by another 90 degree phase shift in the reflected current wave. An 8 foot whip gives about 11 degrees of phase shift end to end on 75m for a total of 22 degrees. If the coil causes no phase shift, where does the other 338 degrees of phase shift come from?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3689. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:32:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA69F29.E5A6C15@uci.edu>
Source record: 105455

Roy Lewallen wrote:
>
> I use lumped circuit analysis when dealing with lumped circuits, and
> distributed circuit analysis when dealing with distributed circuits.
> EZNEC's loads are lumped elements, so when you're talking about EZNEC
> loads, you're talking about lumped elements.
>
> Roy Lewallen, W7EL

Hi Roy,

Wouldn't it be better not to lump any portions of an antenna that are a
part of its electrical length?

73, Jim AC6XG

3690. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 18:52:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dd4dqvoln03t7jp8hbbmg156murc5ro19g@4ax.com>
Source record: 105456

On 03 Nov 2003 15:46:01 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote:

>You are right. It wasn't you, it was and credit belongs to Richard Clark,
>KB7QHC.

Hi Yuri,

The observation was hardly original and I thought it answered the same question that launched this current thread (in other words, your complaint of the shortfall of modeling was already acknowledged with a work-around offered).

What I do not see is any follow-through for that same suggestion. The complaint has been offered twice, but the resolution abandoned as though it had never been made.

I've visited your page, and in an effort to wean out the details (you don't go to much effort to offer an unadorned, plain, vanilla specification for the radiator). I had to guess about the coil length (judging from its only metric being 2.5" diameter) and inductance (you dismiss the importance of its Q and wholly leave this metric blank). Tom cites a 300ï¿½H inductor, but if we are to believe he's unreliable, then why are there no better sources of this fundamental information? Using that same metric (coil diameter) I guess the vertical element was 3/8" (but one picture clearly shows a thin whip which makes charges of mismodeling a sure prospect regardless of honest effort). 60 radials are suggested, but no mention of length (if my attempts to model it yield answers that don't fit your numbers - is it my fault?).

So I proceed with any number of presumptions and with every prospect of charges of cooking results - this is the same odds offered in prospecting eh/cfa claims.

OK, the plain vanilla radiator 93" tall (3/8" stock) in 93 segments surrounded by 60 X 93" radials (#12 wire) ALL elevated 6" above a real, medium ground.
SRC DATA @ 7.1MHz = 0.7995 - J 810.9 ohms
Current varies from 1A at drive point to 0 at tip

The adornment consists of this underspecified coil being decimated and spread across 10 inches of space in the middle of the radiator with lumped values of 30ï¿½H each. For the life of me, I don't know what this exercise was to prove given the results:
SRC DATA @ 7.1MHz = 1.258 - J 1561 ohms
Current varies from 1A at the drive point to 0 at the tip
One variation on the first pass design is that when this current hits

the decimated inductor, the current drops to 0 a few inches before the first inductor section and quickly develops an 180ï¿½ shift over those next few inches which persists on out to the tip. At the bottom of the coil sections, the current again picks up to roughly 100mA climbing to roughly 150mA at the top and then declining over the remaining length of radiator. It would seem that anyone could craft any assortment of conditions to support any of a dozen new theories from this kind of legerdemain.

As far as I am concerned, these are merely a list of facts based upon a poor specification supporting an argument that suffers from an indistinct agenda apart from its lengthy round of 't'ain't so-isms. Yuri, I still see no effort from you to fill in the current distribution readings apart from a rather thin data-set of the two points offered. Your call of warning was already answered some time ago. Does the current vary across the inductor by this offered method: yes! and in spades. Does it vary as you describe it? No, but simple heat can explain that.

73's
Richard Clark, KB7QHC

3691. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 19:03:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g49dqv44a571b4b6rosl17la997mcu66d0@4ax.com>
Source record: 105457

On 3 Nov 2003 09:19:07 -0800, johnbartley@email.com (John Bartley I solved my XP problems w/ Service Pack Linux) wrote:

>FRACTAL-SHAPED TILES DEVELOPED FOR NEW BROADBAND ANTENNA CLASS
>Penn State engineers have developed innovative design methods for a
>new class of antennas composed of an array of fractal-shaped tiles
>that offer anywhere from a 4:1 to 8:1 improvement in bandwidth
>compared to their conventional counterparts. Douglas H. Werner,
>professor of electrical engineering and senior scientist in Penn
>State's Applied Research Laboratory, recently described the new
>antennas at a conference on wireless communication technology in
>Hawaii. While fractal concepts have been used previously in antenna
>design, Werner and his research team are the first to introduce a
>design approach for broadband phased array antenna systems that
>combines aspects of tiling theory with fractal geometry.
>Read the full story at http://live.psu.edu/story/4373

Hi John,

Excuse my reaction: BFD!

I described this style a year and a half ago:
>> "The innovation, called a Penrose TileTenna Circuit(TM) (PTC),
>> uses Penrose Tile conductor paths to replace low efficiency
>> fractal circuits. In doing so, the company has a proprietary
>> position on a harmonic and ubiquitous reach into electronics, RF,
>> and pulley technology.
>>
>> "Virtually every electronic device using fractals or pulleys to
>> form RLC circuits has been eclipsed by the new Penrose TileTenna
>> Circuit(TM). Those low efficiency fractal components were arranged
>> by superstition and ruse to get the pulley to perform as needed.
>> What we've done is ask: can a Penrose Tile pattern, with its
>> smug-awareness and self-indulgance, be used to eliminate
>> fractals and still get the equivalent RLC circuit? We've found
>> that the answer is yes; and in most uses, especially at milliHertz
>> frequencies, all fractals can be replaced by conductive Penrose
>> TileTenna structures. In 110% of cases, the PTCs can substantially
>> reduce the fractal population from their high tide mark of 0.001%
>> market penetration...
>>
>> "Looking at the Penrose TileTenna Circuit(TM) one sees, for
>> example, a beautiful etched copper pattern replacing the ugly
>> fractal traces for a circuit without kinks, plunging the cost and
>> dramatically increasing the reliability of use...

>>
>> "A key part of using PTCs in a practical way was to find a method
>> to identify a fractal arrangement that fails to meet the design
>> specifications for performance and form factor. This, in effect
>> opens the market to all fractal applications being susceptible to
>> replacement by the superior technology offered by PTCs. Other
>> recent and independent research reports take a given Penrose
>> TileTenna and then see how it works as an RLC circuit, such as a
>> filter or resonator...
>>
>> "The CTO of PILES, Inc. (Penrose tILES' new business name,
>> formerly designers of EH/CFA's, marine pulleys and other fractals)
>> scoffs at competitors' slow-to-patent IP security by noting PTC
>> technology has protections of pending patent pending status. 'We
>> thought of it first and that is sufficient to take anyone to
>> court!' goes the logic of this source. PILES' CTO warns that
>> they have an 'announced' pending patent pending status (offering
>> greater protection than simple pending patent pending status)
>> against all antennas designed using an inclined plane. 'We are
>> committed,' offers the CTO, 'to future possibilities.' 'If you
>> think about it, a wrapped incline describes a screw, and we do not
>> want to be the outdone by fraudtenna in the ability to give
>> customers a screw when they seek a novel antenna design.'"
>>
>>For those interested in the prospects of PILES and their ability to
>>irritate fraudtenna in the end, stay tuned for future breakthroughs in
>>pulley research. ;-)

repeated for your edutainment.

73's
Richard Clark, KB7QHC

3692. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 19:29:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ro9dqv8ateack92prp6srjgiqtf5r32rdr@4ax.com>
Source record: 105458
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 03 Nov 2003 17:00:58 GMT, "Marc H.Popek"
<LVMarc@worldnet.att.net> wrote:

>www.fwt.niat.net
>
>This dielectric embedded antennas are smaller than naturally occurs and yet
>have a net gain

Hi Marc,

Interesting sentence construction.

A cogent question would reveal some perspective: How much would your
13dBi dielectric embedded antennas for TV Channel 2 weigh?

73's
Richard Clark, KB7QHC

3693. Attention hammies, I contact UFOs on freeband

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 19:38:59 UTC
From: Twistedhed <twistedhed@webtv.net>
Message-ID: <bo6asj$276$1@news.x-echo.com>
Source record: 105459
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

This is another myth that Lelnad and his gang of jealousy-infected breth
eren perpetuate, that I have talked with "saucer men", I assure you, not
hing is further from the truth. The lies and anger-motivated constructio
ns that Lelnad, Dogie, the false Sparky, and Mad Geo dream up on a daily
basis have
nothing whatsoever to do with my actual experiences in the realm of the
supernatural.

AO=AO=AO=Now this is all well documented mind you, I have contacted the
outer reaches of another dimension while calling skip on 555, and yes I
am well aware that the frequency falls outside the channels that the gov
erment deems preferable for use, but I am not one of the unwashed unawar
e rabble of
citizenry, never have been, hence I am not subject to the same laws as c
ommon, callow men. In college I was on the Deans List if that tells you
anything and my superior intellect won me the favors of many like-minded
individuals in both society and academia. But I shunned their transpare
nt and shallow attentions to pursue my own unglamorous but rewarding pat
h in the swamplands of the south. This unselfish pursuit and my canny na
tive instincts are what I believe has been responsible for opening the d
oor to contact with other dimensions in the continuum and my subsequent
elevation to a cherished confidante. If you doubt me then do so at your
peril for there are many things on heaven and earth that are not yet und
erstood so you would do well to pay your respect to an as yet undisprove
n phenomenon. Alas, here is the meat of it; the beings I have communicat
ed with by chance do in fact effect transport by spherical means. Yes, s
ome call it a saucer, but that is a
misnomer. If the media knew the truth then it would be the undoing of my
special status and the end of all social intercourse. Only on the freeb
and does one learn of such truths. Lelnad and his gang of hounds may sco
ff, and I say let them, for what does one expect from such unenlightened
commoners but
an ignorant barbaric yawp in the face of such great wisdom.=AO=AO=AO=AO

=-
Article poste via Voila News - http://www.news.voila.fr
Le : Mon Nov 3 20:38:59 2003 depuis l'IP : ac9160fe.ipt.aol.com [VIP 532284301978]

3694. Re: Antenna Design Programs

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:01:50 UTC
From: pez <nowhereman@nowhereland.no>
Message-ID: <bo6c6joaj2@nic.grnet.gr>
Source record: 105460

Dear Mr.R.P.Haviland,

Obviously you are the very same person,
who released in the Public Domain
the very first modification
of the notorious
"THINWIRE"
Computer Program by J.H.Richmond,
as it is now appeared at
http://home.att.net/~ray.l.cross/asap/.

Maybe you would find interesting to know that
this work is
permanently referenced by us,
the members of Antennas Group, TheDAG,
e.g. at
http://antennas.ee.duth.gr/mastertheses/enu/k8k/bibliography.htm
or elsewhere,
and I think
this by itself
is suffice to conclude
our comments to your work!

Finally and on the occasion,
I would like to inform you that,
as we steadily work
to correct, modify and improve the
"THINWIRE" code,
we have named our variation of this code
"RICHWIRE"
and built a number of simulators based on it.

Apart from a number
of still difficult to resolve issues,
this is an impressively accurate
explanation/prediction or analysis/design tool
for the vast majority of the antennas
with which we deal with.
An invaluable, indispensable, reliable one!

I looked for your web presence
quite a lot of time ago,
therefore
I am very glad indeed to meet you at last,
especially here.

Sincerely yours,

pez
SV7BAX

"R P Haviland" <bobh@iag.net> wrote in message
news:7Eknb.6916$X22.5635@newsread2.news.atl.earthlink.net...
I hav posted a number ofantenna design programs on http://home.iag.net/~bobh
Comments welcome to bobh@iag.net
W4MB

3695. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:14:15 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqddpf39s7p8c8@corp.supernews.com>
Source record: 105461

I don't have Balanis. Can you provide a short quote where he states that
the current at the terminals of a two-terminal lumped component are unequal?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Yes, I disagree with that.
>
>
> Then you disagree with Balanis.

3696. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:19:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqde2p7fj6nhc5@corp.supernews.com>
Source record: 105462

A radiating stub does act differently than a lumped inductor, in both modeling and reality. EZNEC should reflect this difference accurately. If you're aware of a situation where you think it doesn't, please email me the models illustrating the difficulty.

If you model a stub using a transmission line model, it should behave exactly the same as a lossless lumped inductor at a given frequency. However, it's an accurate model of reality only if the real stub has exactly equal and opposite currents on the two conductors. That is, it's an entirely non-radiating stub.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> If you could build an antenna from straight conductors and lumped
>> inductors, the result would be very close to EZNEC's predictions.
>
>
> Hard to prove since lumped inductors are impossible in reality. Why
> does EZNEC show so much difference between lumped inductors and stub
> inductors? The difference in coils Vs stubs in reality is virtually
> nill.

3697. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:20:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqde59qhiegl76@corp.supernews.com>
Source record: 105463

So, was that a yes or a no? I have trouble with your accent.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Tell us, Cecil, at steady state at one frequency, can a lumped
>> inductor (presumably like the experimenter's toroid) tell whether it's
>> at the base of an antenna or simply in series between a generator and
>> load impedance?
>
>
> This question proves you don't understand the problem. The inductor
> cannot tell if it is installed in an antenna or transmission line.
>
> So I will turn the question around: Does a standing wave antenna
> have standing waves? Reference _Antenna_Theory- by Balanis, page 17,
> section 1.4 Current Distrubution on a Thin Wire Antenna. Is Balanis
> correct when he says: "If the diameter of each wire is very small,
> the ideal standing wave pattern of the current along the arms of
> the (1/2WL) dipole is sinusoidal with a null at the end."
>
> This is after he takes an unterminated transmission line, discusses
> standing waves, and then slowly opens up the ends of the transmission
> line to create a 1/2WL dipole.
>
> I took Balanis' antenna course at ASU in 1995. I asked a lot of
> questions about inductively loaded antennas. The current and
> standing wave pattern on each side of a loading coil is NOT the same.

3698. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:24:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <y6GdnRW5l5j6JDui4p2dnA@comcast.com>
Source record: 105464

Casey,

What kind of directional antenna do you have, that you need to feed it with
450 Ohm line?

Tam/WB2TT

3699. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:24:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdedfm15u144c@corp.supernews.com>
Source record: 105465

No, that's not what I asked. Let me try again.

I have an antenna whose feedpoint impedance I measure as R + jX. I put a lumped (physically very small and short) coil in series with it and drive it with a generator. You and Yuri say that the current going into the coil is different from the current going out.

Now, I replace the antenna with a series resistor and capacitor or inductor which also has a terminal impedance of R + jX ohms. My question is, does the inductor now have equal currents at its two terminals, and why or why not?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> If you answered "yes", please explain how and why, and how we'd
>> calculate the current through and voltage across the inductor. If we
>> moved it an inch up the transmission line from the antenna base, can
>> it still tell?
>
>
> Forget about an inductor becoming conscious. The impedance looking
> into a six foot whip is the same whether the coil is there or not.
> The impedance looking into the bottom of the coil is certainly not
> the same as looking into the six foot whip. I suspect this can be
> proven by modeling a mobile antenna and then moving the source point
> from just under the coil to just above the coil.
>
>> If you answered "no", please write us the equations showing just how
>> much the current should be expected to be different from one end of
>> the inductor to the other.
>
>
> The current will be approximately the same as at the two points
> of wire it replaces in the antenna without the inductor. I earlier
> asked you a question that you seem to have missed. Do you agree
> or disagree with Fig 9-22 of ON4UN`s "Low-Band DXing", included
> on Yuri`s web pages.?
>
>> And where those coulombs are going, that go into one end and don't
>> come out the other.
>
>

> You can answer your own question. Where do the coulombs go that enter
> one end of a 1/4WL stub and don't exit the other end? Please stop
> using lumped circuit analysis on distributed network problems. You
> know and I know that it doesn't work.

3700. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:30:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdenpcq6f509f@corp.supernews.com>
Source record: 105466

Because you're seeing different currents at the two stub terminals, you must be modeling it with wires, which should reflect reality quite well. Look carefully at the currents along the stub and you'll find they're not equal and opposite on the two conductors. Such a radiating stub *is* very different from a coil. That shouldn't be surprising. I have a high level of confidence that if you built the antenna just like you modeled it, you would find the results to closely agree with the model.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Wes Stewart wrote:
>
>> On Mon, 03 Nov 2003 09:26:05 -0600, Cecil Moore
>> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>
>> |Roy Lewallen wrote:
>> |> If you could build an antenna from |> straight conductors and
>> lumped inductors, the result would be very close |> to EZNEC's
>> predictions.
>> |
>> |Hard to prove since lumped inductors are impossible in reality. Why
>> |does EZNEC show so much difference between lumped inductors and stub
>> |inductors?
>> I see no such difference in my model.
>
>
> There shouldn't be a lot of difference. I have modeled two short dipoles,
> one loaded with a lumped inductive reactance and one modeled with the
> same reactance using an inductive stub. EZNEC reports the following:
>
> Inductance lumped j335 10'stub
>
> current in segment just before the coil .8374 amp .8384 amp
>
> current in segment just after the coil .7971 amp .5642 amp
>
> The relative difference just before the coil is quite small, 0.12%.
>
> The relative difference just after the coil is quite large, 41.28%.
>
> There just cannot be that amount of difference between a coil and a
> stub.

3701. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:34:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdev3709hvm40@corp.supernews.com>
Source record: 105467

Yes. If any real component has signficant length, it's best to model it as wires if possible. If it's not possible or practical to model it as wires, about the best you can do is as I've suggested before: model it as a wire of the length and diameter of the component, and insert one or more loads to represent the low frequency impedance of the component. That's about as good as you can do with the limited set of modeling objects you have.

Roy Lewallen, W7EL

Jim Kelley wrote:
>
> Roy Lewallen wrote:
>
>>I use lumped circuit analysis when dealing with lumped circuits, and
>>distributed circuit analysis when dealing with distributed circuits.
>>EZNEC's loads are lumped elements, so when you're talking about EZNEC
>>loads, you're talking about lumped elements.
>>
>>Roy Lewallen, W7EL
>
>
> Hi Roy,
>
> Wouldn't it be better not to lump any portions of an antenna that are a
> part of its electrical length?
>
> 73, Jim AC6XG

3702. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:38:51 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA6BCDA.BD6A9A98@cwis.net>
Source record: 105468

mBird,
The likelihood of your antenna in the attic being hit by
lightning is about the same as winning the lottery. Not
impossible, but don't hold your breath.
'Doc

3703. FOE SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:48:23 UTC
From: Tom - KS5x <ks5x@cox.net>
Message-ID: <oazpb.42$Cj1.24@fed1read07>
Source record: 105369

STICK ANTENNAS- Pro-Am PHF-17 & PHF-30; Lakeview Ham Sticks 9120 & 9140; LIKE NEW, never mobile, used in a restricted community; each includes a matching set of QDs ALL RESONABLE OFFERS CONSIDERED ks5x@cox.net

3704. SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:50:20 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87u15lrxbn.fsf@jidanni.org>
Source record: 105322

Is it just my imagination, or are direct SMA to "F" (TV Coax) connectors hard to find. One usually having to go SMA-BNC-F?

3705. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 20:54:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6c152_8@corp.newsgroups.com>
Source record: 105370

Roy Lewallen wrote:
> I don't have Balanis. Can you provide a short quote where he states that
> the current at the terminals of a two-terminal lumped component are
> unequal?

He doesn't use lumped components and probably for good reason. But here's the quote that allows my analysis. "Standing wave antennas, such as the dipole, can be analyzed as traveling wave antennas with waves propagating in opposite directions (forward and backward) and represented by traveling wave currents 'If' and 'Ib' in Figure 10.1(a)." This means that net total current equals If+Ib.

The fact that the feedpoint current occurs at a current maximum point ties both ends down. 'If' must traverse 90 degrees and 'Ib' must traverse 90 degrees in addition to the 180 degree phase shift due to reflection from the open end. Besides the coil, an 8' whip gives about 22 degrees phase shift in a round trip. Adding the 180 degree phase shift due to the open end reflection gives 202 degrees. But we know the phase shift is actually 360 degrees. Where can the additional 158 degrees of phase shift come from except from the coil?

Center-loaded mobile antennas are still an electrical 1/4 wavelength. If there's no phase shift through the coil, where's the missing 158 degrees of phase shift taking place?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3706. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:01:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6c2ce$1_8@corp.newsgroups.com>
Source record: 105371

Roy Lewallen wrote:

> A radiating stub does act differently than a lumped inductor, in both
> modeling and reality. EZNEC should reflect this difference accurately.
> If you're aware of a situation where you think it doesn't, please email
> me the models illustrating the difficulty.

I have already done that but I just sent them to you again.

> If you model a stub using a transmission line model, it should behave
> exactly the same as a lossless lumped inductor at a given frequency.
> However, it's an accurate model of reality only if the real stub has
> exactly equal and opposite currents on the two conductors. That is, it's
> an entirely non-radiating stub.

The difference in current between the two configurations that I sent to
you means the vertical stubs are radiating better than the horizontal
antenna which is unlikely since EZNEC doesn't show any vertical radiation.
--
73, Cecil http://www.qsl.net/w5dxp

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3707. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:02:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6c33f$1_8@corp.newsgroups.com>
Source record: 105372

Roy Lewallen wrote:

> So, was that a yes or a no? I have trouble with your accent.

It's a no. Lumped inductors are not conscious of anything
including their locations.
--
73, Cecil http://www.qsl.net/w5dxp

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3708. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:08:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6c481_8@corp.newsgroups.com>
Source record: 105373

Roy Lewallen wrote:

> No, that's not what I asked. Let me try again.
>
> I have an antenna whose feedpoint impedance I measure as R + jX. I put a
> lumped (physically very small and short) coil in series with it and
> drive it with a generator. You and Yuri say that the current going into
> the coil is different from the current going out.

Yes, just as the current going into a 1/4WL stub is different from the
current going out. If you use an inductive stub, is the current the
same going in as going out? If so, you have invented faster than
light transfer of current.

> Now, I replace the antenna with a series resistor and capacitor or
> inductor which also has a terminal impedance of R + jX ohms. My question
> is, does the inductor now have equal currents at its two terminals, and
> why or why not?

You have replaced a distributed network with a lumped circuit. If the
lumped circuit model worked on distributed networks, you would be right
and there would be no need for a distributed network model (but there is).
--
73, Cecil http://www.qsl.net/w5dxp

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3709. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:19:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6c730$1_8@corp.newsgroups.com>
Source record: 105374

Roy Lewallen wrote:

> Because you're seeing different currents at the two stub terminals, you
> must be modeling it with wires, which should reflect reality quite well.
> Look carefully at the currents along the stub and you'll find they're
> not equal and opposite on the two conductors. Such a radiating stub *is*
> very different from a coil.

Instead of a knee-jerk defense of your ideas, why don't you actually take
a look at the problem? Those stubs are vertical. EZNEC shows virtually zero
vertically polarized radiation. According to EZNEC, those stubs are radiating
a negligible amount, just like the lumped inductance. Why the 40% difference
in current between the two configurations? Is this a characteristic of NEC?
--
73, Cecil http://www.qsl.net/w5dxp

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3710. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:40:59 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <vdqdnQgfSlz6VjuiRVn-vw@comcast.com>
Source record: 105375
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
news:eRvpb.204144$0v4.16043402@bgtnsc04-news.ops.worldnet.att.net...
> www.fwt.niat.net
>
> This dielectric embedded antennas are smaller than naturally occurs and
yet
> have a net gain

More correctly, they CLAIM a gain, relative to isotropic.

If the antenna is smaller than a free space antenna, then it looses capture
area.
I would be very interested to know how they recoup that.
I suspect these antennas might need some power to drive an on-board
amplifier, which means that their gain claim is bogus, and what they aren't
telling you is that the noise floor comes up also.

TANSTAAFL.

3711. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:43:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <maidqv87abvdj5j3eum5ptma9dh4ro5n6a@4ax.com>
Source record: 105376

On Mon, 03 Nov 2003 15:19:44 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Roy Lewallen wrote:
>
>> Because you're seeing different currents at the two stub terminals, you
>> must be modeling it with wires, which should reflect reality quite well.
>> Look carefully at the currents along the stub and you'll find they're
>> not equal and opposite on the two conductors. Such a radiating stub *is*
>> very different from a coil.
>
>Instead of a knee-jerk defense of your ideas, why don't you actually take
>a look at the problem?
Ah the quality of sneer review.

>Those stubs are vertical. EZNEC shows virtually zero
>vertically polarized radiation. According to EZNEC, those stubs are radiating
>a negligible amount, just like the lumped inductance. Why the 40% difference
>in current between the two configurations? Is this a characteristic of NEC?

Cecil, you have two stubs and they are driven antiphase (typical of a
doublet) and through symmetry would have equal antiphase currents when
compared to their opposites, but not necessarily equal currents within
their twin-pair of lines. The sum of ALL currents (and not just the
myopic view of one of two stubs) would suggest exactly what Roy has
offered.

This, of course, returns us to the question of what part of the
radiator radiates. Sadly, the convention of the current pulse (or
maxima, or other equivalent term) trips up discussion just in these
matters. ALL elements radiate, it is only in the far field where
their contributions negate, not literally within the structure.

73's
Richard Clark, KB7QHC

3712. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:43:22 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031103164322.16581.00000078@mb-m27.aol.com>
Source record: 105377

Richard KB7QHC writes:
>
>I've visited your page, and in an effort to wean out the details (you
>don't go to much effort to offer an unadorned, plain, vanilla
>specification for the radiator). I had to guess about the coil length
>(judging from its only metric being 2.5" diameter) and inductance (you
>dismiss the importance of its Q and wholly leave this metric blank).

Our major disagreement with W8JI was is the current accros antenna loading the same or is it appreciably different. I was just trying to argue that it is signifficantly different, W9UCW has done multitude of tests and measurements and supported my position. I had practical experience of knowing that bottom of uniform coils get hotter than middle or top, I fried heatshrink tubing at the bottom of the coils and this was good enough for my practical knowledge that current must by higher at the bottom. ON4UN book also supports that.

The second step in our quest of properly mastering the phenomena is to investigate the relationships, magnitudes and have it properly accounted for in the modeling software. W9UCW provided some info, data and pictures, he has lot more and is willing to cooperate further, be it writing concise article (he is preparing material for the book also) or answer questions or provide more info. I told him about this NG, so he might show up. So if we are ready to bridge the idea that current is different and implement that in the software, lets roll. So far it appears that Roy still has a problem with understanding what is going on.

Yuri

3713. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:45:55 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031103164555.16581.00000079@mb-m27.aol.com>
Source record: 105378

>
>Excuse my reaction: BFD!
>

Yea, but you didn't do at the university forum or some kind of conference. They will get the "glory" and grant money :-(

Let's se what freaky says, paging his layers?

BUm

3714. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 21:54:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k7jdqvgnak98hkbejretf63iihanumff1e@4ax.com>
Source record: 105379

On 03 Nov 2003 21:43:22 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

> So if we are ready to bridge the
>idea that current is different and implement that in the software, lets roll.
>So far it appears that Roy still has a problem with understanding what is going
>on.
>
>Yuri

Hi Yuri,

That, in fact, is not so. The problem as expressed by you was
acknowledged and a solution offered BEFORE you started this thread.
There was a protocol given THEN to obtain a correct perspective to the
issue.

Do you propose to offer additional data showing the current
distribution over the entire radiator, or are we going to be indulged
in retread arguments that have been answered?

73's
Richard Clark, KB7QHC

3715. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 22:02:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6mjdqvg316l1kisl0l1j3f7r93p54p8np6@4ax.com>
Source record: 105380
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 3 Nov 2003 16:40:59 -0500, "Dave VanHorn" <dvanhorn@cedar.net>
wrote:

>
>"Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
>news:eRvpb.204144$0v4.16043402@bgtnsc04-news.ops.worldnet.att.net...
>> www.fwt.niat.net
>>
>> This dielectric embedded antennas are smaller than naturally occurs and
>yet
>> have a net gain
>
>More correctly, they CLAIM a gain, relative to isotropic.

They? HE (the CTO in fact). American business has a recent history
of clown elevation.

>
>If the antenna is smaller than a free space antenna, then it looses capture
>area.

Capture area is hardly an issue for even the full size antennas they
replace.

>I would be very interested to know how they recoup that.
>I suspect these antennas might need some power to drive an on-board
>amplifier, which means that their gain claim is bogus, and what they aren't
>telling you is that the noise floor comes up also.
>
>TANSTAAFL.
>
Hi Dave,

What is more to the matter is unstated issues of efficiency. I will
let the claims of 8 fold boons pass (which is marketese from the world
of ENRON). Compare these "advantages" of reclaimed volume to the
unanswered query of weight (no claims about density are there?).

Leftover halloween candy.

73's
Richard Clark, KB7QHC

3716. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 22:04:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6d1c0_3@corp.newsgroups.com>
Source record: 105381

Richard Clark wrote:
> Cecil, you have two stubs and they are driven antiphase (typical of a
> doublet) and through symmetry would have equal antiphase currents when
> compared to their opposites, but not necessarily equal currents within
> their twin-pair of lines. The sum of ALL currents (and not just the
> myopic view of one of two stubs) would suggest exactly what Roy has
> offered.

Sorry, Richard, 1/2 of the loaded dipole turned vertical doesn't
show a trace of horizontal radiation. Sorry about that.

Roy suggested the stubs might be radiating. EZNEC says they are not.
You can add two inches of vertical wire to the ends of the antenna
and see the red vertical radiation. The stubs are 0.04WL, #14 wire,
and 6 inch spacing. How much could they radiate on 75m? The difference
in current is not due to radiation. It is due to the phase shift
between Ifwd and Iref through the stub.
--
73, Cecil http://www.qsl.net/w5dxp

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3717. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 22:08:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6d283$1_3@corp.newsgroups.com>
Source record: 105382

Richard Clark wrote:
> That, in fact, is not so. The problem as expressed by you was
> acknowledged and a solution offered BEFORE you started this thread.

For those of us who missed the solution, what was it?
--
73, Cecil http://www.qsl.net/w5dxp

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3718. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 22:18:40 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <1uApb.29$643.10@okepread03>
Source record: 105383
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

It's a live-fire exercise. People die, big deal, move on.
Dead soldiers are like dead child molestors... Who really gives a shit?

3719. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:03:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdnnfgmo83cd0@corp.supernews.com>
Source record: 105384

So, in short, I don't disagree with Balanis.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I don't have Balanis. Can you provide a short quote where he states
>> that the current at the terminals of a two-terminal lumped component
>> are unequal?
>
>
> He doesn't use lumped components and probably for good reason. But here's
> the quote that allows my analysis. "Standing wave antennas, such as the
> dipole, can be analyzed as traveling wave antennas with waves propagating
> in opposite directions (forward and backward) and represented by traveling
> wave currents 'If' and 'Ib' in Figure 10.1(a)." This means that net total
> current equals If+Ib.
>
> The fact that the feedpoint current occurs at a current maximum point ties
> both ends down. 'If' must traverse 90 degrees and 'Ib' must traverse 90
> degrees in addition to the 180 degree phase shift due to reflection from
> the open end. Besides the coil, an 8' whip gives about 22 degrees phase
> shift in a round trip. Adding the 180 degree phase shift due to the open
> end reflection gives 202 degrees. But we know the phase shift is actually
> 360 degrees. Where can the additional 158 degrees of phase shift
> come from except from the coil?
>
> Center-loaded mobile antennas are still an electrical 1/4 wavelength. If
> there's no phase shift through the coil, where's the missing 158 degrees
> of phase shift taking place?

3720. IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:05:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo6n08rtc1@hercules.btinternet.com>
Source record: 105385

If the current (-I1) coming out of a small toroidally-wound coil,
effectively of zero length and diameter in terms of a wavelength, is
different in magnitude from the current (I2) going in at the other end,
where is the make-up-the-difference current (I3) coming from?

I1 + I2 + I3 = Effectively zero.

To where is the I3 wire connected ?

Or is Kirchoff finally going out of fashion according to some noisy,
baffle-gabbing, old-wive-contributors to this supposed educational newsgroup
?

Reg.

3721. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:10:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdo44ntgr4uf3@corp.supernews.com>
Source record: 105387

Good. And I see from your other response that you understand the question.

So now we have a simple series circuit consisting of a generator, the loading inductor, and the R + L or C we used to substitute for the antenna. And your "no" response indicates you've agreed that the voltage across and current through the inductor are the same as when it was connected to the antenna.

Now, choose any values you'd like for the generator voltage or current and the component values, and write the equations showing that the current into the inductor is different in any way (amplitude or phase) from the current going out. Or, if that's too taxing, I'll choose some values for you.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So, was that a yes or a no? I have trouble with your accent.
>
>
> It's a no. Lumped inductors are not conscious of anything
> including their locations.

3722. The never ending argument (was: Current in antenna loading coils controversy)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:11:25 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <3cmdnVNETYQgfTuiRVn-jA@crocker.com>
Source record: 105386

> Cecil Moore wrote:
> > Roy Lewallen wrote:
> Cecil Moore wrote:
> > Roy Lewallen wrote:
> Cecil Moore wrote:
> > Roy Lewallen wrote:
> Cecil Moore wrote:
> > Roy Lewallen wrote:
> Cecil Moore wrote:
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> Cecil Moore wrote:
> > Roy Lewallen wrote:

3723. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:14:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdob1tet7e1b2@corp.supernews.com>
Source record: 105388

Are you referring to something you emailed me? If so, I haven't received
it. I'll be glad to look at it when I do.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Because you're seeing different currents at the two stub terminals,
>> you must be modeling it with wires, which should reflect reality quite
>> well. Look carefully at the currents along the stub and you'll find
>> they're not equal and opposite on the two conductors. Such a radiating
>> stub *is* very different from a coil.
>
>
> Instead of a knee-jerk defense of your ideas, why don't you actually take
> a look at the problem? Those stubs are vertical. EZNEC shows virtually zero
> vertically polarized radiation. According to EZNEC, those stubs are
> radiating
> a negligible amount, just like the lumped inductance. Why the 40%
> difference
> in current between the two configurations? Is this a characteristic of NEC?

3724. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:22:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdoqge9mnhe68@corp.supernews.com>
Source record: 105389

I join you at being astounded at the poor grasp of the most fundamental principles being exhibited by people claiming to be engineers. I was truly lucky in never having to work with people with that shaky a grasp of basic circuit theory. I can only speculate that they must have moved up into management pretty early on, before they got into a position where they actually had to produce something that worked.

Roy Lewallen, W7EL

Reg Edwards wrote:
> If the current (-I1) coming out of a small toroidally-wound coil,
> effectively of zero length and diameter in terms of a wavelength, is
> different in magnitude from the current (I2) going in at the other end,
> where is the make-up-the-difference current (I3) coming from?
>
> I1 + I2 + I3 = Effectively zero.
>
> To where is the I3 wire connected ?
>
> Or is Kirchoff finally going out of fashion according to some noisy,
> baffle-gabbing, old-wive-contributors to this supposed educational newsgroup
> ?
> ----
> Reg.
>
>

3725. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:42:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FA6E7DC.ECC525F8@cwis.net>
Source record: 105390

Reg,
That question has potential...
'Doc

3726. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:48:02 UTC
From: jgboyles@aol.com
Message-ID: <20031103184802.20468.00000118@mb-m23.aol.com>
Source record: 105391

>ubject: IF
>From: "Reg Edwards" g4fgq.regp@ZZZbtinternet.com
>Date: 11/3/2003 5:05 PM Central Standard Time
>Message-id: <bo6n08rtc1@hercules.btinternet.com>
>
>If the current (-I1) coming out of a small toroidally-wound coil,
>effectively of zero length and diameter in terms of a wavelength, is
>different in magnitude from the current (I2) going in at the other end,
>where is the make-up-the-difference current (I3) coming from?
>
>I1 + I2 + I3 = Effectively zero.
>
>To where is the I3 wire connected

Hi Reg, Did someone Imply that? I think they are mistaken with toroids and physically short solenoids.
73 Gary N4AST

3727. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-03 23:54:59 UTC
From: Don Lancaster <don@tinaja.com>
Message-ID: <3FA6EAD3.26473E8F@tinaja.com>
Source record: 105392
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Richard Clark wrote:
>
> On Mon, 03 Nov 2003 17:00:58 GMT, "Marc H.Popek"
> <LVMarc@worldnet.att.net> wrote:
>
> >www.fwt.niat.net
> >
> >This dielectric embedded antennas are smaller than naturally occurs and yet
> >have a net gain
>
> Hi Marc,
>
> Interesting sentence construction.
>
> A cogent question would reveal some perspective: How much would your
> 13dBi dielectric embedded antennas for TV Channel 2 weigh?
>
> 73's
> Richard Clark, KB7QHC

A lot less than they would for the 160 meter ham band.

--
Many thanks,

Don Lancaster
Synergetics 3860 West First Street Box 809 Thatcher, AZ 85552
voice: (928)428-4073 email: don@tinaja.com fax 847-574-1462

Please visit my GURU's LAIR web site at http://www.tinaja.com

3728. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:04:58 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <TN-dnc5di_rUcDui4p2dnA@crocker.com>
Source record: 105393

"'Doc" <w5lz@cwis.net> wrote in message news:3FA6E7DC.ECC525F8@cwis.net...
>
>
> Reg,
> That question has potential...
> 'Doc

the only potential it has is to start another never ending argument... i'm not even going to fall for the obviously intended pun.

3729. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:11:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6ef81_4@corp.newsgroups.com>
Source record: 105394

Roy Lewallen wrote:
> So, in short, I don't disagree with Balanis.

Yes, you have disagreed with an analysis based on Balanis's
'If' and 'Ib'. You even quoted some author saying that an
antenna could not be analyzed in the manner that Balanis
proposes.

> Cecil Moore wrote:
>> He doesn't use lumped components and probably for good reason. But here's
>> the quote that allows my analysis. "Standing wave antennas, such as the
>> dipole, can be analyzed as traveling wave antennas with waves propagating
>> in opposite directions (forward and backward) and represented by
>> traveling
>> wave currents 'If' and 'Ib' in Figure 10.1(a)." This means that net total
>> current equals If+Ib.
--
73, Cecil http://www.qsl.net/w5dxp

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3730. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:17:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f0f3$1_4@corp.newsgroups.com>
Source record: 105395

Reg Edwards wrote:

> If the current (-I1) coming out of a small toroidally-wound coil,
> effectively of zero length and diameter in terms of a wavelength, is
> different in magnitude from the current (I2) going in at the other end,
> where is the make-up-the-difference current (I3) coming from?
>
> I1 + I2 + I3 = Effectively zero.
>
> To where is the I3 wire connected ?
>
> Or is Kirchoff finally going out of fashion according to some noisy,
> baffle-gabbing, old-wive-contributors to this supposed educational newsgroup

The current is not the same at all points in a distributed network, Reg.
Why is the current into a 1/4WL matching stub higher than the current out?
Lumped circuit analysis simply cannot be used on a distributed circuit problem.
I can show you a series stub where current is flowing into both ends at the
same time. 180 degrees later, current is flowing out of both ends at the
same time. Does anyone understand the implications of a distributed network?
--
73, Cecil http://www.qsl.net/w5dxp

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3731. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:18:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo6r9d$615$1@hercules.btinternet.com>
Source record: 105396

To assume a short-circuited, sideways protuding stub line, intended to replace a loading coil, will give the same results as the coil it replaces is unbelievable STUPIDITY.

EZNEC will quite correctly treat the stub line as an essential part of the radiating system, itself much longer than the overall height of the short vertical antenna it is supposed to be loading.

In fact, the length of wire in the stub line needed to resonate the antenna, plus the height of the antenna, will be of the same order as a full size quarter-wave vertical.

Roy, you are wasting your time trying to educate such baffle-gabbing old wives. I make this comment because you are a much too polite gentleman (approaching the English variety) to send them packing yourself with tails between their legs. And I've just finished a glass of South African red.

Yelp, yelp! Can you hear them fading into the distance? ;o) ;o) ;o)

Reg.

3732. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:25:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f2d3$1_4@corp.newsgroups.com>
Source record: 105397

Roy Lewallen wrote:
> So now we have a simple series circuit consisting of a generator, the
> loading inductor, and the R + L or C we used to substitute for the
> antenna.

No we don't, Roy. You cannot be allowed, once again, to get away with
turning a distributed network problem into a lumped circuit problem.
If you can prove me wrong with a distributed network analysis, I will
be the first to admit my mistake. If you cannot prove me wrong with a
distributed circuit analysis, that's a big clue.
--
73, Cecil http://www.qsl.net/w5dxp

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3733. Re: The never ending argument

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:28:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f355_4@corp.newsgroups.com>
Source record: 105398

David Robbins wrote:

>>Cecil Moore wrote:
>>>Roy Lewallen wrote:

So what's the answer, Dave? Is there a current phase shift through a mobile antenna loading coil or not? Seems to me, if a coil can propagate the current phase in zero time, that is faster than light operation.
--
73, Cecil http://www.qsl.net/w5dxp

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3734. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:30:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdsq4g275p48d@corp.supernews.com>
Source record: 105399

I disagree with what you think Balanis says, not what he says. There's
quite a difference.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So, in short, I don't disagree with Balanis.
>
>
> Yes, you have disagreed with an analysis based on Balanis's
> 'If' and 'Ib'. You even quoted some author saying that an
> antenna could not be analyzed in the manner that Balanis
> proposes.
>
>> Cecil Moore wrote:
>>
>>> He doesn't use lumped components and probably for good reason. But
>>> here's
>>> the quote that allows my analysis. "Standing wave antennas, such as the
>>> dipole, can be analyzed as traveling wave antennas with waves
>>> propagating
>>> in opposite directions (forward and backward) and represented by
>>> traveling
>>> wave currents 'If' and 'Ib' in Figure 10.1(a)." This means that net
>>> total
>>> current equals If+Ib.

3735. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:33:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f4ae_4@corp.newsgroups.com>
Source record: 105400

Roy Lewallen wrote:

> I join you at being astounded at the poor grasp of the most fundamental
> principles being exhibited by people claiming to be engineers. I was
> truly lucky in never having to work with people with that shaky a grasp
> of basic circuit theory.

Do you also assert that the current into a 1/8WL stub has to be equal to
the current out of a 1/8WL stub? If not, why not? It's the same principle
as a real-world series coil. I can make the inductance so large that the
current is flowing into the bottom and the top of the coil at the same time
in opposite directions.
--
73, Cecil http://www.qsl.net/w5dxp

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3736. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:36:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f54b_4@corp.newsgroups.com>
Source record: 105401

Roy Lewallen wrote:

> Are you referring to something you emailed me? If so, I haven't received
> it. I'll be glad to look at it when I do.

Yep, I've emailed it twice to you. I had to email them three times to
Yuri before he received it. Apparently, some of the new internet filters
are deleting emails.

Would you agree to cease the ad hominem attacks until you have actually
viewed the problem?
--
73, Cecil http://www.qsl.net/w5dxp

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3737. Re: The never ending argument

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:36:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdt65lnjq3h81@corp.supernews.com>
Source record: 105402

I'm sorry. If I'm bothering the readers, I'll be glad to bow out.

My postings aren't really directed to Cecil -- I know much better than to imagine that I'll ever change his mind, and I'm a firm believer in not wasting time on things I can't change.

No, you and the other readers are really the audience, and the whole reason for the postings. If you and the other readers would rather I shut up, I'll be more than happy to spend my time at more productive pursuits.

Just let me know.

Roy Lewallen, W7EL

David Robbins wrote:
>>Cecil Moore wrote:
>>
>>>Roy Lewallen wrote:
>>
>>Cecil Moore wrote:
>>
>>>Roy Lewallen wrote:
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>>Cecil Moore wrote:
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>>>Roy Lewallen wrote:
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3738. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:37:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdt7mikm7nsec@corp.supernews.com>
Source record: 105403

Woops, slipped through my fingers once again. My hat's off to the master.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So now we have a simple series circuit consisting of a generator, the
>> loading inductor, and the R + L or C we used to substitute for the
>> antenna.
>
>
> No we don't, Roy. You cannot be allowed, once again, to get away with
> turning a distributed network problem into a lumped circuit problem.
> If you can prove me wrong with a distributed network analysis, I will
> be the first to admit my mistake. If you cannot prove me wrong with a
> distributed circuit analysis, that's a big clue.

3739. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:40:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdtdlca3fq78a@corp.supernews.com>
Source record: 105405

I'm sorry, I haven't received anything from you. If you'll send them
again, I'll be glad to take a look and to comment.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> The difference in current between the two configurations that I sent to
> you means the vertical stubs are radiating better than the horizontal
> antenna which is unlikely since EZNEC doesn't show any vertical radiation.

3740. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:41:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f662$1_4@corp.newsgroups.com>
Source record: 105404

JGBOYLES wrote:
> Hi Reg, Did someone Imply that? I think they are mistaken with toroids and
> physically short solenoids.

It is extremely easy to prove. Given the following circuit:

```
Ifwd-in--> coil Ifwd-out-->
------------------------/////////////--------------------
<--Iref-out <--Iref-in
```

Some are saying that the sum of Ifwd+Iref is equal no matter
how much inductance the coil has. That is obviously false.
For that to be true, both Ifwd and Iref would have to travel
the length of the coil in zero time, i.e. faster than light.
--
73, Cecil http://www.qsl.net/w5dxp

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3741. Re: Attention hammies, I contact UFOs on freeband

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:42:29 UTC
From: richcranus@yahoo.com
Message-ID: <c5ecbb69.0311031642.cff9064@posting.google.com>
Source record: 105406
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Twistedhed <twistedhed@webtv.net> wrote in message news:<bo6asj$276$1@news.x-echo.com>...
> This is another myth that Lelnad and his gang of jealousy-infected breth
> eren perpetuate, that I have talked with "saucer men", I assure you, not
> hing is further from the truth. The lies and anger-motivated constructio
> ns that Lelnad, Dogie, the false Sparky, and Mad Geo dream up on a daily
> basis have
> nothing whatsoever to do with my actual experiences in the realm of the
> supernatural.
>
> AO=AO=AO=Now this is all well documented mind you, I have contacted the
> outer reaches of another dimension while calling skip on 555, and yes I
> am well aware that the frequency falls outside the channels that the gov
> erment deems preferable for use, but I am not one of the unwashed unawar
> e rabble of
> citizenry, never have been, hence I am not subject to the same laws as c
> ommon, callow men. In college I was on the Deans List if that tells you
> anything and my superior intellect won me the favors of many like-minded
> individuals in both society and academia. But I shunned their transpare
> nt and shallow attentions to pursue my own unglamorous but rewarding pat
> h in the swamplands of the south. This unselfish pursuit and my canny na
> tive instincts are what I believe has been responsible for opening the d
> oor to contact with other dimensions in the continuum and my subsequent
> elevation to a cherished confidante. If you doubt me then do so at your
> peril for there are many things on heaven and earth that are not yet und
> erstood so you would do well to pay your respect to an as yet undisprove
> n phenomenon. Alas, here is the meat of it; the beings I have communicat
> ed with by chance do in fact effect transport by spherical means. Yes, s
> ome call it a saucer, but that is a
> misnomer. If the media knew the truth then it would be the undoing of my
> special status and the end of all social intercourse. Only on the freeb
> and does one learn of such truths. Lelnad and his gang of hounds may sco
> ff, and I say let them, for what does one expect from such unenlightened
> commoners but
> an ignorant barbaric yawp in the face of such great wisdom.=AO=AO=AO=AO
>
>
>
> =-
> Article poste via Voila News - http://www.news.voila.fr
> Le : Mon Nov 3 20:38:59 2003 depuis l'IP : ac9160fe.ipt.aol.com [VIP 532284301978]

Proving only that Doug Adair N8WWM has way too much time on his hands.
And no common sense at all.

Pay no attention to the dork behind the curtain. It's not Twistedhed!

3742. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:46:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f7ae$1_4@corp.newsgroups.com>
Source record: 105407

Reg Edwards wrote:
> In fact, the length of wire in the stub line needed to resonate the antenna,
> plus the height of the antenna, will be of the same order as a full size
> quarter-wave vertical.

BS, Reg. I have a 102 foot tall, center-loaded vertical, with a ten foot
long shorted horizontal stub in the middle to resonate it on 75m. Do you
have EZNEC? I can send you a copy of the antenna file.
--
73, Cecil http://www.qsl.net/w5dxp

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3743. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:49:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa6f843_4@corp.newsgroups.com>
Source record: 105408

Roy Lewallen wrote:
> I disagree with what you think Balanis says, not what he says. There's
> quite a difference.

Balanis says one can analyze an antenna based on forward and reflected
currents. You say that's not valid. Yes, you do disagree with Balanis.
--
73, Cecil http://www.qsl.net/w5dxp

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3744. Re: The never ending argument

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 00:54:42 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <mNCpb.2700$Bf7.1600033@news1.news.adelphia.net>
Source record: 105409

David Robbins wrote:
>>Cecil Moore wrote:
>>
>>>Roy Lewallen wrote:

Aww Dave! Cecil, Dave and a few others here serve as both education and somethimes entertainment. Go with the flow, learn something and when you get tired stop reading the thread.

It's all good, man!

3745. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:00:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo6to5$c74$1@titan.btinternet.com>
Source record: 105410
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Funnily enough, there is no decrease in capture area with simple, very small antennas. This is a difficult conception to get people's brains around.

There is only a (but important) decrease in efficiency because radiation resistance decreases faster than the loss resistances incurred in matching the antenna to the receiver. Matching loss resistance increases as the antenna dimensions become smaller.

For example, think in terms of the Q and loss resistance of the high inductance coil needed in an antenna tuner.

3746. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:15:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqdvekmsp2co68@corp.supernews.com>
Source record: 105411

It doesn't sound like a complicated model. If that's the case, it wouldn't take long to enter it manually. So in EZNEC, click Outputs, then Show Description. Copy the description and paste it into a posting. After I make an EZNEC file out of it, I'll upload it to my web site so everyone with EZNEC can see what we're talking about.

In general, I strongly prefer that people send me an .EZ file instead of a text description, both to save time and to reduce the probability of an error.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Are you referring to something you emailed me? If so, I haven't
>> received it. I'll be glad to look at it when I do.
>
>
> Yep, I've emailed it twice to you. I had to email them three times to
> Yuri before he received it. Apparently, some of the new internet filters
> are deleting emails.
>
> Would you agree to cease the ad hominem attacks until you have actually
> viewed the problem?

3747. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:40:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo7034$fg0$1@titan.btinternet.com>
Source record: 105412

Cecil and his confederates will soon be taking into account the difference in current, and the forward and backward reflections, between the ends of the coil in a Pi-match network between the plate and 50-ohm output socket of the common or garden 807 linear power amplifier. The Pi-match network behaves as a 1/4-wave transmission line impedance matching transformer. Keep going Cec!

And it has not yet been sorted out whether or not a congugate match exists.

There's a long way still to go. ;o) ;o)

Reg.

3748. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:42:07 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <otvdqv05clq7tumfm54qac00u16agdp7su@4ax.com>
Source record: 105413

On Mon, 03 Nov 2003 12:20:02 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

|Wes Stewart wrote:
|> On Mon, 03 Nov 2003 09:26:05 -0600, Cecil Moore
|> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
|>
|> |Roy Lewallen wrote:
|> |> If you could build an antenna from
|> |> straight conductors and lumped inductors, the result would be very close
|> |> to EZNEC's predictions.
|> |
|> |Hard to prove since lumped inductors are impossible in reality. Why
|> |does EZNEC show so much difference between lumped inductors and stub
|> |inductors?
|>
|> I see no such difference in my model.
|
|There shouldn't be a lot of difference. I have modeled two short dipoles,
|one loaded with a lumped inductive reactance and one modeled with the
|same reactance using an inductive stub. EZNEC reports the following:
|
| Inductance lumped j335 10'stub
|
|current in segment just before the coil .8374 amp .8384 amp
|
|current in segment just after the coil .7971 amp .5642 amp
|
|The relative difference just before the coil is quite small, 0.12%.
|
|The relative difference just after the coil is quite large, 41.28%.
|
|There just cannot be that amount of difference between a coil and a
|stub.

If you use the ideal transmission line model, there is *zero*
difference between an ideal inductor and a transmission line stub.

You are comparing a mess of wire with a ideal lumped inductor. Apples
and oranges.

If you really want to model this stuff accurately take a few hundred
$K out of your next retirement check and buy a high frequency
structure simulator.

www.hfss.com

3749. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:42:17 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vqe0vn4m5hsl4d@corp.supernews.com>
Source record: 105414

Roy, again, has hit the nail square on its head. That he continues to attempt to educate the uneducatable proves he is a better educator than I am. However, I have the responsibility to fail the fools and thus provide a short-cut in their move towards management.
Mac N8TT

--
J. Mc Laughlin - Michigan USA

"Roy Lewallen" <w7el@eznec.com> wrote in message news:vqdoqge9mnhe68@corp.supernews.com...
> I join you at being astounded at the poor grasp of the most fundamental
> principles being exhibited by people claiming to be engineers. I was
> truly lucky in never having to work with people with that shaky a grasp
> of basic circuit theory. I can only speculate that they must have moved
> up into management pretty early on, before they got into a position
> where they actually had to produce something that worked.
>
> Roy Lewallen, W7EL
>

3750. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:44:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7053d_2@corp.newsgroups.com>
Source record: 105415

Roy Lewallen wrote:
> It doesn't sound like a complicated model. If that's the case, it
> wouldn't take long to enter it manually.

There may be a bug in Netscape 7.1. The "reply all" function may not
work right. I'll send you an email direct.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3751. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:48:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa70621_2@corp.newsgroups.com>
Source record: 105416

Reg Edwards wrote:

> Cecil and his confederates will soon be taking into account the difference
> in current, and the forward and backward reflections, between the ends of
> the coil in a Pi-match network between the plate and 50-ohm output socket of
> the common or garden 807 linear power amplifier. The Pi-match network
> behaves as a 1/4-wave transmission line impedance matching transformer. Keep
> going Cec!

Reg, I cannot believe you would side with the people who claim there is zero
delay through a p-net coil. Do you also believe in faster than light
propagation of signals? If there is a delay in one foot of copper wire,
don't you think it is reasonable to expect a delay in 20 feet of copper
wire formed into a coil?

Is the number of degrees on a Smith Chart between 0+j0 ohms and 0+j50 ohms
just a figment of my imagination?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3752. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:55:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa707d5_2@corp.newsgroups.com>
Source record: 105417

Wes Stewart wrote:
> You are comparing a mess of wire with a ideal lumped inductor. Apples
> and oranges.

Not my fault. Why does EZNEC treat these two inductances so differently?

> If you really want to model this stuff accurately take a few hundred
> $K out of your next retirement check and buy a high frequency
> structure simulator.

No thanks, Wes. I can live without that. But let me ask you a question.
If there is a one degree delay through one foot of copper wire, how
can there be a zero delay through 20 feet of wire coiled into a one
foot coil? Given the pressure on the electrons, one would expect
20 times the delay through the coil as through the one foot wire.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3753. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 01:58:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7087b$1_2@corp.newsgroups.com>
Source record: 105418

J. McLaughlin wrote:

> Roy, again, has hit the nail square on its head. That he continues to
> attempt to educate the uneducatable proves he is a better educator than
> I am. However, I have the responsibility to fail the fools and thus
> provide a short-cut in their move towards management.

Heh, heh, so all one has to do to prove one's point on this newsgroup
is be a guru who mounts ad hominem attacks on his opponent. I think
I understand now.

So allow me to ask you this question. If a one foot piece of copper
wire causes a one degree delay in the current, how can a 20 foot
piece of copper wire shaped in a coil cause zero delay through the
coil. I don't remember studying that in EE.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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3754. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:01:42 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <aMDpb.72275$mZ5.450665@attbi_s54>
Source record: 105319

Not at all a dumb question. There are many people that think if it's inside
you don't have anything to worry about (the ostrich syndrome). Lightning
doesn't care much about your roof nor does static. Treat it like an outside
antenna.
"mBird" <no@spam.com> wrote in message
news:xOwpb.44636$ZC4.36714@twister.nyroc.rr.com...
> I got a YAGI antenna and put it in my attic -- helped me get rid of FM
> static problem I had been experiencing with just the basic dipole antenna
I
> was using.
>
> But I was wondering ...
> is there any issues with lightning like if the antenna was outside or is
the
> fact that the antenna is in the attic and covered completely by roof make
> that a non-issue
>
> Thanks for any info (p.s. I know some people are probably laughing at this
> as a dumb question -- but I figure better to ask then take a chance on
> toasting my house!)
>
> Thank you
>
>

3755. Re: Need Hamstick ZL-Special (or similar phased array) help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:03:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqe2819tp3pid8@corp.supernews.com>
Source record: 105320

NQ4S - Delbert wrote:
> I've run into a problem designing a compact antenna and could really
> use some more experienced help.
>
> Due to CCR I'm not allowed to have any permanent antenna structures
> outside. Currently there are 2 HF and 2 VHF/UHF antennas crammed in
> my attic. The HF antennas work to a point, but they are not overly
> efficient. Beyond Europe and South America, most DX stations come
> across as just a whisper.
>
> Over the weekend I did some research on a compact antenna for the back
> yard of my town home. The goal was to come up with something on 20M
> which is compact, light, and easy to put up and take down.
>
> While going through the ARRL antenna book my attention came across a
> chart of field strengths for various combinations of phased arrays.
> One that really had my interest were the ones at only 1/8 wavelength.
> At 20M this is only about 8 feet, which is very doable with some PVC
> pipe for a mount on top of a 30 foot telescoping pole.

You have to realize that those graphs assume zero antenna loss. While that's a good assumption for a full size wire dipole, it's not a good assumption for a Hamstick. More about this below.

> Spending a couple of hours playing with EZNEC I figured out that an 8
> foot separation between two dipoles running about 140-degrees out of
> phase would give a pretty good gain at about a 30-degree takeoff angle
> when mounted 30 feet off the ground. It looks like a really nice
> improvement over a single dipole.
>
> Being that a full dipole would run over 30 feet in length (longer than
> my entire back yard), my natural idea was to use a couple of
> hamsticks. I'm already using two hamstick equivalents for a dipole in
> my attic. It works, and is nice and compact. Using two Hamstick
> dipoles on the 8 foot boom would give a turning radius of around 8
> feet. Very doable.
>

A way to guess at a Hamstick's loss is to model a wire that's the length and diameter of the Hamstick. Model it as a vertical over perfect ground, and look at the feedpoint resistance. Then, assuming that the input resistance of the Hamstick without matching is about 50 ohms, you can guess that the loss resistance is roughly the difference between 50 ohms and the resistance of your wire model. For example, if the wire input R is about 10 ohms, then the Hamstick loss resistance is roughly

40 ohms.

Now make your model array with elements each made of a wire, a source, and a resistor (load) at the source. Make the resistor value equal to the loss resistance you got from the experiment above. If you want to model dipoles, double the wire length and the loss resistor value. Run EZNEC and note the gain. Save the model. Then delete one of the elements and run it again, again noting the gain. The difference between the two is approximately the gain of a two-element Hamstick array over a single Hamstick element. Still think it's worth the effort?

Close spaced arrays with gain inevitably have relatively low feedpoint resistance. This makes them more sensitive to loss, so it becomes impossible to realize the perfect-antenna gain with lossy elements. A particularly interesting array is the 90-degree spaced, 90-degree fed cardioid, like in the EZNEC example files. You'll find that the gain of that array over a single element stays constant regardless of how much loss you add to the elements (as long as you add the same amount to each, and always compare to one element with loss included). In that particular array, one feepoint resistance goes up and the other goes down, in such a way as to make the sensitivity to loss exactly cancel. Most arrays don't share that interesting property, though, and close-spaced arrays certainly don't. I'd be surprised if you got more than a dB and a half or so from your array. You can, however, get a good front-back ratio, and that in itself might make the effort worthwhile. You'll have to be the judge of that.

> Now we reach the point where I'm running into trouble. What would be
> the best way to feed this antenna? My first thought was to run a
> piece of coax up to the first dipole and then a piece from there to
> the second dipole to provide the 140 degree delay. I'm running the
> dipole in my attic without any sort of matching network, and it works
> fine. Will running two dipoles in the same way be close enough to 50
> ohms impedance or am I really missing the boat here?

You're missing the boat. You've got to read more of Chapter 8 of the ARRL Antenna book, where you found the graphs. It probably is possible to feed them with coax only, but not with a 140 degree difference in length. See "The Simplest Phased Array Feed System -- That Works" in Vol. 2 of _The Arrl Antenna Compendium_ if you want to do that. Examples CardTL and 4SqTL furnished with EZNEC illustrate this method. There's more information in the Antenna Notes files accompanying them. If you don't want to use that method, you can use an L network as described in the Antenna Book.

>
> Another variant I've considered is running coax up to the top of the
> pole and into a 1:1 balun to stop any RF coming back down the cable.
> The balun would be close attached to the first dipole. From there a
> piece of 300-ohm ladder could be used as a phasing line running from
> the balun to the 2nd dipole. I'm less confident that this would work
> due to the impedance mismatch.

Same problem.

> My hope is to use a MFJ 33' telescoping pole and a cheap radio shack
> rotator to hoist and spin this light weight antenna. Having the extra
> gain from a phased array might finally let me work some of those far
> off DX stations that I can never seem to hear.
>
> One variant of the idea I'm considering turned up this morning. The
> ZL-Special is two dipoles 1/8 wave apart with one dipole flipped over
> and connected by a 1/8 wave connection. The combination of the flip
> and the line provides an effective 135 degrees of phase delay. Very
> close to what I came up with doing the computer modeling. The problem
> I started seeing with the ZL-Special is that most designs show complex
> matching networks or building folded dipoles to get the right
> impedance.

You might take a look at the "Field Day Special" antenna. It's similar to the ZL special, but there's software to allow you to actually design one. You can get the info from ftp://eznec.com/pub/. Download fdsp~.exe. It's a self-extracting ZIP file that includes instructions. I've been using this antenna on several bands for many years, from home as well as on Field Day. It works as designed.

> I've pretty well hit the wall on my knowledge of matching antennas to
> feedlines. The ARRL Antenna Book has been of help, but I feel like
> I'm missing something in there that just isn't letting me finish the
> idea.
>
> Any information on this would be very helpful. Suggestions on how to
> proceed would be most welcome.
>
> Thanks.
>
> 73 de NQ4S

Roy Lewallen, W7EL

3756. Re: The never ending argument

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:24:00 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <1c3eqv0s8s1ccv4ouq6n1ui4chdqbt9e71@4ax.com>
Source record: 105321

On Mon, 03 Nov 2003 16:36:59 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>I'm sorry. If I'm bothering the readers, I'll be glad to bow out.
>
>My postings aren't really directed to Cecil -- I know much better than
>to imagine that I'll ever change his mind, and I'm a firm believer in
>not wasting time on things I can't change.
>
>No, you and the other readers are really the audience, and the whole
>reason for the postings. If you and the other readers would rather I
>shut up, I'll be more than happy to spend my time at more productive
>pursuits.
>
>Just let me know.
>
>Roy Lewallen, W7EL
>
Roy:

You and a handfull others are on my "must read" list. Keep up the good
work!

Jack K8ZOA

3757. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:30:40 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FA70F5E.9080404@get.lost>
Source record: 105323
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> It's a live-fire exercise. People die, big deal, move on.
> Dead soldiers are like dead child molestors... Who really gives a shit?

Mr. Rumsfeld? Is that you?

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

3758. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:31:43 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311031831.4c1827fe@posting.google.com>
Source record: 105324

Richard,
I think it is very bad what Penn State has done
and they say they are going to
apply for a patent no less.
They do have E mail contacts on their page
so if you send them a copy of your posting
then they will have to declare it to the
Patent Office with their initial request.
If what you are saying is what they are repeating
then congrats and kudo's to you. It would also
be interesting how the initial patent on Fractals was written
i.e was it a 'method' for producing a new series of designs
or limited to specific designs as it could make quite a difference
as far as the PTO is concerned. I would imagine they took the
first tack as to patent all forms in the family would
make it one very huge patent request

Art

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<g49dqv44a571b4b6rosl17la997mcu66d0@4ax.com>...
> On 3 Nov 2003 09:19:07 -0800, johnbartley@email.com (John Bartley I
> solved my XP problems w/ Service Pack Linux) wrote:
>
> >FRACTAL-SHAPED TILES DEVELOPED FOR NEW BROADBAND ANTENNA CLASS
> >Penn State engineers have developed innovative design methods for a
> >new class of antennas composed of an array of fractal-shaped tiles
> >that offer anywhere from a 4:1 to 8:1 improvement in bandwidth
> >compared to their conventional counterparts. Douglas H. Werner,
> >professor of electrical engineering and senior scientist in Penn
> >State's Applied Research Laboratory, recently described the new
> >antennas at a conference on wireless communication technology in
> >Hawaii. While fractal concepts have been used previously in antenna
> >design, Werner and his research team are the first to introduce a
> >design approach for broadband phased array antenna systems that
> >combines aspects of tiling theory with fractal geometry.
> >Read the full story at http://live.psu.edu/story/4373
>
> Hi John,
>
> Excuse my reaction: BFD!
>
> I described this style a year and a half ago:
> >> "The innovation, called a Penrose TileTenna Circuit(TM) (PTC),
> >> uses Penrose Tile conductor paths to replace low efficiency

> >> fractal circuits. In doing so, the company has a proprietary
> >> position on a harmonic and ubiquitous reach into electronics, RF,
> >> and pulley technology.
> >>
> >> "Virtually every electronic device using fractals or pulleys to
> >> form RLC circuits has been eclipsed by the new Penrose TileTenna
> >> Circuit(TM). Those low efficiency fractal components were arranged
> >> by superstition and ruse to get the pulley to perform as needed.
> >> What we've done is ask: can a Penrose Tile pattern, with its
> >> smug-awareness and self-indulgance, be used to eliminate
> >> fractals and still get the equivalent RLC circuit? We've found
> >> that the answer is yes; and in most uses, especially at milliHertz
> >> frequencies, all fractals can be replaced by conductive Penrose
> >> TileTenna structures. In 110% of cases, the PTCs can substantially
> >> reduce the fractal population from their high tide mark of 0.001%
> >> market penetration...
> >>
> >> "Looking at the Penrose TileTenna Circuit(TM) one sees, for
> >> example, a beautiful etched copper pattern replacing the ugly
> >> fractal traces for a circuit without kinks, plunging the cost and
> >> dramatically increasing the reliability of use...
> >>
> >> "A key part of using PTCs in a practical way was to find a method
> >> to identify a fractal arrangement that fails to meet the design
> >> specifications for performance and form factor. This, in effect
> >> opens the market to all fractal applications being susceptible to
> >> replacement by the superior technology offered by PTCs. Other
> >> recent and independent research reports take a given Penrose
> >> TileTenna and then see how it works as an RLC circuit, such as a
> >> filter or resonator...
> >>
> >> "The CTO of PILES, Inc. (Penrose tILES' new business name,
> >> formerly designers of EH/CFA's, marine pulleys and other fractals)
> >> scoffs at competitors' slow-to-patent IP security by noting PTC
> >> technology has protections of pending patent pending status. 'We
> >> thought of it first and that is sufficient to take anyone to
> >> court!' goes the logic of this source. PILES' CTO warns that
> >> they have an 'announced' pending patent pending status (offering
> >> greater protection than simple pending patent pending status)
> >> against all antennas designed using an inclined plane. 'We are
> >> committed,' offers the CTO, 'to future possibilities.' 'If you
> >> think about it, a wrapped incline describes a screw, and we do not
> >> want to be the outdone by fraudtenna in the ability to give
> >> customers a screw when they seek a novel antenna design.'"
> >>
> >>For those interested in the prospects of PILES and their ability to
> >>irritate fraudtenna in the end, stay tuned for future breakthroughs in
> >>pulley research. ;-)
>
> repeated for your edutainment.

>
> 73's
> Richard Clark, KB7QHC

3759. Re: "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:42:20 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <gmEpb.51948$fl1.2515048@twister.southeast.rr.com>
Source record: 105325

Take a look at the license plate mount that Lakeview sells with the Hamsticks.

Good luck.

Bill, W4WNT

"Todjk" <todjk@pdclink.com> wrote in message news:c641b886.0311011735.e539c7c@posting.google.com...
> I am needing to find a "non-evasive" (no drilling) solution for
> mounting a 144/440 mobile antenna in my 2003 Chevy Blazer.
>
> I am trying to see if there is some kind of solution that does not
> involve magnetic roof mounts.
>
> Does a mount exist where the mount clamps to either the glass or the
> metal of the rear hatch of the Blazer?
>
> Any advice is appreciated.
>
> Todd N9ZWY

3760. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:42:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo73mj$h0b$1@hercules.btinternet.com>
Source record: 105326

> Hi Reg, Did someone Imply that? I think they are mistaken with toroids and
> physically short solenoids.
> 73 Gary N4AST

''

They didn't just imply it - they actually said they had measured it. They
are still wandering around with their delusions. No names - no pack drill.

Reg, G4FGQ

3761. Re: 2m vertical dipole for FM

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:44:12 UTC
From: Rooster <grandpa.munster@1313.com>
Message-ID: <0oEpb.99817$Fm2.83371@attbi_s04>
Source record: 105327

Fart Blossom wrote:
> Does anyone have a plan that I can build without a gamma match. Just
> something that is a straight forward dipole. Thanks all.
>
>
Ok, this works ...

Work with 146 MHz, middle of 2m. 468 / 146 ~ 3.2 ft for 1/2 wavelength, total length of dipole. Each half of that (1/4 wl) is ~ 19.23 inches.

Asuming you have some coax of the right type/length etc. with whatever connector you need for your radio, gently cut the outer insulation about 19.3 inches from the free end. Pull the whole piece of outer insulation off the braid.

Fold the braid back over itself toward the radio end for the complete length of the stripped braid, 19.3 inches.

Now from the end you have a 19.3 inch section of only the center dielectric and inner conductor, followed by a 19.3 inch section where the braid has been folded back over the outside of the coax, and then the rest of the coax looks normal.

You need to seal up the approx 40 inches on the end of the coax that you've been working with. If it's mounted outside I would also rig it inside a capped piece of pvc pipe.

There, clear as mud ...

3762. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:46:41 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bo71fs$ii8$1@news1.kornet.net>
Source record: 105328
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FA70F5E.9080404@get.lost...
> Gene Storey wrote:
> > It's a live-fire exercise. People die, big deal, move on.
> > Dead soldiers are like dead child molestors... Who really gives a shit?
>
>
> Mr. Rumsfeld? Is that you?
>

Does sound a bit like him, doesn't it? No big deal, it's not HIS kids
getting killed...

3763. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:49:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7147f_4@corp.newsgroups.com>
Source record: 105329

Reg Edwards wrote:
> They didn't just imply it - they actually said they had measured it. They
> are still wandering around with their delusions. No names - no pack drill.

Reg, if the current phase delay through one foot of wire is 10 degrees,
how the heck can a one foot coil have a phase delay of zero degrees?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3764. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:57:47 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <LAEpb.1348$Ce6.671@newssvr29.news.prodigy.com>
Source record: 105330
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bo71fs$ii8$1@news1.kornet.net...
>
> >
> > Mr. Rumsfeld? Is that you?
> >
>
> Does sound a bit like him, doesn't it? No big deal, it's not HIS kids
> getting killed...

Another person who is nostalgic about the 9-11 attack, who wants to see the "action" moved back here in the U.S., instead of remaining over there in Iraq.

The children and other innocent people who were vaporised in the twin towers do not count, I suppose. Brenda Ann wants us to pull our troops out so that we can have more of that action here in the U.S...

I'll have to disagree with that kind of thinking. Sorry, Brenda Ann!

Charlers Brabham, N5PVL

3765. Re: Attention hammies, I contact UFOs on freeband

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:58:15 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <0c5eqv8ov86p30g8nv5j3lro3bish07fjk@4ax.com>
Source record: 105331
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

In <c5ecbb69.0311031642.cff9064@posting.google.com>, richcranus@yahoo.com
(Richard Cranium) wrote:

>Twistedhed <twistedhed@webtv.net> wrote in message news:<bo6asj$276$1@news.x-echo.com>...
>> This is another myth that Lelnad and his gang of jealousy-infected breth
>> eren perpetuate, that I have talked with "saucer men", I assure you, not
>> hing is further from the truth. The lies and anger-motivated constructio
>> ns that Lelnad, Dogie, the false Sparky, and Mad Geo dream up on a daily
>> basis have
>> nothing whatsoever to do with my actual experiences in the realm of the
>> supernatural.
>>
>> AO=AO=AO=Now this is all well documented mind you, I have contacted the
>> outer reaches of another dimension while calling skip on 555, and yes I
>> am well aware that the frequency falls outside the channels that the gov
>> erment deems preferable for use, but I am not one of the unwashed unawar
>> e rabble of
>> citizenry, never have been, hence I am not subject to the same laws as c
>> ommon, callow men. In college I was on the Deans List if that tells you
>> anything and my superior intellect won me the favors of many like-minded
>> individuals in both society and academia. But I shunned their transpare
>> nt and shallow attentions to pursue my own unglamorous but rewarding pat
>> h in the swamplands of the south. This unselfish pursuit and my canny na
>> tive instincts are what I believe has been responsible for opening the d
>> oor to contact with other dimensions in the continuum and my subsequent
>> elevation to a cherished confidante. If you doubt me then do so at your
>> peril for there are many things on heaven and earth that are not yet und
>> erstood so you would do well to pay your respect to an as yet undisprove
>> n phenomenon. Alas, here is the meat of it; the beings I have communicat
>> ed with by chance do in fact effect transport by spherical means. Yes, s
>> ome call it a saucer, but that is a
>> misnomer. If the media knew the truth then it would be the undoing of my
>> special status and the end of all social intercourse. Only on the freeb
>> and does one learn of such truths. Lelnad and his gang of hounds may sco
>> ff, and I say let them, for what does one expect from such unenlightened
>> commoners but
>> an ignorant barbaric yawp in the face of such great wisdom.=AO=AO=AO=AO
>>
>>
>>
>> =-
>> Article poste via Voila News - http://www.news.voila.fr
>> Le : Mon Nov 3 20:38:59 2003 depuis l'IP : ac9160fe.ipt.aol.com [VIP 532284301978]

>
>Proving only that Doug Adair N8WWM has way too much time on his hands.
>And no common sense at all.
>
>Pay no attention to the dork behind the curtain. It's not Twistedhed!

Quite right.... Twistedhed is the -ham- behind the curtain.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3766. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 02:58:32 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <u44eqv00t610ouvq964fipboeh0iogjps0@4ax.com>
Source record: 105332

On Mon, 03 Nov 2003 19:55:33 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

|Wes Stewart wrote:
|> You are comparing a mess of wire with a ideal lumped inductor. Apples
|> and oranges.
|
|Not my fault. Why does EZNEC treat these two inductances so differently?

Uh... maybe because they're different?
|
|> If you really want to model this stuff accurately take a few hundred
|> $K out of your next retirement check and buy a high frequency
|> structure simulator.
|
|No thanks, Wes. I can live without that. But let me ask you a question.
|If there is a one degree delay through one foot of copper wire, how
|can there be a zero delay through 20 feet of wire coiled into a one
|foot coil? Given the pressure on the electrons, one would expect
|20 times the delay through the coil as through the one foot wire.

When I was working my way to engineering I was a senior associate
engineer working with a PhD who had tired of the politics in the
university environment, given up his tenure, and come to work for
Hughes. We were putting together a bench top setup to evaluate
something or the other in the mixers from the early version of the
Phoenix missile. The front end of this thing, from the waveguide slot
planar antenna back the the mixer inputs, was all waveguide.

Whatever we were doing required the use of a "magic" T. I, the ever
inquisitive student, asked; "Doc, how does a magic T work?"

Doc, former professor and the author of "Intermediate Mathematics of
Electromagnetics", replied,

"It's magic."

3767. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 03:08:56 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031103220856.07536.00000265@mb-m19.aol.com>
Source record: 105333

>
>They didn't just imply it - they actually said they had measured it. They
>are still wandering around with their delusions. No names - no pack drill.
>---
>Reg, G4FGQ
>

Here we go again, smart ass gurus, Rauchians - when they don't get it or run out of arguments they resort to ridicule, name calling, questioning abilities, etc. Why don't you pontiffs MEASURE that stuff, see it with your own eyes, instead of "theorizing" what it "should" be?

Can you engage in civil discussions about the facts, go and verify it with measurements and then either triumph, or admit you deficiencies. Your snotty remarks don't do any good, don't make things right.

"They actually said they measured it" - THEY REALLY and PROPERLY MEASURED IT and presented results. What do you have to show? Your "knowledge"? What you do is pulling Rauch, ridiculing instead of measuring or verifying it yourself. You will end up with big egg on your face. Then who will look stupid?

Yuri

3768. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 03:18:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqe6khriiaqa86@corp.supernews.com>
Source record: 105334

I'll choose this one to respond to, since it talks directly about the models.

Cecil has been kind enough to provide me with the models, and given me permission to post them on my web site. You can download them from ftp://eznec.com/pub/ as Cecils_Models.zip, and run them with the standard version of EZNEC. If you only have the demo version, a reduced-segment model of the verticals at least should work well enough to illustrate the subject matter.

I looked particularly at the two models of a vertical, since they're the simplest. They're both 51 feet high, on 75 meters. One has a single lumped "load" of +j335 ohms between 25 and 26 feet from the ground, and the other has a one-foot-spaced horizontal stub protruding horizontally from the same point.

One point that seems to be drawing attention, if not to say some creative theories, is that the current at the bottom terminal of the stub isn't equal to the current at the top terminal. They are, EZNEC reports, 0.846 and 0.581 amps respectively (at the stub end segments). EZNEC shows them to have very little phase shift along the stub, and very nearly 180 degrees out of phase on the two wires. (People looking at the model should be aware that stub wires 2 and 4 are defined with end 1 of one opposite end 2 of the other. So the phase angles reported by EZNEC are referenced in opposite physical directions. EZNEC reports the phase angles of the currents on the two wires as being nearly identical. So that means that the currents are flowing in phase in opposite directions -- or nearly exactly out of phase if you define positive as the same direction for both wires.)

The fact that the currents at the stub terminals aren't the same means that there can be no doubt that the stub is radiating. The difference constitutes a common mode current. Because the currents are almost exactly out of phase, we can simply subtract them to find the common mode current. At the antenna end of the stub, it's about 0.27 amp. At the output end, it's zero (EZNEC reports a 0.03 amp difference for the segments nearest the short). Taking a simple-minded average, we can say it's very roughly 0.15 amp. This is the equivalent single-wire common mode current. That is, it will radiate as though that amount of current were flowing on a single conductor of the same length.

Field strength is proportional to the current flowing on a conductor, and the length of the conductor. It's not at all valid (using this sort of analysis at least) to apportion radiation to being so much from this part of the antenna or so much from that. For example, the field from one part of the antenna can interfere with the field from others,

resulting in little or no contribution from those sections in certain directions, or maybe in nearly all directions. But to get an idea of the potential radiation from the stub, we can look at the 0.15 amp approximate average current flowing along the ten foot stub, and compare it to the roughly 0.5 amp average over 51 feet for the vertical itself. From that, we see it probably won't be a big contributor to the total field. But that's not at all a criterion for imbalancing the stub current -- which does affect the feedpoint impedance and potentially the pattern. In fact, the stub can cause more disturbance by modifying the current in the main radiator than by its own radiation. That's definitely true in something like a collinear with phasing stubs.

The stub common mode current (that it, the imbalance between currents at the stub terminals) is due to mutual coupling between the stub conductors and the vertical portion of the antenna. It shouldn't be a surprise, and it doesn't require any new theory, reflected currents or powers, or hocus-pocus to explain. It's exactly the same phenomenon that induces current in a Yagi parasitic element, and countless other familiar everyday examples. And EZNEC does the calculation exactly the same (from very basic principles) for all conductors -- it doesn't know or care if you regard some of them as being a "stub".

I'll make a prediction here without having actually tried it. So here's a chance to show just how full of BS I am. Convert the model to a dipole of double the length, in free space, but with a stub on only one side. Move the stub inward toward the center. As you do, I predict that the currents will become more and more balanced. That is, the currents on the two terminals of the stub should become more and more equal. Why? Because as you get it closer to the center, the mutual coupling from the two halves of the antenna to the stub becomes more equal. Exactly at the antenna center, they cancel out. At that point, you can replace the stub with a lumped inductor and find no change. I restricted this to one stub because if there were two, coupling from one stub to the other would create imbalance even near the center.

To answer an earlier question of whether you should expect a ten foot stub to behave like a lumped inductor, the answer is, of course not. At least not if it's in the field of other current-carrying conductors.

What's the mystery? What's the big deal?

Roy Lewallen, W7EL

Cecil Moore wrote:
> . . .
>
> Roy suggested the stubs might be radiating. EZNEC says they are not.
> You can add two inches of vertical wire to the ends of the antenna
> and see the red vertical radiation. The stubs are 0.04WL, #14 wire,
> and 6 inch spacing. How much could they radiate on 75m? The difference
> in current is not due to radiation. It is due to the phase shift
> between Ifwd and Iref through the stub.

3769. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 03:22:38 UTC
From: mwelch@madbbs.com
Message-ID: <39385c80.0311031922.1ddce54@posting.google.com>
Source record: 105335
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Thanks for the link Alan. I was aware of Zogby's poll, but I hadn't seen his summary of the findings. Not too much cause for comfort if you ask me, and these results were from a poll conducted in August before the dire events of recent months. I sure hope Zogby follows up with more current data.

I think what the Iraqi people are telling Zogby is that the coalition should leave Iraq to the Iraqis. They do not want Saddam's jackboot replaced with the yolk of occupation, however benevolent our intentions may seem to be. They don't want a theocracy, nor a secular democracy. Least of all do they wish a government imposed upon them by a governing council handpicked by overlords. What they want most of all is the departure of foreign troops.

The choices confronting us are not attractive. If we leave prematurely Iraq almost certainly will descend into chaos and civil war. The likely outcome of this eventuality is the de facto partition of Iraq into three parts, a Kurdish state in the north, a Sunni entity in the middle, and a Shiaah state in the south with close ties to Iran. This outcome will immeasurably heighten tensions in the region if civil war doesn't lead to regionalized conflict first. Saddam, brutal and evil though he was, at least kept the lid on this pot.

On the other hand, if we stay, our troubles likely will increase. As it would be political suicide for Bush to increase our presence on the ground, something the Democrats just now are trying to goad him to do, we will have to make do with current force levels, and they are insufficient. There is no possibility to send more American troops until the election is over. And I will bet that whichever party takes power in 2004, no matter what they say to get elected, that party will send more troops, not bring them home.

The wild card is how much longer the American public will tolerate 300 soldiers KIA and 2000 wounded (read maimed) every six months, not to mention the exorbitant financial costs of occupation. I suspect that patience is beginning to run out, but that it is not yet exhausted. That may not happen until another administration has tried and failed to manage the occupation. I do believe that by then we will have a mandate to do the right thing and bring the troops home.

Regards,

Grumpus

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:<Vqtpb.52160$v82.2540947@twister.southeast.rr.com>...
> Zogby.com has compiled some polls on this issue. Here's an interesting
> article: http://www.zogby.com/Soundbites/ReadClips.dbm?ID=6164
>
> Regards,
> Alan
> WN4HOG
>
> --
> Windsurfing Club: http://www.ibscc.org
>
>
> "grumpus" <mwelch@madbbs.com> wrote in message
> news:39385c80.0311011802.1787b4ee@posting.google.com...
> > You must have me confused with somebody else. Just today, two more
> > soldiers of ours KIA, and our forces involved in a firefight which
> > left ten Iraqi noncombatants dead. Tell me, how long will they love
> > us at this rate? How long before the patience of the average Iraqi
> > runs out? We are up against the clock friend. We didn't get into
> > this predicament by accident, we deliberately stepped in it.
> >
> > Regards,
> >
> > Grumpus
> >
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:<6GXob.730$Oo4.467@newsread1.news.atl.earthlink.net>...
> > > See what happens when you read Witch Hillary's book.....you get all
> gooey
> > > inside....bring on that VAST RIGHTWING CONSPIRACY.
> > >
> > > In a word ... balderdash.
> > >
> > > Dan/W4NTI
> > >
> > > "grumpus" <mwelch@madbbs.com> wrote in message
> > > news:39385c80.0311011127.f45dc3d@posting.google.com...
> > > > Hi Ross, I entirely agree with your assessment of the pathogenesis of
> > > > the current episode of war fever. This war is the neoconservatives'
> > > > war. Soon to be the American people's war if it can be conflated,
> > > > after the fact, with the so-called War On Terror. If the occupation
> > > > can be made to draw in Al Quaeda and other insurgents and the witting
> > > > or unwitting participation of other states in the region, then presto,
> > > > we have the perfect post hoc justification for the invasion in the
> > > > first place and the perfect pretext for toppling the next domino, so
> > > > the neocons desire.
> > > >
> > > > But in their overweening certainty and their impetuous rush to war
> > > > they overlooked the need for international troops to man the

> > > > occupation and the innate hostility and justifiable suspicion of the
> > > > Iraqi people. If coalition forces do not find themselves in a
> > > > quagmire, at the very least they find themselves taking first steps in
> > > > a long hard slog (an uncharacteristic moment of honest introspection
> > > > by Rumsfeld or a deliberate leak to better position himself in the
> > > > internecine blame game now playing out within the administration?).
> > > > Bogged down as they are in a police action which is dispiriting and
> > > > not their brief, our troops cannot be cycled out to go onto bigger and
> > > > better things. If the neocons in charge had played their hand more
> > > > adroitly, had awaited a season of inspections and won over full
> > > > international cooperation as did Bush the Elder, then perhaps even now
> > > > they would be spurring their destriers into Damascas or even into
> > > > Tehran. The trick now is to bite off more than we can chew, get into
> > > > grave difficulty, and rally the American people around the troops.
> > > > Then take another bite. The neocons have repeatedly claimed that the
> > > > WMD's are buried in the sands of the Bekaa valley, that is why they
> > > > are nowhere to be found in Iraq. Perhaps this is the next bite of the
> > > > apple gleaming in their eye. Events, mostly of their own making, have
> > > > overtaken their resources, not their ambition. If regional war can be
> > > > achieved, look for a call to resurrect the Draft.
> > > >
> > > > I have read that Rummy and crew established their own little
> > > > intelligence agency within the civilian side of the Pentagon which
> > > > examined the raw data collected by the traditional spooks and culled
> > > > out only the bits which gave credence to a pro-war assessment, even,
> > > > as you say, going so far as to rely upon the unsupportable evidence
> > > > presented by unreliable characters such as Chalabi (sic), a member of
> > > > the diaspora for forty years, and others. Having made their own
> > > > assessment in their own way, they injected it high up into the
> > > > national security brief presented to Bush without having it vetted
> > > > through the Intelligence chain of command. This is how all the
> > > > dubious claims about Saddam's WMD's and hostile intentions came to be
> > > > included in the President's speeches, and how the Niger uranium claim,
> > > > based on crudely forged documents and widely discredited within the
> > > > CIA and the State Department, seemed to take on a half-life of its
> > > > own. The neocon chefs cooked the intelligence books. I have also
> > > > read that Sharon has his own little rump intelligence agency which is
> > > > mistrusted by the Mossad.
> > > >
> > > > I wouldn't give Bush too much credit for deviousness. Nixon he is
> > > > not. I think what happened after 9/11 is that the neocons played to
> > > > Bush's exchatological leanings. I think they duped him and they duped
> > > > the American people. Maybe now, with the continuing difficulties we
> > > > face in subduing Iraq, he is wising up and reevaluating how we got
> > > > into this mess in the first place.
> > > >
> > > > Regards,
> > > >
> > > > Grumpus
> > > >

> > > >
> > > >
> > > > Ross Archer <archer@topnow.com> wrote in message
> news:<3FA318BC.55C2DBB5@topnow.com>...
> > > > > Ed Price wrote:
> > > > > [snip]
> > > > > >
> > > > > > The only unfortunate thing about knocking off Sadaam was that he
> was
> hated
> > > > > > by Al Queda, and, in return, did his best to exterminate them. The
> enemy of
> > > > > > my enemy isn't always my friend. It's quite possible to have two
> differing
> > > > > > enemies. And sometimes, it's wisest to let you and him fight. I
> think
> it
> > > > > > will be enormously ironic if we ultimately find that Sadaam sealed
> his
> > > > > > destiny by being a great bluffer.
> > > > > >
> > > > > Far from ironic, it was probably part of a deliberate and
> > > > > relatively clever strategy that went awry for this tyrant.
> > > > > >
> > > > > I intend to show (again) why the argument "Saddam Hussein
> > > > > wouldn't thwart the inspections unless he was hiding large
> > > > > amounts of WMDs" is profoundly ignorant. He would thwart the
> > > > > inspections regardless. Let me explain why.
> > > > > >
> > > > > Say, for the sake of argument, that Saddam had MASSIVE
> > > > > stockpiles of WMDs. It would stand to reason he would
> > > > > thwart the inspection process in every way possible, to
> > > > > postpone or avoid their discovery. This much is obvious.
> > > > > >
> > > > > Now say, for the sake of argument, that Saddam's WMD arsenal
> > > > > was decimated in 1991, and he could NOT overcome the
> > > > > inspection regime, the surveillance, and the no-fly zone
> > > > > enforcement to rebuild his arsenal significantly. What
> > > > > would he do? He would thwart the inspection process in
> > > > > every way possible. Why? Because once it came out, that
> > > > > Saddam couldn't outfox the West, it would make Saddam look
> > > > > weak and reduce his intimidation power drastically.
> > > > > Megalomaniacs simply don't do that.
> > > > > >
> > > > > As background, it's perfectly obvious that Saddam Hussein
> > > > > is/was a demagogue with intentions of expanding his
> > > > > influence to rule the Arab world. Does anyone seriously
> > > > > doubt his megalomania? Just look at the cult of personality
> > > > > he's created, if you remain doubtful. He loves (loved?)
> > > > > worship. Now, if you're a megalomaniac dictator, with

> > > > > aspirations to power and influence, who personally gains
> > > > > pleasure from the worship and fear of others, how would YOU
> > > > > act?
> > > > >
> > > > > First, by "standing up" to the inspections, Israel, or
> > > > > whatever rabidy anti-Western Arabs hate, his popularity
> > > > > among rabidly anti-Western Arabs (of which I hear there are
> > > > > a few) skyrockets. He looks strong and therefore an
> > > > > attractive candidate for leading them. Perhaps even better
> > > > > than Osama bin Laden, his chief competitor to that
> > > > > aspiration. This feeds right into his megalomania. He
> > > > > wants power and followers, and by "standing up to" the
> > > > > allies, and Israel by proxy, he gains major political
> > > > > capital that might have been useful once Saddam had
> > > > > successfully rebuilt his conventional military. A weak
> > > > > nation could be conquered and "Saddamized" rather easily
> > > > > with nothing more than his strong conventional military and
> > > > > an indigenous population of committed sympathetic radicals.
> > > > >
> > > > > Second, by seeming to have WMDs, he intimidates us more. He
> > > > > uses our stupidity, namely "Why else would he thwart the
> > > > > inspection process at every turn if he wasn't hiding
> > > > > weapons?", against us. Saddam figured the allied forces
> > > > > would think twice before striking at him given the potential
> > > > > for mayhem our soliders would face from these (assumed
> > > > > whether real or not) WMDs. So bluffing at having WMDs was a
> > > > > free deterrent he thought would protect his power. A
> > > > > classic poker bluff.
> > > > >
> > > > > So it's not very hard to see why he would pretend to have
> > > > > weapons that were blasted to dust in 1991 that he couldn't
> > > > > rebuild.
> > > > >
> > > > > Where it went wrong for Saddam was he underestimated the
> > > > > single-mindedness of the US Administration to remove him
> > > > > from power. This was something Wolfowitz, Perle, Rumsfeldt,
> > > > > and others had wanted to do for years (cf. PNAC).
> > > > >
> > > > > With the mounting failures to find any evidence of WMDs in
> > > > > Iraq, the only thing to do for an Administration committed
> > > > > to war was to cook the junk evidence and rush to war at
> > > > > maximum possible speed. And that's precisely what they did.
> > > > >
> > > > > We achieved the result of pissing off our allies, who
> > > > > understood that removing Saddam was a US political objective
> > > > > that had nothing to do with security of the USA or much of
> > > > > anyone (except Israel, which gains obvious benefits). They
> > > > > openly criticized us and the quality of our evidence. It was
> > > > > junk evidence. They knew it. Everybody knew it except the
> > > > > American and British people, evidently, because they both

> > > > > were the targets of a thinly-disguised sales job.
> > > > >
> > > > > To bolster the case for going to war, they even went to
> > > > > Iraqi dissidents for threat assessments. The Iraqi
> > > > > dissidents had every reason to co-operate in any scheme to
> > > > > unseat Saddam, and CIA internal documents show they did not
> > > > > consider this source to be reliable at all. Yet their
> > > > > known-unreliable statements were often repeated
> > > > > as a justification for war against Iraq. They also
> > > > > selectively grabbed the minority of evidence bolstering the
> > > > > position that Saddam had stockpiles of WMDs we just couldn't
> > > > > find, and ignored the rest, in their making a case for war.
> > > > >
> > > > > What went wrong for the Bush Administration, is more and
> > > > > more of the American people (and even more of the British)
> > > > > are seeing that we were sold a bill of goods by a cabal of
> > > > > explicitly dishonest manipulators and their dupes.
> > > > >
> > > > > What went wrong for the American people is we're losing
> > > > > soldiers virtually every day in a country that posed no
> > > > > significant threat to our security interests, prior to
> > > > > invasion.
> > > > >
> > > > > I said two things before, and history proved me right on
> > > > > both. First, Saddam didn't have significant WMDs. They
> > > > > will never be found, because they aren't there. Second, the
> > > > > Bush Administration is one of the most incompetent and
> > > > > dishonest we've seen in our history. As the facts emerge
> > > > > (and it will take quite some time given this is by far the
> > > > > most secretive Administration in our history), eventually
> > > > > Bush's Administration will win the mendacity crown from
> > > > > Richard Milhous Nixon.
> > > > >
> > > > > > > Sadaam earned his fate by attacking our economic lifeline, and
> being a
> > > > > > generally de-stabilizing force in a region quite important to the
> USA.
> Yes,
> > > > > > it is about the oil! Just how many Grannys in Schenectady have to
> freeze to
> > > > > > death because they can't afford heat until we recognize that our
> economy is
> > > > > > totally dependent on oil availability & pricing?
> > > > > >
> > > > > > Jimmy Carter tried very hard to get alternative energy
> > > > > > programs underway. As you can imagine, it was primarily oil
> > > > > > and gas interests that lobbied -- and eventually succeeded
> > > > > > -- in killing subsidies to their competitors. Though some
> > > > > > falsely claim it was environmentalists who were to blame,

> > > > > this appears only to be true in the nuclear energy case,
> > > > > where in fact environmentalists did great harm by forcing
> > > > > the use of dirty coal instead of at-least-cleaner nuclear
> > > > > energy.
> > > > >
> > > > > But show me where environmentalists engaged in a concerted
> > > > > successful effort to block government subsidies for wind and
> > > > > solar research in a significant way, and I'll buy you lunch.
> > > > >
> > > > > >
> > > > > > Temporarily, we work with despicable foreigners who despise us,
> because we
> > > > > > are dependent on them in some way. The industrial world's
> dependence
> on oil
> > > > > > has caused the worst economic imbalance we could imagine, giving
> economic
> > > > > > power to many who are unfit to govern a bucket of shit.
> > > > >
> > > > > Saddam wasn't fit to rule the viruses in the bucket of shit.
> > > > > I'm glad he's gone, but the US economy will suffer for
> > > > > decades due to the foolish idiocy and dishonesty of this
> > > > > horrible and corrupt secretive Administration.
> > > > > >
> > > > > > The best thing we could do for America would be to greatly reduce
> our
> > > > > > economy's dependence on foreign oil. OTOH, I don't expect this to
> happen in
> > > > > > my lifetime.
> > > > >
> > > > > Probably not. Until the entrenched energy interests figure
> > > > > out a way to get government money for research, or how to
> > > > > make a profit, or when reserves finally push gasoline up to
> > > > > $5 a gallon or so. Then the tune will change by necessity.
> > > > > Market forces will eventually compel the use of alternatives
> > > > > to oil and gas. Whether it's in 10 years or 200, I can't
> > > > > honestly guess. Could just as easily be either.
> > > > >
> > > > > -- Ross
> > > > >
> > > > > >
> > > > > > Ed
> > > > > > wb6wsn

3770. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 03:45:25 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bo74u0kgu1@news1.kornet.net>
Source record: 105336
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:LAEpb.1348$Ce6.671@newssvr29.news.prodigy.com...
> Another person who is nostalgic about the 9-11 attack, who wants to see
the
> "action" moved back here in the U.S., instead of remaining over there in
> Iraq.
>
> The children and other innocent people who were vaporised in the twin
towers
> do not count, I suppose. Brenda Ann wants us to pull our troops out so
that
> we can have more of that action here in the U.S...
>
> I'll have to disagree with that kind of thinking. Sorry, Brenda Ann!

You're putting words into my mouth, Charles. I said nothing of the sort.
It's (unfortunately) far too late to pull our troops out of Iraq, the course
must be stayed... what I have a problem with is Mr. Rumsfelds lassaiz-faire
attitude that our troops must die...

And, for the last and final time, Iraq and Saddam Hussein had nothing to do
with 9/11.. even Bush has admitted to this now.. get over it.

3771. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 04:17:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bo798o$367p$1@news3.infoave.net>
Source record: 105337

Standby for a lawsuit!

"John Bartley I solved my XP problems w/ Service Pack Linux"
<johnbartley@email.com> wrote in message
news:f90c7f43.0311030919.ca37a58@posting.google.com...
> FRACTAL-SHAPED TILES DEVELOPED FOR NEW BROADBAND ANTENNA CLASS
> Penn State engineers have developed innovative design methods for a
> new class of antennas composed of an array of fractal-shaped tiles
> that offer anywhere from a 4:1 to 8:1 improvement in bandwidth
> compared to their conventional counterparts. Douglas H. Werner,
> professor of electrical engineering and senior scientist in Penn
> State's Applied Research Laboratory, recently described the new
> antennas at a conference on wireless communication technology in
> Hawaii. While fractal concepts have been used previously in antenna
> design, Werner and his research team are the first to introduce a
> design approach for broadband phased array antenna systems that
> combines aspects of tiling theory with fractal geometry.
> Read the full story at http://live.psu.edu/story/4373

3772. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 04:30:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqeasj25qncff8@corp.supernews.com>
Source record: 105338

Here's an experiment to try.

Take Cecil's model of the vertical with the loading coil. Add a single horizontal wire, 10 feet long, connected at the top of the loading coil. That is, make the new wire go from 0, 0, 26 to 10, 0, 26. Notice how much current there is in the horizontal wire. Notice how much different the current is in the vertical below the wire compared to above the wire. Look familiar?

We can work our magic without either an inductor or a stub.

Roy Lewallen, W7EL

3773. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 04:34:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa72d21_5@corp.newsgroups.com>
Source record: 105339

Roy Lewallen wrote:
> What's the mystery? What's the big deal?

Intel has a lot of problems with buses running in the hundreds of MHz
because of the delay in the conductor path between chips. If I tell them
to install a coil in each path instead of a conductor, the delays will
disappear, right? You're pulling my leg, right?

At frequencies where the delay through a coil is a negligible part of
an AC cycle, the delay can be ignored. At frequencies where the delay
through a coil is not a negligible part of an AC cycle, the delay cannot
be ignored and circuit theory will not yield the correct answers. At the
point where the circuit theory error becomes too great, we must switch
to distributed network analysis.

Consider one foot of wire carrying a 1 GHz signal. The phase shift is
greater than 360 degrees. Can we reduce the phase shift to zero by
installing a coil over that one foot length? You *are* pulling my leg,
right?

All coils have delays. Sometimes those delays are negligible. Sometimes
they are not. The delay through a 75m mobile loading coil is NOT negligible.
That assumption causes errors. The phase delay through a coil is approximately
the same as the section of line replaced by the coil. For an 80m loading coil,
that delay is around 80 degrees or the equivalent of 57 feet of wire. Otherwise,
the forward and reflected currents on the antenna would not have the proper phase.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3774. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 04:43:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa72f4b_5@corp.newsgroups.com>
Source record: 105340

Roy Lewallen wrote:
> Here's an experiment to try.
> Take Cecil's model of the vertical with the loading coil. Add a single
> horizontal wire, 10 feet long, connected at the top of the loading coil.
> That is, make the new wire go from 0, 0, 26 to 10, 0, 26. Notice how
> much current there is in the horizontal wire. Notice how much different
> the current is in the vertical below the wire compared to above the
> wire. Look familiar?

And please note that horizontal wire generates lots of horizontally
polarized radiation where there is none for the horizontal stub alone.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3775. OT:Let the stuttering Chinese guy explain it.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 04:58:31 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bo7bm9$37a3$1@news3.infoave.net>
Source record: 105341

"Let the stuttering Chinese guy explain it to you"
Before the days of politically correct speech, Saturday Night Live had an on-going skit that dealt with all complaints by having a stuttering Chinese guy who spoke little English "explain it to you".

Have you called an 800 number with a complaint, or warranty question? Have you
tried to cancel an order or service? Most likely you were given the SNL treatment. Rather than speaking with a concerned employee of the company you called, chances are you were connected to a "call center" in India, The Philippines, or some other exotic location, where the labor is dirt cheap.

I propose a new acronym FHLEM (Foreign Hourly Laborer Exasperating Me). My first encounter with FHLEM occurred last month when I attempted to cancel my America On Line account. I followed the directions on the screen and called the 800 number as directed. I reached a FHLEM in India. I expressed
my desire to cancel my service. This was just the start of a long and fruitless
journey!

She proceeded to ask me why I was terminating my AOL account. I explained the
reason was twofold, first I was upset at the telemarketers calling me "as a valued AOL customer" (exempt from the no call list because of a prior business relationship) and second I now was hooked up on BroadBand service from Pond Branch Telephone. Alas, she had heard these flimsy excuses before and was more than willing to deal with them.

I actually timed the phone call, and at the end of seventeen minutes and endless offers of free months of service, being the old curmudgeon I am, replied "Look cancel the service! This conversation is ended"
I won't bore you with the details of how I told her I would no longer continue
with AOL if they gave me free service for life.

This month the Credit card statement arrives, and once again I am billed for AOL! I called a known USA number for AOL and asked, nay demanded, to speak to
a supervisor. She told me the account had not been cancelled because "I had not completed the cancellation process." Apparently the Chinese guy has
to fully explain it to you in a thirty-minute process.

Once I explained that I was the publisher of the Gilbert News, located twenty

minutes away from the capital, and sans satisfaction, I would be at the desk of the States Attorney General with my complaint within the hour. She relented
and gave me a cancellation number. No need to tell her I have exactly nine hundred seventy three subscribers at last count!

My second call of the day to get technical support for a network router ended
up in the Philippines, but that's a story for another day.
--
<--
Publisher - Gilbert News On-Line
Http://gilbertnews.net

3776. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 05:08:35 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fa736a3_3@news1.prserv.net>
Source record: 105342

The SMA is a precision 50 ohm microwave connector which has been used on some other equipment simply because it is tiny. The F connector is a cheap, really, really cheap non-constant impedance but close to 75 ohm consumer grade connector. One would not ever expect to find both used in the same system.

Having said that, try Auto-Radio on the main shopping street in downtown Rota, Spain. I believe I saw some F to SMA adapters there a few years ago. I know they had SMA to UHF, another unexpected combination.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:87u15lrxbn.fsf@jidanni.org...
> Is it just my imagination, or are direct SMA to "F" (TV Coax) connectors
hard
> to find. One usually having to go SMA-BNC-F?

3777. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 05:12:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqedaqhhmimecf@corp.supernews.com>
Source record: 105343

Huh?

The stub produces just as much horizontally polarized radiation as the wire.

Run your stub vertical model with an elevation plot, and azimuth angle
of 90 degrees. Click FF Tab. Note the magnitude of the horizontal
component -- roughly -30 dBi. Then repeat with the experimental model
with the single horizontal wire.

As I mentioned in my lengthy posting, the radiation from the stub isn't
a large part of the overall field, and this certainly shows it. But it's
certainly enough to disturb the vertical's current. Exactly the same
thing holds for the straight wire. Common mode current is common mode
current. No magic, no mysterious phenomena "not accounted for" by EZNEC.

Roy Lewallen, W7EL

Cecil Moore wrote:
>
> And please note that horizontal wire generates lots of horizontally
> polarized radiation where there is none for the horizontal stub alone.

3778. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 05:49:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fmeeqvs8ci3hr4dhh2mm4ccmbh0escr4kd@4ax.com>
Source record: 105344

On 3 Nov 2003 18:31:43 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard,
>I think it is very bad what Penn State has done

In this case, ignorance is allowed as an excuse. After-all, we are
talking about academics who have no concept of the real world.

>and they say they are going to
>apply for a patent no less.

Let them, I certainly don't care.

>They do have E mail contacts on their page
>so if you send them a copy of your posting
>then they will have to declare it to the
>Patent Office with their initial request.
>If what you are saying is what they are repeating
>then congrats and kudo's to you.

Read it again, Art. The invention is in the humor and the
"obviousness" of it to a practitioner of the art. It is the patent
office that needs to be dope-slapped. No one has to do any "proving"
of claims to get a patent so in the end real work has no merit (and
what makes that comedy sketch a future liability to whoever ponies up
the bucks to buy a license to a technology built on shifting sand).

> It would also
> be interesting how the initial patent on Fractals was written
>i.e was it a 'method' for producing a new series of designs
>or limited to specific designs as it could make quite a difference
>as far as the PTO is concerned. I would imagine they took the
>first tack as to patent all forms in the family would
>make it one very huge patent request
>
>Art

Hi Art,

Fraudtenna's original application is apparent in the description part
of the submission. Equally obvious is that the brunt of the claims
were brutally clipped and they were left with a castrati so light in
its loafers as to carry only carping weight.

The only value of patents is in their being a depreciable asset. In
other words, valuable only to the bean counters to include in their

prospectus.

73's
Richard Clark, KB7QHC

3779. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 06:03:39 UTC
From: antswitch@tomochka.com
Message-ID: <47c89a30.0311032203.6c0e1052@posting.google.com>
Source record: 105345

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<y6GdnRW5l5j6JDui4p2dnA@comcast.com>...
> Casey,
>
> What kind of directional antenna do you have, that you need to feed it with
> 450 Ohm line?
>
> Tam/WB2TT

Well, I don't *need* to feed it with ladder line, I *want* to feed it with it so that I can use it multi-band. It is armchair fantasy at the moment, no antenna yet exists, but it would be essentially a 40/30 2 el. yagi (it's a bit more complicated than that, but I'm still designing). My very preliminary modeling indicates that at resonance you get the typical yagi directional pattern. Driving it on other bands, even with high SWR, will yield anything from normal dipole to meaningful gain in one direction depending on band. So, at the least I could have a rotatable dipole on the non-resonant bands and a bit of F/B on one or two with some luck.

73,

Casey

3780. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 06:11:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <itfeqvgm43r0gukmeommssfgc43u5mijkt@4ax.com>
Source record: 105346
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Mon, 03 Nov 2003 16:54:59 -0700, Don Lancaster <don@tinaja.com>
wrote:

>Richard Clark wrote:
>>
>> On Mon, 03 Nov 2003 17:00:58 GMT, "Marc H.Popek"
>> <LVMarc@worldnet.att.net> wrote:
>>
>> >www.fwt.niat.net
>> >
>> >This dielectric embedded antennas are smaller than naturally occurs and yet
>> >have a net gain
>>
>> Hi Marc,
>>
>> Interesting sentence construction.
>>
>> A cogent question would reveal some perspective: How much would your
>> 13dBi dielectric embedded antennas for TV Channel 2 weigh?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>A lot less than they would for the 160 meter ham band.
>
>--
>Many thanks,
>
>Don Lancaster
>Synergetics 3860 West First Street Box 809 Thatcher, AZ 85552
>voice: (928)428-4073 email: don@tinaja.com fax 847-574-1462
>
>Please visit my GURU's LAIR web site at http://www.tinaja.com

Hi All, Don,

I would least of all think that "Many thanks" was aimed specifically
at me for such little contribution as I've offered; that aside, for
those in the rec.radio.amateur.antenna group, I would offer that Don
is one of the more "out of the box" technical thinkers (sorry for the
strained expression) and I would suggest they follow the link he
offers.

As I have been a subscriber to Circuit Cellar since its inception, I've found Don's articles (and books before then) contained unique solutions to problems that have defied conventional analysis. Or rather those problems that have defied clear analysis through other's falling back on conventional and spontaneously dead answers.

73's
Richard Clark, KB7QHC

3781. Re: Attention hammies, I contact UFOs on freeband

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 06:13:35 UTC
From: JJ <radiobuff0@mailcity.moc>
Message-ID: <B_WdnenjD-142TqiRVn-iQ@gbronline.com>
Source record: 105347
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.antenna

Frank Gilliland wrote:

>>
>>Pay no attention to the dork behind the curtain. It's not Twistedhed!
>
>
> Quite right.... Twistedhed is the -ham- behind the curtain.

Naw, it's just dickiebird in drag.

3782. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 06:31:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tqgeqv46r65qg31pjp6059rborsk9evtp6@4ax.com>
Source record: 105348

On 04 Nov 2003 03:08:56 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:
>Why don't you pontiffs MEASURE that stuff, see it with your own eyes,
>instead of "theorizing" what it "should" be?
>
>Can you engage in civil discussions about the facts, go and verify it with
>measurements and then either triumph, or admit you deficiencies. Your snotty
>remarks don't do any good, don't make things right.

Hi Yuri,

To your credit (and it vastly outweighs the quality of sneer review)
you have gone to the bench for this one. However, this is not the
grail we are talking about; and having obtained data does not achieve
a state of grace. This is simply a starting point (and why I harp on
about the remaining data to demonstrate the actual, total current
distribution along the entire radiator). I am sure that my flack
qualifies with something more that being snotty (albeit a higher
quality of snot); but your expectation of submission from those so
impervious to performing any act that used to be the hallmark of our
avocation - well, that expectation is a fantasy.

I suppose it's cheaper than smoking dope to get the same buzz reading
some of these counter-arguments draped in quantum mechanics.

73's
Richard Clark, KB7QHC

3783. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 09:10:47 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bo8cof$1aok9h$8@ID-189073.news.uni-berlin.de>
Source record: 105357
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0310291033.67873ed2@posting.google.com...
> = = = "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
> = = = wrote in message
news:<bnodb2$13u4j4$3@ID-189073.news.uni-berlin.de>...
> >
> > I am also closely aligned to the Libertarian party,
> > which is even more "right wing" than the Republicrats,
> > but I do believe in the basic human rights issues.
> >
> > --
> > Ryan KC8PMX
> >
>
> Ryan,
>
> I think that many (most) Libertarians would view themselves as
> Moderate or more "middle-of-the-road'.

Last I knew, unless the Republican oriented college that I went to was
wrong, that on the political spectrum, the Libertarian party was more to the
right than republicans.....

>
> Not as extreme as the "Right Wing" [Ultra-Conservative Christian]
> segment of the Republican Party.

Religious affiliation does not necessarily mean right wing.... I am sure
there are some Jews and people of other religions that think "more to the
right" as well.

>
> Or, not as extreme as the "Left Wing" [Socialist Secularist
> Anti-Religion] segment of the Democrat Party.

Not to defend them, but I believe that some of them at least believe that
just because one is of, say for instance, the christian faith, that thier
own religion is not wromg, even if it does not align with the christian
faith.

>
> Even these extremes from both ends of the political spectrum to some
> degree 'believe in basic human rights': Although their definition of

> what those 'basic human rights' mite be, would vary on a point or two.

Probably..... And I am quite sure that alot of people would fit in a few different places on the political spectrum, assuming and thinking the spectrum is a flat straight line going left and right..... (for linear thinkers)

--
Ryan KC8PMX

Health is merely the slowest possible rate at which one can die.

3784. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 09:19:00 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <8aKpb.2123$2B1.1097@newssvr29.news.prodigy.com>
Source record: 105349
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bo74u0kgu1@news1.kornet.net...
>
>
> You're putting words into my mouth, Charles. I said nothing of the sort.

Yes, I think we are all aware of what you said. My post was in response to what you said.

(Duh!)

> It's (unfortunately) far too late to pull our troops out of Iraq, the course
> must be stayed... what I have a problem with is Mr. Rumsfelds lassaiz-faire
> attitude that our troops must die...

Mr. Rumsfelds' attitude is the correct one, Brenda Ann. Obviously you have no clue about why a senior commander would speak that way and blame your failure to understand on poor Mr. Rumsfeld. This is unfair, because most adults are very clear on why there will be casualties when our troops deal with dangerous situations.

Remember that if Mr. Rumsfeld talked down to the lowest common denominator, defense department briefs would sound like you had accidently tuned into "Sesame Street". Mr. Rumsfeld speaks out as an adult, to adults. To understand him, you'll have to grow up and be a big girl.

>
> And, for the last and final time, Iraq and Saddam Hussein had nothing to do
> with 9/11.. even Bush has admitted to this now.. get over it.

Get over what? The 9-11/Iraq "connection" was brought to us by a liberal political commentator who works for the NY Times a year or so ago, as a straw-man to attack when he had nothing legitimate to complain about. On the other hand, the Iraq/terrorist connection, including correspondence and regular meetings with with Bin Laden have been proven multiple times. I suppose that you can hang onto your bogus view by sticking your head into the sand if you want to, but after all of this time, it would probably be best if you just get over it.

Fortunately, your opinions have no effect whatsoever on anything that will be done in connection with planning the war in Iraq, so if you are most

comfortable believing that it's all just the "vast right-wing conspiracy" causing all this trouble for oil money, and that the vile, underhanded raghead terrorists are just innocent "freedom fighters", you are welcome to be just as ridiculous as you want to be.

When you talk anti-american bullcrap that directly endangers our troops by encouraging and giving comfort to the people who are trying to kill them, guys like me will slap you down for being the kind of fool who gets people killed with thier ignorant comments.

Charles Brabham, N5PVL

3785. Re: Numbnut Dumbass 8 Vomit

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 11:23:12 UTC
From: "Ohio Ham"
Message-ID: <vqf311lpc6j90@corp.supernews.com>
Source record: 105350

"'Doc" <w5lz@cwis.net> wrote in message news:3FA669E1.37E05913@cwis.net...
>
>
> "Ohio Ham" wrote:
> >
> > Is a disgrace to the Amateur Radio Community, and needs to be retired
from
> > operating in the amateur spectrum.
>
>
> And 'cross-posting' is ill mannered...

'Doc

Well, cure me big boy.

FOAD.

3786. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 11:44:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <tiMpb.102695$Fm2.88131@attbi_s04>
Source record: 105351

Richard wrote:

SNIP

> The only value of patents is in their being a depreciable asset. In
> other words, valuable only to the bean counters to include in their
> prospectus.
>
> 73's
> Richard Clark, KB7QHC

There is a second value in Patents: they assure lawsuits!!

Deacon Dave, W1MCE

3787. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 12:09:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bo84uggdr1@sparta.btinternet.com>
Source record: 105352

Watch this space for another thrilling episode of the long-running,
nerve-tingling mystery story "The Case of the Missing Third Wire".

3788. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 13:07:36 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <pwNpb.1414$mb5.1108@fed1read02>
Source record: 105353

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:87u15lrxbn.fsf@jidanni.org...
> Is it just my imagination, or are direct SMA to "F" (TV Coax) connectors
hard
> to find. One usually having to go SMA-BNC-F?

It's similar to the reason that drag racers don't have back-up lights.

Ed

3789. Re: Antenna Design Programs

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 13:09:10 UTC
From: Bob Walker <N4CU@AMSAT.ORG>
Message-ID: <VxNpb.77657$9E1.354778@attbi_s52>
Source record: 105354

As a reminder to all of these very important educational studies you should
post the URL http://antennas.ee.duth.gr on April 1.
Regards,
Name Withheld as much as possible

3790. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 14:15:58 UTC
From: "S. Hanrahan" <aa7ya@hotmail.com>
Message-ID: <tucfqvsera354ej5cl32is4ciki06qunjs@4ax.com>
Source record: 105355
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Tue, 28 Oct 2003 18:28:27 GMT, "Alan"
<alannc44@{nospam}ix.netcom.com> wrote:

>Just think, had we focused on Bin Laden, the one actually responsibly for
>9/11, instead of running off on some wild war based on a perceived threat,
>we might already have the true culprit.

I think you will find each terrorist cell or organization is connected
in more ways than just one. They all have one goal in mind, either
the distruction of Western Civilization, or pushing Israel into the
Sea.

>I swore to myself I wouldn't get involved in this thread, but, being
>attracted to Ham Radio because of the supposed international handshakes, I'm
>a sucker for trying to get along with the rest of the world.

You can't negotiate or shake hands with a terrorist who's only goal in
life is to see you and your neighbor dead.

Stacey/AA7YA

3791. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 14:22:00 UTC
From: "S. Hanrahan" <aa7ya@hotmail.com>
Message-ID: <1adfqv4q7tcv1r8lcj20ll3euetom5c9dr@4ax.com>
Source record: 105356
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Wed, 29 Oct 2003 18:09:49 GMT, "Alan"
<alannc44@{nospam}ix.netcom.com> wrote:

>How could things have gone any worse? We still don't have Osama, and guys
>are still dying in Afghanistan even though the news acts like it's fallen
>off the earth.
>
>As far as Sadam, what, specifically, did he have to do with 9/11? When it
>comes down to it, he was probably more of an ally against militant Islamic
>terrorists than any other.
>
>....and, I'm probably more conservative than you..... There's nothing more
>liberal than "nation building", something we were told six years ago that
>wasn't going to happen under this presidency. My how things change.
>
>I'll make a prediction: the 87 billion dollars going to Iraq is just the
>beginning.
>
>Alan
>WN4HOG

Saddam and OBL just didn't become threats to civilization the moment
9/11 happend. Liberals in this country and around the world, and the
United Nations were too busy going ga-ga over their respective Liberal
socialist leaders each of which didn't give a damn for 12 years.

What Bush is doing is taking care of all the foreign policy cans
Klintoon kicked down the road while he was President of these The
United States of America. I know this tears at Liberals, and the 9
Democrat Presidential wannabe's. They had their chances, and they
ignored the threats.

3792. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 14:30:09 UTC
From: "S. Hanrahan" <aa7ya@hotmail.com>
Message-ID: <7sdfqvoplh3rjp74svi8k6g3nbmhbdc2q1@4ax.com>
Source record: 105358
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Tue, 04 Nov 2003 02:57:47 GMT, "charlesb" <n5pvl@sbcglobal.net>
wrote:

>
>"Brenda Ann" <brendad@shinbiro.com> wrote in message
>news:bo71fs$ii8$1@news1.kornet.net...
>>
>> >
>> > Mr. Rumsfeld? Is that you?
>> >
>>
>> Does sound a bit like him, doesn't it? No big deal, it's not HIS kids
>> getting killed...
>
>Another person who is nostalgic about the 9-11 attack, who wants to see the
>"action" moved back here in the U.S., instead of remaining over there in
>Iraq.
>
>The children and other innocent people who were vaporised in the twin towers
>do not count, I suppose. Brenda Ann wants us to pull our troops out so that
>we can have more of that action here in the U.S...
>
>I'll have to disagree with that kind of thinking. Sorry, Brenda Ann!
>
>Charlers Brabham, N5PVL
>

There is a growing mindset in this country, most particularly the
pacifist left, that we should become an isolationist nation. LOL

Good grief. Like that will ever stop terrorists in their tracks.

Stacey/AA7YA

3793. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 15:23:53 UTC
From: "S. Hanrahan" <aa7ya@hotmail.com>
Message-ID: <bvgfqvoqbpq17ukujk94e483299rq44r1b@4ax.com>
Source record: 105359
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Fri, 24 Oct 2003 10:31:19 -0400, "James"
<capjim300sa@nospam.yahoo.com> wrote:

>Watch and see as Bush "Act II popcorn man" becomes
>a one-term President. He's making the same mistakes
>as his daddy did in 92 and the Democrats will eat him
>and the GOP alive in 04. Clinton may have been a
>pot smoking womanizer, but the checks still came thru
>every Friday and more people were working when he
>was running the show in the O. Office.
>

Considering that the Democrats have said time and time again through
stump speeches and Non-Debates, they want to cut and run, I don't see
how they will succeed in unseating Bush. Their job just got harder
now that positive economic numbers have been coming out lately.

3794. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 15:31:03 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <kvidndmSCIujWzqiRVn-uw@comcast.com>
Source record: 105360

You might want to check on a Smith chart to see how bad things get if you patched in about 3 - 4 feet of coax. I know this has been done before. You could also make up a short piece of 100 Ohm balanced line from 2 pieces of RG8, and put 4:1 baluns on each end of that.

Tam/WB2TT
"KS7J" <antswitch@tomochka.com> wrote in message
news:47c89a30.0311032203.6c0e1052@posting.google.com...
> "Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<y6GdnRW5l5j6JDui4p2dnA@comcast.com>...
> > Casey,
> >
> > What kind of directional antenna do you have, that you need to feed it
with
> > 450 Ohm line?
> >
> > Tam/WB2TT
>
> Well, I don't *need* to feed it with ladder line, I *want* to feed it
> with it so that I can use it multi-band. It is armchair fantasy at the
> moment, no antenna yet exists, but it would be essentially a 40/30 2
> el. yagi (it's a bit more complicated than that, but I'm still
> designing). My very preliminary modeling indicates that at resonance
> you get the typical yagi directional pattern. Driving it on other
> bands, even with high SWR, will yield anything from normal dipole to
> meaningful gain in one direction depending on band. So, at the least I
> could have a rotatable dipole on the non-resonant bands and a bit of
> F/B on one or two with some luck.
>
> 73,
>
> Casey

3795. Re: The never ending argument

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 15:39:55 UTC
From: KeyBoard In The Wilderness <KTW@zilch.com>
Message-ID: <fLPpb.2173$Zb7.155@fed1read01>
Source record: 105361

Roy and Cecil -- I find your posts most informative -- ignore the flack.
Keep up the good work -- valuable sources

--
73 From The Keyboard
==========
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vqdt65lnjq3h81@corp.supernews.com...
> I'm sorry. If I'm bothering the readers, I'll be glad to bow out.
>
> My postings aren't really directed to Cecil -- I know much better than
> to imagine that I'll ever change his mind, and I'm a firm believer in
> not wasting time on things I can't change.
>
> No, you and the other readers are really the audience, and the whole
> reason for the postings. If you and the other readers would rather I
> shut up, I'll be more than happy to spend my time at more productive
> pursuits.
>
> Just let me know.
>
> Roy Lewallen, W7EL
>
> David Robbins wrote:
> >>Cecil Moore wrote:
> >>
> >>>Roy Lewallen wrote:
> >>
> >>Cecil Moore wrote:
> >>
> >>>Roy Lewallen wrote:
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> >>Cecil Moore wrote:
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> >>>Roy Lewallen wrote:
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>

3796. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 15:55:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7cc97_7@corp.newsgroups.com>
Source record: 105362

Roy Lewallen wrote:

> The stub produces just as much horizontally polarized radiation as the
> wire.

Not true. The wire produces 2 dB more radiation than the stub. Given
that the stub is located in a high current region compared to the wire,
it is significant how much the stub doesn't radiate. If you replace
the stub with an equal length of single wire, it radiates 4 dB more
than the stub.

> Run your stub vertical model with an elevation plot, and azimuth angle
> of 90 degrees. Click FF Tab. Note the magnitude of the horizontal
> component -- roughly -30 dBi. Then repeat with the experimental model
> with the single horizontal wire.

Thanks, Roy, that's an angle I had not looked at. Results are above.

> As I mentioned in my lengthy posting, the radiation from the stub isn't
> a large part of the overall field, and this certainly shows it. But it's
> certainly enough to disturb the vertical's current. Exactly the same
> thing holds for the straight wire. Common mode current is common mode
> current. No magic, no mysterious phenomena "not accounted for" by EZNEC.

What EZNEC doesn't account for is the phase delay through a bugcatcher
coil which is an appreciable percentage of a wavelength. EZNEC is incapable
of modeling a bugcatcher coil. The only coil that EZNEC is capable of modeling
is one that does not and cannot exist in reality.

Therefore: One cannot use EZNEC to try to prove the current is the
same at both ends of a bugcatcher coil which is what kicked off
this entire discussion.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3797. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 15:59:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7cd9f_7@corp.newsgroups.com>
Source record: 105363
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Ryan, KC8PMX wrote:
> Last I knew, unless the Republican oriented college that I went to was
> wrong, that on the political spectrum, the Libertarian party was more to the
> right than republicans.....

Extremely to the left of republicans on social issues like drug policies.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3798. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:03:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7ce79_7@corp.newsgroups.com>
Source record: 105364

Reg Edwards wrote:
> Watch this space for another thrilling episode of the long-running,
> nerve-tingling mystery story "The Case of the Missing Third Wire".

Reg, you have a black box in the middle of a transmission line with
a high SWR. You measure the current into the box and current out of
the box. You measure 1 amp at 0 degrees going in and 1 amp at 180 degrees
going out. This means that both currents are flowing into the box at
the same time. There is no third wire. What's in the box?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3799. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:39:11 UTC
From: richardharrison@webtv.net
Message-ID: <2421-3FA7D62F-268@storefull-2311.public.lawson.webtv.net>
Source record: 105365

Cecil, W5DXP wrote:
"What EZNEC doesn`t account for is the phase delay through the
bugcatcher coil which is an appreciable percentage of a wavelength."

It needs to have enough delay to replace that missing from the resonant length of the antenna as ON4UN shows in his Fig 9-22.

Inductors are retardation coils.. They delay current change much as a flywhell inhibits change in rotation. When voltage is applied to an RL circuit, current is a function of time. If reactance in a circuit is low, instantaneous current is almost in-phase with instantaneous applied voltage. There is little if any delay of current in response to applied voltage. If inductance in a circuit is high, delay of current is high. Terman gives an example of inductive delay on page 643 of his 1955 edition:

"Another type of artificial line, suitable for low power operation, consists of a coaxial cable in which the inner conductor is a continuous coil of small wire wound on an insulating cylindrical core. This greatly increases inductance per unit length of line with corresponding reduction in velocity and increase in time delay per unit length. It is possible with such a line to obtain a round-trip transit time of as much as 1 microsecond in a length of two feet.

Best regards, Richard Harrison, KB5WZI

3800. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:51:13 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311040851.3a3751e@posting.google.com>
Source record: 105366

Dave Shrader <david.shrader@comcast.net> wrote in message
news:<tiMpb.102695$Fm2.88131@attbi_s04>...
> Richard wrote:
>
> SNIP
>
> > The only value of patents is in their being a depreciable asset. In
> > other words, valuable only to the bean counters to include in their
> > prospectus.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> There is a second value in Patents: they assure lawsuits!!
>
> Deacon Dave, W1MCE

I would question that statement in the U.S. Dave.
It is not a question of who is right or wrong with
respect to patents, its just a case who has the deepest
pockets and who can make enough money thru a violation
so they may hire a lawyer to manipulate the court so
a ruling is never made. Two cases I remember one the windshields
wiper case and the Sears and Roabucks wrench casewhere even
tho the plaintifs went bankrupt pursing justice those who
violated the law profited imensely. My patents on antennas
as well as the one I am claiming now will be abandond after award
since I could never stop any violation let alone pay the maintenance
fees.
My patent attempt are purely for my own satisfaction.
By the way, in some countries the loser picks up the costs which can
retard deep pocket violators in any court actions over those with
little money.
McDonalds found this out to their cost in the U.K. where their
opponents
had little money and were able to reap huge rewards.
Art

3801. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:52:15 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031104115215.23287.00000259@mb-m20.aol.com>
Source record: 105367

>However, this is not the
>grail we are talking about; and having obtained data does not achieve
>a state of grace. This is simply a starting point (and why I harp on
>about the remaining data to demonstrate the actual, total current
>distribution along the entire radiator). I am sure that my flack
>qualifies with something more that being snotty (albeit a higher
>quality of snot); but your expectation of submission from those so
>impervious to performing any act that used to be the hallmark of our
>avocation - well, that expectation is a fantasy.

>Richard Clark, KB7QHC

Sorry Richard, this did not applied to you or your postings, more to the remarks by Reg and Roy picking on "engineers"and ridicule without basis, etc.

I agree with you, I did not do thorough investigation, modeling and measurements. I experienced something and saw some data and notes by others to convince me of validity of the effect. Picture of melted Minooka Special is coming soon, another proof. I will conclude the "case" by putting together article as mentioned. So far I still welcome any contributions to the subject. So we have seen heated "theoretical" debates rather than more or "proper" MEASUREMENTS.

It just kills me that we admit that loading stub shows the difference of currents in modeling (more digestible situation for software) and then when we replace the stub with the equivalent inductance (to maintain resonance and dimensions of the radiator) "they" claim the current will be the same at both ends of coil and yet magically maintain proper current distribution and resonance of the antenna? HOW? And toroid coil? IMPOSSIBLE, but W9UCW measured the same behavior, which jives with reality and what Cecil explains.

I believe W9UCW but I will also do my own measurements, describe them in detail and see how is that "UNREAL".

I am pursuing this mainly to bring to attention and to maybe get those soft antenna experts to account for it in their software so we can use it properly to develop better antennas.

I am an engineer with some real accomplishments and I resent snotty remarks from some armchair "experts and gurus". Prove me wrong in reality, I will retract and apologize. Otherwise STFU if you have nothing better to offer (applies to those with unfounded personal attacks).

Just another question for the GURUs: How does the choke in the form of coiled coax work? The RF current is the same at both ends? What if you cut that (proper) choke in half, what is the current at its ends? Same? Model that and let us know? We know what happens in real life.

Yuri, K3BU.us

3802. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:55:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031104115501.23287.00000260@mb-m20.aol.com>
Source record: 105368

>What's in the box?

Reg with whatever he is drinking :-)

3803. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:55:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7dabc_7@corp.newsgroups.com>
Source record: 105269

Richard Harrison wrote:

> Cecil, W5DXP wrote:
> "What EZNEC doesn`t account for is the phase delay through the
> bugcatcher coil which is an appreciable percentage of a wavelength."
>
> It needs to have enough delay to replace that missing from the resonant
> length of the antenna as ON4UN shows in his Fig 9-22.

This is true in order to get the feedpoint voltage and current in phase,
i.e. in order to resonate the antenna.

The voltage needs 180 degrees round trip delay from the feedpoint to
the end of the antenna and back.

The current needs 360 degrees round trip delay from the feedpoint to
the end of the antenna and back. 180 degrees of that comes from the
reversal of direction at the open end.

Can someone please measure the delay through a 75m bugcatcher coil?
I simply do not believe it is zero, i.e. faster than light.
--
73, Cecil http://www.qsl.net/w5dxp

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3804. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 16:58:31 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <XUQpb.8559$Oo4.3129@newsread1.news.atl.earthlink.net>
Source record: 105270
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Sounded like Osama or his buddy, So Damn Insane.

Dan/W4NTI

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FA70F5E.9080404@get.lost...
> Gene Storey wrote:
> > It's a live-fire exercise. People die, big deal, move on.
> > Dead soldiers are like dead child molestors... Who really gives a shit?
>
>
> Mr. Rumsfeld? Is that you?
>
>
>
>
> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

3805. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:03:56 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031104120356.23287.00000261@mb-m20.aol.com>
Source record: 105271

>
>
>>Watch and see as Bush "Act II popcorn man" becomes
>>a one-term President. He's making the same mistakes
>>as his daddy did in 92 and the Democrats will eat him
>>and the GOP alive in 04. Clinton may have been a
>>pot smoking womanizer, but the checks still came thru
>>every Friday and more people were working when he
>>was running the show in the O. Office.
>>
>
>Considering that the Democrats have said time and time again through
>stump speeches and Non-Debates, they want to cut and run, I don't see
>how they will succeed in unseating Bush. Their job just got harder
>now that positive economic numbers have been coming out lately.
>
>

His daddy's "mistake" was the idiot Perrot who took the votes away from republicans, can't you get that in your sculls?

DemocRATS keep running out "disasters" and will come come with some new "crisis" or they will invent some. Like Global Warmint? It's the SUN stupid, human contribution amounts to a fart in a stadium. Sent the tree huggers to fight forest fires!

BUm

3806. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:06:44 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <E0Rpb.8573$Oo4.4918@newsread1.news.atl.earthlink.net>
Source record: 105272
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:LAEpb.1348$Ce6.671@newssvr29.news.prodigy.com...
>
> "Brenda Ann" <brendad@shinbiro.com> wrote in message
> news:bo71fs$ii8$1@news1.kornet.net...
> >
> > >
> > > Mr. Rumsfeld? Is that you?
> > >
> >
> > Does sound a bit like him, doesn't it? No big deal, it's not HIS kids
> > getting killed...
>
> Another person who is nostalgic about the 9-11 attack, who wants to see
the
> "action" moved back here in the U.S., instead of remaining over there in
> Iraq.
>
> The children and other innocent people who were vaporised in the twin
towers
> do not count, I suppose. Brenda Ann wants us to pull our troops out so
that
> we can have more of that action here in the U.S...
>
> I'll have to disagree with that kind of thinking. Sorry, Brenda Ann!
>
> Charlers Brabham, N5PVL

IMHO, that is what the plan has been all along. Kick Iraqs ass, get rid
of So Damn Insane.(Still working on that one). And suck the ragheads into
the hell storm.

Of course the powers that be could never admit that. Because if they did
the Democrats would be all over them. But in the meantime we are getting
rid of the enemy....And guess what? It ain't in Boston, or New York, etc.

Dan/W4NTI

>
>

3807. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:30:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bcofqvk2539ktjepl0t5u7ubqv46npapmn@4ax.com>
Source record: 105273

On Tue, 04 Nov 2003 11:44:25 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Richard wrote:
>
>SNIP
>
>> The only value of patents is in their being a depreciable asset. In
>> other words, valuable only to the bean counters to include in their
>> prospectus.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>There is a second value in Patents: they assure lawsuits!!
>
>Deacon Dave, W1MCE

Hi Dave,

For the lawyer side of the aisle, that is the same asset. There is
certainly nothing about patents that "give" the inventor ANYTHING.
America's first, greatest inventor, Ben Franklin declared such things
as patents as an abomination to freedom.

73's
Richard Clark, KB7QHC

3808. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:32:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vhofqv455vl8e3kv5t2h57v7vrke070l6q@4ax.com>
Source record: 105274

On 4 Nov 2003 08:51:13 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
> I could never stop any violation

Hi Art,

Au contraire. That is the simplest, easiest thing to do. Discover
the violator, find his competition, offer the competition license
rights in return for their prosecutorial aggression. ;-)

73's
Richard Clark, KB7QHC

3809. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:36:42 UTC
From: tdonaly@aol.com
Message-ID: <20031104123642.16137.00000151@mb-m29.aol.com>
Source record: 105275

Cecil wrote,
>
>
>Ryan, KC8PMX wrote:
>> Last I knew, unless the Republican oriented college that I went to was
>> wrong, that on the political spectrum, the Libertarian party was more to
>the
>> right than republicans.....
>
>Extremely to the left of republicans on social issues like drug policies.
>--
>73, Cecil http://www.qsl.net/w5dxp
>

It doesn't matter whether you call it the left or the right, the concept of
less government interference in our lives is extremely appealing to many of us.
73,
Tom Donaly, KA6RUH

(P.S. I'm not a Libertarian.)

3810. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:40:20 UTC
From: richardharrison@webtv.net
Message-ID: <2421-3FA7E484-295@storefull-2311.public.lawson.webtv.net>
Source record: 105277

Cecil, W5DXP wrote:
"Reg, you have a black box in the middle of a transmission line with a high SWR. You measure the current into the box and out of the box, You measure 1 amp into the box and out of the box, You measure 1 amp and 0 degrees going in and 1 amp at 180 degrees going out. This means that both currents are flowing into the box at the same time. There is no third wire. What`s in the box?"

A phase inverter.

You could have a center-tapped coil in the box. One end and the center could take the input. The other end and the center could provide an output 180-degrees out of phase with the input.

This requires a minimum of three terminals but only 2 wires in and 2 wires out. If 2 directions of travel are allowed on a pair, an open or a short reverses the direction (phase) of the reflected wave.

Best regards, Richard Harrison, KB5WZI

3811. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 17:50:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7rofqv0glsaa4ure38stv8n235pt9hp6vs@4ax.com>
Source record: 105276

On 04 Nov 2003 16:52:15 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote:

>W9UCW measured
>the same behavior, which jives with reality and what Cecil explains.

Hi Yuri,

What W9UCW measured is not the inviolable truth - the same goes for what Cecil "explains."

All measurements come with error. If you cannot express the amount of error (literally, and not just admitting there may be "some" error), such measurements are little more than fancified testimonials often discarded when they don't fit some notion of reality, or heavily emphasized when they converge with the great thesis.

The same operational contrivances hold true for "explanations." The single greatest conceit is discarding first principles to get to the equation that supports the newest revelation to hit since the unification theory. My big stick is where so many reject the first law of SWR measurement of the source matching the line for conventions of discussion. Their "explanations" could fill the congressional record, and make as much sense (but in reality are little more than filibuster against re-visiting first principles).

How do you spot these charlatans of theory and application? They cannot express how much error their work encompasses.

As for the subject line "IF"

I believe that was the title of an English film of a boy's boarding school (by Lindsay Anderson) where the students (Malcom McDowell) went to the roofs with rifles and started popping off their dons.

73's
Richard Clark, KB7QHC

3812. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 18:18:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7ee3b_1@corp.newsgroups.com>
Source record: 105278

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "Reg, you have a black box in the middle of a transmission line with a
> high SWR. You measure the current into the box and out of the box, You
> measure 1 amp into the box and out of the box, You measure 1 amp and 0
> degrees going in and 1 amp at 180 degrees going out. This means that
> both currents are flowing into the box at the same time. There is no
> third wire. What`s in the box?"
>
> A phase inverter.
>
> You could have a center-tapped coil in the box. One end and the center
> could take the input. The other end and the center could provide an
> output 180-degrees out of phase with the input.

Yep, that's one answer. Another answer is a piece of low-loss transmission line that shifts the phase by 180 degrees, i.e. 1/2WL of transmission line.

Point is that unequal currents at the input and output of a black box are easy to achieve and do not violate Kirchhoff's laws. Although physically small, this black box does not meet the definition of a lumped circuit.

A bugcatcher coil on a 75m mobile antenna also does not meet the definition of a lumped circuit.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3813. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 18:27:50 UTC
From: NQ4S@arrl.net
Message-ID: <51ea6238.0311041027.5af6427b@posting.google.com>
Source record: 105279

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:<3fa736a3_3@news1.prserv.net>...

> Having said that, try Auto-Radio on the main shopping street in downtown
> Rota, Spain. I believe I saw some F to SMA adapters there a few years ago.
> I know they had SMA to UHF, another unexpected combination.

SMA to UHF probably isn't as unexpected as you think. I use one to
connect an HT to an antenna mounted in the attic. Lets me listen to
the radio while down in the basement.

The only problem is the weight on the connector. Most of the time it
is probably easier to go from SMA to BNC, have a short run of RG-58,
and then switch from BNC to UHF to run into the RG-8 or RG-8X cable
running to the antenna.

Wish I had some pictures of when the HT (a Kenwood TH-D7AG) was fully
hooked up. It had an antenna cable, power, microphone, and data all
there at once. Looked funny but it got the job done for packet
operation.

3814. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 18:37:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa7f2c2_4@corp.newsgroups.com>
Source record: 105280

Cecil Moore wrote:
> Richard Harrison wrote:
>> The purpose of a loading coil in a short loaded vertical antenna is
>> often to add to the existing degrees of antenna length to reach a
>> resonant length of 90-degrees, as shown in Fig 9-22 of ON4UN`s "Low-Band
>> DXing", and included on Yuri`s web pages.
>
> In order for a current maximum to exist at the feedpoint of a shortened
> (less than 1/4WL) vertical, the forward current must undergo a phase
> shift of 90 degrees, followed by the 180 degree phase shift from being
> reflected by an open circuit, followed by another 90 degree phase shift
> in the reflected current wave. An 8 foot whip gives about 11 degrees of
> phase shift end to end on 75m for a total of 22 degrees. If the coil
> causes no phase shift, where does the other 338 degrees of phase shift
> come from?

Some people thought I was disagreeing with Richard. I wasn't. I was
agreeing with him and adding another reason why he is right. Incidentally,
the 338 degrees above should have been 158 degrees. I forgot to subtract
the 180 degree current phase reversal at the end of the standing-wave
antenna. Since the coil is the only other thing in the circuit, it
must necessarily contribute that 158 degrees, 79 degrees in each
direction.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3815. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 18:45:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqfsuh7amltt3d@corp.supernews.com>
Source record: 105281

I hope the readers will forgive me if I considered the radiation of the two cases to be equal, not worrying about a couple of dB difference in the range of -30 dBi. Actually, I know of no way to ascertain the total radiation from the stub or wire alone, since it occurs at all azimuths and elevations, producing both horizontal and vertical components, and adds to and modify's the vertical's pattern. What I meant to say was that the radiation characteristics are certainly very similar, and both have the same general effect on the vertical's current distribution. And, both for exactly the same reason. Cecil's earlier statement that the wire radiates while the stub does not is certainly and demonstrably not true, and the 2 dB difference in field strength isn't at all evidence that one radiates more total energy than the other.

As for the statement that "EZNEC doesn't account for is the phase delay through a bugcatcher coil", that's entirely true. As I've said several times now, an EZNEC coil "load" is a lumped element model, which has equal currents at its two terminals. A coil with significant physical length doesn't behave like a lumped inductor, and therefore not like the EZNEC model. I believe, but have no proof, that approximating a lengthy coil with a combination of wire and load models will produce reasonable results, but that's the best you can do with NEC based programs like EZNEC. (Or with MININEC-based programs for that matter.)

Anyone who attempts to model a lengthy coil as a lumped "load" component won't get results that closely model reality, for the same reason that anyone who attempts to model a long wire as a short wire will be disappointed. Neither should be a surprise.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> The stub produces just as much horizontally polarized radiation as the
>> wire.
>
>
> Not true. The wire produces 2 dB more radiation than the stub. Given
> that the stub is located in a high current region compared to the wire,
> it is significant how much the stub doesn't radiate. If you replace
> the stub with an equal length of single wire, it radiates 4 dB more
> than the stub.
>
>> Run your stub vertical model with an elevation plot, and azimuth angle
>> of 90 degrees. Click FF Tab. Note the magnitude of the horizontal

>> component -- roughly -30 dBi. Then repeat with the experimental model
>> with the single horizontal wire.
>
>
> Thanks, Roy, that's an angle I had not looked at. Results are above.
>
>> As I mentioned in my lengthy posting, the radiation from the stub
>> isn't a large part of the overall field, and this certainly shows it.
>> But it's certainly enough to disturb the vertical's current. Exactly
>> the same thing holds for the straight wire. Common mode current is
>> common mode current. No magic, no mysterious phenomena "not accounted
>> for" by EZNEC.
>
>
> What EZNEC doesn't account for is the phase delay through a bugcatcher
> coil which is an appreciable percentage of a wavelength. EZNEC is incapable
> of modeling a bugcatcher coil. The only coil that EZNEC is capable of
> modeling
> is one that does not and cannot exist in reality.
>
> Therefore: One cannot use EZNEC to try to prove the current is the
> same at both ends of a bugcatcher coil which is what kicked off
> this entire discussion.

3816. T2DF + diplexer = HF + LF coverage, AM BC rejection

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 18:55:30 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0311041055.169e6128@posting.google.com>
Source record: 105282

One of my strange ideas...

1) There used to be an expensive T2FD by RF Systems that could be remotely switched to T configuration for receiving use below 3 MHz

2) If one wants to cover 0.1-0.54 and 3-20 MHz or so, a diplexer may allow using two specialized antennas with one coax.

Aha!
{bulb lighting up 'n mah noggin}

- 4 LPF's (Fc = .55 MHz) with cold sides joined together (one for each of the upper and lower arms of the T2FD) feeding in-phase an un-un, LF-optimized, stepdown RF transformer

- a balanced HPF (fc = 2 MHz) feeding a bal-un, HF-optimized, stepdown RF transformer

- a low-Z, LF-HF combining diplexer + one coax, or maybe two separate feeds for HF and LF...

Result: one antenna for both LF and low MF (Tee) and HF (T2FD), AM BC rejection, no remote switching needed, possibly usable for HF QRP transmitting.

Comments?

If you are wiser than me, tell me where to read up!

TIA

Filippo

3817. Newbie Question - I need something between 18" and a tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:01:44 UTC
From: bill@dwyer.ws
Message-ID: <65d17d50.0311041101.579ca34a@posting.google.com>
Source record: 105283

No, it's not one of _those_ spams. I just installed a PCS FM
transmitter card http://www.pcs-electronics.com/en/products.php?sub=pc_fm_trans#Pci%20max
without the 5 amp booster. My goal is to have a clean signal
throughout the large (7500 sq ft, 4 levels) house I live in. Using the
18" piece of wire PCS provided a get a low level signal but I have to
to boost it so much it gets noisy. I have tried a software
limiter/filter (MLB4) and it helps a little but not enough.

Is there a better antenna I can rig up without a lot of
expense/difficulty.

Thanks
Bill

3818. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:03:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqftvokptg1c57@corp.supernews.com>
Source record: 105284

This is misleading.

The Rule is that the sum of currents on *all* the box's conductors has to add to zero. If the box has only two terminals, the sum of the two has to be zero -- the only way to get around that would be to put Cecil into the box and have him suck coulombs just as fast as he can. If that two-terminal box contains an inductor, then the current out has to equal the current in -- that's the only way the sum of currents at the two terminals can sum to zero. Provided, of course, that the box is very small in terms of wavelength, and we're measuring over the long term. It's ok to suck up and store charge for a while -- but not forever.

When you put even a third terminal on the box, you have a lot more choices as to what you put into it -- an autotransformer, for example. Then you can find any number of gee, whiz, Mr. Science, absolutely wonderful things about the voltages and currents to dazzle the technically uncertain. The four terminals of Cecil's box provide even more opportunities to amaze. But one thing you can take to the bank, folks: the sum of the currents on all the terminals better add to zero. Unless, of course, Cecil is in the box.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Richard Harrison wrote:
>
>> Cecil, W5DXP wrote:
>> "Reg, you have a black box in the middle of a transmission line with a
>> high SWR. You measure the current into the box and out of the box, You
>> measure 1 amp into the box and out of the box, You measure 1 amp and 0
>> degrees going in and 1 amp at 180 degrees going out. This means that
>> both currents are flowing into the box at the same time. There is no
>> third wire. What`s in the box?"
>>
>> A phase inverter.
>>
>> You could have a center-tapped coil in the box. One end and the center
>> could take the input. The other end and the center could provide an
>> output 180-degrees out of phase with the input.
>
>
> Yep, that's one answer. Another answer is a piece of low-loss transmission
> line that shifts the phase by 180 degrees, i.e. 1/2WL of transmission line.
>
> Point is that unequal currents at the input and output of a black box are

> easy to achieve and do not violate Kirchhoff's laws. Although physically
> small, this black box does not meet the definition of a lumped circuit.
>
> A bugcatcher coil on a 75m mobile antenna also does not meet the
> definition of a lumped circuit.

3819. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:17:01 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0311041117.57b7b62f@posting.google.com>
Source record: 105285

> Treat it like an outside antenna.

Wise words, up to a point.

1) Hardly any difference in the face of a near hit. EMP will hit the antenna through non-conducing roof.

2) No problem with static accumulation, though. That is due to the direct interaction of wind / rain / snow and outside metal.

3) Also, IMO, reduced risk of direct hit. Old fashioned lighting rods featured tall spikes to provide a preferental path to ground for a lightning. Today's standard solution is a set of flat conductors that still provide a preferential path, but do not stand up "inviting" bolts, thus reducing somewhat the likelihood of a hit. (They also affort little or no protection to nearby property, unlike the older design).

This in not so clear cut though.

If grounded, an attic antenna will become statically loaded anyway as the bolt potential builds up. The point effect will be there, leading to a potential dielectric-perforation risk. The roof will indeed afford additional isolation, depending on how much material (roof + DRY air) is between the antenna and the moist outside air in an electrical storm _with_ rain. I don't know the exact figures, but I think rainstorm bolts are more common that dry air bolts.

Take your precautions!

Filippo

3820. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:17:14 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <_WSpb.79310$9E1.365783@attbi_s52>
Source record: 105286

The subject was SMA to F.

"NQ4S - Delbert" <NQ4S@arrl.net> wrote in message
news:51ea6238.0311041027.5af6427b@posting.google.com...
> "Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:<3fa736a3_3@news1.prserv.net>...
>
> > Having said that, try Auto-Radio on the main shopping street in downtown
> > Rota, Spain. I believe I saw some F to SMA adapters there a few years
ago.
> > I know they had SMA to UHF, another unexpected combination.
>
> SMA to UHF probably isn't as unexpected as you think. I use one to
> connect an HT to an antenna mounted in the attic. Lets me listen to
> the radio while down in the basement.
>
> The only problem is the weight on the connector. Most of the time it
> is probably easier to go from SMA to BNC, have a short run of RG-58,
> and then switch from BNC to UHF to run into the RG-8 or RG-8X cable
> running to the antenna.
>
> Wish I had some pictures of when the HT (a Kenwood TH-D7AG) was fully
> hooked up. It had an antenna cable, power, microphone, and data all
> there at once. Looked funny but it got the job done for packet
> operation.

3821. Re: Antenna Design Programs

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:36:14 UTC
From: pez <nowhereman@nowhereland.no>
Message-ID: <bo8v3s$17r$1@nic.grnet.gr>
Source record: 105287

```
Better,
on February the 30th,
to be sure!

d;^)

pez
SV7BAX
```

3822. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:47:55 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0311041147.3215ab6c@posting.google.com>
Source record: 105288

> >===> Do spreaders HAVE to be insulating? <===
>
> YES for sure, for sure. The cage should be really folded dipole, one "wire"
> going up (support, and grounded at the bottom) the other wire on the outside
> (cage) coming down and fed against the ground or radials. Unless you just want
> to make it fat radiator, then it doesn't matter.

Uh? AFAIK, a cage is not a folded monopole.

The "inside" vertical conductor would be shielded by the cage itself
('cept for its very bottom tip, which is grounded) and would not
radiate ('cept locally, within the cage, hence autocanceled). Apart
from discones I also remember seeing multi-kW 1940's TV dipole arrays
in which arms were huge, bulbous surfaces without slots.

This is getting *seriously* complicated.

One should be all thumbs to afford enough rules-of-thumb.

Some spreaders are indeed conductive.
But perhaps the fastening system acts as insulator.
http://www.stockroom.com/j030plus.htm
http://www.stockroom.com/j032plus.htm
You never know.

3823. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 19:52:55 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA80397.3397CD62@uci.edu>
Source record: 105289

Roy Lewallen wrote:
> If that
> two-terminal box contains an inductor, then the current out has to equal
> the current in -- that's the only way the sum of currents at the two
> terminals can sum to zero.

What if you draw a two terminal black box around the middle few feet of
a 1/4 wave vertical? What makes the current become the same at both
ends?

73, Jim AC6XG

3824. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:00:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa8061e$1_6@corp.newsgroups.com>
Source record: 105290

Roy Lewallen wrote:
> I hope the readers will forgive me if I considered the radiation of the
> two cases to be equal, not worrying about a couple of dB difference in
> the range of -30 dBi.

Actually, a more fair comparison is to replace the stub with a wire and
move the rest of the antenna over ten feet so it goes up 25 feet, zigs
to the side by ten feet, and then goes up another 25 feet from there.
That makes the current in the stub and the current in the horizontal
section approximately equal. With that configuration, the radiation
from the horizontal section is 12 dB greater than from the stub, i.e.
24 times as great. Seems the stub works pretty well after all.

> Anyone who attempts to model a lengthy coil as a lumped "load" component
> won't get results that closely model reality, for the same reason that
> anyone who attempts to model a long wire as a short wire will be
> disappointed. Neither should be a surprise.

What kicked off this discussion in the first place is that someone claimed
to know the current below and above a bugcatcher type coil based on modeling
loads in EZNEC. Presumably, he was indeed in for a surprise.
--
73, Cecil http://www.qsl.net/w5dxp

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3825. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:05:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqg1kmgd2pmv27@corp.supernews.com>
Source record: 105292

Read again the fourth sentence of the posting you quoted.

Roy Lewallen, W7EL

Jim Kelley wrote:
>
> Roy Lewallen wrote:
>
>>If that
>>two-terminal box contains an inductor, then the current out has to equal
>>the current in -- that's the only way the sum of currents at the two
>>terminals can sum to zero.
>
>
> What if you draw a two terminal black box around the middle few feet of
> a 1/4 wave vertical? What makes the current become the same at both
> ends?
>
> 73, Jim AC6XG

3826. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:07:59 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa807e1$1_6@corp.newsgroups.com>
Source record: 105293

Roy Lewallen wrote:
> The Rule is that the sum of currents on *all* the box's conductors has
> to add to zero. If the box has only two terminals, the sum of the two
> has to be zero -- the only way to get around that would be to put Cecil
> into the box and have him suck coulombs just as fast as he can. If that
> two-terminal box contains an inductor, then the current out has to equal
> the current in -- that's the only way the sum of currents at the two
> terminals can sum to zero.

That's just the point, Roy. The two terminals don't have to sum to zero
for a distributed network problem, like 1/2WL of coax coiled up inside
that black box.

> But one thing you can take to the bank,
> folks: the sum of the currents on all the terminals better add to zero.
> Unless, of course, Cecil is in the box.

Are you saying I cannot coil up 1/2WL of coax inside a black box and
observe current flowing into both terminals for 1/2 cycle and current
flowing out of both terminals for 1/2 cycle? That would be quite a
revelation.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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3827. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:10:24 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <bo913g$2j8$2@gabriel.uhc.com>
Source record: 105294

Dan Jacobson <jidanni@jidanni.org> wrote:
> Is it just my imagination, or are direct SMA to "F" (TV Coax) connectors hard
> to find. One usually having to go SMA-BNC-F?

Probably not unrelated to the fact that F connectors are HF 75R and SMA are
invariably very low-loss, DC-18GHz 50R connectors.
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
UnitedHealthGroup, Inc., MN013-N400, UNIX Services & Consulting
6150 Trenton Lane North, Plymouth, MN 55440 1-763-744-1723
email: ccox@uhc.com (work) chrisc@chris.org (home)

3828. Re: Newbie Question - I need something between 18" and a tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:12:38 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <w7qdnW62cqa2lTWiRVn-tA@comcast.com>
Source record: 105295

> Is there a better antenna I can rig up without a lot of
> expense/difficulty.

Radiax might do the job for you.

3829. Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:13:25 UTC
From: Ron <rons533@dejazzd.com>
Message-ID: <3FA80612.4A2@dejazzd.com>
Source record: 105291

I am going to install a 30' push up mast to the side of my home with 2 brackets but I am not able to locate any house brackets large enough for the 2" and 1 1/2" pipe. Most that I have seen are very flimsy and will only take the normal TV mast. Any ideas on where to purchase the brackets?

By the way the mast is going to support a 40 meter dipole and a TGM Hybrid Quad with 1.6 sq. feet of wind load.

Ron
K3SZY

3830. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:15:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa809a0$1_6@corp.newsgroups.com>
Source record: 105296

Roy Lewallen wrote:
> Read again the fourth sentence of the posting you quoted.

It would be nice just to repeat it so 5000 readers don't have to
go searching for it.

In any case, it appears to me that an antenna is not a two terminal
network. It appears to be a three or four terminal network with a
virtual ground. To what is EZNEC referencing voltage measurements
on an antenna in free space?
--
73, Cecil http://www.qsl.net/w5dxp

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3831. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:18:35 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA8099B.F6705134@uci.edu>
Source record: 105297

Roy Lewallen wrote:
>
> Read again the fourth sentence of the posting you quoted.
>
> Roy Lewallen, W7EL
>
> Jim Kelley wrote:
> >
> > Roy Lewallen wrote:
> >
> >>If that
> >>two-terminal box contains an inductor, then the current out has to equal
> >>the current in -- that's the only way the sum of currents at the two
> >>terminals can sum to zero.
> >
> >
> > What if you draw a two terminal black box around the middle few feet of
> > a 1/4 wave vertical? What makes the current become the same at both
> > ends?
> >
> > 73, Jim AC6XG

Okay. I read it. I'll try asking the question another way.

What if you draw a two terminal black box around the middle few feet of
a 1/4 wave vertical? What makes the sum of the currents at both ends
become equal to zero?

73, Jim AC6XG

3832. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:47:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA8106B.836ED9F3@uci.edu>
Source record: 105298

Cecil Moore wrote:
> In any case, it appears to me that an antenna is not a two terminal
> network. It appears to be a three or four terminal network with a
> virtual ground.

The only way I can see to model it and get these particular results
would be to have it as a device which increases in impedance at every
point along its length, and which has a current path to ground at each
of an infinite number of such points.

73, Jim AC6XG

3833. A prototype Skeleton Discone for 3G and GSM

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:49:30 UTC
From: yin <nowherewoman@nowhereland.no>
Message-ID: <bo93ed$4q4$1@nic.grnet.gr>
Source record: 105299

Dear all,

I would be grateful
if I have your comments
for a just finished prototype
Skeleton Discone
covering the [800, 2500] MHz Band,
of which some
of its characteristics are as
in the following drafts:

(1)
3D E-Radiation Patterns
at 950 MHz,
with points indicating measurements,
either
in VRML-1 format (~55KB):
http://antennas.ee.duth.gr/recradioamateurantenna/ms0draft/vrml-1.htm
(I suggest either the Intervista or Platinum -both 2.1- VRML viewer)
or
in VRML-2 format (~65KB):
http://antennas.ee.duth.gr/recradioamateurantenna/ms0draft/vrml-2.htm
(I suggest the Cortona 4.1 VRML client)

(2)
AVI movie
for Vertical Plane and Space Radiation Patterns
plus 50-Ohm VSWR and Relative Radiation Intensity
versus frequency,
either
in zip format (~1MB):
http://antennas.ee.duth.gr/recradioamateurantenna/ms0draft/skeletondiscone.zip
or
in avi format (~4MB)
http://antennas.ee.duth.gr/recradioamateurantenna/ms0draft/skeletondiscone.avi

Alternatively,
you can browse the directory:
http://antennas.ee.duth.gr/recradioamateurantenna/ms0draft/

Sincerely,

yin,SV7DMC/TheDAG

3834. ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 20:56:14 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vqg4jis8r1p1c2@corp.supernews.com>
Source record: 105300

I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if anyone would have specs or a schematic? Inside it has a 0.6 ohm 40 watt resistor inline with input and ouput. Off each end of this resistor it has a silver button mica capacitor. My "cheatsheet" for silver button micas is not to be found. I wonder if someone can tell me the capacitance of a silver button mica that has the following six colors: black, brown, red, green, gold, grey.

tnx & 73
hank wd5jfr

3835. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:07:40 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA8151C.CEC18B2B@uci.edu>
Source record: 105301

Jim Kelley wrote:
>
> What if you draw a two terminal black box around the middle few feet of
> a 1/4 wave vertical? What makes the sum of the currents at both ends
> become equal to zero?

Sorry to be obtuse, Roy. The point is only that antenna circuits
obviously present a problem to the assumption that such two terminal
black boxes will necessarily have equal currents at both terminals.

A solenoid should produce a field in the direction of its axis, should
it not?

73, Jim AC6XG

3836. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:19:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa81899_2@corp.newsgroups.com>
Source record: 105302

Jim Kelley wrote:
> What if you draw a two terminal black box around the middle few feet of
> a 1/4 wave vertical? What makes the sum of the currents at both ends
> become equal to zero?

The two-terminal black box must have the same zero dimensions
as the inductance. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3837. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:21:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqg6397ol2k643@corp.supernews.com>
Source record: 105303

You also need to go back and read the fourth sentence of my posting.

Sheesh.

Roy Lewallen, W7EL

Cecil Moore wrote:
> . . .
> Are you saying I cannot coil up 1/2WL of coax inside a black box and
> observe current flowing into both terminals for 1/2 cycle and current
> flowing out of both terminals for 1/2 cycle? That would be quite a
> revelation.

3838. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:22:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa8193f$1_2@corp.newsgroups.com>
Source record: 105304

Jim Kelley wrote:

> Cecil Moore wrote:
>>In any case, it appears to me that an antenna is not a two terminal
>>network. It appears to be a three or four terminal network with a
>>virtual ground.
>
> The only way I can see to model it and get these particular results
> would be to have it as a device which increases in impedance at every
> point along its length, and which has a current path to ground at each
> of an infinite number of such points.

For a 1/4WL vertical, that would be true even if the path to ground
is through displacement currents. But, what about free space?
--
73, Cecil http://www.qsl.net/w5dxp

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3839. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:24:30 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <m-KdnVEWwdKNhDWiRVn-gQ@comcast.com>
Source record: 105305

On 3-Nov-2003, Wes Stewart <n7ws@_arrl.net> wrote:
>....
> Whatever we were doing required the use of a "magic" T. I, the ever
> inquisitive student, asked; "Doc, how does a magic T work?"
>
> Doc, former professor and the author of "Intermediate Mathematics of
> Electromagnetics", replied,
>
> "It's magic."

In the US Navy, we usually explained that such devices worked on the principle of PFM. First word is Pure, Last word is Magic

-ken-

3840. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:26:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqg6d5k6duj057@corp.supernews.com>
Source record: 105306

It would be even nicer if readers would read it.

An antenna could be regarded to have any number of terminals you'd like.

EZNEC does not make voltage measurements. Please go back and read the lengthy recent thread regarding the meaning of voltage and voltage measurement. I recall you were a major contributor. But it's really not necessary to re-post it. Please don't.

EZNEC does show the voltages across sources and loads, both of which are two-terminal lumped components.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Read again the fourth sentence of the posting you quoted.
>
>
> It would be nice just to repeat it so 5000 readers don't have to
> go searching for it.
>
> In any case, it appears to me that an antenna is not a two terminal
> network. It appears to be a three or four terminal network with a
> virtual ground. To what is EZNEC referencing voltage measurements
> on an antenna in free space?

3841. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:34:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqg6roku0ol8d2@corp.supernews.com>
Source record: 105307

Assume the box is non-conducting. There would be a current difference between the two terminals unless you shrunk the length of antenna it contains to a vanishingly small length. In the context of the antenna, even a few feet of an antenna is a significant fraction of a wavelength. Put the box around a few feet of a power transmission line carrying 60 Hz current, and you won't be able to measure any difference between the current going in and coming out. In that situation, a few feet isn't a significant part of a wavelength.

If you use a conducting box, you'll end up with current on the outside of the box that gets into the problem. Its value depends on coupling to the wire inside and to the antenna outside, so it gets stickier than I want to deal with.

Roy Lewallen, W7EL

Jim Kelley wrote:
>
> Roy Lewallen wrote:
>
>>Read again the fourth sentence of the posting you quoted.
>>
>>Roy Lewallen, W7EL
>>
>>Jim Kelley wrote:
>>
>>>Roy Lewallen wrote:
>>>
>>>
>>>>If that
>>>>two-terminal box contains an inductor, then the current out has to equal
>>>>the current in -- that's the only way the sum of currents at the two
>>>>terminals can sum to zero.
>>>
>>>
>>>What if you draw a two terminal black box around the middle few feet of
>>>a 1/4 wave vertical? What makes the current become the same at both
>>>ends?
>>>
>>>73, Jim AC6XG
>
>
> Okay. I read it. I'll try asking the question another way.
>
> What if you draw a two terminal black box around the middle few feet of

> a 1/4 wave vertical? What makes the sum of the currents at both ends
> become equal to zero?
>
> 73, Jim AC6XG

3842. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:36:19 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA81BD3.F4A74CE8@uci.edu>
Source record: 105308

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > Cecil Moore wrote:
> >>In any case, it appears to me that an antenna is not a two terminal
> >>network. It appears to be a three or four terminal network with a
> >>virtual ground.
> >
> > The only way I can see to model it and get these particular results
> > would be to have it as a device which increases in impedance at every
> > point along its length, and which has a current path to ground at each
> > of an infinite number of such points.
>
> For a 1/4WL vertical, that would be true even if the path to ground
> is through displacement currents. But, what about free space?

Evidently there's some kind of an equivalence between electric current
and the electric smoke liberated by the antenna. ;-)

73, Jim AC6XG

3843. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 21:43:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqg7bger9a6376@corp.supernews.com>
Source record: 105309

I'm not sure why anyone would think that you can treat an antenna, or a loading coil of significant length, as a lumped element and expect to get anything resembling accurate results. Who in the world is proposing such a thing? Or is this something to be attributed to the "old wives" and "gurus", so we can then show how much smarter we are by pointing out how stupid it is?

Gee whiz, golly, yes, representing an antenna as a two terminal black box with zero size presents a problem. And no, you can't put a box around anything having any length and expect the current in to equal the current out. And why should this be surprising to anyone?

Yes, a solenoid produces a local (near) field in the direction of its axis. The far field that remains depends on the size and aspect ratio of the solenoid. Hence, we have solenoidal antennas that radiate primarily axially and those which radiate primarily radially. It's not clear to me how this bears on the topic.

Jim Kelley wrote:
>
> Jim Kelley wrote:
>
>>What if you draw a two terminal black box around the middle few feet of
>>a 1/4 wave vertical? What makes the sum of the currents at both ends
>>become equal to zero?
>
>
> Sorry to be obtuse, Roy. The point is only that antenna circuits
> obviously present a problem to the assumption that such two terminal
> black boxes will necessarily have equal currents at both terminals.
>
> A solenoid should produce a field in the direction of its axis, should
> it not?
>
> 73, Jim AC6XG

3844. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 22:13:09 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <VvVpb.107384$Tr4.287544@attbi_s03>
Source record: 105310

Art Unwin KB9MZ wrote:

SNIP
>
>
> I would question that statement in the U.S. Dave.
> It is not a question of who is right or wrong with
> respect to patents, its just a case who has the deepest
> pockets and who can make enough money thru a violation
> so they may hire a lawyer to manipulate the court so
> a ruling is never made.

SNIP

My point exactly. Patents assure Lawsuits!!

I didn't say the patent holder wins.

Deacon Dave

3845. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 22:16:55 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA82557.C535C3B6@uci.edu>
Source record: 105311

Roy Lewallen wrote:

> Gee whiz, golly, yes, representing an antenna as a two terminal black
> box with zero size presents a problem. And no, you can't put a box
> around anything having any length and expect the current in to equal the
> current out. And why should this be surprising to anyone?

The wire comprising an inductor has length. The inductor radiates.
The inductor has two terminals with different currents at each. What
was it you said about Coulombs again?

73, Jim AC6XG

3846. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 22:42:05 UTC
From: N4IXT <n4ixt@arrl.net>
Message-ID: <bo9a4d$826i5$1@ID-105647.news.uni-berlin.de>
Source record: 105312

"Arrow146" <arrow146@aol.com> wrote in message
news:20031103095554.19613.00000242@mb-m01.aol.com...
> Not sure the 269 is much of an upgrade. I have had two,
> first one I sent back because the UHF part did not work
> right. The second was exactly the same. I know of others
> that had the same problem.

Bummer. I wanted it to add 440 to my tuning abilities. <sigh> Well, maybe by the time I can afford one they'll get the bugs worked out.

> The older 259 had problems with the selector switch.

Bingo! I've been having said problems, on some bands I have to hold the switch just right in order to get it to work. Is there a simple fix, other than to send it back to the factory?

> The 259B fixed that problem. I like the 259B, works
> just fine.

That's good to hear.

> The Autek is ok, a little harder to use, I think.
> Needs a new battery every time I go to use it.
> The switches takes a little getting use to.

Not familiar with the Auteks, may have to look at them.

73's

de Robert / N4IXT

3847. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 22:47:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqgb3v1b0bou2f@corp.supernews.com>
Source record: 105313

Sigh.

I give up. It's time for me to get back to work. Have fun, folks.

Roy Lewallen, W7EL

Jim Kelley wrote:
> Roy Lewallen wrote:
>
>
>>Gee whiz, golly, yes, representing an antenna as a two terminal black
>>box with zero size presents a problem. And no, you can't put a box
>>around anything having any length and expect the current in to equal the
>>current out. And why should this be surprising to anyone?
>
>
> The wire comprising an inductor has length. The inductor radiates.
> The inductor has two terminals with different currents at each. What
> was it you said about Coulombs again?
>
> 73, Jim AC6XG

3848. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 23:10:30 UTC
From: Jim <NN7K@Reno.Rmci.Net>
Message-ID: <vqgcf6q9o7pc4@corp.supernews.com>
Source record: 105314

Must agree, as , in my youth, had neighabor liveing across the street, in Portland, OR., this on the valley floor, had her Electric Range struck by lightning, tho, must also agree with Doc, the odds are not much better (or worse, depending on your outlook!) of hitting the lottery. and, if your home is serviced by power lines on poles, there is USUALLY a GROUND WIRE , at the top of the pole line, and, as lightning USUALLY takes the path of least resistance, would be the object struck by lightning. It never hurts, tho to provide lightning protection, just for general safty. Jim NN7K

"CW" <clinton.magers@comcast.net> wrote in message news:aMDpb.72275$mZ5.450665@attbi_s54...
> Not at all a dumb question. There are many people that think if it's inside
> you don't have anything to worry about (the ostrich syndrome). Lightning
> doesn't care much about your roof nor does static. Treat it like an outside
> antenna.
> "mBird" <no@spam.com> wrote in message

3849. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 23:37:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqge1bqu5qcv1a@corp.supernews.com>
Source record: 105315

No, I will make one more comment. After a bit of reflection, I think this might be at the core of some people's problem in envisioning a lumped inductor.

When a current flows into an inductor, it doesn't go round and round and round the turns, taking its time to get to the other end. An inductor wound with 100 feet of wire behaves nothing like a 100 foot wire. Why? It's because when the current begins flowing, it creates a magnetic field. This field couples to, or links with, the other turns. The portion of the field from one turn that links with the others is the measurable quantity called the coefficient of coupling. For a good HF toroid, it's commonly 99% or better; solenoids are lower, and vary with aspect ratio. The field from the input turn creates a voltage all along the wire in the other turns which, in turn, produce an output current (presuming there's a load to sustain current flow). Consequently, the current at the input appears nearly instantaneously at the output. Those who are physics oriented can have lots of fun, I'm sure, debating just how long it takes. The field travels at near the speed of light, but the ability of the current to change rapidly is limited by other factors.

So please flush your minds of the image of current whirling around the coil, turn by turn, wending its way from one end to the other. It doesn't work at all like that. The coupling of fields from turn to turn or region to region is what brings about the property of inductance in the first place.

Radiation is another issue, and provides a path for current, via displacement current, to free space. (I can see it now in Weekly World News: WORLD FILLING WITH COULOMBS! DISASTER LOOMS!) For a component to fit the lumped element model, radiation has to be negligible. And, for the same reason, it can't be allowed to interact with external fields as a receiver, either.

This is very fundamental stuff. You can find a lot more about the topic in any elementary circuit analysis or physics text. If you don't believe what you read there, just killfile my postings -- you won't believe me, either, and reading what I post will be a waste of time for both of us.

Real inductors, of course, are neither zero length nor do they have a perfect coefficient of coupling. And they do radiate. The essence of engineering is to understand the principles well enough to realize which imperfections are important enough to affect the outcome in a particular situation. We simplify the problem by putting aside the inconsequential effects, but don't oversimplify by ignoring factors that are important for the job at hand. Those who insist on using only the simplest model for all applications will often get invalid results. And those who use

only the most complex model for all applications (as is often done in computer circuit modeling), often lose track of what's really going on -- they become good analysts but poor designers. I've seen people capable of only those approaches struggle, and fail, to become competent design engineers.

And with that, I'm outta here. Hope my postings have been helpful.

Roy Lewallen wrote:

> Sigh.
>
> I give up. It's time for me to get back to work. Have fun, folks.
>
> Roy Lewallen, W7EL
>
> Jim Kelley wrote:
>
>> Roy Lewallen wrote:
>>
>>
>>> Gee whiz, golly, yes, representing an antenna as a two terminal black
>>> box with zero size presents a problem. And no, you can't put a box
>>> around anything having any length and expect the current in to equal the
>>> current out. And why should this be surprising to anyone?
>>
>>
>>
>> The wire comprising an inductor has length. The inductor radiates.
>> The inductor has two terminals with different currents at each. What
>> was it you said about Coulombs again?
>>
>> 73, Jim AC6XG
>
>

3850. Re: Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-04 23:44:20 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bo9e9c$bf4$1@reader2.nmix.net>
Source record: 105316

Hi Ron,

I understand the problem. You may have to fabricate something if you really want to mount the mast to the wall rather than to the roof. I'm not aware of wall mounts that are large enough and beefy enough for what you want to do. Doesn't mean there aren't any, of course; I've just never seen one. As you pointed out, the RS 12" wall mount, which I also have but am not currently using, will take only a 1-1/4" mast.

Don't know what kind of roof you have... I'm currently using a push-up mast on top of my flat roof with a Radio Shack tripod mount extended to 15 ft height to support my rotator and 6M beam. This tripod mount will take a 1-3/4" mast, but not a 2", which is why I had to use the 1-3/4" and 1-1/2" segments of the push-up mast. It's guyed four ways with nylon line just below the rotator level.

The tripod is secured to three rather heavy concrete decking foundations (available at Home Depot or Lowe's) that I equipped with masonry anchors and hauled up to the roof one at a time. (Oof!) This seems to be a very stable system, and it obviated drilling holes in the roofing, something you ESPECIALLY want to avoid with a flat roof like we typically have in NM.

Good luck figuring out how to do what you need to do.

Bill / W5WVO
ABQ, NM

Ron wrote:
> I am going to install a 30' push up mast to the side of my home with 2
> brackets but I am not able to locate any house brackets large enough
> for the 2" and 1 1/2" pipe. Most that I have seen are very flimsy and
> will only take the normal TV mast. Any ideas on where to purchase the
> brackets?
>
> By the way the mast is going to support a 40 meter dipole and a TGM
> Hybrid Quad with 1.6 sq. feet of wind load.

>
> Ron
> K3SZY

3851. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 00:00:40 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bo9f80bpv1@reader2.nmix.net>
Source record: 105317

RHF wrote:
>> Not quite. That was Walt Kelly, via Pogo.
>
> Hey, some of us remember Pogo and Albert :o)

Mmmm... Once knew (not well enough!) Walt Kelly's daughter in NYC back in 1968-69 or so... VERY sweet girl. :-) Lost track in 1970 when I moved west. Don't know whatever happened to her...
Bill / W5WVO

>
>
>>
>> Bill Mauldin gave us such gems as:
>>
>> Is there a view like this for the enlisted men?
>> I got a target for ya, but ya gotta be patient!
>> A movin' foxhole attracts the eye!
>> Don't startle the Kraut; he's got a full bottle!
>> I'm an expert on European dirt!
>> The Benevolent & Protective Association of Them What Has Been Shot
>> At.
>>
>> Ed
>> wb6wsn

3852. Re: hints for quasi-professional cage antenna anyone?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 00:09:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u7fgqvslnd1ne20gam0m3mv08urqesg5nc@4ax.com>
Source record: 105318

On 4 Nov 2003 11:47:55 -0800, n1jpr@hotmail.com (SpamLover) wrote:

>Uh? AFAIK, a cage is not a folded monopole.
>
>The "inside" vertical conductor would be shielded by the cage itself
>('cept for its very bottom tip, which is grounded) and would not
>radiate ('cept locally, within the cage, hence autocanceled). Apart
>from discones I also remember seeing multi-kW 1940's TV dipole arrays
>in which arms were huge, bulbous surfaces without slots.

Hi Filippo,

A cage can be a folded monopole (or folded dipole). Has nothing to do with radiation as this is simply a transformer (not BalUN but conventional transformer) and shielding the primary or secondary (depending on which side is driven) does not interfere with either the transformer action, nor radiation. The trick is to not short out the skirt to the interior wire (if it exists - and it should to make sense) at the driven end.

You can also construct a folded mono/dipole by segregating one wire from the remaining bunch at the driven end (if there is no interior wire). One of the virtues of a folded mono/dipole is the increase in apparent radiator thickness causing a wider match range - a cage is conceptually the same, but typically more extreme in its attempt to create a thicker radiator.

The discone is another broad band radiator whose characteristics follow this conceptual sense of building a thicker radiator. Consult:
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm
to observe how the flare of the skirt affects matching over frequency.

73's
Richard Clark, KB7QHC

3853. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 00:37:25 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <d1UnekDFZEq$EAEY@ifwtech.co.uk>
Source record: 105219

Roy Lewallen wrote:

> no, you can't put a box around anything having any length and expect
>the current in to equal the current out. And why should this be
>surprising to anyone?
>
Possibly because radio amateurs are not taught well about what a "lumped component" is. All lumped components are defined as having zero (or negligible) physical dimensions relative to the wavelength at the operating frequency. Similarly, lumped networks are defined as having zero (or negligible) lead lengths relative to the operating wavelength.

In this idealized case, the current into and out of the two terminals of a lumped inductor is always exactly the same. This remains true even if that component is embedded into an antenna where current variations along the length of the conductor do exist.

Because all practical components and networks have some finite physical size, lumped-component behaviour is never absolutely perfect. In principle, any real component must also show some "antenna-like" behaviour, which does allow some variation of current between its terminals... but in practice this effect is usually very small indeed. For example, for physically small components the lumped-component approximation works well in circuit simulations at frequencies up to several GHz. (You may have to simulate each component as a small network in order to account accurately for self-capacitance, self-inductance and loss resistance, but these are still networks of idealized lumped components.)

>Yes, a solenoid produces a local (near) field in the direction of its
>axis. The far field that remains depends on the size and aspect ratio
>of the solenoid. Hence, we have solenoidal antennas that radiate
>primarily axially and those which radiate primarily radially. It's not
>clear to me how this bears on the topic.

Quite a lot, I think. At one extreme, a loading coil may be so small that it behaves as a near-perfect lumped inductor. Such an inductor will not radiate, and will have almost zero difference in current between its two terminals. Those two properties - lack of radiation and no difference in terminal currents - are locked together.

At the other extreme, you may have a long, skinny loading coil that has significant antenna-like properties, radiating at right-angles to its length like a "rubber-duck" (more formally known as a normal-mode helix). In this case the coil does form part of the radiating structure, so you do expect to see a variation in current along the length of the

coil, and hence a difference between the currents at its two ends. Once again, the two properties of radiation and current variation are locked together.

This brings us back to the question of practical loading coils, and how much radiation (and therefore current variation along the length) we can expect. I haven't ever tried to work it out, but my guess is that a fairly short "square" coil that has been optimized for high Q is not going to radiate much, and that we therefore shouldn't expect a large difference in current between its two ends.

Let's see now... a 3.5MHz loading coil that is as much as 10 inches long would scale down to 0.010 inches at 3.5GHz... at that frequency I'd expect to be able to model such a tiny inductor very accurately as a small network of lumped components with no radiating properties.

On the other hand, people who mistakenly believe that even an ideal lumped inductor can have a difference between the currents at its two terminals are rather unlikely to be convinced.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3854. Re: Space Weather - disaster

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 00:41:31 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vqghr0t28ktv53@corp.supernews.com>
Source record: 105220
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I'll go one step further; not only do the democrats show
typical lack of spine in the war on terror, but they would
have this country set back the clock on everything we've
done and do crawling to the United Nations in apology.

I don't think there are many voters that feel this reflects
how they feel. Furthermore, more and more republicans
are taking seats on various levels of government through
the states... I don't see any grass-roots growth of
yellow-bellied liberalism at all.

Clint

--

45 Communist Goals for America

http://www.uhuh.com/nwo/communism/comgoals.htm

--

"S. Hanrahan" <aa7ya@hotmail.com> wrote in message
news:bvgfqvoqbpq17ukujk94e483299rq44r1b@4ax.com...
> On Fri, 24 Oct 2003 10:31:19 -0400, "James"
> <capjim300sa@nospam.yahoo.com> wrote:
>
>
> >Watch and see as Bush "Act II popcorn man" becomes
> >a one-term President. He's making the same mistakes
> >as his daddy did in 92 and the Democrats will eat him
> >and the GOP alive in 04. Clinton may have been a
> >pot smoking womanizer, but the checks still came thru
> >every Friday and more people were working when he
> >was running the show in the O. Office.
> >
>
> Considering that the Democrats have said time and time again through
> stump speeches and Non-Debates, they want to cut and run, I don't see
> how they will succeed in unseating Bush. Their job just got harder
> now that positive economic numbers have been coming out lately.

3855. Re: Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 01:03:30 UTC
From: "Edward A. Feustel" <efeustel@erols.com>
Message-ID: <bo9i99$k22$1@bob.news.rcn.net>
Source record: 105221

Ron,
I bought a set from Fleeman, Anderson, and BI..... in Florida last year.
I found them using Google. Unfortunately I only have the characters of their
name
that would fit in a Quicken line. They cost ~$17.50 shipped.

They sell heavy duty stuff for antennas.

Good luck,

Ed, N5EI
"Ron" <rons533@dejazzd.com> wrote in message
news:3FA80612.4A2@dejazzd.com...
> I am going to install a 30' push up mast to the side of my home with 2
> brackets but I am not able to locate any house brackets large enough for
> the 2" and 1 1/2" pipe. Most that I have seen are very flimsy and will
> only take the normal TV mast. Any ideas on where to purchase the
> brackets?
>
> By the way the mast is going to support a 40 meter dipole and a TGM
> Hybrid Quad with 1.6 sq. feet of wind load.
>
> Ron
> K3SZY

3856. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 01:24:33 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <n7kgqv8rvgkqecnfj5m63bilo5co1krdv8@4ax.com>
Source record: 105222

On Tue, 04 Nov 2003 15:37:11 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

[lots of good stuff snipped]
|
|And with that, I'm outta here. Hope my postings have been helpful.

Thanks, Roy. I'm surprised you stuck around this long. Your posts
are always helpful.

73 Wes N7WS

3857. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 01:26:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA851B8.3A16CD21@uci.edu>
Source record: 105223

Roy,

Let me first apologize for having put the burr under your saddle. This is not my intent. The intent is to try to stimulate some additional thinking on the subject, and perhaps apply some other things we also know about these devices. Your contributions here are obviously invaluable to the entire group. Of course they are helpful. Having recognized that, I hope there are no subjects which are off limits to debate - or opinions that are deemed beyond reproach. Yuri has introduced an interesting subject; one that appears to have two disparate points of view.

At this point, in my view, the side asserting that there is no difference in current from one end of an inductor to the other hasn't defended its position as well as the other side. The point you make for the torroid is well taken I think. Flux from this type of coil is well confined to the core of the inductor.

But torroidal coils are by design, a unique case. I don't think the same case can be made for the helix, or a loopstick type coil for example. These coils do radiate quite well along their axis if nowhere else, and might therefore be expected to behave in a fashion not unlike other radiators, i.e. impedance and hence, current, would vary with position. Since air core coils are ubiquitous in antenna construction, I don't think it's unreasonable to discuss their performance, and consider the findings Yuri has presented as being both reasonable and viable.

73, Jim AC6XG

Roy Lewallen wrote:
>
> No, I will make one more comment. After a bit of reflection, I think
> this might be at the core of some people's problem in envisioning a
> lumped inductor.
>
> When a current flows into an inductor, it doesn't go round and round and
> round the turns, taking its time to get to the other end. An inductor
> wound with 100 feet of wire behaves nothing like a 100 foot wire. Why?
> It's because when the current begins flowing, it creates a magnetic
> field. This field couples to, or links with, the other turns. The
> portion of the field from one turn that links with the others is the
> measurable quantity called the coefficient of coupling. For a good HF
> toroid, it's commonly 99% or better; solenoids are lower, and vary with
> aspect ratio. The field from the input turn creates a voltage all along
> the wire in the other turns which, in turn, produce an output current

> (presuming there's a load to sustain current flow). Consequently, the
> current at the input appears nearly instantaneously at the output. Those
> who are physics oriented can have lots of fun, I'm sure, debating just
> how long it takes. The field travels at near the speed of light, but the
> ability of the current to change rapidly is limited by other factors.
>
> So please flush your minds of the image of current whirling around the
> coil, turn by turn, wending its way from one end to the other. It
> doesn't work at all like that. The coupling of fields from turn to turn
> or region to region is what brings about the property of inductance in
> the first place.
>
> Radiation is another issue, and provides a path for current, via
> displacement current, to free space. (I can see it now in Weekly World
> News: WORLD FILLING WITH COULOMBS! DISASTER LOOMS!) For a component to
> fit the lumped element model, radiation has to be negligible. And, for
> the same reason, it can't be allowed to interact with external fields as
> a receiver, either.
>
> This is very fundamental stuff. You can find a lot more about the topic
> in any elementary circuit analysis or physics text. If you don't believe
> what you read there, just killfile my postings -- you won't believe me,
> either, and reading what I post will be a waste of time for both of us.
>
> Real inductors, of course, are neither zero length nor do they have a
> perfect coefficient of coupling. And they do radiate. The essence of
> engineering is to understand the principles well enough to realize which
> imperfections are important enough to affect the outcome in a particular
> situation. We simplify the problem by putting aside the inconsequential
> effects, but don't oversimplify by ignoring factors that are important
> for the job at hand. Those who insist on using only the simplest model
> for all applications will often get invalid results. And those who use
> only the most complex model for all applications (as is often done in
> computer circuit modeling), often lose track of what's really going on
> -- they become good analysts but poor designers. I've seen people
> capable of only those approaches struggle, and fail, to become competent
> design engineers.
>
> And with that, I'm outta here. Hope my postings have been helpful.
>
> Roy Lewallen wrote:
>
> > Sigh.
> >
> > I give up. It's time for me to get back to work. Have fun, folks.
> >
> > Roy Lewallen, W7EL
> >
> > Jim Kelley wrote:
> >

> >> Roy Lewallen wrote:
> >>
> >>
> >>> Gee whiz, golly, yes, representing an antenna as a two terminal black
> >>> box with zero size presents a problem. And no, you can't put a box
> >>> around anything having any length and expect the current in to equal the
> >>> current out. And why should this be surprising to anyone?
> >>
> >>
> >>
> >> The wire comprising an inductor has length. The inductor radiates.
> >> The inductor has two terminals with different currents at each. What
> >> was it you said about Coulombs again?
> >>
> >> 73, Jim AC6XG
> >
> >

3858. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 01:28:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqgki8nlvtn9b9@corp.supernews.com>
Source record: 105224

Thanks for the very cogent and informative posting, as yours always are.

One thing you said really rang a bell, and made me consider something I'd never thought much about before. If a coil is radiating significantly, the Q will of course be necessarily poor due to the energy "lost" by radiation. Yet this "loss" won't be detrimental to the antenna performance. Tom Rauch has pointed out that loading inductor loss is very often insignificant compared to ground loss in a typical HF mobile system. Maybe the presumed "loss" of some coils is not as bad as it appears in other antenna applications, either.

Roy Lewallen, W7EL

Ian White, G3SEK wrote:
> . . .
> This brings us back to the question of practical loading coils, and how
> much radiation (and therefore current variation along the length) we can
> expect. I haven't ever tried to work it out, but my guess is that a
> fairly short "square" coil that has been optimized for high Q is not
> going to radiate much, and that we therefore shouldn't expect a large
> difference in current between its two ends.
> . . .

3859. Re: SMA to TV Coax connectors hard to find?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 01:51:55 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311041751.341171ff@posting.google.com>
Source record: 105225

Dan Jacobson <jidanni@jidanni.org> wrote in message news:<87u15lrxbn.fsf@jidanni.org>...
> Is it just my imagination, or are direct SMA to "F" (TV Coax) connectors hard
> to find. One usually having to go SMA-BNC-F?

Marlin P. Jones has some unexpected RF adapters. Their website,
www.mpja.com, doesn't want to come up here right now so I don't know
if they have SMA to F, but you might give them a try.

Cheers,
Tom

3860. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:22:29 UTC
From: asdf <asdf@qwerty.com>
Message-ID: <Xns9429C517AA74Fasdfqwerty@68.6.19.6>
Source record: 105227

Jim wrote:

> ... must also agree with Doc, the odds are not
> much better (or worse, depending on your outlook!) of hitting the
> lottery. ...

Actually, I read somewhere that you're about 1000 times more likely to be hit my lightning than to win the PowerBall. I would imagine it would vary considerably depending on which state lottery you're comparing it to, but I'd also imagine that lottery odds are in general much longer than being hit by lightning odds (i.e. winning the lottery is much less likely).

3861. Question on HS Screwdriver land installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:28:14 UTC
From: Paul Braun <cygnus_nospam@ctgonline.org>
Message-ID: <2rngqvkcjb6phbnpt5hjj3h0ktmu5956ub@4ax.com>
Source record: 105228

I'm about to mount a High Sierra screwdriver in my yard to use as my base antenna (condo living, dontcha know....)

I'm going to polish up the brass stud on the mounting bracket. Should I put some sort of anti-oxidation stuff on it before I mount the antenna? I'll be removing the quick-release for the whip as well, since this will be a permanent install and I want one less point of failure.

Any suggestions?

Thanks.

Paul WD9GCO

3862. Re: OT:Let the stuttering Chinese guy explain it.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:34:35 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fa7b247_2@newsfeed.slurp.net>
Source record: 105178

Have you talked with Kenwood Service lately? How's your Korean? Beleive it
or not, they're in Southern CA, but they're all Korean nationals...

73,
Mike KI6PR
El Rancho R.F., CA

"w4jle" wrote
> "Let the stuttering Chinese guy explain it to you"
> Before the days of politically correct speech, Saturday Night Live had an
> on-going skit that dealt with all complaints by having a stuttering
> Chinese guy who spoke little English "explain it to you".
>
> Have you called an 800 number with a complaint, or warranty question? Have
> you
> tried to cancel an order or service? Most likely you were given the SNL
> treatment. Rather than speaking with a concerned employee of the company
you
> called, chances are you were connected to a "call center" in India, The
> Philippines, or some other exotic location, where the labor is dirt cheap.
>
> I propose a new acronym FHLEM (Foreign Hourly Laborer Exasperating Me).

3863. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:37:11 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311041837.413a50f4@posting.google.com>
Source record: 105229

Thanks for your down to earth input Roy
I haven't entered this thread because I was
very confused how the group was dealing with
inductance since what is important to me is
the field around it that permits effective,
efficient coupling of different circuits.
When looking for a lossless system ,coupling
by either capacitance or inductance is necessary
together with the all important HIGH Q.
And if one were to dwell on the wire used as a
missing part of a radiator alone and disregarding
the ebb and flow of the enclosing field
just blows my mind.
Interesting that you spoke of lumped loads and
distributed loads in terms of modeling, many people
here would learn a lot by starting of with a T or pi
type matching system e.t.c. all of which use lumped loads,
and then manipulate these same lumped loads
into distributed loads in multiple coupled circuits
in a form of many coupled distributed load ircuits to
produce a radiator that can maintain a constant input
impedance.
After playing with such circuits to form a combination
radiating lossless circuit(reverse of complex circuit resolving)
the idea of missing radiator lengths would quickly
disappear, as it becomes noticable that the energy field equates
to the actual length of the inductance and not to a slinky style stretch.
There again, as a total amateur with respect to electrical
thing a me jigs I could be adding to the mental riots of those who
are partaking in this never ending gymnastics.If so I will now
sneak quietly out of this conference room before Tom arrives and
put everybody in their place as only he can do.
Regards
Art

Roy Lewallen <w7el@eznec.com> wrote in message news:<vqge1bqu5qcv1a@corp.supernews.com>...
> No, I will make one more comment. After a bit of reflection, I think
> this might be at the core of some people's problem in envisioning a
> lumped inductor.
>
> When a current flows into an inductor, it doesn't go round and round and
> round the turns, taking its time to get to the other end. An inductor
> wound with 100 feet of wire behaves nothing like a 100 foot wire. Why?
> It's because when the current begins flowing, it creates a magnetic

> field. This field couples to, or links with, the other turns. The
> portion of the field from one turn that links with the others is the
> measurable quantity called the coefficient of coupling. For a good HF
> toroid, it's commonly 99% or better; solenoids are lower, and vary with
> aspect ratio. The field from the input turn creates a voltage all along
> the wire in the other turns which, in turn, produce an output current
> (presuming there's a load to sustain current flow). Consequently, the
> current at the input appears nearly instantaneously at the output. Those
> who are physics oriented can have lots of fun, I'm sure, debating just
> how long it takes. The field travels at near the speed of light, but the
> ability of the current to change rapidly is limited by other factors.
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> So please flush your minds of the image of current whirling around the
> coil, turn by turn, wending its way from one end to the other. It
> doesn't work at all like that. The coupling of fields from turn to turn
> or region to region is what brings about the property of inductance in
> the first place.
>
> Radiation is another issue, and provides a path for current, via
> displacement current, to free space. (I can see it now in Weekly World
> News: WORLD FILLING WITH COULOMBS! DISASTER LOOMS!) For a component to
> fit the lumped element model, radiation has to be negligible. And, for
> the same reason, it can't be allowed to interact with external fields as
> a receiver, either.
>
> This is very fundamental stuff. You can find a lot more about the topic
> in any elementary circuit analysis or physics text. If you don't believe
> what you read there, just killfile my postings -- you won't believe me,
> either, and reading what I post will be a waste of time for both of us.
>
> Real inductors, of course, are neither zero length nor do they have a
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> imperfections are important enough to affect the outcome in a particular
> situation. We simplify the problem by putting aside the inconsequential
> effects, but don't oversimplify by ignoring factors that are important
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> for all applications will often get invalid results. And those who use
> only the most complex model for all applications (as is often done in
> computer circuit modeling), often lose track of what's really going on
> -- they become good analysts but poor designers. I've seen people
> capable of only those approaches struggle, and fail, to become competent
> design engineers.
>
> And with that, I'm outta here. Hope my postings have been helpful.
>
> Roy Lewallen wrote:
>
> > Sigh.
> >

> > I give up. It's time for me to get back to work. Have fun, folks.
> >
> > Roy Lewallen, W7EL
> >
> > Jim Kelley wrote:
> >
> >> Roy Lewallen wrote:
> >>
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> >>> Gee whiz, golly, yes, representing an antenna as a two terminal black
> >>> box with zero size presents a problem. And no, you can't put a box
> >>> around anything having any length and expect the current in to equal the
> >>> current out. And why should this be surprising to anyone?
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> >>
> >> The wire comprising an inductor has length. The inductor radiates.
> >> The inductor has two terminals with different currents at each. What
> >> was it you said about Coulombs again?
> >>
> >> 73, Jim AC6XG
> >
> >

3864. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:48:57 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311041848.6584e74d@posting.google.com>
Source record: 105230

If reactance can be seen as a "{missing" part
of a radiator how should we view what a
capacitor represents? Grin
Art

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fa1e8ad$1_3@corp.newsgroups.com>...
> w4jle wrote:
> > Re: Current through a coil in an antenna.
> >
> > If we feed an antenna at the current point, the current decreases as the
> > voltage increases along the antenna element from feed point to end..
> >
> > That being said, a coil replacing a segment of an antenna (in order to
> > physically shorten it) will exhibit the same properties (relating to
> > currents) as the segment it replaced.
>
> Yep, if the feedpoint impedances are the same and both are lossless,
> that has to be true.
>
> Here's a repeat of a diagram I drew earlier.
>
> -----y----------x-----FP-----x----------y----- 1/2WL dipole
>
> -----coil-----FP-----coil----- loaded dipole
>
> Assume the physical length of the loaded dipole is 1/4WL.
>
> Each coil replaces the section between 'x' and 'y'. The currents
> at 'x' and 'y' are quite different, being 1/8WL apart.
>
> Consider an 8 foot center-loaded 75m mobile antenna. 87% of the
> electrical length of the antenna is in the coil.

3865. Re: Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:56:21 UTC
From: Bill VanAlstyne <w5wvo@cybermesa.net>
Message-ID: <bo9phd$es9$1@reader2.nmix.net>
Source record: 105231

That would be Fleeman, Anderson & Bird (FAB Corp.)
http://www.fab-corp.com/
Thanks for the tip, I've been looking for these, too. :-)
Bill / W5WVO

Edward A. Feustel wrote:
> Ron,
> I bought a set from Fleeman, Anderson, and BI..... in
Florida last
> year.
> I found them using Google. Unfortunately I only have the
characters
> of their name
> that would fit in a Quicken line. They cost ~$17.50
shipped.
>
> They sell heavy duty stuff for antennas.
>
> Good luck,
>
> Ed, N5EI
> "Ron" <rons533@dejazzd.com> wrote in message
> news:3FA80612.4A2@dejazzd.com...
>> I am going to install a 30' push up mast to the side of
my home with
>> 2 brackets but I am not able to locate any house brackets
large
>> enough for the 2" and 1 1/2" pipe. Most that I have seen
are very
>> flimsy and will only take the normal TV mast. Any ideas
on where to
>> purchase the brackets?
>>
>> By the way the mast is going to support a 40 meter dipole
and a TGM
>> Hybrid Quad with 1.6 sq. feet of wind load.
>>
>> Ron
>> K3SZY

3866. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 02:57:20 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <vqgppctca5bda8@corp.supernews.com>
Source record: 105232

Actually the man that invented the pushbutton release socket wrench did win his lawsuit against Sears and won big. Sears then licensed the patent and are selling pushbutton release socket wrenches again. I still have my original one and love it.
The intermitent cycle automotobile wondow wiper inventer has has to sue each and every autombile manufacturer for infringement. He has won every suit but the lawyers got most of the money. He also lost his marriage. He is now going without legal assistance in his court cases but is still winning.

Dave Nagel

Art Unwin KB9MZ wrote:
> Dave Shrader <david.shrader@comcast.net> wrote in message
news:<tiMpb.102695$Fm2.88131@attbi_s04>...
>
>>Richard wrote:
>>
>>SNIP
>>
>>
>>>The only value of patents is in their being a depreciable asset. In
>>>other words, valuable only to the bean counters to include in their
>>>prospectus.
>>>
>>>73's
>>>Richard Clark, KB7QHC
>>
>>There is a second value in Patents: they assure lawsuits!!
>>
>>Deacon Dave, W1MCE
>
>
> I would question that statement in the U.S. Dave.
> It is not a question of who is right or wrong with
> respect to patents, its just a case who has the deepest
> pockets and who can make enough money thru a violation
> so they may hire a lawyer to manipulate the court so
> a ruling is never made. Two cases I remember one the windshields
> wiper case and the Sears and Roabucks wrench casewhere even
> tho the plaintifs went bankrupt pursing justice those who
> violated the law profited imensely. My patents on antennas
> as well as the one I am claiming now will be abandond after award
> since I could never stop any violation let alone pay the maintenance
> fees.

> My patent attempt are purely for my own satisfaction.
> By the way, in some countries the loser picks up the costs which can
> retard deep pocket violators in any court actions over those with
> little money.
> McDonalds found this out to their cost in the U.K. where their
> opponents
> had little money and were able to reap huge rewards.
> Art

3867. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 03:02:59 UTC
From: Hacksaw <Hack@comecast.net>
Message-ID: <DLZpb.110905$e01.393115@attbi_s02>
Source record: 105233

I wounder what they have to say about this.

http://www.fractenna.com/index.html

3868. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 03:15:58 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031104221558.16519.00000140@mb-m27.aol.com>
Source record: 105234

>I don't think it's unreasonable to discuss their performance, and
>consider the findings Yuri has presented as being both reasonable and
>viable.
>
>73, Jim AC6XG
>

I am just amazed that with all the "theoretical" arguing going on, why none of the "learned" experts measure, answer or explain the following REAL effects or show where I (we) are wrong:

We are assuming quarter wave electrical (90 deg) antenna with loading coil inserted from 50 - 70% of the radiator length.

1. As I mentioned and got only fuzzy arguments (poor coils, metal caps, poor connection, which do not jive with observations), having let's say 80m mobile Hustler antenna (many of them around) with coil. Put 100W to it (no obstructions, meters, things to detune it) for about 30 secs. Go feel the coil, or if you have thermal strips, watch the color from bottom to top. You will notice warmer bottom. Put 500W to it, you will "reshrink" the tubing, heatshrink tubing will start curling from the bottom, insulation on wire will start blistering. I have done it, I saw it, I melted the bottom of the coil. K0PP is sending picture of similarly fried Minooka Special. Why coils melt at the bottom and not all along if the current is uniform across the coil?
Explanation: Uniform coil, with uniform wire, on uniform form, same caps on top and bottom, the resistance is the same along the coil. If R is the same, and there is more heat developed in part of the coil, then according to I2R formula, current MUST be HIGHER in the part of the coil that heats more - at the bottom. If the current is higher at the bottom part of the coil, it cannot be the SAME at both ends.
Do not believe me? Everybody can do the test with mobile coil and verify it. You don't need meters and nothing disturbs the setup. This demonstartes that current is not uniform accross the coil, it larger at the bottom than on top. Where are we wrong here?

2. As I quoted on my page http://www.k3bu.us/loadingcoils.htm results of W9UCW test and measurements, Barry measured in the controlled environment, (60 radials, good coil, RF ammeters) that current in loading coil varies between top and bottom in the range of 40 - 60%,. which confirms the effect described above and puts some figures on it. It was done on different bands, with different positions of the coil and generally follows the pattern. RF ammeters are designed for this particular type of measurements. We get the same conclusion and confirm the effect - the current in the loading coil varies across the coil, it is not the same.
What is wrong with those measurements and results? Again anyone can verify

them. Did anyone measured anything different?

3. Lets look at the RF choke. Coil the piece of coax into a coil with enough inductance to suppress RF current. Is the current same at both ends?

4. W9UCW used toroid loading coil and got the same results. How could that be? It was MEASURED not "figured" out.

5. Cecil explained the reflected wave situation and delay in the coil, which supports and explains the mechanism of the phenomena.

6. ON4UN in his Low Band DXing book for years has shown and explained the distribution of current in various configurations of loading coils, hats, stubs and clearly shows that current across the coil decreases in proportion to the electrical degrees of the radiator that it replaces. Where is he wrong? Another engineer that "knows nothing"?

7. How could it be if the voltage (neon bulb test) is increasing along the coil towards the top, current has to be decreasing.

Can we see some other (better) measurements, anyone?
Or is all the above fantasy, because EZNEC says so?
Can we have some REASONS instead of ridicule? Point by point please.

Yuri, K3BU.us

3869. Re: Question on HS Screwdriver land installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 03:19:26 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031104221926.16519.00000141@mb-m27.aol.com>
Source record: 105235

>Should
>I put some sort of anti-oxidation stuff on it before I mount the
>antenna? I'll be removing the quick-release for the whip as well,
>since this will be a permanent install and I want one less point of
>failure.
>
>Any suggestions?
>
>Thanks.
>
>Paul WD9GCO
>

Try to minimize the resistance in connections, they are at high current point.
Clean contacts, tight. You can use baby vaseline to coat the connections,
cheaper and good enough. Don't forget some counterpoise or radials.

Yuri

3870. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 03:38:54 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <bo9rch$f68$1@news.datasync.com>
Source record: 105236
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Agreed, as long as you don't interpret the "no 9/11 -- Iraq" connection to mean that Saddam's government was not allies with Al Qaeda.

From the beginning, the war has been about two things:

The widely-publicized (and amazingly enough -- true, despite the conspiracy nonsense) reason for the war was our genuine concern that Iraq had weapons of mass destruction (indicated, not just by US intelligence, but Russian and several others -- including the U.N.'s people) and that they would give them to Al Qaeda to strike covertly at civilians in America.

No sitting president could allow that to happen. Something had to be done about it right away -- our citizens were at risk. When our allies in the U.N. refused to take action, we had to go it alone.

The second reason for the fall of Iraq is that a strong democracy needed to be instituted somewhere (besides Israel) in the Middle East, if we were ever to change the horrible status quo over there. If the institution of democracy in Iraq is successful, kingdoms like Jordan, Syria, and Saudi Arabia will fall, and their people will enjoy true freedom for the first time in centuries.

I could also argue that it has also kept hordes of terrorists flocking to Iraq (instead of New York) to attempt to kill Americans, but we were basically accomplishing the same thing in Afghanistan (though I hear it was tougher for them to get there).

By the way, B.A., you have an amazing depth of knowledge on radio. I really enjoy your posts.

-- Stinger

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bo74u0kgu1@news1.kornet.net...
>
> "charlesb" <n5pvl@sbcglobal.net> wrote in message
> news:LAEpb.1348$Ce6.671@newssvr29.news.prodigy.com...
> > Another person who is nostalgic about the 9-11 attack, who wants to see
> the
> > "action" moved back here in the U.S., instead of remaining over there in
> > Iraq.
> >
> > The children and other innocent people who were vaporised in the twin
> towers

> > do not count, I suppose. Brenda Ann wants us to pull our troops out so
> that
> > we can have more of that action here in the U.S...
> >
> > I'll have to disagree with that kind of thinking. Sorry, Brenda Ann!
>
> You're putting words into my mouth, Charles. I said nothing of the sort.
> It's (unfortunately) far too late to pull our troops out of Iraq, the
course
> must be stayed... what I have a problem with is Mr. Rumsfelds
lassaiz-faire
> attitude that our troops must die...
>
> And, for the last and final time, Iraq and Saddam Hussein had nothing to
do
> with 9/11.. even Bush has admitted to this now.. get over it.
>
>
>

3871. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 03:56:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqgt70ss3qn848@corp.supernews.com>
Source record: 105237

As I recall, the interval wiper case was begun in the '60s and only settled recently. So it took the inventor thirty years to win the suit. And I believe that was only against one auto manufacturer. I seriously doubt that he's collected a nickel yet. The only reason he prevailed is that there was such a huge amount of money involved, lawyers were willing to spend years working on it for a contingency fee. (Consequently, the inventor will only get a portion of the settlement if he's still alive when the money actually changes hands.) For something of more modest value, the inventor will simply be run out of money long before the case reaches court.

As far as I can tell, patents are of use only for companies large enough and with enough resources to defend them. They're often used just to shut out the little guy. For example, Big Company A patents its widget. Big Company B incorporates the widget into its own products. Big Company A threatens to sue Big Company B. Big Company B comes up with some prior art that might void the patent, and threatens to countersue to make the patent void. (This can be done for a huge number of patents. There are surprisingly few truly new ideas, and prior art can very often be found if you've got the resources to look hard enough for it.) Big Company A backs off, and gives Big Company B a royalty-free license to use the widget. That way, they both benefit. If the patent had been voided (which it probably deserved to be), then any old body could use the widget. By letting the patent stand, either company can sue any little guy who tries it. Patents are now awarded with hardly any scrutiny at all, which I'm sure makes this scheme increasingly common. Actually, what I've seen is big companies freely stealing others' patented ideas, and not bothering with the formal process I just described. They don't mess with each other, and that way all the patents stand and the little guys are effectively locked out.

In my humble and decidedly non-legal opinion, a patent is pretty useless to a small inventor, unless it's worth so much that the lawyers are willing to spend millions and years defending it, like in the interval wiper case. I guess it strokes some egos. But I always think about the Hyper-Light-Speed Antenna (U.S. patent #6,025,810) when someone brags about how many patents he's got, just to keep the accomplishment in perspective.

Roy Lewallen, W7EL

David G. Nagel wrote:
> Actually the man that invented the pushbutton release socket wrench did
> win his lawsuit against Sears and won big. Sears then licensed the
> patent and are selling pushbutton release socket wrenches again. I still

> have my original one and love it.
> The intermitent cycle automotobile wondow wiper inventer has has to sue
> each and every autombile manufacturer for infringement. He has won every
> suit but the lawyers got most of the money. He also lost his marriage.
> He is now going without legal assistance in his court cases but is still
> winning.
>
> Dave Nagel

3872. Re: OT:Let the stuttering Chinese guy explain it.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 04:44:23 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Mf%pb.21047$ns.14967@bignews4.bellsouth.net>
Source record: 105238

w4jle <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bo7bm9$37a3$1@news3.infoave.net...
> "Let the stuttering Chinese guy explain it to you"
> Before the days of politically correct speech, Saturday Night Live had an
> on-going skit that dealt with all complaints by having a stuttering
> Chinese guy who spoke little English "explain it to you".
>
> Have you called an 800 number with a complaint, or warranty question? Have
> you
> tried to cancel an order or service? Most likely you were given the SNL
> treatment. Rather than speaking with a concerned employee of the company
you
> called, chances are you were connected to a "call center" in India, The
> Philippines, or some other exotic location, where the labor is dirt cheap.
>
> I propose a new acronym FHLEM (Foreign Hourly Laborer Exasperating Me).
> My first encounter with FHLEM occurred last month when I attempted to
> cancel my America On Line account. I followed the directions on the screen
> and called the 800 number as directed. I reached a FHLEM in India. I
> expressed
> my desire to cancel my service. This was just the start of a long and
> fruitless
> journey!
>
> She proceeded to ask me why I was terminating my AOL account. I explained
> the
> reason was twofold, first I was upset at the telemarketers calling me
> "as a valued AOL customer" (exempt from the no call list because of a
prior
> business relationship) and second I now was hooked up on BroadBand service
> from Pond Branch Telephone. Alas, she had heard these flimsy excuses
before
> and was more than willing to deal with them.
>
> I actually timed the phone call, and at the end of seventeen minutes and
> endless offers of free months of service, being the old curmudgeon I am,
> replied "Look cancel the service! This conversation is ended"
> I won't bore you with the details of how I told her I would no longer
> continue
> with AOL if they gave me free service for life.
>
> This month the Credit card statement arrives, and once again I am billed
for
> AOL! I called a known USA number for AOL and asked, nay demanded, to speak

> to
> a supervisor. She told me the account had not been cancelled because
> "I had not completed the cancellation process." Apparently the Chinese guy
> has
> to fully explain it to you in a thirty-minute process.
>
> Once I explained that I was the publisher of the Gilbert News, located
> twenty
> minutes away from the capital, and sans satisfaction, I would be at the
desk
> of the States Attorney General with my complaint within the hour. She
> relented
> and gave me a cancellation number. No need to tell her I have exactly nine
> hundred seventy three subscribers at last count!
>
> My second call of the day to get technical support for a network router
> ended
> up in the Philippines, but that's a story for another day.
> --
> <--
> Publisher - Gilbert News On-Line
> Http://gilbertnews.net

It is more "commoner" than you think! I ran into the same thing with a
medical
service provider whose "operators" appeared to be in Bangledesh--most of
them I couldn't understand. After a number of fruitless calls about a bill
that was already paid in FULL, I was being charged an extra $25 that they
could not
explain and had not sent a statement for! I got different stories each time
I called. I also discovered a negative credit reference placed in error
which has
caused *other* difficulties. I have been assured that the reference would
be
removed quickly, but certain damage has already been done. I, too, spoke to
a "supervisor" who got a bit smart alecky with me----which caused a shouting
match, which caused me to wish he was here in person so I could "whup" his
rear end. It has now gone to the state Attorney General and consumer
affairs to
sort out. OH, I was also confused with another client all the way across
the
continent! In Oregon!!

Jerry
>
>

3873. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 05:19:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa8892f_3@corp.newsgroups.com>
Source record: 105239

Roy Lewallen wrote:

> I'm not sure why anyone would think that you can treat an antenna, or a
> loading coil of significant length, as a lumped element and expect to
> get anything resembling accurate results.

Roy, have you read the arguments that started this discussion?

They are at: http://www.k3bu.us/loadingcoils.htm

Please tell us if you agree with John Devoldere's "Bible" -
"ON4UN's Low Band DXing", 3rd Edition, on page 9-34:
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3874. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 05:31:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa88bff_3@corp.newsgroups.com>
Source record: 105240

Ian White, G3SEK wrote:
> This brings us back to the question of practical loading coils, and how
> much radiation (and therefore current variation along the length) we can
> expect.

For the feedpoint impedance to be purely resistive in an electrical 1/4WL shortened vertical, the current must undergo a round trip phase shift of 360 degrees and the voltage must undergo a round trip phase shift of 180 degrees. The loading coil must provide the phase shift that the antenna doesn't provide. For a typical 75m 8 ft mobile antenna, the coil must provide approximately 80 degrees of phase shift.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3875. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 05:37:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa88d5b_3@corp.newsgroups.com>
Source record: 105241

Art Unwin KB9MZ wrote:

> If reactance can be seen as a "{missing" part
> of a radiator how should we view what a
> capacitor represents? Grin

A series cap has the opposite effect of a series coil. I have seen
such antennas made out of end to end caps but I've never really
understood their claim to fame.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3876. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 06:46:24 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <boavue$1btrmi$1@ID-189073.news.uni-berlin.de>
Source record: 105254
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

>
> Saddam and OBL just didn't become threats to civilization the moment
> 9/11 happend. Liberals in this country and around the world, and the
> United Nations were too busy going ga-ga over their respective Liberal
> socialist leaders each of which didn't give a damn for 12 years.
>
> What Bush is doing is taking care of all the foreign policy cans
> Klintoon kicked down the road while he was President of these The
> United States of America. I know this tears at Liberals, and the 9
> Democrat Presidential wannabe's. They had their chances, and they
> ignored the threats.

Yep.... they were KEENLY aware of Osama back in the Reagan administration days..... believe it or not it goes back that far! Ole Ollie North brought it to that administrations attention and nothing was done.

--
Ryan KC8PMX

Give a person a fish and you feed them for a day; teach that
person to use The Internet and they won't bother you for weeks.

3877. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 06:49:07 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <boavuf$1btrmi$2@ID-189073.news.uni-berlin.de>
Source record: 105255
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fa7cd9f_7@corp.newsgroups.com...
> Ryan, KC8PMX wrote:
> > Last I knew, unless the Republican oriented college that I went to was
> > wrong, that on the political spectrum, the Libertarian party was more to
the
> > right than republicans.....
>
> Extremely to the left of republicans on social issues like drug policies.
> --
> 73, Cecil http://www.qsl.net/w5dxp

I typically agree more with the Libertarian parties' ideals, except for the
drug policies..... As a former user (knock on wood, 10 years and 2 months
drug-free) and also dealing with people that are users in the emergency
services related fields, I have absolutely no use for any drug not
prescribed by a doctor.

--
Ryan KC8PMX

All of us could take a lesson from the weather. It pays no
attention to criticism.

3878. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 06:52:02 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <boavuh$1btrmi$3@ID-189073.news.uni-berlin.de>
Source record: 105256

Agreed..... there is a limited amount of necessary and required services
that the government needs to perform. In fact, within the exception of
national defense, the federal government needs to be slim-lined down to very
little, as most of the other (within few exceptions) concerns and programs
can be dealt with on the state and local level.

--
Ryan KC8PMX

Some people are like Slinkies . . . not really good for anything, but you
still can't help but smile when you see one tumble down the stairs.

>
>
> It doesn't matter whether you call it the left or the right, the concept
of
> less government interference in our lives is extremely appealing to many
of us.
> 73,
> Tom Donaly, KA6RUH
>
> (P.S. I'm not a Libertarian.)
>
>

3879. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 07:22:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311042322.598d098d@posting.google.com>
Source record: 105242

Roy Lewallen <w7el@eznec.com> wrote in message news:<vqge1bqu5qcv1a@corp.supernews.com>...
> No, I will make one more comment. After a bit of reflection, I think
> this might be at the core of some people's problem in envisioning a
> lumped inductor.
>
> When a current flows into an inductor, it doesn't go round and round and
> round the turns, taking its time to get to the other end. An inductor
> wound with 100 feet of wire behaves nothing like a 100 foot wire. Why?
> It's because when the current begins flowing, it creates a magnetic
> field. This field couples to, or links with, the other turns.

This is the way I view it, and why I couldn't automatically endorse
the fairly large difference they saw. Unless the coil is very long,
say as in a helical whip, I see it acting pretty much as a lumped
inductor. Sure, the current may vary some through the coil when it's a
foot or so long bugcatcher coil, but I don't see it being a major
issue. I wouldn't normally expect to see a sharp current taper across
the coil. I see that type of coil acting much as a "one piece" lumped
inductor, not as a many turned rf roller coaster ride. Not a perfect
lumped inductor, but close enuff for average gov work. MK

3880. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 07:28:26 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311042328.738145ba@posting.google.com>
Source record: 105243

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
>
> A bugcatcher coil on a 75m mobile antenna also does not meet the
> definition of a lumped circuit.

Dunno. I think it does. Not perfect by any means, but I still think it
"acts" pretty much like a lumped inductor. MK

3881. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 09:14:33 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311050114.4849e1bb@posting.google.com>
Source record: 105244
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

= = = "Stinger" <contact@newsserveronly.com>
= = = wrote in message news:<bo9rch$f68$1@news.datasync.com>...
> Agreed, as long as you don't interpret the "no 9/11 -- Iraq" connection to
> mean that Saddam's government was not allies with Al Qaeda.
>
> From the beginning, the war has been about two things:
>
> The widely-publicized (and amazingly enough -- true, despite the conspiracy
> nonsense) reason for the war was our genuine concern that Iraq had weapons
> of mass destruction (indicated, not just by US intelligence, but Russian and
> several others -- including the U.N.'s people) and that they would give them
> to Al Qaeda to strike covertly at civilians in America.
>
> No sitting president could allow that to happen. Something had to be done
> about it right away -- our citizens were at risk. When our allies in the
> U.N. refused to take action, we had to go it alone.
>
> The second reason for the fall of Iraq is that a strong democracy needed to
> be instituted somewhere (besides Israel) in the Middle East, if we were ever
> to change the horrible status quo over there. If the institution of
> democracy in Iraq is successful, kingdoms like Jordan, Syria, and Saudi
> Arabia will fall, and their people will enjoy true freedom for the first
> time in centuries.
>
> I could also argue that it has also kept hordes of terrorists flocking to
> Iraq (instead of New York) to attempt to kill Americans, but we were
> basically accomplishing the same thing in Afghanistan (though I hear it was
> tougher for them to get there).
>

Stinger,

YES - The FIRST usefulness of "IRAQ" is that it has become a Terrorist
Magnet.
IMHO: Most Americans for what ever reason or politcal leanings would
simply say. (If Asked the Question and Given the Choice.)
? Is it better to "Fight" Foreign Terrorist, Over there in Distant
Lands, or to Fight Them Here in Our Homeland the USofA ?
[ ] Fight Them Over There (IMHO would get 99.73% of the votes.)
[ ] Then Fight Them HERE! (IMHO would get 00.27% of the votes.)

The SECOND 'usefulness' of "IRAQ" is the Leason for the Rest of the World; that Peace with the USofA is better than Opposition and War with the USofA.
- The UN, the French, the Germans ETC will not help you if the USofA decides to Deal With You [.]
- - Speaking Softly and Carrying a Big Stick works better in todays real world.
- - - If there is a Terrible Example of what the Big Stick can do to others.
= = = = Iran and North Korea are both more understanding of what the USofA; Can and Will Do If Necessary.

NOTE: The Leason of the USofA in Vietnam and the USSR in Afganistan is that the USofA 'stayed-the-course' in Vietnam for Twice as Many Years and Paid Four Times (4X) the "Price in American Lives"; as the USSR was willing to do in Afganistan.
- - - The USofA will Pay the Price of using it's Big Stick.

The THIRD 'usefulness' of "IRAQ" is every Terrorist that goes to Iraq is one less Terriorst that goes to Israel to Kill and do Damage there.

The FOURTH 'usefulness' of "IRAQ" is the quite and progressive movement for modernization and change in the Governments and Political Systems of the neighboring states in the region.

bwdik ~ RHF
.
.
>
> By the way, B.A., you have an amazing depth of knowledge on radio. I really
> enjoy your posts.
>
> -- Stinger
>

3882. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 09:45:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <bN6mwzD+aMq$EAmc@ifwtech.co.uk>
Source record: 105245

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>> This brings us back to the question of practical loading coils, and
>>how much radiation (and therefore current variation along the length)
>>we can expect.
>
>For the feedpoint impedance to be purely resistive in an electrical 1/4WL
>shortened vertical, the current must undergo a round trip phase shift of
>360 degrees and the voltage must undergo a round trip phase shift of 180
>degrees. The loading coil must provide the phase shift that the antenna
>doesn't provide. For a typical 75m 8 ft mobile antenna, the coil must
>provide approximately 80 degrees of phase shift.

I'm sure you'll find the answer in Balanis, if you read it with an open
mind instead of trying to force him to agree with you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3883. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 09:46:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <nc$5kGErbMq$EAAj@ifwtech.co.uk>
Source record: 105246

Yuri wrote:
>
>I am just amazed that with all the "theoretical" arguing going on, why
>none of the "learned" experts measure, answer or explain the following
>REAL effects or show where I (we) are wrong:
>
[...]

Yuri is making some fair points - those practical observations do need to be explained.

But first we all need to agree that for an ideal lumped loading coil, the current at the top and bottom terminals will be the same. If the current is not the same at both ends, then the coil cannot be behaving as an ideal lumped inductor.

That tells us that the explanation has to involve the non-zero physical dimensions of the coil. In other words, the coil is no longer just a pure inductor - it also has some antenna-like distributed properties, which do allow (and indeed require) a current variation along the length.

I don't know what the full detailed explanation is. But I do know that, in order to be correct for all possible cases, it *must* include the feature that as the physical dimensions of the coil tend towards zero, the difference in current between its two ends falls towards zero also. Any "explanation" that denies this fundamental physical fact is guar-an-teed to be wrong.

So let's agree on that, and then we can move forward to find an explanation.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3884. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 11:55:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Ny5qb.81764$275.238335@attbi_s53>
Source record: 105247

I'm sure Chip is active off line.

Deacon Dave, W1MCE

Hacksaw wrote:

> I wounder what they have to say about this.
>
> http://www.fractenna.com/index.html
>
>

3885. Re: IF

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 12:04:32 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <kH5qb.10279$Oo4.2067@newsread1.news.atl.earthlink.net>
Source record: 105248

[snip]
Does anyone understand the implications of a distributed network?
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

Zeno perhaps?

--
Peter K1PO
Indialantic By-the-Sea, FL

3886. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 12:21:11 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <wW5qb.820$643.530@okepread03>
Source record: 105249
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Walt Davidson" <g3nyy@despammed.com> wrote
> On Tue, 4 Nov 2003 21:38:54 -0600, "Stinger"
>
> >The second reason for the fall of Iraq is that a strong democracy needed to
> >be instituted somewhere (besides Israel) in the Middle East
>
> Israel is a democracy?

Yes. It has three branches of government (legislature, executive, and courts).
You don't have to be Jewish to be a citizen, but you do have to be Jewish to
become the executive.

3887. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 13:32:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa8fcb4$1_5@corp.newsgroups.com>
Source record: 105250

Mark Keith wrote:
> This is the way I view it, and why I couldn't automatically endorse
> the fairly large difference they saw. Unless the coil is very long,
> say as in a helical whip, I see it acting pretty much as a lumped
> inductor. Sure, the current may vary some through the coil when it's a
> foot or so long bugcatcher coil, but I don't see it being a major
> issue. I wouldn't normally expect to see a sharp current taper across
> the coil. I see that type of coil acting much as a "one piece" lumped
> inductor, not as a many turned rf roller coaster ride. Not a perfect
> lumped inductor, but close enuff for average gov work. MK

The round trip current phase shift in an electrical 1/4WL vertical must
total 360 degrees. If the coil doesn't perform part of that phase shift,
what does?
--
73, Cecil http://www.qsl.net/w5dxp

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3888. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 13:36:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa8fdb3_5@corp.newsgroups.com>
Source record: 105251

Mark Keith wrote:

> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
>>A bugcatcher coil on a 75m mobile antenna also does not meet the
>>definition of a lumped circuit.
>
> Dunno. I think it does. Not perfect by any means, but I still think it
> "acts" pretty much like a lumped inductor. MK

Where does the rest of the necessary phase shift in the round trip
current come from if not from the coil?
--
73, Cecil http://www.qsl.net/w5dxp

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3889. Re: Penn State fractal antenna reduces unwanted lobes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 13:43:07 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311050543.4c99de61@posting.google.com>
Source record: 105252

David.
I chose those three cases deliberately
because they were people who pursued their case
since money was more important than life.
I also stated the McDonalds case in the U.K.
where justice came without total ruination.
Look at cases where the "giants" take on
"giants" as in the phamacutical industry
where appeals upon appeals and other
manipulations of the court drag on for years.
Yes, the courts allow the little man to
challenge the big man but he never "wins",
he always loses the most valuable thing
that he has, a major part of his life
in exchange for following his "rights".
In these particular cases quoted it emphasised
the difference in "rights" between the U.K. and the U.S.
which supposedly follow the same system but where one follows the
"intent" of the law where the other follows the
" actual wording" of the law. This places the U.S. descisions
in the same bracket of many threads seen at this site.
Art

"David G. Nagel" <nagel@core.com> wrote in message
news:<vqgppctca5bda8@corp.supernews.com>...
> Actually the man that invented the pushbutton release socket wrench did
> win his lawsuit against Sears and won big. Sears then licensed the
> patent and are selling pushbutton release socket wrenches again. I still
> have my original one and love it.
> The intermitent cycle automotobile wondow wiper inventer has has to sue
> each and every autombile manufacturer for infringement. He has won every
> suit but the lawyers got most of the money. He also lost his marriage.
> He is now going without legal assistance in his court cases but is still
> winning.
>
> Dave Nagel
>
>
> Art Unwin KB9MZ wrote:
> > Dave Shrader <david.shrader@comcast.net> wrote in message
news:<tiMpb.102695$Fm2.88131@attbi_s04>...
> >
> >>Richard wrote:
> >>

> >>SNIP
> >>
> >>
> >>>The only value of patents is in their being a depreciable asset. In
> >>>other words, valuable only to the bean counters to include in their
> >>>prospectus.
> >>>
> >>>73's
> >>>Richard Clark, KB7QHC
> >>
> >>There is a second value in Patents: they assure lawsuits!!
> >>
> >>Deacon Dave, W1MCE
> >
> >
> > I would question that statement in the U.S. Dave.
> > It is not a question of who is right or wrong with
> > respect to patents, its just a case who has the deepest
> > pockets and who can make enough money thru a violation
> > so they may hire a lawyer to manipulate the court so
> > a ruling is never made. Two cases I remember one the windshields
> > wiper case and the Sears and Roabucks wrench casewhere even
> > tho the plaintifs went bankrupt pursing justice those who
> > violated the law profited imensely. My patents on antennas
> > as well as the one I am claiming now will be abandond after award
> > since I could never stop any violation let alone pay the maintenance
> > fees.
> > My patent attempt are purely for my own satisfaction.
> > By the way, in some countries the loser picks up the costs which can
> > retard deep pocket violators in any court actions over those with
> > little money.
> > McDonalds found this out to their cost in the U.K. where their
> > opponents
> > had little money and were able to reap huge rewards.
> > Art

3890. Re: Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 13:52:56 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <fuvhqvcn97n2n2go842ihn3hc8d679e93o@4ax.com>
Source record: 105226

On Tue, 04 Nov 2003 20:13:25 GMT, Ron <rons533@dejazzd.com> wrote:

>I am going to install a 30' push up mast to the side of my home with 2
>brackets but I am not able to locate any house brackets large enough for
>the 2" and 1 1/2" pipe. Most that I have seen are very flimsy and will
>only take the normal TV mast. Any ideas on where to purchase the
>brackets?
>
>By the way the mast is going to support a 40 meter dipole and a TGM
>Hybrid Quad with 1.6 sq. feet of wind load.
>
>Ron
>K3SZY

Go to Yahoo search and enter "antenna wall mounts"

It brought up at least one entry that accepts up to 2" pipe:

http://secure2.hostmaster2000.com/Merchant2/merchant.mv?Screen=CTGY&Store_Code=ecomm&Category_Code=Pipe+%26+Wall+Mounts

Bunch of other entries, too.

I had good luck a couple of years ago using the Radio Shack 12" wall
mounts. While they are rated for only 1-1/4" pipe, they can take
bigger.

Bob
k5qwg

3891. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 13:55:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa9020c$1_5@corp.newsgroups.com>
Source record: 105253

Ian White, G3SEK wrote:

> Cecil Moore wrote:
>> For the feedpoint impedance to be purely resistive in an electrical 1/4WL
>> shortened vertical, the current must undergo a round trip phase shift of
>> 360 degrees and the voltage must undergo a round trip phase shift of 180
>> degrees. The loading coil must provide the phase shift that the antenna
>> doesn't provide. For a typical 75m 8 ft mobile antenna, the coil must
>> provide approximately 80 degrees of phase shift.
>
> I'm sure you'll find the answer in Balanis, if you read it with an open
> mind instead of trying to force him to agree with you.

Ian, I learned the above in the class I took from Balanis at ASU in 1995
while I worked for Intel in Chandler, AZ. I asked him a lot of
questions about center-loaded antennas as they are not covered well
in his book. The fact that none of the resident gurus on this newsgroup
will touch the above simple question with a ten foot pole speaks volumes.
A very bright engineer has been in email contact with me over this deductive
reasoning problem. So far, he has not attempted to resolve the conflict
between a lumped inductor and the absolutely necessary phase shift.

Here is the answer to the question presented by Devoldere in "ON4UN's
Low Band DXing". For convenience sake, I will draw the vertical mobile
antenna as one half of a dipole but the same logic applies. Note the
coil is drawn in electrical degrees, not in proportional physical length.

wire coil wire
----------//////////////////////----------
22.5 deg 45 deg 22.5 deg

We know from the end result that this is what has to happen. An electrical
1/4WL antenna simply must cause a 90 degree phase shift in the current
from end to end. Otherwise, it wouldn't be an electrical 1/4WL antenna.

Until someone can explain exactly how a lumped inductor causes a 45 degree
phase shift in the current, I am going to assume that a lumped inductor
is incapable of that feat.
--
73, Cecil http://www.qsl.net/w5dxp

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3892. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:02:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa903c5_5@corp.newsgroups.com>
Source record: 105257

Ian White, G3SEK wrote:
> I don't know what the full detailed explanation is. But I do know that,
> in order to be correct for all possible cases, it *must* include the
> feature that as the physical dimensions of the coil tend towards zero,
> the difference in current between its two ends falls towards zero also.
> Any "explanation" that denies this fundamental physical fact is
> guar-an-teed to be wrong.
>
> So let's agree on that, and then we can move forward to find an
> explanation.

OK, let's agree on that and take another look at the example I just presented on another thread involving half a dipole.

wire coil wire
---------------////---------------
22.5 deg ? deg 22.5 deg

Assuming a lumped inductance, presumably the current into the coil will have the same phase as the current out of the coil. Zero phase shift through the coil means this antenna has the same current phasing as a 40m dipole used on 75m, i.e. the feedpoint current is at a current minimum point. We know that is NOT the case in reality. So what's the answer?
--
73, Cecil http://www.qsl.net/w5dxp

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3893. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:05:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa90456$1_5@corp.newsgroups.com>
Source record: 105258
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Walt Davidson wrote:

> On Tue, 4 Nov 2003 21:38:54 -0600, "Stinger"
> <contact@newsserveronly.com> wrote:
>>The second reason for the fall of Iraq is that a strong democracy needed to
>>be instituted somewhere (besides Israel) in the Middle East
>
> Israel is a democracy?

Actually a representative republic. Three year olds have no vote and
voters vote for representatives, not laws.
--
73, Cecil http://www.qsl.net/w5dxp

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3894. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:13:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa9063e$1_5@corp.newsgroups.com>
Source record: 105259
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Ryan, KC8PMX wrote:
> I typically agree more with the Libertarian parties' ideals, except for the
> drug policies..... As a former user (knock on wood, 10 years and 2 months
> drug-free) and also dealing with people that are users in the emergency
> services related fields, I have absolutely no use for any drug not
> prescribed by a doctor.

And if drugs were legalized, would you feel the same way or would you
start using again? An adult has an inalienable right to determine
the contents of his or her body, for better or worse.
--
73, Cecil http://www.qsl.net/w5dxp

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3895. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:19:55 UTC
From: Nisse <nisse@nospam.com>
Message-ID: <3FA9070A.F9CC692@nospam.com>
Source record: 105260

You could try a piece of twin (short) RG-58's tight together passing the
rotator,
shield connected to earth in one end.

```
------------------0_____________________________________0---------
```

To rig I 2 x RG58, piled together, passing
rotator To Ant.

```
------------------0_____________________________________0---------
```

I
to Earth

I've used this way to pass trough walls and sharp corners, so why not also
at the
rotator. It is NOT an optimum solution, but it kind of works... At hi
power, use
RG8 (or -lookalike).

N

KS7J wrote:

> Please reply to the list or directly to me: shack AT tomochka DOT com.
>
> Hello antenna mavens,
>
> Searching high and low today for examples of feeding a rotating
> antenna with ladder/window/open feed line. My idea would be to use a
> standoff near the tower top (say, 3-4' perpendicular to the tower) and
> drape a large loop of window line from the feedpoint to this standoff,
> then route the remainder of the feed line down and away from the tower
> using standoffs as necessary.
>
> Anyone have experience with this sort of setup or can you suggest a
> better one? Is there a rule of thumb for how large the loop should be
> to accomodate a 450 degree turn?
>
> I would imagine using a stranded conductor feed line would be
> preferable given the amount of flex that may be inherent. How would
> one stiffen the overall draped loop though to prevent it being blown
> near metal in a breeze?
>
> TIA es 73.
>
> Please reply to the list or directly to me: shack AT tomochka DOT com.
>
> - Casey

3896. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:39:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031105093957.28920.00000117@mb-m23.aol.com>
Source record: 105261

G3SEK wrote:

>
>But first we all need to agree that for an ideal lumped loading coil,
>the current at the top and bottom terminals will be the same. If the
>current is not the same at both ends, then the coil cannot be behaving
>as an ideal lumped inductor.

We are back to this line of "reasoning":
.....and if we rip all four legs off the frog and say "Frog jump", frog doesn't jump. The "conclusion" is - Froggie is deaf :-)

Is it a big science secret that coils can cause delay, phase shift?
Can anyone also measure the fricken thing and THEN argue????

We have the effect, W9UCW measured it, ON4UN and W5DXP provided explanations, what's missing? Being wrong, recognizing it and admitting? (Sorry)
Just because software (for now?) cannot digest it, it can't be?
This is becoming amusing to see how serious this misconception was out there and who is on the bandwagon.
Let's see "better" explanation. The difference is THERE doesn't matter how anyone denies it!!!
Knowing about it will help to design and optimize the crippled antennas, including fricken fracktals (with coils).

I am gathering material for test setup allowing to measure RF current in every foot of the loaded antenna, I have two 8 amp meters, so I will have to use some power for full deflection, but it will be just another level of the same thing. You are all invited to witness! I will document it, take pictures and video.

If there are no answers, pointing wrong to the points I have raised in my other posting, then I am done, can't do anything more, just will do the measurements and present the results.

Yuri, K3BU.us

3897. Re: Trying to Locate Push Up Mast Brackets

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 14:43:09 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fa90bbf.1106540531@news.galilei.com>
Source record: 105262

Hi Ron

I just ran down to my local Welding/Blacksmith shop with the distance
I needed from the mounting point to the inside edge of the mast.
They had the band iron in stock and fabricated one for me for $35.00
which included a dip in vinyl to keep it from rusting and all the
needed bolts and washers in stainless.
I had a 50 footer!

TTUL
Gary

3898. Debt, Vacations, Fun? MAKE MONEY NOW!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 15:04:40 UTC
From: Nice Person <iamnicehelpme@yahoo.co.uk>
Message-ID: <bob3i8meg1@hercules.btinternet.com>
Source record: 105263
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio

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member. That makes this program's total cost $0!!! Follow
this link to open your PayPal account:

https://www.paypal.com

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Anytime you find yourself short on cash just take out your $5.00
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lottery every week with no real hope of ever winning.

IMPORTANT!!! IN ORDER FOR THIS PROGRAM TO WORK, YOU MUST BE HONEST. DO
NOT ADD YOUR EMAIL IMMEDIATELY TO THE #1 POSITION, AND MAKE SURE TO
SEND YOUR 5 DOLLARS TO THE PERSON AT #1. IF EVERYONE WHO TRIED THIS
DIDN"T SEND THE MONEY, THEN NOBODY WOULD MAKE A DIME. 5 DOLLARS IS A
VERY SMALL INVESTMENT, ESPECIALLY WHEN YOUR ABOUT TO MAKE MANY MANY
MANY
TIMES THAT AMOUNT. IF WE ARE ALL HONEST, THEN WE ALL MAKE LOTS OF
MONEY!!

REMEMBER, you add your email to the #3 spot, and then move everyone
else
up 1(deleting the person who was formally in the #1 spot, and who you
should have sent your money to). DO NOT add your email to #1 when you
start this program. If everyone did this, then NO ONE would make a
cent.

THIS PROGRAM WORKS - JUST TRY IT

POSITION # 1 PAYPAL Account: lamsmo@aol.com

POSITION # 2 PAYPAL ACCOUNT: pepsiholic44@aol.com

POSITION # 3 PAYPAL ACCOUNT: bunnylovemedo@yahoo.com

Integrity and honesty make this plan work.
Participants who actively promote this program will average between
$8000
and
$12000 and receive the donations within two weeks.

This is not a chain letter. You are simply making a donation of $5.00
to another person. The Program does not violate title

18 section 1302 of the Postal and lottery code.

Remember -TIME is of the essence. YOU can choose to live Paycheck-to-Paycheck or live FREE from FINANCIAL BONDAGE. Become a part of the donation program and help people help people.

This program is about helping each other!

Success is a journey - Not a destination!

Start Your Journey TODAY!!!!

3899. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 15:13:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <uFprC3VzORq$EAwA@ifwtech.co.uk>
Source record: 105264

Cecil Moore wrote:
>OK, let's agree on that and take another look at the example I just presented
>on another thread involving half a dipole.
>
> wire coil wire
>---------------////---------------
> 22.5 deg ? deg 22.5 deg
>
>Assuming a lumped inductance, presumably the current into the coil will have
>the same phase as the current out of the coil. Zero phase shift through the
>coil means

>this antenna has the same current phasing as a 40m dipole used on
>75m, i.e. the feedpoint current is at a current minimum point.

Sorry, I don't understand that last statement...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3900. Re: Debt, Vacations, Fun? MAKE MONEY NOW!!!!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 15:39:29 UTC
From: --exray-- <a@b.c>
Message-ID: <vqi6c3nm3i8a78@corp.supernews.com>
Source record: 105265
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio

Join me in reporting this scammer to:
news-complaints@lists.btinternet.com
Forward the message with complete headers.

-Bill M

Nice Person wrote:
> Follow the directions below and in two weeks you'll have up to

3901. Any Good Or Useful For Listening Only ?: WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:01:27 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <2c6dnXUSYL8SgzSiRVn-hA@comcast.com>
Source record: 105266

Hello:

Am using a long wire (actually, I guess I should call it a random length wire) antenna for
receiving only. It runs around the 4 edges of my attic, and then down to rceiver.

Do listening only up to 30 MHz. Have a JRC NRD 545

Saw an ad for the WinRadio Balun on the Grove site. [The WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter]

Would sure appreciate any opinions as to whether it's worth getting, and if it "might" improve receotion
for me ?

Any other thoughts on this would be appreciated.

I've seen, over the years, comments that for receiving only, and using a long-wire, a Balun to match Z would not
add anything to S/N, and isn't worth even trying.

Others have said in effect, "it can't hurt to match the Z."

A bit confused.
Anyone ever used this unit, or one like it, for receiving ?

Thanks,
Bob

3902. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:13:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa92258$1_1@corp.newsgroups.com>
Source record: 105267

Ian White, G3SEK wrote:

> Cecil Moore wrote:
>> OK, let's agree on that and take another look at the example I just
>> presented
>> on another thread involving half a dipole.
>>
>> wire coil wire
>> ---------------////---------------
>> 22.5 deg ? deg 22.5 deg
>>
>> Assuming a lumped inductance, presumably the current into the coil
>> will have the same phase as the current out of the coil. Zero phase
>> shift through the coil means this antenna has the same current phasing
>> as a 40m dipole used on 75m, i.e. the feedpoint current is at a current
>> minimum point.
>
> Sorry, I don't understand that last statement...

A 40m 1/4WL vertical used on 40m is 90 degrees long.

A 40m 1/4WL vertical used on 80m is 45 degrees long and we know its characteristics.
If the coil above has zero phase shift, the antenna above is also 45 degrees
long and will exhibit the feedpoint characteristics of a 40m 1/4WL vertical
used on 80m but we know it doesn't exhibit those characteristics. ERGO,
the phase shift through the coil is not zero.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3903. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:17:14 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <eo9qb.206248$0v4.16281495@bgtnsc04-news.ops.worldnet.att.net>
Source record: 105169
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Sir Clark,

No work on using the embedded moldable plastic dielectric at 50 Mc... as you point out the size and weight does not appear to be advantageous.

However, above 900 the size shrink, has an advantage

we have other ideas to use the FWT at lower frequencies.... stay tuned

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:ro9dqv8ateack92prp6srjgiqtf5r32rdr@4ax.com...
> On Mon, 03 Nov 2003 17:00:58 GMT, "Marc H.Popek"
> <LVMarc@worldnet.att.net> wrote:
>
> >www.fwt.niat.net
> >
> >This dielectric embedded antennas are smaller than naturally occurs and yet
> >have a net gain
>
> Hi Marc,
>
> Interesting sentence construction.
>
> A cogent question would reveal some perspective: How much would your
> 13dBi dielectric embedded antennas for TV Channel 2 weigh?
>
> 73's
> Richard Clark, KB7QHC

3904. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:24:59 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <vv9qb.206254$0v4.16281988@bgtnsc04-news.ops.worldnet.att.net>
Source record: 105170
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

You need to understand more about capture area effective area etc.

The Bogus gain is relatively easy to measure, open field, sig generator two
standard dipoles and then compare with the FWT OR

two FWT's antennas on same range and use Friis equation to predict expected
isotropic, then you compare with what your DUT performs ...

It really has the gain we claim, sir!

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:vdqdnQgfSIz6VjuiRVn-vw@comcast.com...
>
> "Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
> news:eRvpb.204144$0v4.16043402@bgtnsc04-news.ops.worldnet.att.net...
> > www.fwt.niat.net
> >
> > This dielectric embedded antennas are smaller than naturally occurs and
> yet
> > have a net gain
>
> More correctly, they CLAIM a gain, relative to isotropic.
>
> If the antenna is smaller than a free space antenna, then it looses
capture
> area.
> I would be very interested to know how they recoup that.
> I suspect these antennas might need some power to drive an on-board
> amplifier, which means that their gain claim is bogus, and what they
aren't
> telling you is that the noise floor comes up also.
>
> TANSTAAFL.
>
>

3905. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:29:14 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311050829.23c10df4@posting.google.com>
Source record: 105171

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:<nc$5kGErbMq$EAAj@ifwtech.co.uk>...
> Yuri wrote:
> >
> >I am just amazed that with all the "theoretical" arguing going on, why
> >none of the "learned" experts measure, answer or explain the following
> >REAL effects or show where I (we) are wrong:
> >
> [...]
>
> Yuri is making some fair points - those practical observations do need
> to be explained.
>
> But first we all need to agree that for an ideal lumped loading coil,
> the current at the top and bottom terminals will be the same. If the
> current is not the same at both ends, then the coil cannot be behaving
> as an ideal lumped inductor.

I believe that Tom took this stance early on when he explained
variances of slight current change by virtue of the capacitive
component of the real world
inductor when wound on a scale that is used on a vertical radiator.
I suspect that if he brought Q into the equation /discussion people
would not of gotten off track so quickly in the first place! People
have become so enamourd with modeling technics they are willing to let
their guard down
and accept what their results show and throw caution to the wind.
I think I will follow Roy and get out of this one
Art

Now the vainess of man does not allow one to admit error,
so the hole digging continues with faces pointed down
despite pleas from the faces above
Art

>
> That tells us that the explanation has to involve the non-zero physical
> dimensions of the coil. In other words, the coil is no longer just a
> pure inductor - it also has some antenna-like distributed properties,
> which do allow (and indeed require) a current variation along the
> length.
>
> I don't know what the full detailed explanation is. But I do know that,
> in order to be correct for all possible cases, it *must* include the
> feature that as the physical dimensions of the coil tend towards zero,

> the difference in current between its two ends falls towards zero also.
> Any "explanation" that denies this fundamental physical fact is
> guar-an-teed to be wrong.
>
> So let's agree on that, and then we can move forward to find an
> explanation.

3906. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:30:51 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <%A9qb.206273$0v4.16282021@bgtnsc04-news.ops.worldnet.att.net>
Source record: 105172
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

the standard antenna's on the web site, have a weight that span from 1 oz
to 4 oz for the smallest to biggest, respectively.

1/2 the linear dimension = 1/8 volume if Enron's finances were this
rudimentary, they would still be in business!

Hey consider this,

an antenna with 1/4 the aspect ratio (effective front viewed area) also has
a 1/4 chance of being hit by a defined shrapnel density specified in
military antenna requirements. AS FWT ARE smaller, they also posses a lower
probability of damage from gunfire for a given field.

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:6mjdqvg316l1kisl0l1j3f7r93p54p8np6@4ax.com...
> On Mon, 3 Nov 2003 16:40:59 -0500, "Dave VanHorn" <dvanhorn@cedar.net>
> wrote:
>
> >
> >"Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
> >news:eRvpb.204144$0v4.16043402@bgtnsc04-news.ops.worldnet.att.net...
> >> www.fwt.niat.net
> >>
> >> This dielectric embedded antennas are smaller than naturally occurs and
> >yet
> >> have a net gain
> >
> >More correctly, they CLAIM a gain, relative to isotropic.
>
> They? HE (the CTO in fact). American business has a recent history
> of clown elevation.
>
> >
> >If the antenna is smaller than a free space antenna, then it looses
capture
> >area.
>
> Capture area is hardly an issue for even the full size antennas they
> replace.
>
> >I would be very interested to know how they recoup that.
> >I suspect these antennas might need some power to drive an on-board
> >amplifier, which means that their gain claim is bogus, and what they

aren't
> >telling you is that the noise floor comes up also.
> >
> >TANSTAAFL.
> >
> Hi Dave,
>
> What is more to the matter is unstated issues of efficiency. I will
> let the claims of 8 fold boons pass (which is marketese from the world
> of ENRON). Compare these "advantages" of reclaimed volume to the
> unanswered query of weight (no claims about density are there?).
>
> Leftover halloween candy.
>
> 73's
> Richard Clark, KB7QHC

3907. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna w uwb

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 16:39:04 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <Il9qb.206283$0v4.16283176@bgtnsc04-news.ops.worldnet.att.net>
Source record: 105173
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Exactly, plus consider this,

the raditiative elements, are operating at 1/4 resonances (hence preferable radiation resistance and bandwidths too!) it just that they are smaller in a dielectric than in free space. further, the spacing between array elements, directors, reflectors, etc also shrink by the Er ^0.5. shrinking the aggregate spacing and the overall dimensions of the final antenna.

Stayed tuned as we are releasing bi & tri band antenna's soon.

And a host of UWB antennas. Even a UWB optimized to deposit energy inside of a human for echocardio-graphic imaging has UWB radar... UWB antenna technology is in need of standard product offerings... needs better sign generation too!

I'd like to see the electronics for wi fi and uwb put onto or into the antenna FWET antenna modules, simplifying the critical electronics to antenna interface.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bo6to5$c74$1@titan.btinternet.com...
> Funnily enough, there is no decrease in capture area with simple, very small
> antennas. This is a difficult conception to get people's brains around.
>
> There is only a (but important) decrease in efficiency because radiation
> resistance decreases faster than the loss resistances incurred in matching
> the antenna to the receiver. Matching loss resistance increases as the
> antenna dimensions become smaller.
>
> For example, think in terms of the Q and loss resistance of the high
> inductance coil needed in an antenna tuner.
>
>
>

3908. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 17:50:19 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <DZednUKk_8PMpTSiRVn-ig@comcast.com>
Source record: 105174
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
news:vv9qb.206254$0v4.16281988@bgtnsc04-news.ops.worldnet.att.net...
> You need to understand more about capture area effective area etc.
>
> The Bogus gain is relatively easy to measure, open field, sig generator
two
> standard dipoles and then compare with the FWT OR
>
> two FWT's antennas on same range and use Friis equation to predict
expected
> isotropic, then you compare with what your DUT performs ...
>
> It really has the gain we claim, sir!

As it happens, I'm headed to DLS in chicago soon http://www.dlsemc.com/ ,
and I have an application for this sort of antenna, provided it passes the
"snake oil" test. www.mobilecommand.net

We have a bluetooth module that could use such an antenna, as well as a
wi-fi module coming along in the near future.

If I can wedge it into our testing day, I wouldn't mind giving it a test,
and reporting the results back here.

3909. Re: Antenna Safety Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 18:13:11 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <a4fiqvc3tmtmjsclrdm756brs1lip3i7n7@4ax.com>
Source record: 105177

On Wed, 05 Nov 2003 02:22:29 GMT, asdf <asdf@qwerty.com> wrote:

>Jim wrote:
>
>> ... must also agree with Doc, the odds are not
>> much better (or worse, depending on your outlook!) of hitting the
>> lottery. ...
>
>Actually, I read somewhere that you're about 1000 times more likely to be
>hit my lightning than to win the PowerBall. I would imagine it would vary
>considerably depending on which state lottery you're comparing it to, but
>I'd also imagine that lottery odds are in general much longer than being
>hit by lightning odds (i.e. winning the lottery is much less likely).

Guess I'm gonna have to ask for better odds as my tower gets hit bout
3 times a year on average.
http://www.rogerhalstead.com/tower.htm
There are taller towers around, but it's two miles to the nearest one.

Considering I never disconnect the gear I've had very little damage.
One direct hit really frazzled the end of the big 144/440 vertical,
blew off all the coax seal and tape, and even removed the plating from
all the connectors at the top of the tower. I did lose the front end
out of the 2-meter rig on that one. The water running out of the 9913
after the lightening removed the coax seal was at least as big a
problem.

One-of-these-days I'm going to get some static balls up there to see
if they make a difference.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>

3910. Re: Help IDing this antenna base or brand please?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 18:15:31 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <cgfiqvctcc2o9gfe1u25qtdjspg0gq7inh@4ax.com>
Source record: 105175

On Mon, 03 Nov 2003 19:16:31 GMT, Dragon Doctor
<dragondoctor2001@yahoo.com> wrote:

>This 5/8 wave 2M stick has been riding around in the back
>of my 4x4 for years and I've forgotten what brand it is and I now
>need a hole type mount for it.
>Anybody recognize this from the pix?
>http://f1.pg.photos.yahoo.com/ph/dragondoctor2001/lst?.dir=/ant+base
>
"Looks like" a Diamond, or Comet. They are interchangable.
My mag mount looks very much like that.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>Thanks in advance for your help on this.

3911. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 18:29:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3afiqv4p3iih2gfgt01tlihahkbcc5n4ep@4ax.com>
Source record: 105176
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 05 Nov 2003 16:17:14 GMT, "Marc H.Popek"
<LVMarc@worldnet.att.net> wrote:

>Sir Clark,
>
>No work on using the embedded moldable plastic dielectric at 50 Mc... as you
>point out the size and weight does not appear to be advantageous.
>
>However, above 900 the size shrink, has an advantage
>
>we have other ideas to use the FWT at lower frequencies.... stay tuned
>

CTO?

What does that stand for in your organization?

If we are to judge your product (which, by the way, has a page down):
>>Standard Features
...
>> * Specifications - FWT Antennas can be built from 49 to 10,000 MHz.

Seems you could have as easily claimed
>> * Specifications - FWT Antennas can be built from 900 to 10,000 MHz.
if, in fact, that could be achieved.

73's
Richard Clark, KB7QHC

3912. To Bob Miller; re Your Answer To My Balun Quest.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 18:48:48 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <GuudnVlrAchV2DSiRVn-gw@comcast.com>
Source record: 105179

Hi Bob:

Tried to e-mail you, but wouldn't go thru.
Guess it's best to stick to newsgroup for quest's and answers

Am pretty new at this, and although I always thought I had things hooked up
right, now you have wondering.

I have my "long-wire" antenna going to the High Z input.

This seems to contradict your statement: If your long wire is connected to
your low-z terminal, you're already
in business

Am I right in that it should be going to the High Z input ?

Is it that the output end of the built in Hi Z input's Balun you mentioned
is the exact same as the input to the Low Z coax ?

BTW: -heard anything about a new version of the 545 coming out ?
- what software are you usaing for download and control. ?

Sure is a lot to learn about using the NRD to best advantage, for a beginner
like me.
Am enjoying it, though. JRC turns out a nice product; it's a joy to use.

To reply please use; rgsrose@comcast.net

Best regards,
Bob

3913. Re: dielectric antennas that appear to work?Re: Potted 900MHz PCB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 19:06:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j9giqv4f8gbq45lhe3f8ce3n3nbeok8pmr@4ax.com>
Source record: 105180
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Wed, 05 Nov 2003 16:30:51 GMT, in rec.radio.amateur.antenna you
wrote:

> the standard antenna's on the web site, have a weight that span from 1 oz
>to 4 oz for the smallest to biggest, respectively.
>
>1/2 the linear dimension = 1/8 volume if Enron's finances were this
>rudimentary, they would still be in business!
>
>Hey consider this,
>
>an antenna with 1/4 the aspect ratio (effective front viewed area) also has
>a 1/4 chance of being hit by a defined shrapnel density specified in
>military antenna requirements. AS FWT ARE smaller, they also posses a lower
>probability of damage from gunfire for a given field.
>

CTO,

1 to 4 Oz at what scale and to what comparison? More ENRON marketing
factoids. ENRON has no product offered and I notice you have no page
of products offered either.

Would you like to comment on how much flak your virtual designs have
avoided here? It would seem you have the boy scout's electronics
dictionary handy to draw terms from indiscriminately to scatter
through these non-responsive marketing postings you are making (from
your home computer? :-)

Sales must be extremely tenuous for you to have to find ego-salve in
an amateur group. Let's see, a slow server, a .net domain name,
posting business news from a private account, no products, but a lot
of power-point presentations and you have trouble with the fundamental
questions. All of this adds up to a vanity web site.

Let's look at another factoid published:
>Marc Popek, CTO of Focused Wave Technology Group,
>moved to Las Vegas over sixteen years ago.
>He is a successful entrepreneur and American inventor,
>holding over 12 patents in a wide swath of technologies;
>including laser control, exotic signal processing,
>intelligent controls, wireless communications and antennas.

Through a search of the PTO against the name Popek we find:
>Results of Search in 1976 to present db for:
>IN/Popek: 27 patents

9 Popek; Marc H. (Las Vegas, NV)
Apparatus and method for automatic climate control- filed 1994
Phased array acoustic signal processor - filed 1988
Impulse waveform drive apparatus for surface acoustic wave chirp system - filed 1988
Process for fabricating a sculptured stripling interface conductor - filed 1988
Electro-optical phase modulator - filed 1988
Sculptured stripline interface conductor - filed 1986
Driver unit for a laser Q-switch - filed 1985
Linear gain voltage controlled oscillator with modulation compensation - filed 1983
Frequency modulation system for a frequency synthesizer - filed 1984
7 Popek; Bruce P. (South Windsor, CT)
3 Popek; Witold J. (716 S. Milwaukee Ave., Wheeling, IL 60090)
2 Karen Popek (Poughquag, NY)
2 Popek; Joseph C. (Detroit, MI)
2 Popek; Gerald J. (Los Angeles, CA)
2 Popek; Stephen (Warren, OH)

How does this compare with:
>holding over 12 patents in a wide swath of technologies;
12? I count 9. Wide technologies? The majority during the late 80's were assigned to Harris, earlier work to Motorola. The titles above reveal those were typically confined to one very specialized segment.

>including laser control, exotic signal processing,
>intelligent controls, wireless communications and antennas.
The only antennas patented, by Bruce, not Mark, were for toys.
Intelligent controls? HVAC comes to mind for work 10 years ago.
Laser control and signal processing are not simple topics, but neither are they applicable to antennas barring unique invention - notably absent from the list above.

Is this talent fungible to antennas commonly courted in this group?
Could be, but there is clearly an absence in experience to the matter insofar as the grandiose credentials suggest.

The fact of the matter is that the material presented at:
http://www.fwt.niat.net/
is not much more than antenna engineering samples drawn from classroom introductory lab work at the local University.

73's
Richard Clark, KB7QHC

3914. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 19:25:07 UTC
From: desmoface@aol.com
Message-ID: <20031105142507.23681.00000211@mb-m17.aol.com>
Source record: 105181

> just wondering.... can I take a 40M delta loop and add an 80M dipole to it?
>> Will there be interaction? SWR problems?

Why not just increase the size of your loop to make it an 80 meter loop?? That should cover 40m, at least thats what I've read...I'm in the process of building my 80 meter loop which will hopefully work 10-80...Good luck..

Steve

3915. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 19:30:09 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <+jlPLwbBUqEAAj@ifwtech.co.uk>
Source record: 105182

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>
>> Cecil Moore wrote:
>>> OK, let's agree on that and take another look at the example I just
>>>presented
>>> on another thread involving half a dipole.
>>>
>>> wire coil wire
>>> ---------------////---------------
>>> 22.5 deg ? deg 22.5 deg
>>>
>>> Assuming a lumped inductance, presumably the current into the coil
>>>will have the same phase as the current out of the coil. Zero phase
>>> shift through the coil means this antenna has the same current
>>>>phasing
>>> as a 40m dipole used on 75m, i.e. the feedpoint current is at a current
>>> minimum point.
>> Sorry, I don't understand that last statement...
>
>A 40m 1/4WL vertical used on 40m is 90 degrees long.
>
>A 40m 1/4WL vertical used on 80m is 45 degrees long and we know its
>characteristics.
>If the coil above has zero phase shift, the antenna above is also 45 degrees
>long and will exhibit the feedpoint characteristics of a 40m 1/4WL vertical
>used on 80m but we know it doesn't exhibit those characteristics. ERGO,
>the phase shift through the coil is not zero.

OK, I see what you're getting at, but by changing the frequency you are losing sight of some important points. Let's stay on the *same* frequency, halve the physical height of the antenna and insert a lumped loading coil at the midpoint.

Instead of being 90deg tall, our vertical monopole is now only 45deg tall (physically). Drawn on its side, and fed against ground at one end, it now looks like:

>>> wire coil wire
>>> ---------------////---------------
>>> 22.5 deg ? deg 22.5 deg
>>>
(just as you drew it)

Where you're going astray (I suspect) is in believing that the coil literally "replaces" the 45deg of antenna that was lost when we halved the height. It doesn't - the loading coil drastically changes the current distribution.

Fed with 1.0A at the base, the original quarter-wave has a roughly cosine-shaped current distribution, so the current at a point 22.5deg from the top is 1A * cos(90-22.5) = 0.38A.

Now feed the loaded antenna with 1.0A at the base. The current distribution is now radically different: in the bottom 22.5deg of the antenna, the current hardly changes - let's say it's 0.9A at the bottom of the loading coil.

Since we have assumed a lumped loading coil, the current at the top of the coil is the same 0.9A. But now the current distribution in the top 22.5deg is very different from the full-size case: it tapers much more sharply, from 0.9A down to zero at the very top.

This is all standard stuff. My reason for walking through it is to emphasize that shortening the antenna and loading it changes many things about the current distribution, both above and below the loading coil. And here are two other important differences: the feed impedance of the loaded antenna is much lower than that of the full-size; and the much sharper reduction in current is associated with a much higher E-field over the same length of top section.

To sum up, shortening and loading the antenna creates so many important differences that you're misleading *yourself* if you say that the loading coil simply "replaces" the missing length of antenna.

Two footnotes:

1. The diagram for current distribution with center loading in 'Low Band DXing' is based on the same incorrect assumption that loading coil somehow fully "replaces" the missing 45deg of antenna. (Fortunately the method later in the same chapter for calculating the inductance of loading coils is still OK, because it doesn't depend on any assumptions about current distribution.)

2. I haven't thought about an answer to Cecil's problems of what happens to the "missing" 45deg, and what happens to the forward and reflected waves of voltage and current. Since it's Cecil who chooses to think about antennas in such ways, he'll have to solve his own problems!

My only point is that a correct solution can *not* involve a difference in the currents at the two ends of an idealized lumped inductor. Such a difference simply cannot be... so the true solution will be that bit harder for Cecil to find.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3916. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 19:34:50 UTC
From: desmoface@aol.com
Message-ID: <20031105143450.23681.00000213@mb-m17.aol.com>
Source record: 105183

Hey guys and gals, Im kind of new on this group...What do you guys think about full wave horizontal loops?? I was researching my next antenna and wanted to homebrew a wire of some sort...was all set to make a fan dipole for 20, 40 and 80 when someone turned me onto full wave loops..with a tuner it is said that a full wave 80 meter loop can tune most of the higher frequencies (10, 20, 40 and probably the warc bands)..makes sence as 1 wavelenght on 80 is 2 on 40, 4 on 20, etc...

Oh well, mine is ready to go up, have to leader lines in the trees, all im waiting for is wire, rope and coax which should be here any day...

What do you guys/gals think of the full wave loops?

Steve
kb8viv

3917. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 19:39:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1tiiqvg6ctkoiq2ajd9gagtrlme6prp7un@4ax.com>
Source record: 105184

On 05 Nov 2003 14:39:57 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>
>We are back to this line of "reasoning":
>.....and if we rip all four legs off the frog and say "Frog jump", frog doesn't
>jump. The "conclusion" is - Froggie is deaf :-)
>
...
>
>I am gathering material for test setup allowing to measure RF current in every
>foot of the loaded antenna, I have two 8 amp meters, so I will have to use some
>power for full deflection, but it will be just another level of the same thing.
>You are all invited to witness! I will document it, take pictures and video.
>

Hi Yuri,

Good engineering starts with a plan. You start with the instruments
you have available. This is the line of "reasoning" where, if you
have only a hammer, all problems are nails.

It took no more than 1 minute to summon up my EZNEC file of your test
set-up (which you have still failed to confirm, deny, amend, or
specify) to observe that your comment:
>so I will have to use some power for full deflection
which is rather low on specifics to observe for myself this must mean
100W as the base current for the model comes quite close to the 8
Ampere full scale deflection for 100W drive.

However, we get into issues of your having done work at the 100mA
levels and we thus turn to my earlier comments about accuracy.

100mA on an 8 Ampere full scale 3.5 inch meter is slightly more than
1% deflection (less than the width of the needle). The 100W
excitation current levels near and through the model's solenoid
exhibit values in the 1 Ampere region or at 12% deflection for an
instrument that is arguably as accurate as 10%. This does not bode
well for a compelling exhibition of any conclusive results.

NOW, if I were wrong to presume that 100W is going to be the
excitation - is that MY fault? If we jack up the power applied
(easily within the means of an amateur so empowered, so to speak) then
that region can certainly be forced into readings of vastly improved
accuracy relative to the available metering. HOWEVER, this now
inhibits doing the full length survey because the lower section would

clearly overload the metering. You can't win for losing.

Well, you can win if you are accomplished at the bench (a rare talent in this ivory tower where merit is weighed by angel population counts) by modifying your metering through shunts. I will warn you, however, it is incumbent upon you to reveal how that was accomplished, how it was confirmed and the data to support that too. You will also have to measure the surface temperatures and conspire to replicate them to your metering (something that you have not really responded to) to observe the systematic error introduced by these ever growing power applications. This, in a sense, is a turn of "you can't win for losing, but you can get close, but you still might lose anyway."

I might add that you stand every chance of being slow cooked while taking readings. Both for safety's sake and accuracy (so as to not disturb the fields and those readings) use a telescope. We don't want your video to appear on FOX. I will add for the sake of anticipating the gowned one's suggestions, remote readings through extended leads will invalidate everything.

73's
Richard Clark, KB7QHC

3918. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 20:00:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qhliqvsk6j4b9sjhs6sjap7qn3k0op2t7v@4ax.com>
Source record: 105185

On 05 Nov 2003 19:34:50 GMT, desmoface@aol.com (Desmoface) wrote:

>
>What do you guys/gals think of the full wave loops?
>
>Steve
>kb8viv

Hi Steve,

Your request seems simple enough to resolve with the free version of
EZNEC and reduce the risk of over-analysis that abounds here. ;-)

Visit:
http://www.eznec.com/

73's
Richard Clark, KB7QHC

3919. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 20:18:45 UTC
From: denton <denton@oregontrail.net>
Message-ID: <boblhc$3n4$1@news.oregontrail.net>
Source record: 105186

I run two loops...one about 220' long...just some wire strung underneath a dipole, fed at the top with twin lead and I open it up at the bottom to use on 160.
The second is a 20 meter delta loop, fed at the bottom with twin lead that I use mostly on 20meters.
The smaller loop has better noise to signal on the higher bands than the bigger loop, but still the larger loop will work 80 thru 10 nicely, as a loop.
I have tried dipoles, G5RV's and other ants in the past but the loops seem to be the best performer for me.
"Desmoface" <desmoface@aol.com> wrote in message news:20031105143450.23681.00000213@mb-m17.aol.com...
> Hey guys and gals, Im kind of new on this group...What do you guys think about
> full wave horizontal loops?? I was researching my next antenna and wanted to
> homebrew a wire of some sort...was all set to make a fan dipole for 20, 40 and
> 80 when someone turned me onto full wave loops..with a tuner it is said that a
> full wave 80 meter loop can tune most of the higher frequencies (10, 20, 40 and
> probably the warc bands)..makes sence as 1 wavelenght on 80 is 2 on 40, 4 on
> 20, etc...
>
> Oh well, mine is ready to go up, have to leader lines in the trees, all im
> waiting for is wire, rope and coax which should be here any day...
>
> What do you guys/gals think of the full wave loops?
>
> Steve
> kb8viv

3920. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 20:29:45 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311051229.30742ced@posting.google.com>
Source record: 105187

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fa8fcb4$1_5@corp.newsgroups.com>...
> Mark Keith wrote:
> > This is the way I view it, and why I couldn't automatically endorse
> > the fairly large difference they saw. Unless the coil is very long,
> > say as in a helical whip, I see it acting pretty much as a lumped
> > inductor. Sure, the current may vary some through the coil when it's a
> > foot or so long bugcatcher coil, but I don't see it being a major
> > issue. I wouldn't normally expect to see a sharp current taper across
> > the coil. I see that type of coil acting much as a "one piece" lumped
> > inductor, not as a many turned rf roller coaster ride. Not a perfect
> > lumped inductor, but close enuff for average gov work. MK
>
> The round trip current phase shift in an electrical 1/4WL vertical must
> total 360 degrees. If the coil doesn't perform part of that phase shift,
> what does?

What if it does though? If the coil is still a fairly small portion of
the overall length, I don't see the change as severe. Heck, if current
is supposed to be the same on each end of the coil, it should be the
same going in both directions..:) Seems to me it would pretty much
equal out in the overall scheme of things. Even if one ends up with a
bit more current, being the coil is not that large overall, the
difference should not be drastic. Or to my thinking anyway..I think
it's quite possible a coil mounted higher than 1/2 the total length
shows a sharper cutoff of current at it's end. To me , it's because of
the shorter overall length of the stinger above the coil. The current
taper at the top of the coil and above is more abrupt than if the coil
were center loaded. Or thats the way I see it. Whether it's right or
wrong remains to be seen... MK

3921. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 20:37:22 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bobkjg$i0j$1@news1.kornet.net>
Source record: 105188
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fa90456$1_5@corp.newsgroups.com...
> Walt Davidson wrote:
>
> > On Tue, 4 Nov 2003 21:38:54 -0600, "Stinger"
> > <contact@newsserveronly.com> wrote:
> >>The second reason for the fall of Iraq is that a strong democracy needed
to
> >>be instituted somewhere (besides Israel) in the Middle East
> >
> > Israel is a democracy?
>
> Actually a representative republic. Three year olds have no vote and
> voters vote for representatives, not laws.

Very much like our own government..

3922. Re: OCF Dipole vs. G5RV vs. Carolina Windom ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 20:50:38 UTC
From: desmoface@aol.com
Message-ID: <20031105155038.23813.00000232@mb-m10.aol.com>
Source record: 105189

>I have tried dipoles, G5RV's and other ants in the past but the loops seem
>to be the best performer for me.

Hi Denton, thats what I've been hearing from people that have used full wave loops...supposedly much quieter (than dipoles/g5rv's etc) as its a terminated antenna...I can't wait to get mine up..Thanks again..

Steve
kb8viv

3923. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 21:28:06 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031105162806.28980.00000208@mb-m23.aol.com>
Source record: 105190

>
>However, we get into issues of your having done work at the 100mA
>levels and we thus turn to my earlier comments about accuracy.
>
>100mA on an 8 Ampere full scale 3.5 inch meter is slightly more than
>1% deflection (less than the width of the needle).

Richard,
you got the "wires crossed" - mixing two cases.
W9UCW measured data I have been quoting in my article at K3BU.us, he SET the power for the bottom meter to read full scale on his 100 mA meter. Then he read the top meter which showed readings in the 40 to 60 % down.
I have not done my measurements besides "hand test" and frying the Hustler coils. Just brief test to see how much deflection I get with 100W on 8A meter.

I know a thing or two about measurements, done my years at IBM Test Engineering Dept. I will document my tribulations and if get it, use infrared camera too. If W9UCW lied, deceived us I will be the first one to choke him :-) So far he put figures on what I knew and they jive.
Why don't you guys that know pitfalls of measurement do it and report ?????
Hello????

Yuri. K3BU.us

I am not as dumb as Reg portrays me. Got highest IBM Award - Outstanding Contribution Award signed by then chairman Frank Cary for Design and Development Excellence. BTW this was doing something that "experts" at IBM Endicott lab said it couldn't be done. This coil stuff is trivial in comparison.

3924. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 21:38:50 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA96DEA.5DE282AB@uci.edu>
Source record: 105191

"Ian White, G3SEK" wrote:
> Since we have assumed a lumped loading coil, the current at the top of
> the coil is the same 0.9A. But now the current distribution in the top
> 22.5deg is very different from the full-size case: it tapers much more
> sharply, from 0.9A down to zero at the very top.

Right. But the discussion is about whether the lumped loading coil
model is accurate. Any conclusions based upon inaccurate assumptions
would probably also be inaccurate.

73, Jim AC6XG

3925. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 22:16:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa97781_4@corp.newsgroups.com>
Source record: 105192

Ian White, G3SEK wrote:
> Where you're going astray (I suspect) is in believing that the coil
> literally "replaces" the 45deg of antenna that was lost when we halved
> the height. It doesn't - the loading coil drastically changes the
> current distribution.

No, I do NOT claim that the coil literally replaces the 45 degree of antenna that was lost. The feedpoint impedance drops which indicates that it is not a literal replacement. The decrease in the feedpoint impedance indicates that the antenna is not radiating as much energy in one cycle as a full 1/4WL vertical since the reflected current has increased. This is consistent with field strength tests.

> Since we have assumed a lumped loading coil, the current at the top of
> the coil is the same 0.9A. But now the current distribution in the top
> 22.5deg is very different from the full-size case: it tapers much more
> sharply, from 0.9A down to zero at the very top.

I propose that it cannot do that. Seems to me, the impedance looking toward the end of the antenna is approximately the same for a six foot whip Vs the base of a six foot whip mounted atop a coil. I don't see any reason to suspect otherwise. Please provide me a reason.

> the feed impedance of the
> loaded antenna is much lower than that of the full-size;

... which proves my point above. That indicates that it is not as efficient a radiator as a full size 1/4WL vertical. In fact, the less efficient it becomes as a radiator, the lower the feedpoint impedance. This fits in exactly with the fact that a good 75m mobile antenna has a ~12 ohm feedpoint impedance.

> To sum up, shortening and loading the antenna creates so many important
> differences that you're misleading *yourself* if you say that the
> loading coil simply "replaces" the missing length of antenna.

I never said that so I assume that is your straw man. If that is not a straw man, I apologize but it walks and talks like a straw man.

> 1. The diagram for current distribution with center loading in 'Low Band
> DXing' is based on the same incorrect assumption that loading coil
> somehow fully "replaces" the missing 45deg of antenna.

Please prove that a shortened antenna that is electrically 90 degrees doesn't replace the missing number of degrees in the physical antenna.

> 2. I haven't thought about an answer to Cecil's problems of what happens
> to the "missing" 45deg, and what happens to the forward and reflected
> waves of voltage and current.

That's more than obvious, Ian. :-) How about thinking about those nagging questions and providing us an answer? This is what happens when one ignores the basics. The steady-state shortcut strikes again.

> My only point is that a correct solution can *not* involve a difference
> in the currents at the two ends of an idealized lumped inductor. Such a
> difference simply cannot be... so the true solution will be that bit
> harder for Cecil to find.

Since there is no such thing in reality as an idealized lumped inductor, there is no real solution to the problem. Please allow me to suggest that you guys are just engaging in mental masturbation. Was it good for you? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3926. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 22:23:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa97914$1_4@corp.newsgroups.com>
Source record: 105193

Mark Keith wrote:

> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fa8fcb4$1_5@corp.newsgroups.com>...
>>The round trip current phase shift in an electrical 1/4WL vertical must
>>total 360 degrees. If the coil doesn't perform part of that phase shift,
>>what does?
>
> What if it does though? If the coil is still a fairly small portion of
> the overall length, I don't see the change as severe. Heck, if current
> is supposed to be the same on each end of the coil, it should be the
> same going in both directions..:) Seems to me it would pretty much
> equal out in the overall scheme of things.

May I suggest that you think about the problem for awhile longer? If the
current doesn't undergo a 360 degree phase shift in its round trip, that
will *decrease* the feedpoint current. But we know the feedpoint current
increases when a loading coil is installed. This is a clear indication
that the reflected current is still in phase with the forward current.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3927. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 22:28:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa97a4e$1_4@corp.newsgroups.com>
Source record: 105194

Yuri Blanarovich wrote:
> I am not as dumb as Reg portrays me.

What Reg needs is some Bella Sera Merlot. Dang, that's good stuff.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3928. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 23:09:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <8BGvz0gPMYq$EAjx@ifwtech.co.uk>
Source record: 105195

Jim Kelley wrote:
>
>
>"Ian White, G3SEK" wrote:
>> Since we have assumed a lumped loading coil, the current at the top of
>> the coil is the same 0.9A. But now the current distribution in the top
>> 22.5deg is very different from the full-size case: it tapers much more
>> sharply, from 0.9A down to zero at the very top.
>
>Right. But the discussion is about whether the lumped loading coil
>model is accurate. Any conclusions based upon inaccurate assumptions
>would probably also be inaccurate.

The discussion has had to take a step back, because we quickly
discovered that there isn't agreement about the properties of an
idealized lumped inductor.

Without that shared fundamental understanding of what "the lumped model"
is, it's hopeless to discuss whether or not that model is accurate for a
practical coil.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3929. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 23:21:28 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <fx7nvXj4XYq$EAFB@ifwtech.co.uk>
Source record: 105196

Cecil Moore wrote:

[More wriggling, followed by]

>Please allow me to suggest that
>you guys are just engaging in mental masturbation. Was it good for you? :-)

I'm finished with you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3930. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-05 23:48:28 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FA98C4C.5AA1B5B@uci.edu>
Source record: 105197

"Ian White, G3SEK" wrote:
> The discussion has had to take a step back, because we quickly
> discovered that there isn't agreement about the properties of an
> idealized lumped inductor.

There's been some blustery speculation about that, but I think the issue is more whether or not an idealized inductor can actually tell us the whole story. It doesn't seem to.

> Without that shared fundamental understanding of what "the lumped model"
> is, it's hopeless to discuss whether or not that model is accurate for a
> practical coil.

Perhaps so. I haven't seen anyone actually share their fundamental understanding of the model with the group yet.

73, Jim AC6XG

3931. Re: Newbie Question - I need something between 18" and a tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 03:22:18 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vqjfj2ne4hjcfe@corp.supernews.com>
Source record: 105199

I second what Dave has said. I have designed systems using Radiax to provide coverage in confined areas. It does about what Andrew says it does. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message news:w7qdnW62cqa2lTWiRVn-tA@comcast.com...
>
>
> > Is there a better antenna I can rig up without a lot of
> > expense/difficulty.
>
> Radiax might do the job for you.
>
>

3932. Re: Any Good Or Useful For Listening Only ?: WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 03:47:33 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <4cgjqv490f28ht5e0u9trcntn8kn9k8jb7@4ax.com>
Source record: 105268

On Wed, 5 Nov 2003 11:01:27 -0500, "Robert11" <rgsxrose@comcast.net>
wrote:

>Hello:
>
>Am using a long wire (actually, I guess I should call it a random length
>wire) antenna for
>receiving only. It runs around the 4 edges of my attic, and then down to
>rceiver.
>
>Do listening only up to 30 MHz. Have a JRC NRD 545
>
>Saw an ad for the WinRadio Balun on the Grove site. [The WiNRADiO
>WR-LWA-0130 Long Wire Antenna Adapter]
>
>Would sure appreciate any opinions as to whether it's worth getting, and if
>it "might" improve receotion
>for me ?

Bob, I doubt that it would help. I have a JRC NRD 525, and I would
imagine the antenna setup on the back of my radio is similar to your
545. There's a connection for a "hi-z" antenna, that is, a long wire,
and the radio has a built-in balun behind that connection to match the
wire to the radio. There is another connnection, a "low-z" connnection
for coax-fed antennas.

If your long wire is connected to your low-z terminal, you're already
in business. About the only additional thing might be to also run a
ground wire from the ground terminal on your low-z terminal to a
little ground rod -- although that probably won't do much to your
reception.

The Win-radio balun would simply duplicate what you already have in
your very fine 545 radio.

Bob
k5qwg

>
>Any other thoughts on this would be appreciated.
>
>I've seen, over the years, comments that for receiving only, and using a
>long-wire, a Balun to match Z would not
>add anything to S/N, and isn't worth even trying.
>

>Others have said in effect, "it can't hurt to match the Z."
>
>A bit confused.
>Anyone ever used this unit, or one like it, for receiving ?
>
>Thanks,
>Bob

3933. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 04:08:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j8hjqvkvhmrujuljg6lv1ukfp3737i9kia@4ax.com>
Source record: 105200

On 05 Nov 2003 21:28:06 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>Why don't you guys that know pitfalls of measurement do it and report ?????
>Hello????
>
Hi Yuri,

As this is your party, the burden of proof is upon you. I supplied
you with a litany of trip-points and you in fact responded to none.
If we await and find breathlessly announced results achieved by
obviously problematic means followed by universal HO-HUMs, is it MY
fault?

>This coil stuff is trivial in
>comparison.

You may not be dumb, you may have been awarded up the gumpstump, you
may have done testing, but nothing is trivial or everything is
trivial. In other words, why all the sturm und drang if there's
nothing to it? Announcing things like this being trivial, in the
spin-meistering of the political hacks, is lowering the bar and
reducing expectations so that mediocre work glows in comparison.

Obtaining precision and accuracy is not daunting, it is not beyond the
reach of ordinary means, it simply takes planning. Too many here
backfill that lack with cut-and-paste philosophy.

Yuri, you came here to buff up your position to counter Tom's
criticism. You asked for input, and instead you seem to be fishing
for praise. What's the program? Respond to the technical points or
insert [applause here] in your posts.

73's
Richard Clark, KB7QHC

3934. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 04:19:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa9cc97_7@corp.newsgroups.com>
Source record: 105201

Jim Kelley wrote:
> There's been some blustery speculation about that, but I think the issue
> is more whether or not an idealized inductor can actually tell us the
> whole story. It doesn't seem to.

If a loading coil has no effect on the current or the electrical
length of the antenna, exactly what effect does it have?
--
73, Cecil http://www.qsl.net/w5dxp

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3935. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 04:22:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fa9cd39_7@corp.newsgroups.com>
Source record: 105202

Ian White, G3SEK wrote:

> Cecil Moore wrote:
>> Please allow me to suggest that
>> you guys are just engaging in mental masturbation. Was it good for
>> you? :-)
>
> I'm finished with you.

Ian, I apologize if my humor offended you.
--
73, Cecil http://www.qsl.net/w5dxp

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3936. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 05:18:22 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <s5mdnQLxeq44RDSiRVn-gg@comcast.com>
Source record: 105203

Jacques,

You might want to do what I did, which is to download both the MFJ and Autok instruction manuals. I ended up getting the 269. Compare the specs, but as I recall, the MFJ has a wider impedance range, and if you want to cover VHF, you have to buy two Auteks.

I have had no problems with the 269. That includes using it on 432 MHz.

There is also a Japanese one, which looks more professional than either of the others, but it only measures up to 300 Ohms.

Tam/WB2TT
"ON5MJ" <on5mj_no_more _spam_in_stock_sorry_@skynet.be> wrote in message news:3fa5416a$0$22179$ba620e4c@reader3.news.skynet.be...
> Hi there,
>
> I want to buy an antenna analyser HF and/or VHF. Could be MFJ or Autek. But
> I don't have experience with theses equipments. Following you what could be
> the best one ?
>
> 73 de ON5MJ - Jacques.
>
>

3937. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 05:51:33 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bodjrc$1cdtil$2@ID-189073.news.uni-berlin.de>
Source record: 105207
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fa9063e$1_5@corp.newsgroups.com...
> Ryan, KC8PMX wrote:
> > I typically agree more with the Libertarian parties' ideals, except for
the
> > drug policies..... As a former user (knock on wood, 10 years and 2
months
> > drug-free) and also dealing with people that are users in the emergency
> > services related fields, I have absolutely no use for any drug not
> > prescribed by a doctor.
>
> And if drugs were legalized, would you feel the same way or would you
> start using again?

Nope.... I have absolutely no desire to ever use again. In fact, the smell
of marijuana now makes me naseaus (sp.?)

An adult has an inalienable right to determine
> the contents of his or her body, for better or worse.

Yeah that is true..... to a point, unless it starts to affect me. A person
using while operating any kind of vehicle has the possibility to affect me.
I have dealt with this many times on the emergency services side. Also,
another effect is if I have to pick up slack because a person either went on
a "bender" over the weekend or the night before, I SHOULD NOT have to pick
up that slack. But unfortunately today, that is the way that things work.

I cannot find one viable reason why to use any drugs at this point in my
life unless prescribed by a physician for medicinal purposes. (The only two
drugs left I have yet to kick are caffiene and nicotine..... but working
on that.)

--
Ryan KC8PMX

Never take life seriously. Nobody gets out alive anyway.

3938. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 07:48:10 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0311052348.9725f9b@posting.google.com>
Source record: 105204

Hi Jacques,
I have an Autek RF-1 and I'm happy about it. It fulfills most of my measurement needs on shortwaves. AFAIK, MFJ offers two advantages:
- the analog "display" is a bit better when tuning circuitry
- it can serve also as a frequency counter (I do not mind this, as I have a separate counter)

MFJ has disadvantages, too:
- it is bigger and heavier
- it is more "battery hungry"
- frequent problems with switches have been reported
- it costs almost twice more

73 from Ivan OK1SIP

"ON5MJ" <on5mj_no_more _spam_in_stock_sorry_@skynet.be> wrote in message news:<3fa5416a$0$22179$ba620e4c@reader3.news.skynet.be>...
> Hi there,
>
> I want to buy an antenna analyser HF and/or VHF. Could be MFJ or Autek. But
> I don't have experience with theses equipments. Following you what could be
> the best one ?
>
> 73 de ON5MJ - Jacques.

3939. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 08:14:33 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3faa02ec$0$16110$ba620e4c@reader0.news.skynet.be>
Source record: 105205

Thank you friends for your replies.

I followed the advise of a replier in visiting eHam to check some surveys and I was horrified in reading the opinions of some users (of both items) concerning the reliability and after sale services even under warranty. So the cheapest would be the best choice. Do you experience problems of quality ?

Subsidiary question: following Autek, their VA1 gives the sign of reactance X, which in turn is not given by MFJ. Is it definitively a better feather ?

Thank you in advance.

73 de ON5MJ - Jacques.

3940. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 09:20:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <wQB8HRARJhq$EATH@ifwtech.co.uk>
Source record: 105206

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>
>> Cecil Moore wrote:
>>> Please allow me to suggest that
>>> you guys are just engaging in mental masturbation. Was it good for
>>>you? :-)
>> I'm finished with you.
>
>Ian, I apologize if my humor offended you.

It wasn't the "humor" (which was too feeble to offend anyone) but your talent for turning any technical discussion into a total waste of time.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

3941. Re: To Bob Miller; re Your Answer To My Balun Quest.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 13:49:13 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5ejkqvgjoqt0viscpksd4bkibgorv256ge@4ax.com>
Source record: 105198

On Wed, 5 Nov 2003 13:48:48 -0500, "Robert11" <rgsxrose@comcast.net>
wrote:

>Hi Bob:
>
>Tried to e-mail you, but wouldn't go thru.

Edit the "nospam" out of my email address and it should go through.

>Guess it's best to stick to newsgroup for quest's and answers
>
>Am pretty new at this, and although I always thought I had things hooked up
>right, now you have wondering.
>
>I have my "long-wire" antenna going to the High Z input.
>
>This seems to contradict your statement: If your long wire is connected to
>your low-z terminal, you're already
>in business

The low-z terminal takes a coax connector. I suppose you could solder
your long wire to the center pin of a coax plug, but there's no need
to go to the trouble.
.
>
>Am I right in that it should be going to the High Z input ?

Yes, just stick your long wire into the high z terminal; no connector
needed.

>Is it that the output end of the built in Hi Z input's Balun you mentioned
>is the exact same as the input to the Low Z coax ?

That, I don't know, but I'm sure NRD has designed the inputs to more
or less match the impedance of your antenna -- a higher impedance for
long wires, a lower impedance for antennas fed with 50 ohm coax.
>
>BTW: -heard anything about a new version of the 545 coming out ?
> - what software are you usaing for download and control. ?

Haven't heard about the new version; I'm using the older 525, which
doesn't, to my knowledge, use software.

Bob
k5qwg

>
>Sure is a lot to learn about using the NRD to best advantage, for a beginner
>like me.
>Am enjoying it, though. JRC turns out a nice product; it's a joy to use.
>
>To reply please use; rgsrose@comcast.net
>
>Best regards,
>Bob

3942. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 14:56:20 UTC
From: richardharrison@webtv.net
Message-ID: <8614-3FAA6114-233@storefull-2312.public.lawson.webtv.net>
Source record: 105208

Cecil, W5DXP wrote:
"Until someone can explain exactly how a lumped inductor causes a 45-degree phase shift in the current, I`m going to assume that a lumped inductor is incapable of that feat."

There are base loading coils in shielded boxes which don`t radiate but do have significant inductance which make too-short antennas seem long enough for impedance matching purposes.

How to get 45-degrees? Make te reactance equal to the total resistance in the circuit. Pythagoras showed how about 2500 years ago. You have a 1:1 ratio between resistance and reactance which are at right-angles to each other. Thus, the resultant impedance is the vector sum which is the square root of 2 times the resistance or reactance which are equal. Pythagoras said: c sq = a sq + b sq.

c = impedance
a = resistance
b = reactance

Resistance and reactance are at right angles to each other. When they are equal, their resultant impedance bisects the right-angle of 90-degrees, so the impedance is at 45-degrees.

In a resistance, the voltage drop is instantaneous with the current through the resistance. In a pure inductance, current lags the voltage by 90-degrees. In a circuit containing both resistance and inductive reactance, the current lag is somewhere between 0 and 90-degrees. In fact, the current makes the same angle with the applied voltage as impedance in the circuit makes with the resistance because volts and amps are in-phase in the resistance.

An inductor which radiates brings an extra to the impedance calculation, its radiation resistance.

Best regards, Richard Harrison, KB5WZI

3943. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:14:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa6624_6@corp.newsgroups.com>
Source record: 105209
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Ryan, KC8PMX wrote:
> Yeah that is true..... to a point, unless it starts to affect me. A person
> using while operating any kind of vehicle has the possibility to affect me.

Alcohol is legal as it should be. Drinking and driving is illegal as it should be. Illegal alcohol in the 1920's was very good for organized crime just as illegal marijuana is very good for organized crime today.
--
73, Cecil http://www.qsl.net/w5dxp

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3944. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:26:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa68de_6@corp.newsgroups.com>
Source record: 105210

Ian White, G3SEK wrote:

> Cecil Moore wrote:
>> Ian, I apologize if my humor offended you.
>
> It wasn't the "humor" (which was too feeble to offend anyone) but your
> talent for turning any technical discussion into a total waste of time.

Imaginary circuits impossible to achieve in reality are not a waste of time? What is the agenda for diverting the discussion away from reality to something that cannot possibly exist in reality? I may be wrong, but it seems to me that agenda simply seeks to avoid the truths that will be uncovered by limiting the discussion to things that are possible.

Since lumped inductors are impossible to achieve in reality, one might assert that they can sit up and spit cider in your eye. (From an old Dean Martin movie) How could you ever prove otherwise since the assertion cannot be tested?
--
73, Cecil http://www.qsl.net/w5dxp

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3945. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:36:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa6b4f$1_6@corp.newsgroups.com>
Source record: 105211

Richard Harrison wrote:

> Cecil, W5DXP wrote:
> "Until someone can explain exactly how a lumped inductor causes a
> 45-degree phase shift in the current, I`m going to assume that a lumped
> inductor is incapable of that feat."
>
> There are base loading coils in shielded boxes which don`t radiate but
> do have significant inductance which make too-short antennas seem long
> enough for impedance matching purposes.

But the point is, those loading coils in shielded boxes are NOT *lumped inductors*. We have been told that lumped inductors have zero phase shift. Apparently, a 45-degree phase shift in the current through a lumped inductor would violate the rules of usage for lumped inductors.

I have no doubt that real-world inductors provide a phase shift in the current. My statement was limited entirely to lumped inductors, a purely imaginary conceptual model. Sorry if that wasn't clear.
--
73, Cecil http://www.qsl.net/w5dxp

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3946. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:40:18 UTC
From: jder8745@aol.com
Message-ID: <20031106104018.15878.00000216@mb-m21.aol.com>
Source record: 105212

Howdy,

I CAN'T REMEMBER off hand but you can see if it's still in your ARRL handbook.

73 de Jack, K9CUN

3947. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:52:29 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031106105229.14963.00000431@mb-m14.aol.com>
Source record: 105213

KB7QHC wirtes:
>As this is your party, the burden of proof is upon you. I supplied
>you with a litany of trip-points and you in fact responded to none.

I appreciate your points, some are valid, I know about them, some were off target, some are in the area of nitpicking, when we are overlooking bigger picture.

I explained that your previous posting was based on wrong assumptions (not reading carefully the threads?) - the 100mA on 8A meter, measurement techniques, etc.

I will do my tests and measurements, first I will do that on my Radiomobile, to test the real life typical mobile situation. Next it would be to replicate W9UCW setup with radials.

I keep getting "arguments" that are nitpicking in the .01 area of significance vs. 50% and the facts.

I presented 7 points of proof and asked if anyone can debunk them, prove wrong, so far not a single "overthrow".

Let me try to summarize again briefly:

The temperature test, feeling or thermal strips prove that there is not .1 difference in current accross the loading coil but around 50%.

W9UCW measured it and showed 40 - 60% differences.

W5DXO explained mechanics of the effect.

Are the FACTS in the way of coil "must" have the same current theory?

This is not enough proof that current is significantly different at both ends of the coil rather than miniscule, hardly measureable? That IS the argument.

As has been demonstrated, there is a camp that believes the current is the same. We know it is not and are bringing it to their attention in hope that it will set the record and knowledge straight. If they choose not to believe it, then let them be happy with their calculated world.

Anyone measured it yet?

Yuri, K3BU.us

3948. Re: COPS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 15:59:04 UTC
From: ve3tmt <ve3tmt@rac.ca>
Message-ID: <nduqb.7181$Pg1.395158@news20.bellglobal.com>
Source record: 105215

Kathy,

Have you forgotten to take your medicine again?

3949. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 16:07:35 UTC
From: Steve <steve6690@hotmail.com>
Message-ID: <3faa71c6$0$2383$cc9e4d1f@news.dial.pipex.com>
Source record: 105214

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:s5mdnQLxeq44RDSiRVn-gg@comcast.com...
> Jacques,
>
> You might want to do what I did, which is to download both the MFJ and
Autok
> instruction manuals. I ended up getting the 269. Compare the specs, but as
I
> recall, the MFJ has a wider impedance range, and if you want to cover VHF,
> you have to buy two Auteks.
>
> I have had no problems with the 269. That includes using it on 432 MHz.
>
> There is also a Japanese one, which looks more professional than either of
> the others, but it only measures up to 300 Ohms.

Might be the Kuranishi ?
>
> >
> >
>
>

3950. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 16:48:17 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <lXuqb.12640$Oo4.3658@newsread1.news.atl.earthlink.net>
Source record: 105216

"Desmoface" <desmoface@aol.com> wrote in message
news:20031105142507.23681.00000211@mb-m17.aol.com...
> > just wondering.... can I take a 40M delta loop and add an 80M dipole to
it?
> >> Will there be interaction? SWR problems?
>
> Why not just increase the size of your loop to make it an 80 meter loop??
That
> should cover 40m, at least thats what I've read...I'm in the process of
> building my 80 meter loop which will hopefully work 10-80...Good luck..
>
> Steve
>

But remember a loop for 80 fed with coax will make for a high impedeance on
40.

If you feed this 80 meter loop with ladder line, open wire line, etc. You
can use it everywhere via a balanced output tuner of course.

Dan/W4NTI

3951. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:00:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa7f0f$1_6@corp.newsgroups.com>
Source record: 105217

Yuri Blanarovich wrote:
> Are the FACTS in the way of coil "must" have the same current theory?
>
> This is not enough proof that current is significantly different at both ends
> of the coil rather than miniscule, hardly measureable? That IS the argument.
>
> As has been demonstrated, there is a camp that believes the current is the
> same. We know it is not and are bringing it to their attention in hope that it
> will set the record and knowledge straight.

One more data point. Assuming a 102 inch base-loaded mobile antenna on 75m,
the impedance looking into the whip is around 0.5-j2000. If we assume a current
of 1.5 amp into the bottom of the coil and also out of the top of the coil,
the voltage at the top of the coil will be around 3000 volts.

With a base loaded 75m antenna, the voltage at the top of the coil should
not be extremely difficult to measure and could be viewed with an oscilloscope.
This is an experiment that I can do at reduced power.
--
73, Cecil http://www.qsl.net/w5dxp

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3952. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:09:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa8101$1_6@corp.newsgroups.com>
Source record: 105218

Dan/W4NTI wrote:
> But remember a loop for 80 fed with coax will make for a high impedeance on
> 40.

Higher, but not too high. A 2 WL loop is resonant in much the same way
that a 1 WL loop is resonant. Perhaps you are thinking about dipoles?
--
73, Cecil http://www.qsl.net/w5dxp

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3953. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:13:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FAA8122.E72BDA74@uci.edu>
Source record: 105119

Cecil Moore wrote:
> We have been told that lumped inductors have zero phase shift.

I think the claim is that there is zero current differential in magnitude across a lumped inductor. It's certainly true of a pure inductor. Presumably, one in which radiation is not a factor, and for which the electrical length is short compared to wavelength.

73, Jim AC6XG

3954. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:16:52 UTC
From: richardharrison@webtv.net
Message-ID: <11661-3FAA8204-28@storefull-2317.public.lawson.webtv.net>
Source record: 105121

Cecil, W5DXP wrote:
"My statement was limited entirely to lumped inductors, a purely imaginary conceptual model."

Sorry I didn`t get the picture. An inductor that provides no phase shift is similar to a capacitor that holds no charge. Inductors and capacitors store energies in their magnetic and electric fields. Current lags in the inductor and leads in the capacitor. Pure reactances have a 90-degree phase shift between applied voltage and resulting current by definition.

An inductor sans phase shift is salt without savor or sugar without sweetness.

Lumped inductance means coiled in place of straight wire, to me. Reference to toroidal coils in this thread implied to me an absence of external field, for which I chose a shielded coil with a straight-axis for my example.

I agree with Cecil that a 90-degree antenna which includes only a 45-degree length of wire needs another 45-degree phase-shift in its length to reach the full 90-degrees.

As the coil is in series with a resistance, and the resistance the coil experiences depends upon its position between drivepoint (low-resistance) and far end (high resistance) at the end of the element, the inductance required to produce the same required phase shift, varies with its position in the element.

Where the resistance is low, so is the required inductance. Where the resistance is high, so is the required inductance, and it is all for the same number of degrees that the antenna is short.

Best regards, Richard Harrison, KB5WZI

3955. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:23:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <na0lqvgbesojv4usk8odj1ht0tt0lkjvr4@4ax.com>
Source record: 105120

On Tue, 4 Nov 2003 14:56:14 -0600, "Henry Kolesnik"
<wd5jfr@oklahoma.net> wrote:

>I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if anyone
>would have specs or a schematic? Inside it has a 0.6 ohm 40 watt resistor
>inline with input and ouput. Off each end of this resistor it has a silver
>button mica capacitor. My "cheatsheet" for silver button micas is not to be
>found. I wonder if someone can tell me the capacitance of a silver button
>mica that has the following six colors: black, brown, red, green, gold,
>grey.
>
>tnx & 73
>hank wd5jfr
>
Hi Hank,

Practical issues like this are often deferred while angel population
counts on pin-heads are being conducted. ;-)

There are two styles of marking these components. One occupies half
the arc of the button, the other occupies 240 degrees of the arc.

Given that you start with the color black, I would presume this is of
the first variety. As such: 1,2, X100000, 5%, 6 GOhms resistance.

73's
Richard Clark, KB7QHC

3956. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:36:15 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FAA868F.AE9B1594@uci.edu>
Source record: 105122

Cecil Moore wrote:
> If a loading coil has no effect on the current or the electrical
> length of the antenna, exactly what effect does it have?

Apparently the correct answer is "loading".

73, Jim AC6XG

3957. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 17:55:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Lu-dnQ_Wq5xhFzeiRVn-jw@comcast.com>
Source record: 105123

Steve,

I had seen ads for it in QST, and just found it in the new HRO catalog. It is the NCG BR-200. Covers 1.8 to 170 MHz with an impedance range of 12.5 - 300. It has a 6 digit frequency display, and analog meter for impedance. So, I don't know how/if it displays reactance. Anyhow, it is $400.

Tam/WB2TT
"Steve" <steve6690@hotmail.com> wrote in message
news:3faa71c6$0$2383$cc9e4d1f@news.dial.pipex.com...
> > There is also a Japanese one, which looks more professional than either
of
> > the others, but it only measures up to 300 Ohms.
>
> Might be the Kuranishi ?

3958. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:00:05 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3faa8c39$0$30700$ba620e4c@reader1.news.skynet.be>
Source record: 105125

Hi there,
Have a look to this page

http://www.eham.net/reviews/products/31

73 de Jacques - ON5MJ

3959. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:00:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <br1lqv4ma38jvak6f806j44so58b41blh3@4ax.com>
Source record: 105124

On 06 Nov 2003 15:52:29 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:
>I explained that your previous posting was based on wrong assumptions (not
>reading carefully the threads?) - the 100mA on 8A meter, measurement
>techniques, etc.

Hi Yuri,

This, above, is exactly my complaint and it illustrates how you are
projecting your problem on me. It is you who is not reading carefully
because you did not respond to the issues, but rather injected this
specious comment.

I responded specifically to 100mA, I responded specifically to 8A, I
responded to how you are going to lose accuracy through scaling, I
responded specifically to how you could approach that, I responded
directly to what it would demand. You answered NONE of these
technical issues and instead made this lame complaint above. You left
me to speculate about the model - NO RESPONSE to that either. You
left me to speculate about drive level - NO RESPONSE to that either.
You describe the enormous heat issues that come with these
characteristics that have been UNRESPONDED to. Instead you dismiss
the issue of heat in the same breath as applied to a caloric based
measuring device as:
>nitpicking in the .01 area of significance
Which is unsupported by any data. Obviously you find it simpler to
reject than to investigate. This is the class of argument you decry
coming from Tom, but it is consistent with the class of sneer review
common in this forum.

As I stated, please insert the stage directions [applause here] for
your scripting if you are not going to respond to the technical
comments.

What is the program? If you prefer (as shown by your more than single
participation in) these ethereal speculations of how to measure a real
infinitesimal component (a contradiction on the face of it); then
please for the sake of truth in labeling also mark your postings as
being "for entertainment only."

73's
Richard Clark, KB7QHC

3960. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:14:41 UTC
From: richardharrison@webtv.net
Message-ID: <5921-3FAA8F91-102@storefull-2315.public.lawson.webtv.net>
Source record: 105126

Yuri, K3BU wrote:
"Are the FACTS in the way of coil "must" have the same current theory?"

Sure. Power traveling along a radiator is absorbed in resistance, both loss and radiation resistance, so it is diminished by the time it gets to a reflection point, the tip of the antenna. This is not like a coil without an opportunity to radiate or which is small in terms of wavelength.

Often an extreme example is more impressive than the mediocre. For instance, complete reflections on a lossless line make clearer examples of phase patterns than slight mismatches on a lossy line.

For a coil, use the example of the "normal helix antenna". At one of the radio broadcast stations where I worked in 1949, was an operator, James L. Davis, W5LIT who wrapped a bamboo fishing pole completely from end to end with wire in the form af a solenoid, using it as his rear bumper mounted 75-meter phone mobile antenna. When he modulated, the corona at its tip echoed his voice.

Obviously, there was a huge difference in the drivepoint current (high) of this antenna, a continuous coil, and the current at the tip (low). The voltage was the reverse of its end currents, being high where the current was low and being low where the current was high. J.L. Davis was very pleased with his mobile operation.

Best regards, Richard Harrison, KB5WZI

3961. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:36:17 UTC
From: Robert Lyons <boblyons@duct.umich.edu.tape>
Message-ID: <7wwqb.4762$H91.99635@news.itd.umich.edu>
Source record: 105129

W1RFI wrote:

> I have not looked at a plasma TV, Chip, but I would make that diagnosis
> primarily on on the basis of the sphere of influence. In the BPL test areas,
> the interference was heard over the entire area that had the BPL couplers in
> place.

Hmmm - I wonder ... presumably the BPL couplers are capacitors coupling appropriate RF from one leg of the power system to the next. Would they also couple spuriously-generated RF at similar frequencies? (yeah, I'm sure the couplers are more involved than simple RF bypass caps - that's not the question here.)

The PPL rep accused you of mis-interpreting the RF from a neon sign as a BPL signal. What DOES happen to the hash generated by a neon sign, then? is it propagated through the power grid much further when BPL couplers are present? How about other sources of broadband noise, like loose wires, arcing insulators, etc? Will the entire BPL scheme spread all these other spurious emissions far and wide?

And, by the way, since aircraft use AM, do they receive hash when they fly over BPL lines? Are our brethren in aviation potentially useful allies in this war?

Bob, KI8AB

3962. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:42:48 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <ICwqb.95086$ao4.280881@attbi_s51>
Source record: 105127

Regarding the sign of reactance.

The MFJ does NOT display the sign. But, I don't find this to be a problem because decreasing reactance with increasing frequency is CAPACITIVE and increasing reactance with increasing frequency is INDUCTIVE. So, a minor variation in frequency tells me the type of reactance.

Deacon Dave.

3963. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:46:00 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <IFwqb.95097$ao4.280015@attbi_s51>
Source record: 105128

I remember when all Hams had to pass an examination that included how to
read the color codes on resistors and capacitors.

Sigh! But that was back in the good ol' days ... sigh ...

Deacon Dave, W1MCE
+ + +

Richard Clark wrote:

> On Tue, 4 Nov 2003 14:56:14 -0600, "Henry Kolesnik"
> <wd5jfr@oklahoma.net> wrote:
>
>
>>I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if anyone
>>would have specs or a schematic? Inside it has a 0.6 ohm 40 watt resistor
>>inline with input and ouput. Off each end of this resistor it has a silver
>>button mica capacitor. My "cheatsheet" for silver button micas is not to be
>>found. I wonder if someone can tell me the capacitance of a silver button
>>mica that has the following six colors: black, brown, red, green, gold,
>>grey.
>>
>>tnx & 73
>>hank wd5jfr
>>
>
> Hi Hank,
>
> Practical issues like this are often deferred while angel population
> counts on pin-heads are being conducted. ;-)
>
> There are two styles of marking these components. One occupies half
> the arc of the button, the other occupies 240 degrees of the arc.
>
> Given that you start with the color black, I would presume this is of
> the first variety. As such: 1,2, X100000, 5%, 6 GOhms resistance.
>
> 73's
> Richard Clark, KB7QHC

3964. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:53:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa9958$1_6@corp.newsgroups.com>
Source record: 105130

Jim Kelley wrote:

> Cecil Moore wrote:
>>We have been told that lumped inductors have zero phase shift.
>
> I think the claim is that there is zero current differential in
> magnitude across a lumped inductor. It's certainly true of a pure
> inductor. Presumably, one in which radiation is not a factor, and for
> which the electrical length is short compared to wavelength.

For a lumped inductance, the electrical length is zero. Presumably,
that has a zero effect on the current. Assuming that only the voltage
is affected, the phase relationship between the voltage and current
is blown compared to an unloaded antenna. But the relationship is
somehow (magically?) restored by the time the end of the antenna is
encountered. Exactly how is that relationship restored?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3965. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 18:56:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faa9a3a_6@corp.newsgroups.com>
Source record: 105131

Dave Shrader wrote:
> I remember when all Hams had to pass an examination that included how to
> read the color codes on resistors and capacitors.
>
> Sigh! But that was back in the good ol' days ... sigh ...

When resistors and capacitors had color codes. Ever see a color code
on an SMD device? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3966. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:07:04 UTC
From: desmoface@aol.com
Message-ID: <20031106140704.14300.00000169@mb-m04.aol.com>
Source record: 105132

>But remember a loop for 80 fed with coax will make for a high impedeance on
>40.

Yeah, you'd probably need to use a tuner but one wavelength on 80 is 2 wavelengths on 40, is 4 wl's on 20, 8 on 10....theoretically an 80 meter loop should work great on 10-80 and the take off angle supposedly decreases as the frequency increases...so it should be good at dx too..

Steve
kb8viv

3967. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:14:01 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <7LSdnbXMXtodADeiRVn-vw@comcast.com>
Source record: 105133

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3faa8101$1_6@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > But remember a loop for 80 fed with coax will make for a high impedeance
on
> > 40.
>
> Higher, but not too high. A 2 WL loop is resonant in much the same way
> that a 1 WL loop is resonant. Perhaps you are thinking about dipoles?
> --
> 73, Cecil http://www.qsl.net/w5dxp

Two things to consider here:

1. If you cut it for 3850, as an example, it will be way out of band on 40
meters (7700).

2. If you match it with a 1/4 wave section of RG11 on 80 meters, that will
be 1/2 wave on 40, and have no effect.

Having said all that, I find my Ameritron amp with a pi network output will
tune up on 40 meters. My loop is resonant at about 3800. Just in case, I
keep the power down.

Tam/WB2TT

3968. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:29:00 UTC
From: AK <ak-in-nc@mchsi.com>
Message-ID: <0ixqb.131169$Tr4.337435@attbi_s03>
Source record: 105134

GOhms for a capacitor?

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:na0lqvgbesojv4usk8odj1ht0tt0lkjvr4@4ax.com...
> On Tue, 4 Nov 2003 14:56:14 -0600, "Henry Kolesnik"
> <wd5jfr@oklahoma.net> wrote:
>
> >I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if
anyone
> >would have specs or a schematic? Inside it has a 0.6 ohm 40 watt
resistor
> >inline with input and ouput. Off each end of this resistor it has a
silver
> >button mica capacitor. My "cheatsheet" for silver button micas is not to
be
> >found. I wonder if someone can tell me the capacitance of a silver
button
> >mica that has the following six colors: black, brown, red, green, gold,
> >grey.
> >
> >tnx & 73
> >hank wd5jfr
> >
> Hi Hank,
>
> Practical issues like this are often deferred while angel population
> counts on pin-heads are being conducted. ;-)
>
> There are two styles of marking these components. One occupies half
> the arc of the button, the other occupies 240 degrees of the arc.
>
> Given that you start with the color black, I would presume this is of
> the first variety. As such: 1,2, X100000, 5%, 6 GOhms resistance.
>
> 73's
> Richard Clark, KB7QHC

3969. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:33:18 UTC
From: desmoface@aol.com
Message-ID: <20031106143318.26644.00000234@mb-m28.aol.com>
Source record: 105135

>1. If you cut it for 3850, as an example, it will be way out of band on 40
>meters (7700).

Will it?? A full wave on 3850 is aprox 261 ft. A full wave on 7700 is aprox
130.52 feet. Looks pretty close to 2 wavelengths on 40..using the 1005/Freq
loop equation..

Again, my loop isnt up yet so I can't comment, I'm just going by equations on
paper...I'd expect a 2:1-3:1 swr on its resonant frq as it should see aprox 100
ohms....easily tuned out with the built in tuner in my rig...I would expect it
to work pretty good on 10-80 but will most certainly need a tuner to keep the
finals happy on freq's above 80....This is what I'm banking on LOL...Mine
should be up saturday..WOOHOO!!

Steve
kb8viv

3970. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:38:27 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031106143827.13006.00000363@mb-m14.aol.com>
Source record: 105136

OK let me take it point by point here:

>k3bu@aol.comnoSaddam (Yuri Blanarovich)
>wrote:
>>I explained that your previous posting was based on wrong assumptions (not
>>reading carefully the threads?) - the 100mA on 8A meter, measurement
>>techniques, etc.
>
>Hi Yuri,
>
>This, above, is exactly my complaint and it illustrates how you are
>projecting your problem on me. It is you who is not reading carefully
>because you did not respond to the issues, but rather injected this
>specious comment.
>

I gathered that you mixed W9UCW measurements where he set the power level going into the antenna such, that he achieved 100 mA full deflection on his 100 mA ammeter mounted on the bottom of the coil, then he read at the same time deflection on the similar 100 mA meter mounted on the top of the coil, showing 40 to 60 mA deflection, depending on the band and position of the coil, quoting some figures as I showed them in my article. What is wrong with that? Where he went wrong? Can you elaborate?

>I responded specifically to 100mA, I responded specifically to 8A, I
>responded to how you are going to lose accuracy through scaling, I
>responded specifically to how you could approach that, I responded
>directly to what it would demand.

I was planning to do the "W9UCW thing" duplicate the setup, put my 8A meter at the bottom of the coil, drive it to full deflection and then read the current at the top 8A meter and expect to read somewhere between 4 - 6 A. If the Tom camp is right and we are full of it, it should read 8A (minus fraction for all the losses "calculated"). What's wrong with that?

>You answered NONE of these
>technical issues and instead made this lame complaint above.

I have not done it yet. You have technical questions about W9UCW measurements and setup, ask him W9UCW@aol.com

>You left
>me to speculate about the model - NO RESPONSE to that either.

What model? Hardware "model" W9UCW used was 60 quarter wave radials on ground (40m - see the picture) shorted radiator tuned to resonance with loading coil (see picture). Normal loaded antenna.

Soft model by W5DXP was described by him.

>You
>left me to speculate about drive level - NO RESPONSE to that either.

I said that W9UCW set the drive level to show 100 mA deflection on the bottom meter, to eliminate errors you worried about, can't get any better than full scale deflection. The objective was to see the how much current decreases from the bottom to the top of the coil. Is it +-0 as Tom camp claims or is it significantly more like around 50% we found and claim. How is that terribly wrong that would prove Toms are right?

>You describe the enormous heat issues that come with these
>characteristics that have been UNRESPONDED to.

Huh?
I mentioned heat effect, where "lousy" Hustler coil demonstrates more heat generation at the bottom than at the top, therefore higher current at the bottom than at the top. What's wrong with that and conclusion that there must be more current flowing in the bottom turns than in top turns?

>Instead you dismiss
>the issue of heat in the same breath as applied to a caloric based
>measuring device as:
>>nitpicking in the .01 area of significance
>Which is unsupported by any data.

Huh? Can you elaborate?
What has bottom third of the coil heating up from the current (no meters) has to do with caloric based measuring device? You stick heat sensitive strip on the coil you will see the rapid change of colors going from the bottom to the top. What is wrong with that?

>Obviously you find it simpler to
>reject than to investigate. This is the class of argument you decry
>coming from Tom, but it is consistent with the class of sneer review
>common in this forum.

Reject what? I said I would measure it myself, both on mobile and test set up aka W9UCW. What am I supposed to investigate? Why the Rauchians don't get it? I provided 7 points and asked for rebuttal or showing what was wrong with them, can you answer them point by point, where did we go wrong?

>As I stated, please insert the stage directions [applause here] for
>your scripting if you are not going to respond to the technical
>comments.
>

What technical comments? We showed what we have found, showed pictures of reality, showed how it was done so far, what we measured, what we think is doing it. Where is anybody showing that was wrong and they found right? Again, if you are questioning W9UCW measurements go to him.
If you have problem with modeling programs goto Roy.

>What is the program? If you prefer (as shown by your more than single
>participation in) these ethereal speculations of how to measure a real
>infinitesimal component (a contradiction on the face of it); then
>please for the sake of truth in labeling also mark your postings as
>being "for entertainment only."

Who is speculating? What truth? Modeled and calculated by those who "know"?

OK, I confess, all this is was just made up for the entertainment purposes
only, we are full of sh1t, pictures were doctored, measured data were generated
by random number generator, coils were heated up with torch, ON4UN is wrong,
Cecil is on something.
I confess that Roy, Tom, Reg, Ian et al are my heroes. I will model the loaded
coil/antenna and stick it in my antenna connector and work the world.

>
>73's
>Richard Clark, KB7QHC
>

88's
Yuri Blanarovich, K3BU
still waiting for ONE PROPER MEASUREMENT, hellooooo????
otherwise you flat earth (er equal loading coil current) believers are the ones
flying in the la-la land.

3971. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:39:40 UTC
From: desmoface@aol.com
Message-ID: <20031106143940.25850.00000502@mb-m28.aol.com>
Source record: 105137

>Will it?? A full wave on 3850 is aprox 261 ft. A full wave on 7700 is aprox
>130.52 feet. Looks pretty close to 2 wavelengths on 40..using the 1005/Freq
>loop equation..
>

Woops, this is the eqation for a loop, not sure if it applies to a delta
loop..but it shouldnt be far off...

Steve
kb8viv

3972. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 19:49:24 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vql9ea192fe05b@corp.supernews.com>
Source record: 105138

Good and bad news..
I found my capacitance meter and measured the button and it's about 1500 pf.
The bad news is in my posting I transposed red and green and the correct
color sequence is: black, brown, green, red, gold, gray..
Black desigantes military, and 1500 pf by the next 3 but I still need to
know what the gold and gray designate..
Tolerance, temp coeff, and voltage but which 2 are designated and how?. Any
tips appreciated. A spec on this cplr would be appreciated.
tnx
hank wd5jfr
"Henry Kolesnik" <wd5jfr@oklahoma.net> wrote in message
news:vqg4jis8r1p1c2@corp.supernews.com...
> I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if
anyone
> would have specs or a schematic? Inside it has a 0.6 ohm 40 watt
resistor
> inline with input and ouput. Off each end of this resistor it has a
silver
> button mica capacitor. My "cheatsheet" for silver button micas is not to
be
> found. I wonder if someone can tell me the capacitance of a silver
button
> mica that has the following six colors: black, brown, red, green, gold,
> grey.
>
> tnx & 73
> hank wd5jfr
>
>
>

3973. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 20:22:29 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FAAAD85.6786765E@uci.edu>
Source record: 105139

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > Cecil Moore wrote:
> >>We have been told that lumped inductors have zero phase shift.
> >
> > I think the claim is that there is zero current differential in
> > magnitude across a lumped inductor. It's certainly true of a pure
> > inductor. Presumably, one in which radiation is not a factor, and for
> > which the electrical length is short compared to wavelength.
>
> For a lumped inductance, the electrical length is zero. Presumably,
> that has a zero effect on the current. Assuming that only the voltage
> is affected, the phase relationship between the voltage and current
> is blown compared to an unloaded antenna. But the relationship is
> somehow (magically?) restored by the time the end of the antenna is
> encountered. Exactly how is that relationship restored?

The problem seems to be caused by the assumption that an inductor has no current lag in an antenna circuit.

In my experience, lumped circuit elements are just a simplified way of expressing the characteristics of device that has distributed reactances and resistance. You draw the equivalent circuit as inductors, capacitors, and resistors in series and shunt where appropriate, and assign the appropriate values to each. You can do that just as easily with an antenna as with a transformer. In the case of a loading coil, perhaps you could say that a portion of the "lumped" inductance of the antenna is replaced with a coil inductor. From a relative size standpoint, the inductance of the coil is certainly "lumped" compared the inductance of the rest of the antenna. But does size matter? :-) As Richard alluded, an inductor with zero phase shift must have zero inductance. I think it's safe to assume loading coils cause a phase shift. But what of the current differential? Seems difficult to believe that current can go from max to min, and impedance and voltage go from min to max along the 15" of a 40 meter hamstick whip.

73, Jim AC6XG

3974. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 20:59:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <319lqvk0qiod0qmel6fpv36ph8inadknd1@4ax.com>
Source record: 105140

On 06 Nov 2003 19:38:27 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

Hi Yuri,

What is the problem with going back to a post and responding to that?
Duplicated unnecessarily, but obviously needed:
>>>100mA on an 8 Ampere full scale 3.5 inch meter is slightly more than
>>>1% deflection (less than the width of the needle). The 100W
>>>excitation current levels near and through the model's solenoid
>>>exhibit values in the 1 Ampere region or at 12% deflection for an
>>>instrument that is arguably as accurate as 10%. This does not bode
>>>well for a compelling exhibition of any conclusive results.
>>>
>>>NOW, if I were wrong to presume that 100W is going to be the
>>>excitation - is that MY fault? If we jack up the power applied
>>>(easily within the means of an amateur so empowered, so to speak) then
>>>that region can certainly be forced into readings of vastly improved
>>>accuracy relative to the available metering. HOWEVER, this now
>>>inhibits doing the full length survey because the lower section would
>>>clearly overload the metering. You can't win for losing.
>>>
>>>Well, you can win if you are accomplished at the bench (a rare talent
>>>in this ivory tower where merit is weighed by angel population counts)
>>>by modifying your metering through shunts. I will warn you, however,
>>>it is incumbent upon you to reveal how that was accomplished, how it
>>>was confirmed and the data to support that too. You will also have to
>>>measure the surface temperatures and conspire to replicate them to
>>>your metering (something that you have not really responded to) to
>>>observe the systematic error introduced by these ever growing power
>>>applications. This, in a sense, is a turn of "you can't win for
>>>losing, but you can get close, but you still might lose anyway."
Given your failure to respond/correct/aknowledge forced speculations,
I had to cover many angles "implicit" in your vague specifications.
You found an error, skipped the correct guess and still did not
actually offer a hard specification.

>I have not done it yet. You have technical questions about W9UCW measurements
>and setup, ask him W9UCW@aol.com

You haven't done what? I've asked how large the radiator, how large
the coil, what size the radial field. WAS not WILL BE. All of these
are fundamental questions for specifications that supposedly are part
and parcel to your evidence and you ask ME to confirm the details?

Why do you expect this to be compelling evidence that blows Tom out of
the water? I did far more with a simple model that anyone could
review for completeness' sake. You didn't responded to that! What's
the program here?

>>You left
>>me to speculate about the model - NO RESPONSE to that either.
>
>What model? Hardware "model" W9UCW used was 60 quarter wave radials on ground
>(40m - see the picture) shorted radiator tuned to resonance with loading coil
>(see picture). Normal loaded antenna.
>Soft model by W5DXP was described by him.

GAD! Why do you bother to come here for support?
This all started with your avowed problem of
>>>Significant impact on modeling software. If the stuff is not accomodated
>>>properly, then results (mainly efficiency) are way off.
Which had already been answered before you started this thread. You
say so in your web page.

3 Days ago I offer my model that disputes Tom, supports you
inferentially and you ask "what model?" Boy how lazy.
>>>OK, the plain vanilla radiator 93" tall (3/8" stock) in 93 segments
>>>surrounded by 60 X 93" radials (#12 wire) ALL elevated 6" above a
>>>real, medium ground.
>>> SRC DATA @ 7.1MHz = 0.7995 - J 810.9 ohms
>>> Current varies from 1A at drive point to 0 at tip
>>>
>>>The adornment consists of this underspecified coil being decimated and
>>>spread across 10 inches of space in the middle of the radiator with
>>>lumped values of 30ï¿½H each. For the life of me, I don't know what
>>>this exercise was to prove given the results:
>>> SRC DATA @ 7.1MHz = 1.258 - J 1561 ohms
>>> Current varies from 1A at the drive point to 0 at the tip
>>>One variation on the first pass design is that when this current hits
>>>the decimated inductor, the current drops to 0 a few inches before the
>>>first inductor section and quickly develops an 180ï¿½ shift over those
>>>next few inches which persists on out to the tip. At the bottom of
>>>the coil sections, the current again picks up to roughly 100mA
>>>climbing to roughly 150mA at the top and then declining over the
>>>remaining length of radiator. It would seem that anyone could craft
>>>any assortment of conditions to support any of a dozen new theories
>>>from this kind of legerdemain.
If there are ANY details that are wrong, I haven't seen one syllable
written by you to the matter. I would point out that nothing about
this model quoted above resonates in spite of your assertion that it
did for the hardware tested. You never read this did you?

>I said that W9UCW set the drive level to show 100 mA deflection on the bottom
>meter, to eliminate errors you worried about, can't get any better than full
>scale deflection. The objective was to see the how much current decreases from
>the bottom to the top of the coil. Is it +-0 as Tom camp claims or is it

>significantly more like around 50% we found and claim. How is that terribly
>wrong that would prove Toms are right?

Have you actually read any of my posts?
>
>>You describe the enormous heat issues that come with these
>>characteristics that have been UNRESPONDED to.
>
>Huh?
>I mentioned heat effect, where "lousy" Hustler coil demonstrates more heat
>generation at the bottom than at the top, therefore higher current at the
>bottom than at the top. What's wrong with that and conclusion that there must
>be more current flowing in the bottom turns than in top turns?
>
>Huh? Can you elaborate?

Yuri, it is your statement that begs elaboration. Do you have data
that supports
>>>nitpicking in the .01 area of significance
- obviously not.

>What has bottom third of the coil heating up from the current (no meters) has
>to do with caloric based measuring device?

You are now removing the frog's legs to prove it is deaf?

>You stick heat sensitive strip on
>the coil you will see the rapid change of colors going from the bottom to the
>top. What is wrong with that?

Do you know how that ammeter works? You have here, and repeatedly,
offered a description of considerable heat. The RF Ammeter works on
the basis of heat (that's why it is called a thermocouple type). It
is in close proximity to a source of heat by simple observation of the
photos offered and undoubtedly what you anticipate in repeating at
elevated power levels (more heat). What more does it take to suggest
this heat is a source of error?
>
>88's
>Yuri Blanarovich, K3BU
>still waiting for ONE PROPER MEASUREMENT, hellooooo????
>otherwise you flat earth (er equal loading coil current) believers are the ones
>flying in the la-la land.

Still waiting for you to
1.) provide a complete specification of the
a.) radiator
b.) solenoid
c.) ground
d.) drive applied (not readings)
2.) respond to the model offered;
3.) describe the errors possibly attending all this heat.

Do I get real technical specifications OR should I be applauding?
Please tell me what form of support you expect.

73's
Richard Clark, KB7QHC

3975. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:08:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qidlqvgdegnqksc9c5tete67fg8b8i2n3f@4ax.com>
Source record: 105141

On Thu, 06 Nov 2003 19:29:00 GMT, "AK" <ak-in-nc@mchsi.com> wrote:
>GOhms for a capacitor?
Yes. 6 of them, minimum. That's what the grey stands for. This color is non-standard for button types (complete with non-standard spelling) and refers to standard Mica. However, even for button types there's a minimum of 7.5 GOhms to as high as 50 GOhms possible.

73's
Richard Clark, KB7QHC

3976. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:18:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faabb68$1_7@corp.newsgroups.com>
Source record: 105142

Richard Clark wrote:
> You are now removing the frog's legs to prove it is deaf?

Cricket's leg, Richard, cricket's leg.

> Still waiting for you to
> 1.) provide a complete specification of the
> a.) radiator
> b.) solenoid
> c.) ground
> d.) drive applied (not readings)
> 2.) respond to the model offered;
> 3.) describe the errors possibly attending all this heat.

Too bad you don't hold the other side to the same standards.
One wonders why. Others asserted the positive premise. Why
is it not up to them to prove their assertions? Why is it
up to Yuri to disprove the positive assertions by others that
triggered this entire discussion? You're not prejudiced, are you?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3977. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:27:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faabd9f_7@corp.newsgroups.com>
Source record: 105143

Jim Kelley wrote:
> Seems difficult to
> believe that current can go from max to min, and impedance and voltage
> go from min to max along the 15" of a 40 meter hamstick whip.

Not difficult at all for True Believers of Old Wives' Tales
or hams seduced by the steady-state model. :-) Component energy
waves don't matter, don'tcha know? Never mind that standing waves
are probably impossible without forward waves and reverse waves.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3978. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:32:33 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <JJedndmZ5chIIDeiRVn-ig@comcast.com>
Source record: 105144

Henry,

I couldn't find all of the info in any one Table. But I think (according to Reference Data For Radio Engineers)

Black - For MIL type D or X, the temperature coefficient is +/- 100. I think that means all MIL.

Gold means 5%

Gray probably means 800V.

Tam/WB2TT
"Henry Kolesnik" <wd5jfr@oklahoma.net> wrote in message news:vql9ea192fe05b@corp.supernews.com...
> Good and bad news..
> I found my capacitance meter and measured the button and it's about 1500 pf.
> The bad news is in my posting I transposed red and green and the correct
> color sequence is: black, brown, green, red, gold, gray..
> Black desigantes military, and 1500 pf by the next 3 but I still need to
> know what the gold and gray designate..
> Tolerance, temp coeff, and voltage but which 2 are designated and how?. Any
> tips appreciated. A spec on this cplr would be appreciated.
> tnx
> hank wd5jfr
> "Henry Kolesnik" <wd5jfr@oklahoma.net> wrote in message
> news:vqg4jis8r1p1c2@corp.supernews.com...
> > I just got a TMC Directional Coupler Unit Model CU 2/50 and wonder if
> anyone
> > would have specs or a schematic? Inside it has a 0.6 ohm 40 watt
> resistor
> > inline with input and ouput. Off each end of this resistor it has a
> silver
> > button mica capacitor. My "cheatsheet" for silver button micas is not to
> be
> > found. I wonder if someone can tell me the capacitance of a silver
> button
> > mica that has the following six colors: black, brown, red, green, gold,
> > grey.
> >
> > tnx & 73
> > hank wd5jfr
> >

> >
> >
>
>

3979. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:36:25 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <7MWdnSPfY8p8IzeiRVn-tw@comcast.com>
Source record: 105145

That was the whole point. 7700 is out of band.

Tam/WB2TT

3980. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:46:13 UTC
From: desmoface@aol.com
Message-ID: <20031106164613.26622.00000240@mb-m27.aol.com>
Source record: 105146

>That was the whole point. 7700 is out of band.
>
>Tam/WB2TT
>

Yeah, but its two wavelengths, it should probably perform at least as good or better on 40 than it does on 80?? It would most certainly have a lower angle of radiation. Again, I'm no electrical engineer, but I've always been led to believe that the bigger the antenna the better...it should certainly resonate efficiently on 10-80, in theory anyway..in the same way that a full wave is better than a half wave or a quarter wave.

See: http://www.ku4ay.net/loop.html and http://www.cebik.com/atl1.html which are just a few of the sites discussing these fine antennas..

Steve
kb8viv

3981. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 21:49:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <naglqvg0rfka4ojmil3vnbod24fm4du8ja@4ax.com>
Source record: 105147

On Thu, 6 Nov 2003 16:32:33 -0500, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>Gray probably means 800V.

Mil-Spec has no specification at 800V, gray is for characteristic.
Voltage is not available with so few markings. Mil-Spec voltage spans
from 100V to 2000V through 9 grades.

73's
Richard Clark, KB7QHC

3982. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 22:45:19 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <W8Aqb.964$643.414@okepread03>
Source record: 105148
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

The best way to get off of cigarettes is to start smoking cigars.
The best way to get off of coffee and soda pop is to drink cold water in a bottle.

The object is to replace one pacifier with another. Cigars are easy to
quit.

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote
>
> The only two drugs left I have yet to kick are caffiene and nicotine

3983. Need source for Motorol HT800 parts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 23:36:24 UTC
From: earcad@aol.com
Message-ID: <bf3bee01.0311061536.49268e92@posting.google.com>
Source record: 105149
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.scanner

Hello
Please email if you know of a source or wher i can buy a complete unit.
Thanks in advance
Regards
AC

Item Qty Unit Description

P/F (HT 800) HANDIE-TALKIE MOTOROLA

01 15 pcs Switch/Pot, ON-OFF Volume (S1/R140) # ï¿½?ï¿½
02 10 pcs Switch Frequency (S2/2 & 8 Channel) # ï¿½?ï¿½
03 10 pcs Switch (S3) # 4005 101 Q01

3984. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-06 23:40:07 UTC
From: jgboyles@aol.com
Message-ID: <20031106184007.05695.00000116@mb-m11.aol.com>
Source record: 105150

>The MFJ does NOT display the sign. But, I don't find this to be a
>problem because decreasing reactance with increasing frequency is
>CAPACITIVE and increasing reactance with increasing frequency is
>INDUCTIVE.

Hi Dave, The MFJ-259B manual states this is "usually" the case, and that is what I always do. Usually and always are not exactly the same. I do seem to remember this discussed a few years back, and someone provided evidence this was not always the case. They quoted Smith Chart proof. For the life of me I can't find the thread, and haven't had time to play with the chart to confirm. This method always (so it seems) works for me, but there are always exceptions.

73 Gary N4AST

3985. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 00:12:36 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <UrBqb.95191$275.263433@attbi_s53>
Source record: 105151

Jim, the reactance at the antenna can be any value. The reactance at the
input to the transmission line, with VSWR, can be any OTHER value.

The point is ... at the measurement point, where ever that is, at the
antenna or at the transmission line, a determination of either Inductive
or Capacitive reactance can be measured with the MFJ 259B.

Deacon Dave, W1MCE
+ + +

JGBOYLES wrote:

SNIP

I do seem to
> remember this discussed a few years back, and someone provided evidence this
> was not always the case. They quoted Smith Chart proof.

SNIP

, but there are always exceptions.
>
> 73 Gary N4AST

3986. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 00:36:14 UTC
From: jgboyles@aol.com
Message-ID: <20031106193614.20547.00000184@mb-m10.aol.com>
Source record: 105152

>The point is ... at the measurement point, where ever that is, at the
>antenna or at the transmission line, a determination of either Inductive
>or Capacitive reactance can be measured with the MFJ 259B.

I agree Dave, I just wish I could find that thread, or knew why MFJ said
"Usually".
73 Gary N4AST

3987. Re: ant coupler & silver mica ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 00:39:08 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <MQBqb.95362$275.263216@attbi_s53>
Source record: 105153

Henry Kolesnik wrote:

> Good and bad news..
> I found my capacitance meter and measured the button and it's about 1500 pf.
> The bad news is in my posting I transposed red and green and the correct
> color sequence is: black, brown, green, red, gold, gray..
> Black desigantes military, and 1500 pf by the next 3 but I still need to
> know what the gold and gray designate..

SNIP

The standard code is ...
Black = 0
Brown = 1
Red = 2
Orange = 3
Yellow = 4
Green = 5
Blue = 6
Violet = 7
Grey = 8
White = 9
Gold = 5%
Silver = 10%

First color = 1st significant digit
Second color = 2nd significant digit
Third Color = decimal multiplier
Fourth Color = Tolerance
Fifth Color = Temperature Coefficient

Additionally, for mica capacitors the colors have position dependent
significance. For a Military mica capacitor the position sub-code is as
follows:

First dot = Black = designation as JAN Mica
Second dot = Brown = first significant digit = 1
Third dot = Green = second significant digit = 5
Second line, first dot = Red = multiplier = 100
Second line, second dot = Gold = 5%
Second line, second dot = Grey = voltage rating = 800 [8 = grey] volts DC.

All of above is as I recall from many, many years ago. [I stopped
detailed military design 25 years ago ...] Someone may have more info or
better recollection.

For a spec I'd look into the EIA specs or JAN-MIL-C series.

Good Luck & God Bless

Deacon Dave, W1MCE

> Tolerance, temp coeff, and voltage but which 2 are designated and how?. Any
> tips appreciated. A spec on this cplr would be appreciated.
> tnx
> hank wd5jfr
> "Henry Kolesnik" <wd5jfr@oklahoma.net> wrote in message
> news:vqg4jis8r1p1c2@corp.supernews.com...
>

3988. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 00:54:54 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3faaedd9$0$29127$ba620e4c@reader3.news.skynet.be>
Source record: 105154

Hi Dave,

Thank you for your wyse reply. Effectively we can go around the problem of the sign of reactance.

73 de Jacques - ON5MJ

3989. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 00:57:30 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <KpSdnfi6U96dczeiRVn-sg@comcast.com>
Source record: 105155

Steve,

You are right about the gain. I ran EZNEC on the 75 meter loop, and the gain at 40 m is about 3db more than on 75. However, it is not resonant in band. I got an impedance at 3850 of 40 + j5. Impedance at 7700 of 69 +j1, and impedance at 7300 of 18 + j87 (That is an SWR of >10). Gets worse below 7300.

There is enough feedline and wire loss in the real world antenna that the SWR measured from the shack is about 5:1 on 40 m.

Tam/WB2TT
"Desmoface" <desmoface@aol.com> wrote in message
news:20031106164613.26622.00000240@mb-m27.aol.com...
> >That was the whole point. 7700 is out of band.
> >
> >Tam/WB2TT
> >
>
> Yeah, but its two wavelengths, it should probably perform at least as good
or
> better on 40 than it does on 80?? It would most certainly have a lower
angle of
> radiation. Again, I'm no electrical engineer, but I've always been led to
> believe that the bigger the antenna the better...it should certainly
resonate
> efficiently on 10-80, in theory anyway..in the same way that a full wave
is
> better than a half wave or a quarter wave.
>
> See: http://www.ku4ay.net/loop.html and
> http://www.cebik.com/atl1.html which are just a few of the sites
discussing
> these fine antennas..
>
> Steve
> kb8viv

3990. Re: "Non-Evasive" Antenna Mount for 2003 Chevy Blazer

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 01:17:17 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <xoCqb.72249$fl1.3187246@twister.southeast.rr.com>
Source record: 105156

Hi Todd,

I think that both Comet and Diamond have hatch clamps that will hold a vertical antenna. They usually come with SO239 connections. I'm using a Comet clamp on the back door of a Jeep.

Good luck,

Bill, W4WNT

"Todjk" <todjk@pdclink.com> wrote in message news:c641b886.0311011735.e539c7c@posting.google.com...
> I am needing to find a "non-evasive" (no drilling) solution for
> mounting a 144/440 mobile antenna in my 2003 Chevy Blazer.
>
> I am trying to see if there is some kind of solution that does not
> involve magnetic roof mounts.
>
> Does a mount exist where the mount clamps to either the glass or the
> metal of the rear hatch of the Blazer?
>
> Any advice is appreciated.
>
> Todd N9ZWY

3991. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 01:51:25 UTC
From: larry_jefferies@yahoo.com
Message-ID: <61ed6067.0311061751.71066eca@posting.google.com>
Source record: 105157
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

You said it Jackie.

Larry

> > > > > Daniel L. Jeswald (W4NTI)
> > > > > 89 Wildman Road
> > > > > Anniston AL
> > > > > 36201
> > > > >
> > > > > Charles D. Brabham (N5PVL)
> > > > > Rt 2 Box 46
> > > > > Lyford TX
> > > > > 78569
> > > > > Phone: 956-347-3612

jackiew1@37.com (Jackie Ward) wrote in message
news:<12329882.0311021759.4eb43015@posting.google.com>...
> Too funny. I hope you can get those two racist pigs off. Charles and
> Daniel have been jacking around for months now.
>
> Now that their addresses are being posted I am sure someone will blow
> the whistle on them.
>
> Jackie
>
>
> robert_king@usa.com (Robert King) wrote in message
news:<66dbd28a.0311020825.a5dc994@posting.google.com>...
> > Nice try Charles Brabham, we all know who the racists are around here.
> > In fact anyone who has been on this newsgroup over the past month
> > knows about the crap you and Daniel have been spreading.
> >
> > Captial "L" loser, the noose is closing..... Enjoy....
> >
> > Bob
> >
> > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> >
> > > Asked about his astounding success in mowing down thousands of screaming
> > > raghead fanatics with very few casualties (sound familiar?) , the Israeli
> > > general agreed to give the reporter the exclusive secret to his

> > > unprecedented military success...
> > >
> > > "Fight Arabs." he said.
> > >
> > > Charles Brabham, N5PVL
>
> > > > > > Daniel L. Jeswald (W4NTI)
> > > > > > 89 Wildman Road
> > > > > > Anniston AL
> > > > > > 36201
> > > > > >
> > > > > > Charles D. Brabham (N5PVL)
> > > > > > Rt 2 Box 46
> > > > > > Lyford TX
> > > > > > 78569
> > > > > > Phone: 956-347-3612
> >
> > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>...
> > > "Robert King" <robert_king@usa.com> wrote in message
> > > news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> > > > You said it brother. Myself and a couple of the regulars are checking
> > > > into a way to remove all their racist posts. I will keep you all
> > > > posted.
> > >
> > > There is no way to remove racist posts by "Private" or "Larry". Sorry!
> > >
> > > The "regulars" here have been using usenet for years, and do not have to
> > > speculate as to whether posts can be "removed" from usenet. They already
> > > know better.
> > >
> > > Amazing how consistently ignorant the little "racist" group that has invaded
> > > this newsgroup is.
> > >
> > > Sooner or later they will all take a hike, and we can get back to discussing
> > > amateur radio.
> > >
> > > Charles Brabham, N5PVL

3992. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 02:29:57 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031106212957.14963.00000472@mb-m14.aol.com>
Source record: 105158

The time I am spending arguing here, I will be better off to do my own measurements and start to write the article. I think this is about what I needed, I have got the picture, explanation for what are we seeing, its time to put it all together. I will just comment on your ending comments, unless I see any serious and measured arguments, further arguments are just running around in circles.

>
>Do you know how that ammeter works? You have here, and repeatedly,
>offered a description of considerable heat. The RF Ammeter works on
>the basis of heat (that's why it is called a thermocouple type). It
>is in close proximity to a source of heat by simple observation of the
>photos offered and undoubtedly what you anticipate in repeating at
>elevated power levels (more heat). What more does it take to suggest
>this heat is a source of error?
>>

I know how ammeters work. I key the TX, the ammeter almost instantaneously shows the current. W9UCW used good quality coils that would not heat up with 100 mA current. No time for coil to get red hot and fry the meters. You can see that from the pictures.
I mentioned Hustler coil, wound with small gage aluminum wire and have experienced heating of the bottom with no meters screwing it up or vice versa. I put 500 W to it and saw that heatshrink tubing fried at the bottom = more current there, no meters to show error.
So what's the horrendous heat got to do with what W9UCW measured? Try it, measure it.
If I will do measurement I will not use Hustler aluminum coils but 1/4" tubing. Got that?

>88's
>>Yuri Blanarovich, K3BU
>>still waiting for ONE PROPER MEASUREMENT, hellooooo????
>>otherwise you flat earth (er equal loading coil current) believers are the
>ones
>>flying in the la-la land.
>
>Still waiting for you to
>1.) provide a complete specification of the
> a.) radiator
> b.) solenoid
> c.) ground
> d.) drive applied (not readings)

You pick typical mobile antenna, mount the coil from half way up, pick pair of radials or any ground, drive with what you have and see what you get. The objective is to prove or disprove that current across the loading is not the same, but more in the order of 50% drop with +/-10% error if you like.

>2.) respond to the model offered;
>3.) describe the errors possibly attending all this heat.
>
>Do I get real technical specifications OR should I be applauding?
>Please tell me what form of support you expect.
>
>73's
>Richard Clark, KB7QHC

As I said, you want to verify W9UCW measurements, contact him, I don't have ALL the details of his experiment. I will provide that info on my setup, when I get around to do it.

What I expected? To see if anyone else measured the current in the coils and what they found, or if we are in error, where did we committed error and show us where we are wrong, if we are. (no one yet)
I was looking for explanation of the effect. (thanks Cecil, makes sense)
We found that software (EZNEC) does not treat the effect properly.
We found that people learned that coil "must" have the same current and they will not accept reality and argue to death that it ain't so, if it is.
I am happy to confirm that I was right, I found out about the effect and reasons behind it, opened my eyes wider and got me some ideas to improve loaded and mobile antennas. I corrected my opinion about reflected waves, I don't like them on feedlines, but I appreciate them on the radiators now (thanks Cecil). I found that presently we can approximate loading coil as a loading stub in the soft modeling (thanks Cecil) to get some more meaningful results rather than using imaginary coil. Unless someone shows that 7 points I raised are not valid, I am happy with results of this interesting exercise.

Thanks all!

Yuri

3993. FA: Bird Componets / MAXON Radios

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 02:58:45 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <EZDqb.48601$OI.1359476@read1.cgocable.net>
Source record: 105159
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Have the following items listed on Ebay.
Have a Look....
Tnx Norm ve3czi at arrl.net

Bird 4C100
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=3057311008&category=4672&rd=1

Bird 4D100
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=3057311848&category=4672&rd=1

Maxon SP-310V2 VHF Portable
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=3057368049&category=4674&rd=1

Maxon SM-6450 UHF Mobile
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=3057371586&category=4674&rd=1

3994. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 03:15:36 UTC
From: desmoface@aol.com
Message-ID: <20031106221536.26304.00000188@mb-m19.aol.com>
Source record: 105160

>You are right about the gain. I ran EZNEC on the 75 meter loop, and the gain
>at 40 m is about 3db more than on 75. However, it is not resonant in band. I
>got an impedance at 3850 of 40 + j5. Impedance at 7700 of 69 +j1, and
>impedance at 7300 of 18 + j87 (That is an SWR of >10). Gets worse below
>7300.
>
>There is enough feedline and wire loss in the real world antenna that the
>SWR measured from the shack is about 5:1 on 40 m.
>

Yeah, the rig's not gonna see a 50 ohm impedence, no question about that...It's
a compromise I guess...I'll let you know how it does though, I'll be hanging
wire this weekend for my 80 meter full wave horizontal loop...but if L. B.
Cebik, W4RNL
endorses em - thats good enuf for me hehe...he's sort of an antenna guru...

Steve
kb8viv

3995. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 03:29:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fab1280_8@corp.newsgroups.com>
Source record: 105161

JGBOYLES wrote:
>>The MFJ does NOT display the sign. But, I don't find this to be a
>>problem because decreasing reactance with increasing frequency is
>>CAPACITIVE and increasing reactance with increasing frequency is
>>INDUCTIVE.
>
> Hi Dave, The MFJ-259B manual states this is "usually" the case, and that is
> what I always do. Usually and always are not exactly the same. I do seem to
> remember this discussed a few years back, and someone provided evidence this
> was not always the case. They quoted Smith Chart proof. For the life of me I
> can't find the thread, and haven't had time to play with the chart to confirm.
> This method always (so it seems) works for me, but there are always exceptions.

For instance, a G5RV's feedpoint reactance is +j160 at 9.17 MHz and
+j98 at 9.18 MHz, i.e. decreasing reactance with increasing frequency.
As the anti-resonant point is approached, the resistance increases but
the reactance decreases with increasing frequency.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3996. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 03:35:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fab13c0$1_8@corp.newsgroups.com>
Source record: 105162

Tarmo Tammaru wrote:
> You are right about the gain. I ran EZNEC on the 75 meter loop, and the gain
> at 40 m is about 3db more than on 75. However, it is not resonant in band. I
> got an impedance at 3850 of 40 + j5. Impedance at 7700 of 69 +j1, and
> impedance at 7300 of 18 + j87 (That is an SWR of >10). Gets worse below
> 7300.

But notice the subject line compares 40m and 80m, not 75m.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3997. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 04:08:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fab1b8a$1_8@corp.newsgroups.com>
Source record: 105163

Yuri Blanarovich wrote:
> Unless someone shows that 7 points I raised are not
> valid, I am happy with results of this interesting exercise.

Here's an interesting EZNEC result. I took the 102' loaded dipole
that was resonant on 3.76 MHz and ran it on 14.3 MHz. I repositioned
the loading coils at a current minimum point with a one ohm resistor
on each side so there is 0.03 wavelength between resistors.

--------------R1--coil1--R2-------FP--------R3--coil2--R4--------------

EZNEC sez:
Current through R1 is 0.1618 amps at -156 degrees
Current through coil1 0.09643 amps at -130 degrees
Current through R2 is 0.08098 amps at -70 degrees

In the ten degrees between R1 and R2, the current doubles and shifts
phase by 86 degrees. Can we use these results to prove there is a
phase shift through a lumped inductor? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3998. Re: Need source for Motorol HT800 parts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 05:47:08 UTC
From: "Dr. Anton Squeegee" <SpammersAreVermin@dev.null>
Message-ID: <MPG.1a14d1ba63f63898989acc@192.168.42.131>
Source record: 105164
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.scanner

In article <bf3bee01.0311061536.49268e92@posting.google.com>,
earcad@aol.com says...

> Hello
> Please email if you know of a source or wher i can buy a complete unit.
> Thanks in advance
> Regards
> AC

<snip>

Silly question. Have you tried contacting Motorola?

National parts is at 1800-422-4210

--
Dr. Anton Squeegee, Director, Dutch Surrealist Plumbing Institute
(Known to some as Bruce Lane, KC7GR)
kyrrin a/t bluefeathertech d-o=t c&o&m
"Quando Omni Flunkus Moritati" (Red Green)

3999. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 07:39:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqmj24j85ukg9a@corp.supernews.com>
Source record: 105165

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> Unless someone shows that 7 points I raised are not
>> valid, I am happy with results of this interesting exercise.
>
>
> Here's an interesting EZNEC result. I took the 102' loaded dipole
> that was resonant on 3.76 MHz and ran it on 14.3 MHz. I repositioned
> the loading coils at a current minimum point with a one ohm resistor
> on each side so there is 0.03 wavelength between resistors.
>
> --------------R1--coil1--R2-------FP--------R3--coil2--R4--------------
>
> EZNEC sez:
> Current through R1 is 0.1618 amps at -156 degrees
> Current through coil1 0.09643 amps at -130 degrees
> Current through R2 is 0.08098 amps at -70 degrees
>
> In the ten degrees between R1 and R2, the current doubles and shifts
> phase by 86 degrees. Can we use these results to prove there is a
> phase shift through a lumped inductor? :-)

No.

It'll take a lot more than an EZNEC analysis, or back yard measurement
for that matter, to disprove theory that's been verified and used
successfully for more than a century.

Roy Lewallen, W7EL

4000. MFJ or Autek.....what a fool I am.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 07:50:18 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <mdjmqvshru1bebnhbefirkcinm161g7o44@4ax.com>
Source record: 105166

On Sun, 2 Nov 2003 18:40:10 +0100, "ON5MJ" <on5mj_no_more
_spam_in_stock_sorry_@skynet.be> wrote:

>Hi there,
>
>I want to buy an antenna analyser HF and/or VHF. Could be MFJ or Autek. But
>I don't have experience with theses equipments. Following you what could be
>the best one ?
>
>73 de ON5MJ - Jacques.
>

I bought an MFJ269, because it is beeing advertised as:
"measure antenna impedances REAL and IMAGINARY"
Then they give the range: "from shortwave to 70cm"

Nowhere in the MFJ advertising they do mention,
that on the 70 cm range (R+jX) measurements are NOT POSSIBLE.

They fooled me.

(Which isn't that difficult, anyway).

W.

4001. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 09:02:26 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <tcJqb.9174$mb5.5158@fed1read02>
Source record: 105167

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:boavuh$1btrmi$3@ID-189073.news.uni-berlin.de...
> Agreed..... there is a limited amount of necessary and required services
> that the government needs to perform. In fact, within the exception of
> national defense, the federal government needs to be slim-lined down to
very
> little, as most of the other (within few exceptions) concerns and programs
> can be dealt with on the state and local level.
>
>
> --
> Ryan KC8PMX

Admirable sentiment, until you start listing the exceptions.

Spectrum allocation
Interstate commerce
Monetary control
Environmental control
International trade
Mutual legal recognition

And that took less than a minute.

Ed
wb6wsn

4002. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 09:05:49 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <FfJqb.9188$mb5.3788@fed1read02>
Source record: 105168
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Walt Davidson" <g3nyy@despammed.com> wrote in message
news:ssrhqv0cs3repovv90rv65ms9hgve5sp5f@4ax.com...
> On Wed, 5 Nov 2003 06:21:11 -0600, "Gene Storey" <nospam@cox.net>
> wrote:
>
> >> Israel is a democracy?
> > >
> > >Yes. It has three branches of government (legislature, executive, and
courts).
> > >You don't have to be Jewish to be a citizen, but you do have to be Jewish
to
> > >become the executive.
> >
> > That sounds like an interesting re-definition of "democracy".
> >
> > --
> > Walt Davidson Email: g3nyy @despammed.com

Who cares? The USA isn't a democracy either. Democracy is three wolves and a sheep voting about dinner.

Ed
wb6wsn

4003. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 09:07:52 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <zhJqb.9198$mb5.1058@fed1read02>
Source record: 105069
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:boavuf$1btrmi$2@ID-189073.news.uni-berlin.de...
>
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3fa7cd9f_7@corp.newsgroups.com...
> > Ryan, KC8PMX wrote:
> > > Last I knew, unless the Republican oriented college that I went to was
> > > wrong, that on the political spectrum, the Libertarian party was more
to
> the
> > > right than republicans.....
> >
> > Extremely to the left of republicans on social issues like drug
policies.
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
>
>
> I typically agree more with the Libertarian parties' ideals, except for
the
> drug policies..... As a former user (knock on wood, 10 years and 2
months
> drug-free) and also dealing with people that are users in the emergency
> services related fields, I have absolutely no use for any drug not
> prescribed by a doctor.
>
>
> --
> Ryan KC8PMX
>
> All of us could take a lesson from the weather. It pays no
> attention to criticism.
>
>

Finally kicked that aspirin Jones, huh?

Ed
wb6wsn
```

4004. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 10:29:06 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <rvrmqvslog77kqkn3o6ifvnq2u22eqmbot@4ax.com>
Source record: 105070

On Fri, 31 Oct 2003 19:30:49 -0500, <w4udx@bellsouth.net> wrote:

>Hi group,
> just wondering.... can I take a 40M delta loop and add an 80M dipole to it?
>Will there be interaction?
>SWR problems?
>
>Mark W4UDX
>

Hi Mark and All,

your Idea of adding a dipole to you 40 meter loop is not a great way
to go.. there will be interaction between the dipole and the loop.
that will cause you problems on both bands.. The better approach would
be to feed the loop with open wire through a good balanced tuner and
feed it on both bands.. on 80m for a 40 m loop you may have to open
the loop opposet from the feed point . If you have room however to
put up a 80 Meter horizontal loop and feed it with Open wire (Ladder
Line) it will play very well on all bands 80-10m.

Remember a Horizontal loop will get better take off angel as you move
up in frequency. a vertical loop gets worse as you move up in
frequency. (that is higher take off angles) I used a 160M horizontal
loop here for many years .. until a storm took down too of the trees
used for support. But it was a good all round antenna.

73 Dave kc1di

P.S. you may want to read up on loops here's a good place to start.
http://www.cebik.com/vdelt.html

http://www.cebik.com/atl1.html

http://www.cebik.com/fdim/fdim5.html

4005. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 12:37:26 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <YmMqb.1054$643.70@okepread03>
Source record: 105071
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

The US is a democracy.

Any country is a democracy, which has a legislature, an executive, and
a supreme court.

http://usinfo.state.gov/products/pubs/whatsdem/

"Ed Price" <edprice@cox.net> wrote
>
> Who cares? The USA isn't a democracy either. Democracy is three wolves and a
> sheep voting about dinner.
>
> Ed
> wb6wsn

4006. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 12:41:14 UTC
From: N8KDV <n8kdv@nospam.iserv.net>
Message-ID: <3FAB92E9.BCF7E349@nospam.iserv.net>
Source record: 105072
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:

> The US is a democracy.

Sorry, we are a Representative Republic. Get your facts straight.

>
>
> Any country is a democracy, which has a legislature, an executive, and
> a supreme court.
>
> http://usinfo.state.gov/products/pubs/whatsdem/
>
> "Ed Price" <edprice@cox.net> wrote
> >
> > Who cares? The USA isn't a democracy either. Democracy is three wolves and a
> > sheep voting about dinner.
> >
> > Ed
> > wb6wsn

4007. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 12:58:45 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <9GMqb.5531$vq.5475@newssvr25.news.prodigy.com>
Source record: 105073
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"N8KDV" <n8kdv@nospam.iserv.net> wrote in message
news:3FAB92E9.BCF7E349@nospam.iserv.net...
>
>
> Gene Storey wrote:
>
> > The US is a democracy.
>
> Sorry, we are a Representative Republic. Get your facts straight.
>

When you guy finally figure out how many angels can dance on the head of a pin, be sure and let us all know.

Charles Brabham, N5PVL

4008. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 14:39:40 UTC
From: K7JEB <k7jeb@qsl.remove.net>
Message-ID: <6bOqb.3321$Cj1.2864@fed1read07>
Source record: 105074

Roy Lewallen, W7EL, wrote:

> No.
>
> It'll take a lot more than an EZNEC analysis, or back yard measurement
> for that matter, to disprove theory that's been verified and used
> successfully for more than a century

As I followed this topic thread both in this forum and on eHam, I formed my own opinion about the observed disparity between currents entering and leaving an antenna loading coil. My conclusion was that the parasitic capacitances between the coil turns and ground were responsible for shunting a fraction of this current away from the coil terminal that connects to the top part of the antenna (in the present case of a shortened, vertical monopole - the typical HF mobile antenna).

To confirm this notion, I created the following EZNEC(tm) model of a 13-foot, inductively loaded monopole fed against a perfect ground: (1) a 3-ft bottom section containing the RF source, (2) a set of four inductors connected in series and occupying a physical length on the antenna of 2 feet, (3) a set of three "gimmick" wires attached to the internal nodes of the inductor assembly and extending horizontally for 2 feet that simulate the parasitic capacitances between the coil turns and ground and (4) an 8-foot whip on the top to complete the antenna. The operating frequency was chosen to be 3900 kHz and the inductors were adjusted in value to resonate the entire antenna at this frequency.

The results are shown below as an EZNEC printout of the load data for the four inductors (Inductor 1 is the one closest to the bottom):

EZNEC ver. 3.0

Yuri's Mobile #1 11/7/2003 6:05:04 AM

---------- LOAD DATA ----------

Frequency = 3.9 MHz

Load 1 Voltage = 4280 V. at 89.99 deg.
--> Current = 10.24 A. at -0.01 deg.
Impedance = 0 + J 418 ohms
Power = 0 watts

Load 2 Voltage = 4144 V. at 89.98 deg.
--> Current = 9.914 A. at -0.02 deg.
Impedance = 0 + J 418 ohms
Power = 0 watts

Load 3 Voltage = 3756 V. at 89.97 deg.
--> Current = 8.985 A. at -0.03 deg.
Impedance = 0 + J 418 ohms
Power = 0 watts

Load 4 Voltage = 3125 V. at 89.97 deg.
--> Current = 7.476 A. at -0.03 deg.
Impedance = 0 + J 418 ohms
Power = 0 watts

Total applied power = 156.6 watts

As can be seen, there is roughly a 25% reduction in current from
bottom to top on the "loading coil".

Interestingly, most of this current-shunting appears to take
place near the top of the "coil".

This model is admittedly quite crude. The conclusions I reached
were that there was at least a qualitative effect from the parasitic
shunting capacitances on the current flow through a loading coil
and that quantitatively it appears to be fairly significant.

I have included the text description of the model from EZNEC
below:

EZNEC ver. 3.0

Yuri's Mobile #1 11/7/2003 6:24:20 AM

---------- ANTENNA DESCRIPTION ----------

Frequency = 3.9 MHz
Wire Loss: Zero

---------- WIRES ----------

No. End 1 Coord. (in) End 2 Coord. (in) Dia (in) Segs
Conn. X Y Z Conn. X Y Z
1 GND 0, 0, 0 W2E1 0, 0, 36 0.1 8
2 W1E2 0, 0, 36 W3E1 0, 0, 42 0.1 1
3 W4E1 0, 0, 42 24, 0, 42 0.1 1
4 W2E2 0, 0, 42 W5E1 0, 0, 48 0.1 1
5 W6E1 0, 0, 48 0, 24, 48 0.1 1
6 W4E2 0, 0, 48 W7E1 0, 0, 54 0.1 1
7 W8E1 0, 0, 54 -24, 0, 54 0.1 1
8 W6E2 0, 0, 54 W9E1 0, 0, 60 0.1 1
9 W8E2 0, 0, 60 0, 0, 156 0.1 1

Total Segments: 16

```
-------------- SOURCES --------------

No. Spec. Pos. Actual Pos. Amplitude Phase Type
Wire # % From E1 % From E1 Seg (V/A (deg.)
1 1 1.00 6.25 1 10 0 I

-------------- LOADS (R + jX Type) --------------

Load Spec. Pos. Actual Pos. R X
Wire # % From E1 % From E1 Seg (ohms) (ohms)
1 2 50.00 50.00 1 0 418
2 4 50.00 50.00 1 0 418
3 6 50.00 50.00 1 0 418
4 8 50.00 50.00 1 0 418

No transmission lines specified

Ground type is Perfect

Just to complete the picture, here is the Source data:

EZNEC ver. 3.0

Yuri's Mobile #1 11/7/2003 6:48:30 AM

--------------- SOURCE DATA ---------------

Frequency = 3.9 MHz

Source 1 Voltage = 16.43 V. at 17.66 deg.
Current = 10 A. at 0.0 deg.
Impedance = 1.566 + J 0.4984 ohms
Power = 156.6 watts
SWR (50 ohm system) = 31.937

I will be happy to send out the .EZ file for this
to any interested parties. Splice together the
e-mail address below to contact me.

73,

Jim Bromley, K7JEB

k7jeb (at) qsl (dot) net
```

4009. T2FD modded to add LF, no switching, AM BC rejection

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 14:59:06 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0311070659.e814c57@posting.google.com>
Source record: 105075

There used to be an expensive T2FD by RF Systems that could be remotely switched to T configuration for use below 3 MHz.

If one wants to cover 0.1-0.54 and 3-20 MHz or so, a diplexer may allow using the T2FD as TWO specialized antennas:
- a LF "Tee" with both upper and lower wires fed in phase
- a T2FD fed across as usual
with no switching, and rejection of strong signals in the AM broadcast band - which are a problem for some.

This is what I though up:

For LF, use the T2FD as a short T, with all four semi-arms fed in phase. Connect each side of the classical T2FD feed point, and each side of the resistor, to 4 separate unbalanced Low Pass filters (Fc = .55 MHz), all outputs in parallel, feeding in-phase a stepdown RF transformer, unbalanced-unbalanced, LF-optimized, 50 ohm out.

For HF, connect only the T2FD feedpoints to a balanced High Pass filter (fc = 2 MHz), feeding a step-down balun, HF-optimized, 50 ohm out.

If a single coax is desired, a low-Z, unbalanced, LF-HF combining diplexer could be used. As an alternative, two coax lines - perhaps RG9 for two way HF, RG58 for LF receiving.

Result: one antenna for both LF and low MF (Tee) and HF (T2FD), no remote switching needed, AM BC rejection - particularly strong if a diplexer is used to output on a single coax.

I still have to work out if the out-of-band load of the front ends of the BPFs is small enough not to ruin performance too much. I am thinking of multiple T networks.

LPFs: four unbalanced, Zi=Zo=~3000ohm @ .55MHz, feeding in parallel a 4:1 or so unbalanced transformer to 50 ohm coax. Zi at HF intuits to be horrendously high - good! Are numbers in the ballpark?

HPF: one balanced, Zi=Zo=300 ohm @ 2MHz, feeding a 4:1 balun into a 75 ohm coax.
How do I get a steep rise in load viewed from MF / LF? Are T networks steep enough?

Comments? If you can convince me this is dumb, I'll save myself a lot of crunching, but it would be a pity.

TIA

Filippo

4010. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 15:31:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fabbacc$1_8@corp.newsgroups.com>
Source record: 105076

Roy Lewallen wrote:
> It'll take a lot more than an EZNEC analysis, or back yard measurement
> for that matter, to disprove theory that's been verified and used
> successfully for more than a century.

Nobody is out to disprove theory. But it seems apparent that the lumped
inductor conceptual model and a real-world inductor have little in common.
For the same reason, one cannot use a model of a lossless transmission
line to determine real-world efficiency. Models do not dictate reality.
It is supposed to be the other way around.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4011. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 15:34:30 UTC
From: richardharrison@webtv.net
Message-ID: <11860-3FABBB86-50@storefull-2313.public.lawson.webtv.net>
Source record: 105077

Yuri, K3BU wrote:
"Point by point please." to a list of 7 facts supporting his contention that a non-uniform current exists in a 1/4-wave antenna with a loading coil inserted at a spot from 50 to 70% of the radiator length, on Wed. Nov. 5, 2003, 3:15 am (CST + 6).

1. Coil is warmer at bottom than top.

As power dissipation is proportional to the square of the current, it shows that in a uniform structure heat is where the current is high.

2. Current indicators at the top and bottom of a loading coil show 40 to 60% difference in ends of the loading coil.

High accuracy may not be available, but the argument is between same current or dissimilar currents at the ends of the coil. High accuracy is not needed.

3. Let`s look at the RF choke.

It`s not what the coil is called. It`s position and size with respect to wavelength.

4. W9UCW used a toroid and got the same results.

The results were based on phase delay, not coil radiation. Antenna current in a coil results from overcoming an opposition. This impedance is a vector sum of reactance and resistance. The reactance of the coil is the same in both directions of energy travel. The impedance the antenna presents at the ends of the coil is not the same in both directions.

Any coil reactance produces a delay. Inductors used in telephone circuits to block audio and pass d-c and low-frequency ringing current are called "retardation coils". A delay time of the signal is called "phase lag". These are appropriate names. Toroid coils cause phase lag too.

5. Cecil explained the reflected wave situation and delay in the coil---.

Cecil did it accurately and well.

6. ON4UN in his Low Band DXing book for years has shown and explained the distribution of current in various configurations of loading coils----etc.

ON4UN did it right and it has stood the test of time. Don`t hold your breath waiting for revisions.

7. How could it be if the voltage (neon bulb test) is increasing along the coil towards the top, current has to be decreasing.

Yes, unless the power is increasing in the same direction, and it`s not. The neon shows high potential gradient points. In the driven quarter-wave radiating element, loaded or unloaded, the maximum voltage always seems to be at the tip end.

We know that as in a transmission line, in a standing-wave antenna, reflection produces current maxima at voltage minima, and vice versa.

Yuri shouldn`t bemoan lack of response to his Antenna Group 7. It only shows there is not much to contradict.

Best regards, Richard Harrison, KB5WZI

4012. HELP: Will a TH3-JR HF beam load on 17m?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 16:21:00 UTC
From: Pat's Sympatico <nobady@nowhere.nil>
Message-ID: <dFPqb.3376$143.227569@news20.bellglobal.com>
Source record: 105078

I'm butting up a new tower and I'm deciding between the Hy-Gain TH3JR and the Butternut HF5B.

My tower is 10' from the lot line, so I'm trying to minimize overhang above the neighbors house. I can park the beam when not in use, so even if the turning radius is greater than 12', as long as the 1/2 the boom length is less than 11', I would not be 'parked' over his home.

So, the butternut and the hygain are both smaller antennae, but I would like to have the WARC bands as well as the typical 20-15-10 combo.

Anyone have some thoughts on this?

PLEASE REPLY HERE. (as the spam is simply too much.)

Thanks!
Pat,
VE3PMK

4013. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 17:55:00 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bogm9kbei1@hercules.btinternet.com>
Source record: 105079
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

> When you guy finally figure out how many angels can dance on the head of a
> pin, be sure and let us all know.
>
> Charles Brabham, N5PVL

==========

Charles, just like the other technical old wives, as usual you've got it all wrong.

May I refer you to the grand-master himself - Sir Isach Newton. The measurement standard is NOT the head of a pin - it is the point of a NEEDLE which differs by an order of magnitude in smallness.

Reg. G4FGQ

4014. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 18:02:43 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <77Rqb.3386$Vo5.205@newssvr29.news.prodigy.com>
Source record: 105080
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bogm9kbei1@hercules.btinternet.com...
> > When you guy finally figure out how many angels can dance on the head of
a
> > pin, be sure and let us all know.
> >
> > Charles Brabham, N5PVL
>
> ==========
>
> Charles, just like the other technical old wives, as usual you've got it
all
> wrong.
>
> May I refer you to the grand-master himself - Sir Isach Newton. The
> measurement standard is NOT the head of a pin - it is the point of a
NEEDLE
> which differs by an order of magnitude in smallness.
> ----
> Reg. G4FGQ
>

I was referring to the American standard, of course, since American politics
were involved.

Over here, we've had them dancing on the heads of pins for quite a while,
over 150 years. Maybe it's the rich foods and leisurely life-style over here
that makes it necessary for us to have a little bit more room for our
angels.

Charles Brabham, N5PVL

4015. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 18:35:07 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FABE5DB.6C2F1460@cwis.net>
Source record: 105081

Mark,
On 40meters, adding an 80 meter dipole to the 40 meter
loop won't 'mess' things up much. It'll change the radiation
pattern, make it sort of directional, kinda. No big deal.
But, on 80 meters, the 40 meter loop acts like a 1/2 wave
'short' between the two halves of the dipole. SWR goes up
close to around 500:1, the transmitter is looking at something
on the order of '300R - 2500J'. Not too good, and as for the
lower radiation angle, it really doesn't make a lot of
difference
at that point.
'Doc

PS - The 'numbers' are approximate, "close enough for 'gum-ment'
work"...

4016. Re: HELP: Will a TH3-JR HF beam load on 17m?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 18:55:19 UTC
From: desmoface@aol.com
Message-ID: <20031107135519.06416.00000232@mb-m19.aol.com>
Source record: 105082

How bout the tennadyne log periodic? I believe they have a 5 or 6 element version that's not too big.

I had a force 12 c3 up for a bit, it was a pretty large antenna but it worked 10-20 and the tuner in me rig even tuned it up on 40 although it didnt work good on 40. They now make the c3 in a short version which isnt much off the performance of the regular c3, which is probably similar to a 2 element yagi on 20 and 3 elements on 10 and 15..Good luck.

Steve
kb8viv

4017. Re: HELP: Will a TH3-JR HF beam load on 17m?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 18:59:19 UTC
From: desmoface@aol.com
Message-ID: <20031107135919.06416.00000233@mb-m19.aol.com>
Source record: 105083

>How bout the tennadyne log periodic? I believe they have a 5 or 6 element
>version that's not too big.

http://www.tennadyne.com/specs&prices.htm

Check it out, never used one but they look promising and they should work
everything between 10-20..

Steve
kb8viv

4018. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:00:29 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <q4qnqvc20tm660urgg4mn5phf453388q35@4ax.com>
Source record: 105084

On Thu, 06 Nov 2003 13:36:17 -0500, Robert Lyons
<boblyons@duct.umich.edu.tape> wrote:

>W1RFI wrote:
>
>> I have not looked at a plasma TV, Chip, but I would make that diagnosis
>> primarily on on the basis of the sphere of influence. In the BPL test areas,
>> the interference was heard over the entire area that had the BPL couplers in
>> place.
>
>
>Hmmm - I wonder ... presumably the BPL couplers are capacitors coupling
>appropriate RF from one leg of the power system to the next. Would they
>also couple spuriously-generated RF at similar frequencies? (yeah, I'm
>sure the couplers are more involved than simple RF bypass caps - that's
>not the question here.)
>
>The PPL rep accused you of mis-interpreting the RF from a neon sign as a
>BPL signal. What DOES happen to the hash generated by a neon sign, then?
>is it propagated through the power grid much further when BPL couplers
>are present? How about other sources of broadband noise, like loose wires,
>arcing insulators, etc? Will the entire BPL scheme spread all these other
>spurious emissions far and wide?
>
>And, by the way, since aircraft use AM, do they receive hash when they
>fly over BPL lines? Are our brethren in aviation potentially useful
>allies in this war?

We'd basically have to identify an area close to an airport.
IF it were to interfere it would be more likely to interfere with nav
radios such as the ILS and VORs.

Even small planes are likely to be several thousand feet above any
current test area and as the areas are small any interference would be
brief and quite likely unnoticed.

Now, if they'd put one off the approach end of a runway using an ILS
and screw up the glide slope indication for an airliner, I think the
PBL experiment would be over in a hurry.

I don't think that is going to happen.
Even if those frequencies are "notched out" I think it would affect an
ILS indicator and I emphasize the "I think" part. I also think they
will avoid putting anything near an airport until the system is in
widespread use with the hopes that sheer pressure would force the
continuance of the service. These people "ain't dumb". They are going

to play everything to their advantage including attempts to discredit any testing that shows them in a bad light, as we've already seen. I wouldn't call them dishonest, or that they would resort to "prefabrication, or prevarication". I think everyone can draw their own conclusions.

I would hope the FAA and FCC would require specific testing be done both in the laboratory and in the field due to the quite possible severe consequences were interference to aviation to occur.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>
>Bob, KI8AB

4019. ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:04:02 UTC
From: "Johnny V. Mullins" <jvm333@alltel.net>
Message-ID: <1068232956.954445@ph9cache>
Source record: 105085

Hi, group. I'm considering an attempt at building a quad antenna for 11 meters.
The plans I have, leave some of the details to the builder.
It's my understanding that the driven element needs to be fed VIA a balun.
I emailed a person with baluns "for sale" listed on ebay. He replied that he thought I needed a 4:1 balun for a quad.
It's was my understanding that the balun should be a 1:1 ??

Anyone in the group care to advise me on this question ??

Any help and /or advise on the building of the 4 element 11 meter Quad would be appreciated :-) !!

Thanks

Johnny

4020. BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:25:25 UTC
From: "Johnny V. Mullins" <jvm333@alltel.net>
Message-ID: <1068233131.786143@ph9cache>
Source record: 105086

Hi, group. I'm considering an attempt at building a quad antenna for 11 meters.
The plans I have, leave some of the details to the builder.
It's my understanding that the driven element needs to be fed VIA a balun.
I emailed a person with baluns "for sale" listed on ebay. He replied that he thought I needed a 4:1 balun for a quad.
It's was my understanding that the balun should be a 1:1 ??

Anyone in the group care to advise me on this question ??

Any help and /or advise on the building of the 4 element 11 meter Quad would be appreciated :-) !!

Thanks

Johnny

4021. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:32:14 UTC
From: desmoface@aol.com
Message-ID: <20031107143214.21581.00000266@mb-m19.aol.com>
Source record: 105087

>Hi, group. I'm considering an attempt at building a quad antenna for 11
>meters.

Seems to be some good info on 11 meter quads here:

http://www.signalengineering.com/ultimate/4_element_quad.html

They suggest a 1:1 current balun and even have suggestions for a particular
manufacturer's product.

Cubex is a company I'd contact as they have been in the quad building bidnes
for a long time, they build an 11 meter quad and can probably help you get it
set up right; http://www.cubex.com/cb.htm

Good luck.

Steve
kb8viv

4022. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:47:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fabf6e1_7@corp.newsgroups.com>
Source record: 105088

'Doc wrote:
> Mark,
> On 40meters, adding an 80 meter dipole to the 40 meter
> loop won't 'mess' things up much. It'll change the radiation
> pattern, make it sort of directional, kinda. No big deal.
> But, on 80 meters, the 40 meter loop acts like a 1/2 wave
> 'short' between the two halves of the dipole. SWR goes up
> close to around 500:1, the transmitter is looking at something
> on the order of '300R - 2500J'. Not too good, and as for the
> lower radiation angle, it really doesn't make a lot of
> difference at that point.

Doc, ask yourself - why would the 80m signal rather flow into an
impedance of 300-j2500 than into an impedance of 70+j0? Answer:
it wouldn't. An 80m 1/2wl dipole in parallel with a 40m 1wl loop
is a perfectly acceptable configuration as far as feedpoint
impedances go.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4023. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 19:49:58 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311071149.354638ae@posting.google.com>
Source record: 105089
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

GS,

Ah then by using your definition: NAZI Germany was a Democracy !
- The USSR was a Democracy.
- - The Peoples "Democratic" [Republic] of North Korea is a Democracy.
(Alone with many other nations that call themselves Peoples
"Democratic" [Republics]}
- - - Islamic Republic of Iran is a Democracy.

Fidel Castro should be honored as the longest living Leader of a
Democracy.
- - - The Republic of Cuba.

Why the World is Full of Democracies ~ RHF
.
.
= = = "Gene Storey" <nospam@cox.net>
= = = wrote in message news:<YmMqb.1054$643.70@okepread03>...
> The US is a democracy.
>
> Any country is a democracy, which has a legislature, an executive, and
> a supreme court.
>
> http://usinfo.state.gov/products/pubs/whatsdem/
>
> "Ed Price" <edprice@cox.net> wrote
> >
> > Who cares? The USA isn't a democracy either. Democracy is three wolves and a
> > sheep voting about dinner.
> >
> > Ed
> > wb6wsn

4024. Re: HELP: Will a TH3-JR HF beam load on 17m?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 20:04:17 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bogts4$19uc$1@f04n12.cac.psu.edu>
Source record: 105090

I have the T6 and I like it very much. It meets all the specifications and works very well for me. If I was to do it over again, I would get the next bigger one as the SWR curves are a bit lower and the beam width a bit sharper. But the T6 will beat the beans out of any small tribander in all ways except front to back.
Be aware that the minimum height is 40' with something around 65' optimal. Also Tennadyne almost always have them in stock for rapid shipment unlike other companies that can make you wait weeks or more for them to ship.

So for one more not very meaningful testimonial, I've worked 276 countries in 2 years, with 100+ countries on 20, 15, 10m and I'm waiting (hoping) for cards on 17 and 12m.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Desmoface" <desmoface@aol.com> wrote in message
news:20031107135919.06416.00000233@mb-m19.aol.com...
> >How bout the tennadyne log periodic? I believe they have a 5 or 6 element
> >version that's not too big.
>
> http://www.tennadyne.com/specs&prices.htm
>
> Check it out, never used one but they look promising and they should work
> everything between 10-20..
>
> Steve
> kb8viv

4025. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 20:30:50 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <sZmdnSgWiqx1nTGiRVn-uw@comcast.com>
Source record: 105091

"Johnny V. Mullins" <jvm333@alltel.net> wrote in message
news:1068232956.954445@ph9cache...
> Hi, group. I'm considering an attempt at building a quad antenna for 11
> meters.
> The plans I have, leave some of the details to the builder.
> It's my understanding that the driven element needs to be fed VIA a balun.
> I emailed a person with baluns "for sale" listed on ebay. He replied that
he
> thought I needed a 4:1 balun for a quad.
> It's was my understanding that the balun should be a 1:1 ??
>

The driven element should end up near 50 ohms, so you want a 1-1 balun.

--
A: Because it messes up the order in which people normally read text.
Q: Why is top-posting such a bad thing?
A: Top-posting.
Q: What is the most annoying thing on usenet?

4026. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 23:26:21 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031107182621.13254.00000039@mb-m16.aol.com>
Source record: 105092

>
>Yuri shouldn`t bemoan lack of response to his Antenna Group 7. It only
>shows there is not much to contradict.
>
>Best regards, Richard Harrison, KB5WZI
>
>

Hi Richard,
thanks very much for the positive reinforcement. Seems that those who get their hands dirty from antenna grease know a thing or two, those who model their world on the computer know their paper stuff.
So far not a one "overthrow" of my 7 points, so I take it that we are on the right track and hope that others get it too and help us to use it properly.

BTW I just found good source for liquid crystal strip thermometers, they have them in the pet shops, they are used for aquarium temperature measurements cost around $2. Cheap and easy way to verify the heat from current. I will get some and run som visual tests on Hustlers.

73 Yuri

4027. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 23:39:18 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3faadbb9_4@newsfeed.slurp.net>
Source record: 105109

Unless you go the route of feeding with twin lead and a tuner (and, yes I know several local hams that do so successfully), then you need to back up and look at the impedance of your driven loop, and the impedance of your feedline - a balun, if used, will match those two impedances. For example, a 300-ohm element with 50-ohm coax would require a 6:1 balun.

Hope that helps. Good luck!

73,
KI6PR
El Rancho R.F., CA

"Johnny V. Mullins" wrote
> Hi, group. I'm considering an attempt at building a quad antenna for 11
> meters.
> The plans I have, leave some of the details to the builder.
> It's my understanding that the driven element needs to be fed VIA a balun.
> I emailed a person with baluns "for sale" listed on ebay. He replied that
he
> thought I needed a 4:1 balun for a quad.
> It's was my understanding that the balun should be a 1:1 ??
>
> Anyone in the group care to advise me on this question ??
>
> Any help and /or advise on the building of the 4 element 11 meter Quad
would
> be appreciated :-) !!
>
> Thanks
>
> Johnny
>
>
>

4028. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 23:41:08 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FAC2D94.C7A6DA59@cwis.net>
Source record: 105093

Cecil,
"Horse hockey"! Try it and see what happens.
Didn't say model it...try it.
'Doc

4029. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-07 23:42:21 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3faadc6a_3@newsfeed.slurp.net>
Source record: 105110

An additional comment. Are you aware that Cubex is now offering 11-meter quads? Conversely, are you aware that there are a number of good books on quad theory and construction? Just trying to help...

- KI6PR
El Rancho R.F., Ca

"Johnny V. Mullins" wrote
> Hi, group. I'm considering an attempt at building a quad antenna for 11
> meters.
> The plans I have, leave some of the details to the builder.
> It's my understanding that the driven element needs to be fed VIA a balun.
> I emailed a person with baluns "for sale" listed on ebay. He replied that
he
> thought I needed a 4:1 balun for a quad.
> It's was my understanding that the balun should be a 1:1 ??
>
> Anyone in the group care to advise me on this question ??
>
> Any help and /or advise on the building of the 4 element 11 meter Quad
would
> be appreciated :-) !!
>
> Thanks
>
> Johnny
>
>
>

4030. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 00:51:31 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <boheng$7sr9$1@news3.infoave.net>
Source record: 105094

For 5 watts or less, a 1:1 balun is ideal. If you are running a linear, you will need at least a 12:1, in fact I would get 2 and run them in series.

"Johnny V. Mullins" <jvm333@alltel.net> wrote in message news:1068232956.954445@ph9cache...
> Hi, group. I'm considering an attempt at building a quad antenna for 11
> meters.
> The plans I have, leave some of the details to the builder.
> It's my understanding that the driven element needs to be fed VIA a balun.
> I emailed a person with baluns "for sale" listed on ebay. He replied that
he
> thought I needed a 4:1 balun for a quad.
> It's was my understanding that the balun should be a 1:1 ??
>
> Anyone in the group care to advise me on this question ??
>
> Any help and /or advise on the building of the 4 element 11 meter Quad
would
> be appreciated :-) !!
>
> Thanks
>
> Johnny
>
>
>

4031. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 01:27:23 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <LEXqb.2155$643.2023@okepread03>
Source record: 105095
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"N8KDV" <n8kdv@nospam.iserv.net> wrote
>
>
> Gene Storey wrote:
>
> > The US is a democracy.
>
> Sorry, we are a Representative Republic. Get your facts straight.

A representative republic would probably be a democracy, depending
on whether it had separate legislative, executive, and court systems. The
United states is a republic, and it is a democracy, and it has majority rule
by representative government.

4032. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 01:28:35 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <TFXqb.2159$643.586@okepread03>
Source record: 105096
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote
>
> When you guy finally figure out how many angels can dance on the head of a
> pin, be sure and let us all know.

If you are standing in line for 25 cent blow-jobs, I think you're in the
wrong line there fluffy.

4033. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 01:35:13 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <6MXqb.2160$643.1262@okepread03>
Source record: 105097
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Not true. None of those systems are/were a democracy because they
did/do not have equality before the law, nor the right to vote.

"RHF" <rhf-mail@pacbell.net> wrote
> GS,
>
> Ah then by using your definition: NAZI Germany was a Democracy !
> - The USSR was a Democracy.
> - - The Peoples "Democratic" [Republic] of North Korea is a Democracy.
> (Alone with many other nations that call themselves Peoples
> "Democratic" [Republics]}
> - - - Islamic Republic of Iran is a Democracy.
>
> Fidel Castro should be honored as the longest living Leader of a
> Democracy.
> - - - The Republic of Cuba.
>
> Why the World is Full of Democracies ~ RHF

4034. Re: BPL a reality regardless of prior users

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 01:56:52 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311071756.549f2fb6@posting.google.com>
Source record: 105098

Has a radio station lost income because advertisers
are not having their messages heard by some listeners?
Have any radio stations complained of interference
of any sort ?

These people count much more than anybody because
they have money which means influence.
What would really count is to vote out the present
government so that it would cost twice as much as
was originaly thought as influence costs would
have to start all over again.
On the other hand is local broadcasting on the way out
together with ham radio? We appear to know everything that counts
so that with mystery gone so will curiousity. Our monthly magazine
is not eagerly awaited anymore as the first portion is really of
interest to the few and the second portion is devoted to
organisational business.
Seems like a lot of hams have migrated to the internet to discuss
items of interest.
You certainly do not hear technical discussions anymore
I personaly have not been on the air for ages
other than an occasional test, and I suspect that I am not alone.
Maybe it is time to move on and give up the frequencies anyway.
Do enjoy my RADCOM tho because it talks to me, not down to me
as someone who should get an education and rise up to the
publishers level. Frankly our membership and influence is dwindling
fast,
so maybe we would regain it back if we let this scheme go ahead so we
can
say ' we told you so ' rather than howling into the wind.
Since most things are now discussed on the internet rather than ham
radio
perhaps we should think more of what is best to the common interest,
perpetuating ham radio for the few old people until they die or
enlarging internet access for the many and for the future, something
that our hobby does not have.
Art

Please throw your rocks into this basket and not at me !
TIA

i i
i i
i i
i_____1

x

4035. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 02:03:36 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <Y9Yqb.4582$AP7.3437@newssvr29.news.prodigy.com>
Source record: 105099
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Gene Storey" <nospam@cox.net> wrote in message
news:TFXqb.2159$643.586@okepread03...
> "charlesb" <n5pvl@sbcglobal.net> wrote
> >
> > When you guy finally figure out how many angels can dance on the head of
a
> > pin, be sure and let us all know.
>
> If you are standing in line for 25 cent blow-jobs, I think you're in the
> wrong line there fluffy.

Watch your mouth, asswipe.

Charles Brabham, N5PVL

4036. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 02:45:25 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <NdKdnQwhwaMyxTGiRVn-ig@comcast.com>
Source record: 105100

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:boheng$7sr9$1@news3.infoave.net...
> For 5 watts or less, a 1:1 balun is ideal. If you are running a linear,
you
> will need at least a 12:1, in fact I would get 2 and run them in series.

Oh now be nice.
He hasn't said anything about running illegal power. As long as he's
coloring inside the lines, I see no reason to be mean.

4037. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 03:57:04 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <kQZqb.104129$ao4.313379@attbi_s51>
Source record: 105101

I suppose after the Alzheimer's sets in, you can't remember what you just read but for the rest of us, we rather not have to wade through previously read info to get to the message.

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message news:sZmdnSgWiqx1nTGiRVn-uw@comcast.com...
>
>
> --
> A: Because it messes up the order in which people normally read text.
> Q: Why is top-posting such a bad thing?
> A: Top-posting.
> Q: What is the most annoying thing on usenet?
>
>

4038. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 04:04:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fac6b7a$1_4@corp.newsgroups.com>
Source record: 105102
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> The United states is a republic, and it is a democracy, ...

It's not a democracy because some citizens are prohibited from voting.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4039. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 04:33:48 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bohrok$82c9$1@news3.infoave.net>
Source record: 105103

You will note I gave the correct advice for coloring inside the lines. The situation as stated is self correcting. besides, how could you ever accuse someone as warm and fuzzy as myself of being anything other than nice?

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message news:NdKdnQwhwaMyxTGiRVn-ig@comcast.com...
>
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:boheng$7sr9$1@news3.infoave.net...
> > For 5 watts or less, a 1:1 balun is ideal. If you are running a linear,
> you
> > will need at least a 12:1, in fact I would get 2 and run them in series.
>
> Oh now be nice.
> He hasn't said anything about running illegal power. As long as he's
> coloring inside the lines, I see no reason to be mean.
>
>

4040. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 04:34:50 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bohrqi$8337$1@news3.infoave.net>
Source record: 105104

Amen and Amen!

"CW" <clinton.magers@comcast.net> wrote in message
news:kQZqb.104129$ao4.313379@attbi_s51...
> I suppose after the Alzheimer's sets in, you can't remember what you just
> read but for the rest of us, we rather not have to wade through previously
> read info to get to the message.
>
>
> "Dave VanHorn" <dvanhorn@cedar.net> wrote in message
> news:sZmdnSgWiqx1nTGiRVn-uw@comcast.com...
> >
> >
> > --
> > A: Because it messes up the order in which people normally read text.
> > Q: Why is top-posting such a bad thing?
> > A: Top-posting.
> > Q: What is the most annoying thing on usenet?
> >
> >
>
>

4041. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 04:51:02 UTC
From: Snidley <NoEmail@NoAddress>
Message-ID: <bohsnjdfh0@pita.alt.net>
Source record: 105105
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fac6b7a$1_4@corp.newsgroups.com...
Gene Storey wrote:
> The United states is a republic, and it is a democracy, ...

It's not a democracy because some citizens are prohibited from voting.
--
73, Cecil http://www.qsl.net/w5dxp

Oh? Prohibited? Please 'splain, Lucy.

4042. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 05:17:14 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bohua8$842c$1@news3.infoave.net>
Source record: 105106
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

For starters convicted felons, people under the age of 18...

"Snidley" <NoEmail@NoAddress> wrote in message
news:bohsnjdfh0@pita.alt.net...
>
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3fac6b7a$1_4@corp.newsgroups.com...
> Gene Storey wrote:
> > The United states is a republic, and it is a democracy, ...
>
> It's not a democracy because some citizens are prohibited from voting.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> Oh? Prohibited? Please 'splain, Lucy.
>
>

4043. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 05:21:04 UTC
From: Jer <abuse@supernews.com>
Message-ID: <43%qb.57691$Ub4.52938@twister.socal.rr.com>
Source record: 105107
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Well, if one is to dense to figure out how to vote, then you don't deserve a vote. Its not rocket science you know...

de jer...

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fac6b7a$1_4@corp.newsgroups.com...
> Gene Storey wrote:
> > The United states is a republic, and it is a democracy, ...
>
> It's not a democracy because some citizens are prohibited from voting.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4044. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 05:26:24 UTC
From: Snidley <NoEmail@NoAddress>
Message-ID: <bohuptnhi0@pita.alt.net>
Source record: 105108
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bohua8$842c$1@news3.infoave.net...
For starters convicted felons, people under the age of 18...

Oh. OK. That is law. Not a big deal. I thought the poster was going to moan
that some factions of the 'minority' community are being purposely
disenfranchised.
Liberal mindsets see these things differently and the rule of law has no
meaning to them.

"Snidley" <NoEmail@NoAddress> wrote in message
news:bohsnjdfh0@pita.alt.net...
>
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3fac6b7a$1_4@corp.newsgroups.com...
> Gene Storey wrote:
> > The United states is a republic, and it is a democracy, ...
>
> It's not a democracy because some citizens are prohibited from voting.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
> Oh? Prohibited? Please 'splain, Lucy.
>
>

4045. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 07:53:52 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <xMudnd19cu5iPTGi4p2dnA@comcast.com>
Source record: 105111

"Mikey" <ki6pr@arrl.net> wrote in message
news:3faadbb9_4@newsfeed.slurp.net...
> Unless you go the route of feeding with twin lead and a tuner (and, yes I
> know several local hams that do so successfully), then you need to back up
> and look at the impedance of your driven loop, and the impedance of your
> feedline - a balun, if used, will match those two impedances. For
example,
> a 300-ohm element with 50-ohm coax would require a 6:1 balun.

A full wave loop should come in right around 50 ohms.

4046. Re: BPL a reality regardless of prior users

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 08:22:32 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <599pqvcjdv4itu6bpiftkcvssqe6oks273@4ax.com>
Source record: 105112

On 7 Nov 2003 17:56:52 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Has a radio station lost income because advertisers
>are not having their messages heard by some listeners?
>Have any radio stations complained of interference
>of any sort ?
>
>These people count much more than anybody because
>they have money which means influence.

Unless they end up interfering with safety services and aviation.
how'd you like to have the airliner you are riding in suddenly lose
the glide slope on the way down the ILS in a heavy rain with a 200
foot ceiling?

>What would really count is to vote out the present
>government so that it would cost twice as much as
>was originaly thought as influence costs would
>have to start all over again.
>On the other hand is local broadcasting on the way out

I don't support the local stations if that's what you mean. They and I
have had some disagreements.

>together with ham radio? We appear to know everything that counts

I think that was said about Physics, Astronomy, and a number of other
fields way back in the eighteen hundreds too.

>so that with mystery gone so will curiousity. Our monthly magazine
>is not eagerly awaited anymore as the first portion is really of
>interest to the few and the second portion is devoted to

What few. I read the adds and haven't had to pay for it in over 30
years.

>organisational business.

Home brewing programmable QRP rigs and projects is becoming much more
popular in our area, although I still prefer QRO. I'm over hauling an
old Henry 2K4 that lost a bout with lightening although it survived
pretty well. Just the SWR circuitry and bias diode were fried.

>Seems like a lot of hams have migrated to the internet to discuss
>items of interest.
>You certainly do not hear technical discussions anymore

Those make up about a quarter of what you hear on our local repeater
(147.00)

>I personaly have not been on the air for ages
>other than an occasional test, and I suspect that I am not alone.

I'm more active now than in the last 20 years.

<snip>
>perhaps we should think more of what is best to the common interest,

Other than BPL doesn't do what they say. It still requires a broad
band cable to run along with it to feed the power line on the order of
every block or less. So what is the advantage of running BPL if you
already have the required broad band cable?

>perpetuating ham radio for the few old people until they die or
>enlarging internet access for the many and for the future, something
>that our hobby does not have.

Novice classes and upgrading here in the Midland area are going great
with plans for a new class coming up. The choice now, is how much
upgrading to they want to add to the classes..

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

>Art
>
>Please throw your rocks into this basket and not at me !
>TIA
>
>
> i i
> i i
> i i
> i_____1
>x

4047. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 10:45:13 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311080245.298adcb6@posting.google.com>
Source record: 105113
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

GS,

"The US is a democracy.
Any country is a democracy,
which has a legislature,
an executive,
and a supreme court."

I see you have ADDED to your 'original definition' of a "Democracy"
:o)

But, All of the Countries, Nations, Systems

* Had Equality Before the Law - As Defined by Their Laws.
- - - In Cuba - Fidel just place 1000s in Prison - For Thinking Wrong.
- - - In Iran - Citizens have Equality before Civil Law and "The
Faithful" may be 'judged' before Shari`ah (Islamic Religious) Law.
(What could be more Equal?)

* Had the Right To Vote - And The Responsibility to Vote.
- - - In Iraq - Saddam was recently Re-Elected by 99.46% of the Vote
and 99.73% (Nearly Everyone) Voted.
- - - The Peoples "Democratic" [Republics] always have Higher Voter
Turn-Outs than the USofA, Canada, The UK, EURO-Land, Japan and other
so called western democracies. These Peoples Democratic Republics are
evidently more democratic then the USofA an the others western
democracies.

* * Think of the USofA:
- - - Jimmy Carter has had to "Monitor" elections in the USofA.
- - - Look at the last Presidential Election in the USofA and the
Missed Votes in the State of Florida.

Proud to say: I Am American ~ RHF
Simply an Old Retired Blue Collar Union Member - Tovarisch
.
.
= = = "Gene Storey" <nospam@cox.net>
= = = wrote in message news:<6MXqb.2160$643.1262@okepread03>...
> Not true. None of those systems are/were a democracy because they
> did/do not have equality before the law, nor the right to vote.
>
> "RHF" <rhf-mail@pacbell.net> wrote

> > GS,
> >
> > Ah then by using your definition: NAZI Germany was a Democracy !
> > - The USSR was a Democracy.
> > - - The Peoples "Democratic" [Republic] of North Korea is a Democracy.
> > (Alone with many other nations that call themselves Peoples
> > "Democratic" [Republics]}
> > - - - Islamic Republic of Iran is a Democracy.
> >
> > Fidel Castro should be honored as the longest living Leader of a
> > Democracy.
> > - - - The Republic of Cuba.
> >
> > Why the World is Full of Democracies ~ RHF
>

4048. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 12:15:47 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <T75rb.144626$Fm2.125445@attbi_s04>
Source record: 105114

PHFOOBAH!!!

All my mail is sorted by thread. I remember what I've read. And not
having to scan, or reread what I've already read, makes most sense.

Bottom Posting presents the situation where someone must read the entire
previously read comments, some for the umpteenth time, again and again
and again.

For me Top Posting is the best solution.

Deacon Dave, W1MCE

CW wrote:

> I suppose after the Alzheimer's sets in, you can't remember what you just
> read but for the rest of us, we rather not have to wade through previously
> read info to get to the message.
>
>
> "Dave VanHorn" <dvanhorn@cedar.net> wrote in message
> news:sZmdnSgWiqx1nTGiRVn-uw@comcast.com...
>
>>
>>--
>>A: Because it messes up the order in which people normally read text.
>>Q: Why is top-posting such a bad thing?
>>A: Top-posting.
>>Q: What is the most annoying thing on usenet?
>>
>>
>
>
>

4049. 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 13:45:10 UTC
From: "www.ttdown.com" <blah@bleh.com>
Message-ID: <87rpqvki193gu27bbaui39fki8blp8kb94@4ax.com>
Source record: 105115

I have a small, low power (50 mw) wireless camera that
transmits on 1.2 Ghz. Current range with a stub antenna
is about 200 feet, line of sight.

I could spend about $100 buying a commrecial loop yagi
for 1.2 Ghz, but I'd rather make something myself.
Any cantenna type designs for 1.2 Ghz?
I don't see any on the web, and I'm not sure how to scale
the 2.4 Ghz design for 1.2 Ghz use.

Am generally be interested in amplifying antenna designs
(both omni and directional) that can be put together
inexpensively.

Thanks!

aw

4050. Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 14:11:06 UTC
From: PagCal <pagcal@runbox.com>
Message-ID: <vqpubr5q6l8d66@corp.supernews.com>
Source record: 105116

Has anyone looked at this patent?

See http://l2.espacenet.com/espacenet/viewer?PN=WO0245210

for details.

It's basically a coil wrapped around a ferrite rod/tube
that sensitive to the magnetic part of the electromagnetic
field.

The author claims it can be built small, handle high
power, and is mostly omni-directional.

They also went to the trouble of patenting it
in Canada, number CA2427575, but I can find no US patent.

4051. FS: Cushcraft MA5V Ham Radio Vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 14:20:43 UTC
From: David Hawkins <dthawk@verizon.net.NOSPAM>
Message-ID: <%Y6rb.23340$p9.16882@nwrddc02.gnilink.net>
Source record: 105117
Cross-posted to: dfw.forsale,rec.radio.amateur.antenna

http://www.cushcraft.com/amateur/details.asp?catid=92

FS: Cushcraft MA5V Ham Radio Vertical antenna

Price: $75 to the first one to show up. Antenna was put up last year, and works great. Excellent condition. Getting ready to move and need to take down antenna. MSRP $199. Will not ship, must assist in taking down antenna.

Plano Texas

email: dthawk @ verizon . net

KB5WK

4052. Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 14:24:25 UTC
From: PagCal <pagcal@runbox.com>
Message-ID: <vqpv4q2e3jk52c@corp.supernews.com>
Source record: 105118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Has anyone looked at patents:

US4429280 - Apparatus for DEmodulation of Modulated Curl-Free Magnetic Vector Potential

US4429288 - Apparatus for modulation of a Curl-Free Magnetic Vector Potential Field

US4432098 - Apparatus for transfer of Information by means of a Curl-Free Magnetic Vector Potential Field

US4447779 - Apparatus for Determination of a Receiving device utilizing a Curl-Free Magnetic Vector Potential Field.

US4605897 - Apparatus for distance determination between receiving device utilizing a Curl-Free Magnetic Vector Potential Field.

US4491795 - Josephson Junction Interferometer Device for detection of Curl-Free Magnetic Vector Potential field.

These were patented by Raymond C. Gelinas of Concord MA, and assigned to Honeywell, Inc.

I have no idea of the range of this type of communications system, frequencies used, or even the bandwidth you could achieve.

What is Curl-Free transmission anyway?

4053. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:03:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fad05e5$1_7@corp.newsgroups.com>
Source record: 105019

Dave Shrader wrote:
> For me Top Posting is the best solution.

Sure beats having to scroll down 15 screens only to find, "I agree."
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4054. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:09:36 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <DqydnWhrA-yomjCi4p2dnA@crocker.com>
Source record: 105020

"PagCal" <pagcal@runbox.com> wrote in message
news:vqpubr5q6l8d66@corp.supernews.com...
> Has anyone looked at this patent?
>
> See http://l2.espacenet.com/espacenet/viewer?PN=WO0245210
>
> for details.
>
> It's basically a coil wrapped around a ferrite rod/tube
> that sensitive to the magnetic part of the electromagnetic
> field.
>
> The author claims it can be built small, handle high
> power, and is mostly omni-directional.
>
> They also went to the trouble of patenting it
> in Canada, number CA2427575, but I can find no US patent.
>
>

doesn't look like anything special, but then again you don't have to have anything really special to get a patent... heck, the device doesn't even have to work. someone has patented an antenna that sends signals faster than light, if i remember right it was basically a halogen floodlight tube with a coil around it and a bunch of other junk... as an additional claim they claimed it helped plants grow, which is probably the only claim they could prove if they were ever asked to.

4055. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:12:29 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <lJ7rb.15123$mb5.2102@fed1read02>
Source record: 105021
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Gene Storey" <nospam@cox.net> wrote in message
news:YmMqb.1054$643.70@okepread03...
> The US is a democracy.
>
> Any country is a democracy, which has a legislature, an executive, and
> a supreme court.
>
> http://usinfo.state.gov/products/pubs/whatsdem/
>
> "Ed Price" <edprice@cox.net> wrote
> >
> > Who cares? The USA isn't a democracy either. Democracy is three wolves
and a
> > sheep voting about dinner.
> >
> > Ed
> > wb6wsn
>
>

Another top-posting wad of blather from a civics-deficient mind. Somewhat understandable, however, since you are deriving your wisdom from the US Department of State. Looking at your reference, I am amazed to read the verbal back-flips about what they think a democracy ought to be. I'm further amazed at how they do anything to avoid calling a "representative" democracy a republic. No wonder our foreign policy is a crock of shit; we officially can't understand what we are!

A democracy may or may not have morals, may or may not protect the rights of minorities, and is practically unworkable for groups beyond a certain size. And once you modify a democracy, by adding modifying conditions, it likely isn't a democracy anymore.

Ed
wb6wsn

4056. Re: Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:18:14 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <zOadnQLtRY6mIDCiRVn-hA@crocker.com>
Source record: 105022
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

"PagCal" <pagcal@runbox.com> wrote in message
news:vqpv4q2e3jk52c@corp.supernews.com...
> Has anyone looked at patents:
>
> US4429280 - Apparatus for DEmodulation of Modulated Curl-Free Magnetic
> Vector Potential
>
> US4429288 - Apparatus for modulation of a Curl-Free Magnetic Vector
> Potential Field
>
> US4432098 - Apparatus for transfer of Information by means of a
> Curl-Free Magnetic Vector Potential Field
>
> US4447779 - Apparatus for Determination of a Receiving device utilizing
> a Curl-Free Magnetic Vector Potential Field.
>
> US4605897 - Apparatus for distance determination between receiving
> device utilizing a Curl-Free Magnetic Vector Potential Field.
>
> US4491795 - Josephson Junction Interferometer Device for detection of
> Curl-Free Magnetic Vector Potential field.
>
> These were patented by Raymond C. Gelinas of Concord MA, and assigned to
> Honeywell, Inc.
>
> I have no idea of the range of this type of communications system,
> frequencies used, or even the bandwidth you could achieve.
>
> What is Curl-Free transmission anyway?

lets see, if the magnetic field doesn't have any curl then there is no
electric field created. so basically you have a static magnetic field. so
modulating it doesn't make much sense as then it would have a non-zero curl.
as far as receiving it there are devices to detect static magnetic fields,
and a josephson junction may be able to do that.

4057. Re: Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:28:40 UTC
From: PagCal <pagcal@runbox.com>
Message-ID: <vqq2t91nu2tace@corp.supernews.com>
Source record: 105023
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

The 3'd patent talks about 'transfer of information', but
I don't know the range.

David Robbins wrote:
> "PagCal" <pagcal@runbox.com> wrote in message
> news:vqpv4q2e3jk52c@corp.supernews.com...
>
>>Has anyone looked at patents:
>>
>>US4429280 - Apparatus for DEmodulation of Modulated Curl-Free Magnetic
>>Vector Potential
>>
>>US4429288 - Apparatus for modulation of a Curl-Free Magnetic Vector
>>Potential Field
>>
>>US4432098 - Apparatus for transfer of Information by means of a
>>Curl-Free Magnetic Vector Potential Field
>>
>>US4447779 - Apparatus for Determination of a Receiving device utilizing
>>a Curl-Free Magnetic Vector Potential Field.
>>
>>US4605897 - Apparatus for distance determination between receiving
>>device utilizing a Curl-Free Magnetic Vector Potential Field.
>>
>>US4491795 - Josephson Junction Interferometer Device for detection of
>>Curl-Free Magnetic Vector Potential field.
>>
>>These were patented by Raymond C. Gelinas of Concord MA, and assigned to
>>Honeywell, Inc.
>>
>>I have no idea of the range of this type of communications system,
>>frequencies used, or even the bandwidth you could achieve.
>>
>>What is Curl-Free transmission anyway?
>
>
> lets see, if the magnetic field doesn't have any curl then there is no
> electric field created. so basically you have a static magnetic field. so
> modulating it doesn't make much sense as then it would have a non-zero curl.
> as far as receiving it there are devices to detect static magnetic fields,
> and a josephson junction may be able to do that.
>
>

4058. Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:36:08 UTC
From: assar@eiscat.com
Message-ID: <4e9f8ac8.0311080736.70378187@posting.google.com>
Source record: 105024

Hi every one
I have just bought a GAP voyager DX antenna which I have just put up. At the moment I am rather disapointed, due to really high SWR on all bands (160m, 80m, 40m and 20m). I am wondering if some one have a schematic on this antenna, so I could do some inital measurements between the terminals on the coax and to the different aluminum pipes to see if something is wrong there. I forgot to make some drawings on how things was actually connected especially for the top part with the capacitor and the coaxial feed, and also how the thin loading pipes on the sides are connected. This antenna is a real beast to put up and probaply the same to take down so I do not look forward to try to take it down to find the fault.

Best regards Assar W. SM2LTA

4059. Re: HELP: Will a TH3-JR HF beam load on 17m?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 15:50:49 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vqq46jeoo2f67b@corp.supernews.com>
Source record: 105025

Dear Pat:
As John has indicated, you will be much more satisfied with a LPDA
than a tri-bander. Tennadyne has an LPDA for all sorts of lots.
However, be sure to ask for the extra sleeve option for the rear
(longest) element. You should use a good truss made of "plastic" rope
to help the boom load (use more rope than what is shipped with their
antenna) - in other words, have a mast that extends more than 1.5 feet
above the boom.
The elements are well designed mechanically, but will not take
really high wind and only about 5 to 7 mm of ice. (With that amount of
ice, the element ends point almost straight down.) I wish that one
could easily blacken Al after assembly so that the sun could help melt
ice.
Try hard to mount at least one wave length high at 20 m. - as John
has noted.
Use a piece of flooded coax to connect to the front of the antenna
that you run back under the boom to a coil on a plastic tube mounted
right across the (insulated) boom to mast clamp (terminated in a coax
connector that you can weatherproof and to which you connect the main
transmission line). Do not put the choke out at the end of the boom.
Let us know what you do.
73 Mac N8TT
--
J. Mc Laughlin - Michigan USA

"John Passaneau" <jxp16@psu.edu> wrote in message
news:bogts4$19uc$1@f04n12.cac.psu.edu...
> I have the T6 and I like it very much. It meets all the specifications
and
> works very well for me. If I was to do it over again, I would get the
next
> bigger one as the SWR curves are a bit lower and the beam width a bit
> sharper. But the T6 will beat the beans out of any small tribander in
all
> ways except front to back.
> Be aware that the minimum height is 40' with something around 65'
optimal.
> Also Tennadyne almost always have them in stock for rapid shipment
unlike
> other companies that can make you wait weeks or more for them to ship.
>
> So for one more not very meaningful testimonial, I've worked 276
countries
> in 2 years, with 100+ countries on 20, 15, 10m and I'm waiting

(hoping) for
> cards on 17 and 12m.
>
>
> --
> John Passaneau, W3JXP
> Penn State University
> w3jxp@arrl.net
>
>>

4060. Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 16:06:36 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <gw8rb.720$KN4.516040@news1.news.adelphia.net>
Source record: 105026

I've finished my magloop, and have a few questions.

I made the antenna according to Reg's magloop program.

Octagon loop, 7.3 meters diameter

19.05 conductor diameter

100 watts output

3 meters above ground (though not for testing)

average soil

The diameter of the coupling loop is .420 meters in diameter. Since I saw this param changing all over the place as I changed frequencies in the program, I just chose a diameter from somewhere in the 40 meter band. The loop is done up as a Faraday loop from coax, circular, and placed in the traditional position. Continuity has been measured.

All seems to be well, but when attaching the antenna analyzer to the thing, I get infinitely high SWR in most places (understandable) with a foray into around 100-300 ohms on what I think may be the tuned frequency.

Anyone know why my measurements could be so far off? At first I thought the loop could be cut wrong, but just using the program shows a wide variation in loop sizes, so I doubt that is correct.

TIA - Mike KB3EIA -

4061. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 16:32:40 UTC
From: Sverre Holm <la3za.0junk4me@qsl.net>
Message-ID: <ST8rb.37321$os2.546446@news2.e.nsc.no>
Source record: 105027

The antenna was first patented in Norway this summer, and I have just read that patent. I think the innovative aspect of it is the ferrite and its properties which makes it feasible for a transmitter at VHF/UHF at reasonable power levels and
with a size of only a few cms.

Of course, the patent says very little about the ferrite - I guess that's how a good patent is
supposed to be written. The antenna is in use for tracking of sheep and it is being evaluated by the Royal Air Force (UK), so I think there must be something to it, see
http://www.hard-core-dx.com/index.php?topic=antennas

http://www.aftenposten.no/english/local/article.jhtml?articleID=609108

http://www.ancom.no/presentation01.htm

http://www.nrk.no/programmer/tv/schrodingers_katt/3038763.html (in Norwegian)

Sverre, LA3ZA
---
www.qsl.net/la3za

"PagCal" <pagcal@runbox.com> wrote in message
news:vqpubr5q6l8d66@corp.supernews.com...
> Has anyone looked at this patent?
>
> See http://l2.espacenet.com/espacenet/viewer?PN=WO0245210
> It's basically a coil wrapped around a ferrite rod/tube
> that sensitive to the magnetic part of the electromagnetic
> field.
>
> The author claims it can be built small, handle high
> power, and is mostly omni-directional.

4062. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 16:38:18 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Ot2dnTp435J6hjCiRVn-vg@comcast.com>
Source record: 105028

> Sure beats having to scroll down 15 screens only to find, "I agree."

You're also supposed to trim the original down to just what's necessary so people understand what you're replying to.

4063. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 16:47:27 UTC
From: Hacksaw <Hack@comecast.net>
Message-ID: <z69rb.107068$ao4.322274@attbi_s51>
Source record: 105029

Just go and feed the wires direct, no balum needed at all. Works just fine with out all that crap.

4064. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 16:54:28 UTC
From: "William H. O'Hara, III" <whoohara@yahoo.com>
Message-ID: <Xns942D78D7F7B98AX2A3DA5M1512AODKAMO@216.168.3.44>
Source record: 105030
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in
news:sJVob.595$aL4.375@newssvr25.news.prodigy.com:

> Don't you just hate it when some racist commie thinks your
> ham radio newsgroup is his soap-box?
>
> Trolls are insects, best ignored.
>
> Charles Brabham, N5PVL

You were not happy with destroying the packet radio newsgroup?
You and your toadies post to everything on almost every
mainstream newsgroup. When are you going to stop?

You are the troll, whose killfile expires on me every 30 days
or I did not killfile you for a certain newsgroup.

There use to be nothing but on topic information here until
you showed up.

Your buddy W4NTI did not refute the charges on eham with any
effectiveness. He merely attempted to attack the credibility
of the accuser. He could offer no real rebuttal to the story.
Why don't you blast him about it for awhile in email and leave
us alone?

Bill

--
William H. O'Hara KB1IUB use QRZ.com for address lookup

4065. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 17:04:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fad222c_7@corp.newsgroups.com>
Source record: 105031

K7JEB wrote:
> I will be happy to send out the .EZ file for this
> to any interested parties. Splice together the
> e-mail address below to contact me.

Good stuff, as usual, Jim. It comes as no surprise to me that a three dimensional component with distributed resistance, distributed inductance, and distributed capacitance changes the voltages and currents at each end of the component. The changes are accentuated in a standing-wave environment.

And to improve on your model a tad, make the capacitive wires equal on each side of the installation point, i.e. instead of a 2 foot wire sticking out horizontally, make it one foot of wire sticking out in two opposite directions. That will minimize radiation from those wires.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4066. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 17:11:25 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <5t9rb.312$gS4.132@newsfep4-winn.server.ntli.net>
Source record: 105032

Mike,

I don't see any mention of a fixed or variable capacitor. I take it that there is one fitted!

Just an observation,

Roger, G7JAQ,

4067. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 17:25:42 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <8u-dnSQ7FbGeujCiRVn-hQ@comcast.com>
Source record: 105033

"Hacksaw" <Hack@comecast.net> wrote in message
news:z69rb.107068$ao4.322274@attbi_s51...
> Just go and feed the wires direct, no balum needed at all. Works just
> fine with out all that crap.

Until you start wondering why you have so much RF in the shack, and why you don't get the directivity you ought to..

Your inability to see the difference does not mean that there is no difference.

4068. Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 17:53:26 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <q4arb.16853$Oo4.16408@newsread1.news.atl.earthlink.net>
Source record: 105034
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Per Websters Dictionary;

Democracy

1. Rule by the people.
2. A community so governed.
3. The quality of being democratic.

Republic;

A state in which the sovereign power is vested in representatives chosen by the people.

Constitution;

The system of fundamental laws of a nation or society.

Thus, we are indeed, a Constitutional Republic.

We vote for and elect REPRESENTITIVES. These folks are 'supposed' to vote in congress, either state or federal, what the electorate wants.

We are a representitive form of government.

A true democracy is one where everyone gets a vote, and the majority wins.

Can you imagine how much fun it would be to have to vote on every single issue, local, state, federal? There wouldn't be enough time in a lifetime to do it.

Our representitives are 'supposed' to base their lawmaking on the CONSTITUTION. Obviously this is not working.

What is happening is the judiciary of APPOINTED, not elected, judges are actually making the law.

In reality this country should stand up and revolt. We are NOT following our constitution.

So...what sort of government do we REALLY have?

Dan/W4NTI

Dan/W4NTI

Dan/W4NTI

"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0311080245.298adcb6@posting.google.com...
> GS,
>
> "The US is a democracy.
> Any country is a democracy,
> which has a legislature,
> an executive,
> and a supreme court."
>
> I see you have ADDED to your 'original definition' of a "Democracy"
> :o)
>
> But, All of the Countries, Nations, Systems
>
> * Had Equality Before the Law - As Defined by Their Laws.
> - - - In Cuba - Fidel just place 1000s in Prison - For Thinking Wrong.
> - - - In Iran - Citizens have Equality before Civil Law and "The
> Faithful" may be 'judged' before Shari`ah (Islamic Religious) Law.
> (What could be more Equal?)
>
> * Had the Right To Vote - And The Responsibility to Vote.
> - - - In Iraq - Saddam was recently Re-Elected by 99.46% of the Vote
> and 99.73% (Nearly Everyone) Voted.
> - - - The Peoples "Democratic" [Republics] always have Higher Voter
> Turn-Outs than the USofA, Canada, The UK, EURO-Land, Japan and other
> so called western democracies. These Peoples Democratic Republics are
> evidently more democratic then the USofA an the others western
> democracies.
>
> * * Think of the USofA:
> - - - Jimmy Carter has had to "Monitor" elections in the USofA.
> - - - Look at the last Presidential Election in the USofA and the
> Missed Votes in the State of Florida.
>
>
> Proud to say: I Am American ~ RHF
> Simply an Old Retired Blue Collar Union Member - Tovarisch
> .
> .
> = = = "Gene Storey" <nospam@cox.net>
> = = = wrote in message news:<6MXqb.2160$643.1262@okepread03>...
> > Not true. None of those systems are/were a democracy because they
> > did/do not have equality before the law, nor the right to vote.
> >
> > "RHF" <rhf-mail@pacbell.net> wrote
> > > GS,
> > >
> > > Ah then by using your definition: NAZI Germany was a Democracy !
> > > - The USSR was a Democracy.
> > > - - The Peoples "Democratic" [Republic] of North Korea is a Democracy.

> > > (Alone with many other nations that call themselves Peoples
> > > "Democratic" [Republics]}
> > > - - - Islamic Republic of Iran is a Democracy.
> > >
> > > Fidel Castro should be honored as the longest living Leader of a
> > > Democracy.
> > > - - - The Republic of Cuba.
> > >
> > > Why the World is Full of Democracies ~ RHF
> >

4069. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 17:57:10 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <W7arb.16862$Oo4.12156@newsread1.news.atl.earthlink.net>
Source record: 105035
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"William H. O'Hara, III" <whoohara@yahoo.com> wrote in message
news:Xns942D78D7F7B98AX2A3DA5M1512AODKAMO@216.168.3.44...

> There use to be nothing but on topic information here until
> you showed up.
>
> Your buddy W4NTI did not refute the charges on eham with any
> effectiveness. He merely attempted to attack the credibility
> of the accuser. He could offer no real rebuttal to the story.
> Why don't you blast him about it for awhile in email and leave
> us alone?
>
> Bill
>
> --
> William H. O'Hara KB1IUB use QRZ.com for address lookup

What "charges" are you speaking of William H. O'Hara? One does not refute a
outright lie.

Dan/W4NTI

4070. AEA Isoloop: Stepper Motor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 18:05:28 UTC
From: Charles Wittnam <wittnam@bresnan.net>
Message-ID: <lfarb.146508$Tr4.386345@attbi_s03>
Source record: 105036

I have an old AEA Isoloop that I bought 14 years ago. The stepper motor that moves the large central tuning capacitor has gone to the great antenna farm in the sky.
I am trying to find a replacement for it. (After I hung a large wire antenna system my XYL suddenly became nostalgic about the Isoloop). I do not have any technical info about what motor is needed. I can probably figure it out when I pull everything apart, but I wondered if anyone had access to this information?

Charlie KD7HU

4071. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 18:05:44 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <Yfarb.16887$Oo4.4505@newsread1.news.atl.earthlink.net>
Source record: 105037

If you followed the instructions you will have a very good SWR. I did with mine.

I do not have the paperwork available, but I'm sure GAP does. Check their site via Google.

The cap at the top is for 160 meters only.

The side rods are for the various bands. It is the linear loading. The longer the rod, the lower the frequency.

Dan/W4NTI

"Assar W." <assar@eiscat.com> wrote in message news:4e9f8ac8.0311080736.70378187@posting.google.com...
> Hi every one
> I have just bought a GAP voyager DX antenna which I have just put up.
> At the moment I am rather disapointed, due to really high SWR on all
> bands (160m, 80m, 40m and 20m). I am wondering if some one have a
> schematic on this antenna, so I could do some inital measurements
> between the terminals on the coax and to the different aluminum pipes
> to see if something is wrong there. I forgot to make some drawings on
> how things was actually connected especially for the top part with the
> capacitor and the coaxial feed, and also how the thin loading pipes on
> the sides are connected. This antenna is a real beast to put up and
> probaply the same to take down so I do not look forward to try to take
> it down to find the fault.
>
> Best regards Assar W. SM2LTA

4072. Re: Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 18:16:02 UTC
From: 14313 balderdash <vavavavooms@voicenet.com>
Message-ID: <1068317039.678491@newshost03.voicenet.com>
Source record: 105040
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

"PagCal" <pagcal@runbox.com> wrote in message
news:vqpv4q2e3jk52c@corp.supernews.com...

> What is Curl-Free transmission anyway?

That's when you send a fax to someone who is
not using one of those old obsolete Panasonic
or Sharp fax machines because their too damm
cheap to go out and buy a plain-paper fax
like everyone else has already.

(obsessive frugality is a 'common issue' with ham radio
operators and HO model train enthusiasts you see...)

4073. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 18:16:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bojbti$sp4$1@titan.btinternet.com>
Source record: 105038

"Roger Adam" wrote -
>
> I don't see any mention of a fixed or variable capacitor. I take it that
> there is one fitted!
>

================================

Neither is there any mention of frequency. Where is the antenna analyser connected? What parameters are being measured. How long is the feedline, etc. ?

Does the antenna work when connected to a transmitter or receiver? If it doesn't what are the symptoms?

A magloop has an extremely high Q and narrow bandwidth. Behaviour approaches that of a quartz crytal. If you don't get the expected measurement results then the most likely reason is the limited capabilty of the analyser. A precision, scientific-grade instrument is needed.

Reg.

4074. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 18:25:04 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bojcf3$8oks$1@news3.infoave.net>
Source record: 105039

As I have always stated to anti top posters, learn to quote and I will stop top posting.

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message news:Ot2dnTp435J6hjCiRVn-vg@comcast.com...
>
> > Sure beats having to scroll down 15 screens only to find, "I agree."
>
> You're also supposed to trim the original down to just what's necessary so
> people understand what you're replying to.
>
>

4075. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:21:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gbgqqv4ojje2ig32q5en8f18022shd3vkf@4ax.com>
Source record: 105041

On Sat, 08 Nov 2003 16:06:36 GMT, Mike Coslo <mcoslo@adelphia.net>
wrote:

>Octagon loop, 7.3 meters diameter
...
> ...somewhere in the 40 meter band.

On Sat, 8 Nov 2003 18:16:19 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Neither is there any mention of frequency.
...
>A magloop has an extremely high Q and narrow bandwidth. Behaviour

Really? You two are talking past each other.

73's
Richard Clark, KB7QHC

4076. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:25:29 UTC
From: W6DKN <w6dkn-nospam-@qsl.net>
Message-ID: <vqqgpddonrqf5c@corp.supernews.com>
Source record: 105042

Dan/W4NTI wrote:
> Per Websters Dictionary;
>
> Democracy
>
> 1. Rule by the people.
> 2. A community so governed.
> 3. The quality of being democratic.
>
>
> Republic;
>
> A state in which the sovereign power is vested in representatives
> chosen by the people.
>
> Constitution;
>
> The system of fundamental laws of a nation or society.
>
> Thus, we are indeed, a Constitutional Republic.
>
> We vote for and elect REPRESENTITIVES. These folks are 'supposed' to
> vote in congress, either state or federal, what the electorate wants.
>
> We are a representitive form of government.
>
> A true democracy is one where everyone gets a vote, and the majority
> wins.
>
> Can you imagine how much fun it would be to have to vote on every
> single issue, local, state, federal? There wouldn't be enough time
> in a lifetime to do it.
>
> Our representitives are 'supposed' to base their lawmaking on the
> CONSTITUTION. Obviously this is not working.
>
> What is happening is the judiciary of APPOINTED, not elected, judges
> are actually making the law.
>
> In reality this country should stand up and revolt. We are NOT
> following our constitution.
>
> So...what sort of government do we REALLY have?
>

> Dan/W4NTI

A government by the educated and affluent, allowed to rule by the apathetic and un-informed general masses.

But you don't need a revolution to fix it, only a few changes.

First, a law that no person of title could hold public office (this was in the original Constitution). This would eliminate all the lawyers (Esquires) - a key step in fixing things.

Next, a single term limit on all public offices - including judges. This would eliminate the career politicians and demigod judicial mentality.

Lastly, elimination of all exemptions from common law and special perks that those in office have granted themselves. Want to fix Social Security? Make all those in Congress have to give up their Congressional retirement plan (full annual salary for life) and live off Social Security like the masses...

73 de W6DKN

4077. Re: 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:34:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9qgqqv0opdkfqauth3954pgb173t8h7aqt@4ax.com>
Source record: 105043

On Sat, 08 Nov 2003 08:45:10 -0500, www.ttdown.com <blah@bleh.com>
wrote:
>I don't see any on the web, and I'm not sure how to scale
>the 2.4 Ghz design for 1.2 Ghz use.

Hi OM,

Scaling is simple. It means exactly what the descriptive term
implies. Multiply EVERY dimension of EVERY element by 2 (but only if
the frequencies are an order of 2, use other ratios as appropriate).
This does not include the connector which should be isolated from the
antenna through a BalUn or Choke (if not already evident, or if this
is a new topic, research that separately, the connector is NOT an
antenna element).

73's
Richard Clark, KB7QHC

4078. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:35:50 UTC
From: Alan Beagley <abeagley@optonline.net>
Message-ID: <bojgil$1ejspm$1@ID-207580.news.uni-berlin.de>
Source record: 105044

I understand that patents do not always tell the whole story either:
many, many years ago I worked in a pharmaceutical laboratory where we
were trying to come up with a product that circumvented a German patent,
but we could not even get the process described in the patent to work --
they may have omitted mention of a catalyst.

-=-
Alan

On 11/08/03 11:32 am Sverre Holm put fingers to keyboard and launched
the following message into cyberspace:

> The antenna was first patented in Norway this summer, and I have just read
> that patent. I think the innovative aspect of it is the ferrite and its
> properties which makes it feasible for a transmitter at VHF/UHF at
> reasonable power levels and
> with a size of only a few cms.
>
> Of course, the patent says very little about the ferrite - I guess that's
> how a good patent is
> supposed to be written.

4079. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:48:52 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <EMbrb.8404$P%1.7533113@newssvr28.news.prodigy.com>
Source record: 105045

"W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
news:vqqgpddonrqf5c@corp.supernews.com...
> Dan/W4NTI wrote:
> > Per Websters Dictionary;
> >
> > Democracy
> >
> > 1. Rule by the people.
> > 2. A community so governed.
> > 3. The quality of being democratic.
> >
> >
> > Republic;
> >
> > A state in which the sovereign power is vested in representatives
> > chosen by the people.
> >
> > Constitution;
> >
> > The system of fundamental laws of a nation or society.
> >
> > Thus, we are indeed, a Constitutional Republic.
> >
> > We vote for and elect REPRESENTITIVES. These folks are 'supposed' to
> > vote in congress, either state or federal, what the electorate wants.
> >
> > We are a representitive form of government.
> >
> > A true democracy is one where everyone gets a vote, and the majority
> > wins.
> >
> > Can you imagine how much fun it would be to have to vote on every
> > single issue, local, state, federal? There wouldn't be enough time
> > in a lifetime to do it.
> >
> > Our representitives are 'supposed' to base their lawmaking on the
> > CONSTITUTION. Obviously this is not working.
> >
> > What is happening is the judiciary of APPOINTED, not elected, judges
> > are actually making the law.
> >
> > In reality this country should stand up and revolt. We are NOT
> > following our constitution.
> >

> > So...what sort of government do we REALLY have?
> >
> > Dan/W4NTI
>
> A government by the educated and affluent, allowed to rule by the
apathetic
> and un-informed general masses.
>
> But you don't need a revolution to fix it, only a few changes.
>
> First, a law that no person of title could hold public office (this was in
> the original Constitution). This would eliminate all the lawyers
> (Esquires) - a key step in fixing things.
>
> Next, a single term limit on all public offices - including judges. This
> would eliminate the career politicians and demigod judicial mentality.
>
> Lastly, elimination of all exemptions from common law and special perks
> that those in office have granted themselves. Want to fix Social Security?
> Make all those in Congress have to give up their Congressional retirement
> plan (full annual salary for life) and live off Social Security like the
> masses...

And of course all union and non-union employees will give up their pensions too. If the politicians have to give up their retirement plans, the autoworkers etc should be equally willing to give up theirs.

Dee D. Flint, N8UZE

4080. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:54:37 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311081154.315e6dfd@posting.google.com>
Source record: 105046
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message news:<lJ7rb.15123$mb5.2102@fed1read02>...
> "Gene Storey" <nospam@cox.net> wrote in message
> news:YmMqb.1054$643.70@okepread03...
> > The US is a democracy.
> >
> > Any country is a democracy, which has a legislature, an executive, and
> > a supreme court.
> >
> > http://usinfo.state.gov/products/pubs/whatsdem/
> >
> > "Ed Price" <edprice@cox.net> wrote
> > >
> > > Who cares? The USA isn't a democracy either. Democracy is three wolves
> and a
> > > sheep voting about dinner.
> > >
> > > Ed
> > > wb6wsn
> >
> >
>
> Another top-posting wad of blather from a civics-deficient mind. Somewhat
> understandable, however, since you are deriving your wisdom from the US
> Department of State. Looking at your reference, I am amazed to read the
> verbal back-flips about what they think a democracy ought to be. I'm further
> amazed at how they do anything to avoid calling a "representative" democracy
> a republic. No wonder our foreign policy is a crock of shit; we officially
> can't understand what we are!
>

Most of the old Soviet styled communist nations labled themselves:
- - - The Peoples "Democratic" [Republic] of __________ (File in the Blank)

Like the Peoples "Democratic" [Republic] of California
- - - Actually the California State Flag says/reads "California Republic"

> A democracy may or may not have morals, may or may not protect the rights of
> minorities, and is practically unworkable for groups beyond a certain size.
> And once you modify a democracy, by adding modifying conditions, it likely
> isn't a democracy anymore.
>
>

> Ed
> wb6wsn

4081. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:56:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bthqqvcqlpe5tirpt5esaorkps9hjs913r@4ax.com>
Source record: 105047

On Sat, 08 Nov 2003 19:39:39 +0000, lysander@uk2.net wrote:
>Would it not be better to get a long piece of
>pipe and a plumber's pipebender and make the loop out of one piece of
>pipe to avoid joints?

Hi OM,

Solder is for weather sealing an already conductive join. Those who think of the solder as conductor then extend its resistive qualities into the equation (ignoring the massive surface area involved). If their solder jobs melt, it is only positive proof of the poor surface preparation, and/or subsequent oxidation following a poor solder job.

Mike's 7 Meter diameter 40M loop hardly fits into the "mag loop" genre. The coupling loop comes closer, but then it has the advantage of being near the larger element which offloads the current demand.

However, one piece of pipe works too, but you still have the joins at each end. What size wire will you use? When can you finally use something more reasonable than #0000 to the transmitter terminals (which, no doubt, harbor #18 wire)? ;-)

73's
Richard Clark, KB7QHC

4082. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 19:59:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <njiqqv8euv7gv77on0cugtosu5oqdgj78o@4ax.com>
Source record: 105048

On Sat, 08 Nov 2003 14:35:50 -0500, Alan Beagley
<abeagley@optonline.net> wrote:

>I understand that patents do not always tell the whole story either:
>many, many years ago I worked in a pharmaceutical laboratory where we
>were trying to come up with a product that circumvented a German patent,
>but we could not even get the process described in the patent to work --
>they may have omitted mention of a catalyst.
>
>-=-
>Alan

Hi Alan,

More their problem. By law, a patent is FULL disclosure. Failure to
that end is sufficient to nullify it. If you simply copied their work
and added that "catalyst," then you have just nudged their patent into
the dust bin.

73's
Richard Clark, KB7QHC

4083. Re: Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 20:14:01 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <d8crb.147467$Fm2.128906@attbi_s04>
Source record: 105049
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I believe a Hall Effect device does the same thing!!

>
> lets see, if the magnetic field doesn't have any curl then there is no
> electric field created. so basically you have a static magnetic field. so
> modulating it doesn't make much sense as then it would have a non-zero curl.
> as far as receiving it there are devices to detect static magnetic fields,
> and a josephson junction may be able to do that.
>
>

4084. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 20:30:56 UTC
From: W6DKN <w6dkn-nospam-@qsl.net>
Message-ID: <vqqkk3t5742d53@corp.supernews.com>
Source record: 105050

Dee D. Flint wrote:
> "W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
> news:vqqgpddonrqf5c@corp.supernews.com...
>> Dan/W4NTI wrote:
>>> Per Websters Dictionary;
>>>
>>> Democracy
>>>
>>> 1. Rule by the people.
>>> 2. A community so governed.
>>> 3. The quality of being democratic.
>>>
>>>
>>> Republic;
>>>
>>> A state in which the sovereign power is vested in representatives
>>> chosen by the people.
>>>
>>> Constitution;
>>>
>>> The system of fundamental laws of a nation or society.
>>>
>>> Thus, we are indeed, a Constitutional Republic.
>>>
>>> We vote for and elect REPRESENTITIVES. These folks are 'supposed'
>>> to vote in congress, either state or federal, what the electorate
>>> wants.
>>>
>>> We are a representitive form of government.
>>>
>>> A true democracy is one where everyone gets a vote, and the
>>> majority wins.
>>>
>>> Can you imagine how much fun it would be to have to vote on every
>>> single issue, local, state, federal? There wouldn't be enough time
>>> in a lifetime to do it.
>>>
>>> Our representitives are 'supposed' to base their lawmaking on the
>>> CONSTITUTION. Obviously this is not working.
>>>
>>> What is happening is the judiciary of APPOINTED, not elected, judges
>>> are actually making the law.
>>>
>>> In reality this country should stand up and revolt. We are NOT

>>> following our constitution.
>>>
>>> So...what sort of government do we REALLY have?
>>>
>>> Dan/W4NTI
>>
>> A government by the educated and affluent, allowed to rule by the
>> apathetic and un-informed general masses.
>>
>> But you don't need a revolution to fix it, only a few changes.
>>
>> First, a law that no person of title could hold public office (this
>> was in the original Constitution). This would eliminate all the
>> lawyers (Esquires) - a key step in fixing things.
>>
>> Next, a single term limit on all public offices - including judges.
>> This would eliminate the career politicians and demigod judicial
>> mentality.
>>
>> Lastly, elimination of all exemptions from common law and special
>> perks that those in office have granted themselves. Want to fix
>> Social Security? Make all those in Congress have to give up their
>> Congressional retirement plan (full annual salary for life) and live
>> off Social Security like the masses...
>
> And of course all union and non-union employees will give up their
> pensions too. If the politicians have to give up their retirement
> plans, the autoworkers etc should be equally willing to give up
> theirs.
>
> Dee D. Flint, N8UZE

Except that Congress has created for themselves an obscene retirement plan - serve 1 term and then draw your full salary for the rest of your life - tax free. Quite unique, and very different from the retirement plans they allow the common man...

The key idea here is that they don't have to give up a retirement plan in general, only that they would be subject to the same retirement plan options that the common person has available to them.

73 de W6DKN

4085. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 20:40:47 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311081240.168dff97@posting.google.com>
Source record: 105051

"David Robbins" <noone@nowhere.com> wrote in message
news:<DqydnWhrA-yomjCi4p2dnA@crocker.com>...
> "PagCal" <pagcal@runbox.com> wrote in message
> news:vqpubr5q6l8d66@corp.supernews.com...
> > Has anyone looked at this patent?
> >
> > See http://l2.espacenet.com/espacenet/viewer?PN=WO0245210
> >
> > for details.
> >
> > It's basically a coil wrapped around a ferrite rod/tube
> > that sensitive to the magnetic part of the electromagnetic
> > field.
> >
> > The author claims it can be built small, handle high
> > power, and is mostly omni-directional.
> >
> > They also went to the trouble of patenting it
> > in Canada, number CA2427575, but I can find no US patent.
> >
> >
>
> doesn't look like anything special, but then
again you don't have to have
> anything really special to get a patent...

Absolutely correct since every thing is now known !
We have a lot of very educated experts in the antenna
field that can attest to that. If it is not already
printed in a book or was not presented as something
new found by an expert then it most certainly a case of snake
oil or something that was obvious but useless.
Sounds like you have been succesful in the patent field
and thus can talk from personal experience, care to share
some of these 'useles' patents that you have to illustrate
your point?
Regards
Art

heck, the device doesn't even
> have to work. someone has patented an antenna that sends signals faster
> than light, if i remember right it was basically a halogen floodlight tube
> with a coil around it and a bunch of other junk... as an additional claim
> they claimed it helped plants grow, which is probably the only claim they
> could prove if they were ever asked to.

4086. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:07:55 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <LWcrb.8419$P%1.7548469@newssvr28.news.prodigy.com>
Source record: 105052

"W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
news:vqqkk3t5742d53@corp.supernews.com...
> Dee D. Flint wrote:
> > "W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
> > news:vqqgpddonrqf5c@corp.supernews.com...
> >> Dan/W4NTI wrote:
> >>> Per Websters Dictionary;
> >>>
> >>> Democracy
> >>>
> >>> 1. Rule by the people.
> >>> 2. A community so governed.
> >>> 3. The quality of being democratic.
> >>>
> >>>
> >>> Republic;
> >>>
> >>> A state in which the sovereign power is vested in representatives
> >>> chosen by the people.
> >>>
> >>> Constitution;
> >>>
> >>> The system of fundamental laws of a nation or society.
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> >>>
> >>> We vote for and elect REPRESENTITIVES. These folks are 'supposed'
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> >>> A true democracy is one where everyone gets a vote, and the
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> >>> Can you imagine how much fun it would be to have to vote on every
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> >>> in a lifetime to do it.
> >>>
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> >>> CONSTITUTION. Obviously this is not working.
> >>>
> >>> What is happening is the judiciary of APPOINTED, not elected, judges
> >>> are actually making the law.

> >>>
> >>> In reality this country should stand up and revolt. We are NOT
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> >>> So...what sort of government do we REALLY have?
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> >>> Dan/W4NTI
> >>
> >> A government by the educated and affluent, allowed to rule by the
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> >> First, a law that no person of title could hold public office (this
> >> was in the original Constitution). This would eliminate all the
> >> lawyers (Esquires) - a key step in fixing things.
> >>
> >> Next, a single term limit on all public offices - including judges.
> >> This would eliminate the career politicians and demigod judicial
> >> mentality.
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> >> Lastly, elimination of all exemptions from common law and special
> >> perks that those in office have granted themselves. Want to fix
> >> Social Security? Make all those in Congress have to give up their
> >> Congressional retirement plan (full annual salary for life) and live
> >> off Social Security like the masses...
> >
> > And of course all union and non-union employees will give up their
> > pensions too. If the politicians have to give up their retirement
> > plans, the autoworkers etc should be equally willing to give up
> > theirs.
> >
> > Dee D. Flint, N8UZE
>
> Except that Congress has created for themselves an obscene retirement
> plan - serve 1 term and then draw your full salary for the rest of your
> life - tax free. Quite unique, and very different from the retirement
plans
> they allow the common man...
>
> The key idea here is that they don't have to give up a retirement plan in
> general, only that they would be subject to the same retirement plan
> options that the common person has available to them.
>
> 73 de W6DKN

However, that's different from what you actually said.

Dee D. Flint, N8UZE

4087. 2m Yagi K3PF project question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:12:25 UTC
From: wntu4@yahoo.com
Message-ID: <6c7a372f.0311081312.5d8e92a1@posting.google.com>
Source record: 105053

I am converting a RS FM ant into a 2m yagi per the article. I have
worked out a way to flip flop the antenna from vertical to horizontal
and back as I like, but am concerned about interference from my 20
foot 'tower' when in horizontal mode, it being emt. Would some kind of
shielding on the emt work to prevent problems? Or would it even be
enough of a problem to worry about?
Thanks for any help!

4088. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:19:50 UTC
From: K7JEB <k7jeb.remove_this@qsl.net>
Message-ID: <j6drb.4434$Cj1.2063@fed1read07>
Source record: 105054

Cecil, W5DXP, wrote:

> And to improve on your model a tad, make the capacitive wires equal on
> each side of the installation point, i.e. instead of a 2 foot wire sticking
> out horizontally, make it one foot of wire sticking out in two opposite
> directions. That will minimize radiation from those wires.

Good suggestion, Cecil. I had planned to make the capacitive
wires into little square-shaped contraptions having about the
same size as a turn of wire on the loading coil and then
duplicate them up and down in the Z direction. I may still
do this, but I wanted to publish the preliminary results as
soon as I saw an effect, however imperfectly perceived.

Jim, K7JEB

4089. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:27:41 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <B_SdnbTMJOwlwjCiRVn-uw@comcast.com>
Source record: 105055

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bojcf3$8oks$1@news3.infoave.net...
> As I have always stated to anti top posters, learn to quote and I will
stop
> top posting.

Call us back when you learn the basics of social interaction.

4090. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:28:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fad600b$1_2@corp.newsgroups.com>
Source record: 105056
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Dan/W4NTI wrote:
> So...what sort of government do we REALLY have?

Sadly, we are drifting toward fascism - governmental
control with private ownership.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4091. Re: Curl-Free Transfer of Information

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:30:46 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <_OedncUXp63s_TCiRVn-sA@comcast.com>
Source record: 105057
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:d8crb.147467$Fm2.128906@attbi_s04...
>
> I believe a Hall Effect device does the same thing!!

Hall effect, essentially magnethydrodynamics in a solid block of
semiconductor.
electrons flowing from top to bottom are deflected to left or right, by a
field through the third axis.
Detects static fields just fine.

4092. Re: AEA Isoloop: Stepper Motor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 21:32:17 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <AoidncfXNOhR_TCiRVn-iw@comcast.com>
Source record: 105058

> I am trying to find a replacement for it. (After I hung a large wire
> antenna system my XYL suddenly became nostalgic about the Isoloop). I do
> not have any technical info about what motor is needed. I can probably
> figure it out when I pull everything apart, but I wondered if anyone had
> access to this information?

Check the winding resistance, and wether it's a bipolar (four wire) or
unipolar (more than four wires) If the replacement is mechanically fit, and
the same general resistance and scheme, you'll be fine.

4093. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:08:59 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <%Pdrb.4735$nF5.996@newssvr29.news.prodigy.com>
Source record: 105059
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"William H. O'Hara, III" <whoohara@yahoo.com> wrote in message
news:Xns942D78D7F7B98AX2A3DA5M1512AODKAMO@216.168.3.44...
> "charlesb" <n5pvl@sbcglobal.net> wrote in
> news:sJVob.595$aL4.375@newssvr25.news.prodigy.com:
>
> > Don't you just hate it when some racist commie thinks your
> > ham radio newsgroup is his soap-box?
> >
> > Trolls are insects, best ignored.
> >
> > Charles Brabham, N5PVL
>
> You were not happy with destroying the packet radio newsgroup?
> You and your toadies post to everything on almost every
> mainstream newsgroup. When are you going to stop?
>

Ummm, take a valium of something, man. (Thorazine might be more
approriate...)

Charles Brabham, N5PVL

4094. Re: 2m Yagi K3PF project question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:15:39 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <pdqqqvc17m8k0ldqpf2oq1fggj25v6mpqm@4ax.com>
Source record: 105060

On 8 Nov 2003 13:12:25 -0800, wntu4@yahoo.com wrote:

>I am converting a RS FM ant into a 2m yagi per the article. I have
>worked out a way to flip flop the antenna from vertical to horizontal
>and back as I like, but am concerned about interference from my 20
>foot 'tower' when in horizontal mode, it being emt. Would some kind of
>shielding on the emt work to prevent problems? Or would it even be
>enough of a problem to worry about?
>Thanks for any help!

I think you meant interference in the vertical position. About the
only way to prevent interaction is to use a non-conductive mast such
as fiberglass. Placing a non-conductor over the emt wouldn't help
much, if any, so it's probably not worth the effort. You may notice
change in SWR and you can expect a change in radiation pattern
-however it may not have a significant impact on performance for local
and/or repeater use.

4095. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:17:12 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <IXdrb.4736$rl5.2634@newssvr29.news.prodigy.com>
Source record: 105061
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:W7arb.16862$Oo4.12156@newsread1.news.atl.earthlink.net...
>
> > William H. O'Hara KB1IUB use QRZ.com for address lookup
>
> What "charges" are you speaking of William H. O'Hara? One does not refute
a
> outright lie.

Don't bother, Dan. The guy is from wig city. Having no identity or character
of his own, he leeches off of his betters. It's best to think of his wild
claims and exaggerations as symptoms of his mental state, a cry for help. -
Then ignore them.

Charles Brabham, N5PVL

4096. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:19:48 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <8_drb.4738$QL5.2392@newssvr29.news.prodigy.com>
Source record: 105062
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fad600b$1_2@corp.newsgroups.com...
> Dan/W4NTI wrote:
> > So...what sort of government do we REALLY have?
>
> Sadly, we are drifting toward fascism - governmental
> control with private ownership.

I keep hearing that it's the idiotarians who are relentlessly taking over
everything.

Charles Brabham, N5PVL

4097. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:20:30 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311081420.7ca90ae7@posting.google.com>
Source record: 105063
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

FO&A.

This is why some many so called 'democrats'
do not like the Pledge of Allegiance.

For those simple words
"I Pledge of Allegiance to the Flag
of the United States of America,
and To The REPUBLIC For Which It Stands...

http://history.vineyard.net//pledge.htm
http://home.att.net/~poofcatt/july.html
http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_pledge.html

I Proudly Stand with My Hand over My Heart and Head Held High:

"I Pledge Allegiance to the Flag
of the United States of America,
and to the REPUBLIC for which it stands:
one Nation under "GOD", Indivisible,
With Liberty and Justice for ALL."
- - - amen, Amen. AMEN !

God Bless America - Just an old Boy Scout ~ RHF
.
.
Does anyone remember the "American Creed" ?

"I believe in the United States of America as a Government of the
People, by the People, for the People; whose Just Powers are Derived
from the Consent of the Governed; A Democracy in a Republic, a
Sovereign Nation of many Sovereign States; a Perfect Union, one and
inseparable; Established upon those Principles of Freedom, Equality,
Justice, and Humanity for which American Patriots Sacrificed their
Lives and Fortunes.

I therefore believe it is My Duty to My Country to Love it; to Support
its Constitution; to Obey its Laws; to Respect its Flag; and to Defend
it Against ALL Enemies."

http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_creed.html
http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_creed_print.html
.
.
= = = "Dan/W4NTI" <w4nti@get rid of this mindspring.com>

= = = wrote in message news:<q4arb.16853$Oo4.16408@newsread1.news.atl.earthlink.net>...
> Per Websters Dictionary;
>
> Democracy
>
> 1. Rule by the people.
> 2. A community so governed.
> 3. The quality of being democratic.
>
>
> Republic;
>
> A state in which the sovereign power is vested in representatives chosen by
> the people.
>
> Constitution;
>
> The system of fundamental laws of a nation or society.
>
> Thus, we are indeed, a Constitutional Republic.
>
> We vote for and elect REPRESENTITIVES. These folks are 'supposed' to vote
> in congress, either state or federal, what the electorate wants.
>
> We are a representitive form of government.
>
> A true democracy is one where everyone gets a vote, and the majority wins.
>
> Can you imagine how much fun it would be to have to vote on every single
> issue, local, state, federal? There wouldn't be enough time in a lifetime
> to do it.
>
> Our representitives are 'supposed' to base their lawmaking on the
> CONSTITUTION. Obviously this is not working.
>
> What is happening is the judiciary of APPOINTED, not elected, judges are
> actually making the law.
>
> In reality this country should stand up and revolt. We are NOT following
> our constitution.
>
> So...what sort of government do we REALLY have?
>
> Dan/W4NTI
>
>
> Dan/W4NTI
>
>
> Dan/W4NTI

>
> "RHF" <rhf-mail@pacbell.net> wrote in message
> news:e5e13af8.0311080245.298adcb6@posting.google.com...
> > GS,
> >
> > "The US is a democracy.
> > Any country is a democracy,
> > which has a legislature,
> > an executive,
> > and a supreme court."
> >
> > I see you have ADDED to your 'original definition' of a "Democracy"
> > :o)
> >
> > But, All of the Countries, Nations, Systems
> >
> > * Had Equality Before the Law - As Defined by Their Laws.
> > - - - In Cuba - Fidel just place 1000s in Prison - For Thinking Wrong.
> > - - - In Iran - Citizens have Equality before Civil Law and "The
> > Faithful" may be 'judged' before Shari`ah (Islamic Religious) Law.
> > (What could be more Equal?)
> >
> > * Had the Right To Vote - And The Responsibility to Vote.
> > - - - In Iraq - Saddam was recently Re-Elected by 99.46% of the Vote
> > and 99.73% (Nearly Everyone) Voted.
> > - - - The Peoples "Democratic" [Republics] always have Higher Voter
> > Turn-Outs than the USofA, Canada, The UK, EURO-Land, Japan and other
> > so called western democracies. These Peoples Democratic Republics are
> > evidently more democratic then the USofA an the others western
> > democracies.
> >
> > * * Think of the USofA:
> > - - - Jimmy Carter has had to "Monitor" elections in the USofA.
> > - - - Look at the last Presidential Election in the USofA and the
> > Missed Votes in the State of Florida.
> >
> >
> > Proud to say: I Am American ~ RHF
> > Simply an Old Retired Blue Collar Union Member - Tovarisch
> > .
> > .
> > = = = "Gene Storey" <nospam@cox.net>
> > = = = wrote in message news:<6MXqb.2160$643.1262@okepread03>...
> > > Not true. None of those systems are/were a democracy because they
> > > did/do not have equality before the law, nor the right to vote.
> > >
> > > "RHF" <rhf-mail@pacbell.net> wrote
> > > > GS,
> > > >
> > > > Ah then by using your definition: NAZI Germany was a Democracy !

> > > > - The USSR was a Democracy.
> > > > - - The Peoples "Democratic" [Republic] of North Korea is a Democracy.
> > > > (Alone with many other nations that call themselves Peoples
> > > > "Democratic" [Republics]}
> > > > - - - Islamic Republic of Iran is a Democracy.
> > > >
> > > > Fidel Castro should be honored as the longest living Leader of a
> > > > Democracy.
> > > > - - - The Republic of Cuba.
> > > >
> > > > Why the World is Full of Democracies ~ RHF
> > >

4098. Re: Racist Troll "Larry", or "Private" or whatever....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:30:14 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <W7erb.17381$Oo4.10317@newsread1.news.atl.earthlink.net>
Source record: 105064
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:IXdrb.4736$rI5.2634@newssvr29.news.prodigy.com...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:W7arb.16862$Oo4.12156@newsread1.news.atl.earthlink.net...
> >
> > > William H. O'Hara KB1IUB use QRZ.com for address lookup
> >
> > What "charges" are you speaking of William H. O'Hara? One does not
refute
> a
> > outright lie.
>
> Don't bother, Dan. The guy is from wig city. Having no identity or
character
> of his own, he leeches off of his betters. It's best to think of his wild
> claims and exaggerations as symptoms of his mental state, a cry for
help. -
> Then ignore them.
>
> Charles Brabham, N5PVL
>
>

Yeah, I've seen his 'postings' elsewhere.

I just enjoy watching them 'squirm' when they can't validate what they say.

Dan/W4NTI

4099. Re: 2m Yagi K3PF project question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:34:25 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Kb2dnXkmxsXA8jCiRVn-uw@comcast.com>
Source record: 105065

<wntu4@yahoo.com> wrote in message
news:6c7a372f.0311081312.5d8e92a1@posting.google.com...
> I am converting a RS FM ant into a 2m yagi per the article. I have
> worked out a way to flip flop the antenna from vertical to horizontal
> and back as I like, but am concerned about interference from my 20
> foot 'tower' when in horizontal mode, it being emt.

>Would some kind of shielding on the emt work to prevent problems?

I can think of ways to make the EMT not reflect, but they would also make it
absorptive, which would also be not good.

Fiberglass pole is pretty much the only way to be sure it dosen't interact.

You have me interested though, what mechanism are you using?
I've toyed with some ideas, but never hit anything I liked.
I thought about using a crossed yagi, but that gives me a 3db penalty in
both modes. :-P
Also, birds and ice love horizontal elements. I'd like to be able to go
horzontal, but stow it vertical to avoid those hazards.

4100. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 22:34:32 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <Yberb.17386$Oo4.8592@newsread1.news.atl.earthlink.net>
Source record: 105066

"W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
news:vqqgpddonrqf5c@corp.supernews.com...
> Dan/W4NTI wrote:
> > Per Websters Dictionary;
> >
> > Democracy
> >
> > 1. Rule by the people.
> > 2. A community so governed.
> > 3. The quality of being democratic.
> >
> >
> > Republic;
> >
> > A state in which the sovereign power is vested in representatives
> > chosen by the people.
> >
> > Constitution;
> >
> > The system of fundamental laws of a nation or society.
> >
> > Thus, we are indeed, a Constitutional Republic.
> >
> > We vote for and elect REPRESENTITIVES. These folks are 'supposed' to
> > vote in congress, either state or federal, what the electorate wants.
> >
> > We are a representitive form of government.
> >
> > A true democracy is one where everyone gets a vote, and the majority
> > wins.
> >
> > Can you imagine how much fun it would be to have to vote on every
> > single issue, local, state, federal? There wouldn't be enough time
> > in a lifetime to do it.
> >
> > Our representitives are 'supposed' to base their lawmaking on the
> > CONSTITUTION. Obviously this is not working.
> >
> > What is happening is the judiciary of APPOINTED, not elected, judges
> > are actually making the law.
> >
> > In reality this country should stand up and revolt. We are NOT
> > following our constitution.
> >

> > So...what sort of government do we REALLY have?
> >
> > Dan/W4NTI
>
> A government by the educated and affluent, allowed to rule by the
apathetic
> and un-informed general masses.
>
> But you don't need a revolution to fix it, only a few changes.
>
> First, a law that no person of title could hold public office (this was in
> the original Constitution). This would eliminate all the lawyers
> (Esquires) - a key step in fixing things.
>
> Next, a single term limit on all public offices - including judges. This
> would eliminate the career politicians and demigod judicial mentality.
>
> Lastly, elimination of all exemptions from common law and special perks
> that those in office have granted themselves. Want to fix Social Security?
> Make all those in Congress have to give up their Congressional retirement
> plan (full annual salary for life) and live off Social Security like the
> masses...
>
> 73 de W6DKN
>
>

What a eutopia that would be. Never happen.

First off you could NEVER get the lawyers in charge to go for it.

Dan/W4NTI

4101. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 23:28:35 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311081528.61a5aff3@posting.google.com>
Source record: 105067

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031107182621.13254.00000039@mb-m16.aol.com>...
> >
> >Yuri shouldn`t bemoan lack of response to his Antenna Group 7. It only
> >shows there is not much to contradict.
> >
> >Best regards, Richard Harrison, KB5WZI
> >
> >
>
>
> Hi Richard,
> thanks very much for the positive reinforcement. Seems that those who get their
> hands dirty from antenna grease know a thing or two, those who model their
> world on the computer know their paper stuff.

Yuri you make a very good point there. Those skilled in the
arts have often used gimmicks or quasi ruses in their studies
especialy in the use of mathematics where one can show on paper that
one plus one equals three
but cannot prove it factually. Engineers also use imaginary things in
the search of knoweledge where those that use their hands have to deal
with the real world. For many inductance is pure but imaginary as is
capacitance, each of these in the real world is a network but
engineers with the help of Laplace
have learned to deal with the real world with altered equations yet
use the same name such as inductance which in the real world there is
no such thing.
The fact that you used an imaginary term such as inductance instead of
a network unfortunately placed you in their camp in the world of
imagination.
An example with respect to your subject is for you to ask them to
provide you with an inductance of unlimited Q which in the imaginary
world that they frequent is no big deal, where in the real world you
are finding that Q beyond a 1000 is nigh impossible. Since speach
itself cannot resolve factual things to the satisfaction of all then
their will be no resolution.
All this reminds me of a problem I had years ago when I reffered to
capacitive coupling where its inherrent inductive component can be
used for matching purposes.
Now you tell me how you can convince experts that a capacitor is a
network
and thus has a usefull inductance component when they see for
mathematical reasons that the word capacitance refers to an imaginary

term to describe
what cannot be in the real world?
However Yuri your experimenting supplies an advantage over the experts
in that
it is in the real world that true invention has its value.
Art

> So far not a one "overthrow" of my 7 points, so I take it that we are on the
> right track and hope that others get it too and help us to use it properly.
>
> BTW I just found good source for liquid crystal strip thermometers, they have
> them in the pet shops, they are used for aquarium temperature measurements cost
> around $2. Cheap and easy way to verify the heat from current. I will get some
> and run som visual tests on Hustlers.
>
> 73 Yuri

4102. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-08 23:49:03 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <6qvqqvcfo9iak6ancgnq3kmig2he276b7r@4ax.com>
Source record: 105068

On Sat, 08 Nov 2003 19:59:02 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 08 Nov 2003 14:35:50 -0500, Alan Beagley
><abeagley@optonline.net> wrote:
>
>>I understand that patents do not always tell the whole story either:
>>many, many years ago I worked in a pharmaceutical laboratory where we
>>were trying to come up with a product that circumvented a German patent,
>>but we could not even get the process described in the patent to work --
>>they may have omitted mention of a catalyst.
>>
>>-=-
>>Alan
>
>Hi Alan,
>
>More their problem. By law, a patent is FULL disclosure. Failure to
>that end is sufficient to nullify it. If you simply copied their work
>and added that "catalyst," then you have just nudged their patent into
>the dust bin.

Not necessarily.

Some years back I worked for a company that had a series of products
that it had been producing for years. Long enough that some patents
would have run out, but they never patented any of the work. They had
chosen to keep the process proprietary.

A competitor, after something like 30 years finally figured out how to
make the stuff and applied for a patent. They served notice that we
were in violation of "their" patent applied for and would have to pay
royalties on 30 years of production. It only took a few days with
the company lawyers showing that we had been producing and selling the
stuff for years. That was the end of their patent attempt. OTOH they
were able to go ahead and produce their own "brand" of the products
although they were not able to use the trade name which was
copyrighted.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S/# CD-2)
>
>73's
>Richard Clark, KB7QHC

4103. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 00:39:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u41rqv8kc1vsvm687otmkhu8jfma1eej29@4ax.com>
Source record: 104919

On Sat, 08 Nov 2003 23:49:03 GMT, Roger Halstead
<newsgroup@rogerhalstead.com> wrote:

>On Sat, 08 Nov 2003 19:59:02 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:

>>More their problem. By law, a patent is FULL disclosure. Failure to
>>that end is sufficient to nullify it. \
>
>Not necessarily.

Necessarily. Failure to provide full disclosure is FRAUD.
>
>Some years back I worked for a company that had a series of products
>that it had been producing for years. Long enough that some patents
>would have run out, but they never patented any of the work. They had
>chosen to keep the process proprietary.
>
>A competitor, after something like 30 years finally figured out how to
>make the stuff and applied for a patent. They served notice that we
>were in violation of "their" patent applied for and would have to pay
>royalties on 30 years of production. It only took a few days with
>the company lawyers showing that we had been producing and selling the
>stuff for years. That was the end of their patent attempt. OTOH they
>were able to go ahead and produce their own "brand" of the products
>although they were not able to use the trade name which was
>copyrighted.
>
>Roger Halstead (K8RI EN73 & ARRL Life Member)
>www.rogerhalstead.com
>N833R World's oldest Debonair? (S# CD-2)
>>
Hi Roger,

All you've done is provide an anecdote that shows how companies use
the legal system for intimidation.

There is no such thing as protection for
>were in violation of "their" patent applied for
(legal baloney). Anyone can sue anyone else for anything. Bringing
suit, like patent pending, has no basis in law until the judge smacks
the gavel. No basis, that is, except putting a cloud on a title (the
intimidation factor). If you can wait it out and have no asset sale
in the works, there's no problem and you can counter-sue if the
original suit is found be a nuisance. If you can't wait it out
(because you are selling assets) you settle; thus the intimidation

becomes extortion.

The only protections allowed in your story would have been your old company would have been allowed to continue production to their old standard and could not be held in violation of the patent to the second company. This has a special legal term within patent law(which I cannot currently recall) that recognizes an established product could be brought to market before a patent for basically the same thing is published (there are no issues of prior art for the patent holder and no issues of violation for the prior manufacturer).

73's
Richard Clark, KB7QHC

4104. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 01:30:43 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FAD98C3.F06F6FCB@cwis.net>
Source record: 104920

Art,
Your same old 'song and dance' is really getting tiresome.
Instead of making a vocation of being a martyr, find something
else to beat your breast over for a while.
'Doc

4105. Re: Current in antenna loading coils controversy

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 01:39:53 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031108203953.15556.00000084@mb-m23.aol.com>
Source record: 104921

>However Yuri your experimenting supplies an advantage over the experts
>in that
>it is in the real world that true invention has its value.
>Art
>

I guess it is a sign of where "modern" technology and modeling is leading us - to the imaginary paper world.

It just disturbs me that some of the "learned" people would not "lower" themselves to the reality, question the facts and adjust their "knowledge" out of the modeling world. As Cecil said, modeling supposed to model reality or close to it, not the other way around. In view of this exercise I am going to revise and investigate some of the topics I asked about here before. Looks like the "advice" I got might not be based on reality.
I am sorry to see some of the "gurus" ridiculing and making snotty remarks, rather than pausing and stepping back to have a closer look or question or discuss it in a civil manner. Oh well, good thing it is only a hobby :-)

73 Yuri, K3BU

4106. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 01:41:49 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAD9B18.1070001@get.lost>
Source record: 104922
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

RHF wrote:

> I Proudly Stand with My Hand over My Heart and Head Held High:
>
> "I Pledge Allegiance [snip]

Now that we established who the biggest American patriot is, when do we move on to the dick measuring contest? The rules are the same as in the patriotism game: he who shouts the loudest, wins.

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4107. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 01:52:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqr7ejord9t18@corp.supernews.com>
Source record: 104923

Somehow I'm getting the image here of engineers sitting at their computers, proposing lofty but unsupportable theories and modeling idealized but impossible circuits, while the tinkerers -- REAL MEN -- with grease under their fingernails, wrenches in hand, are designing and producing the practical items that REALLY WORK.

Lemme tell 'ya. Those generators that make your power, those turbine blades that spin them. Those jet engines and airframes that get you across the country with nearly unbelievable reliability and safety. The little HTs you yak on. The signal generators, spectrum analyzers, oscilloscopes you use to make measurements. The marvelous ICs that do everything from running your microwave oven to being the guts of your PC. Those weren't designed by technicians or back room tinkerers. Those were designed by engineers who know and understand basic principles and how to apply them. Nearly anything designed in the last couple of decades has been extensively modeled before the first metal is cut, the first wire soldered, the first circuit board or IC produced. And when the extensively modeled airplane is built, it flies. The IC and circuit board work. They work by the thousands or hundred of thousands, despite tolerances, component variations, and temperature changes. Because they were modeled and they were understood. Not because somebody made one sorta work once on a workbench by experimenting. People who reject modeling as "paper stuff" and decry established theory have simply crippled themselves. It's their choice, but there's no reason to be proud of it.

Part of the everyday work of an engineer involves making measurements of one sort or another. And it's when the results are surprising that you'll see the difference between someone who has a solid background in fundamentals and the person who doesn't. The former will work to resolve the surprising measurement results with known and trusted theory. The latter will question the theory, not having a solid background to build on. I've seen technicians quickly reject Ohm's law on the basis of a single careless measurement. From then on, that person has lost the ability to rely on a powerful principle, and can never be quite sure what kind of relationship to expect among voltage, current, and resistance. A person who does understand the principles will search for what errors or shortcomings have been made in the measurement process, or what simplifications have been made that aren't valid, will resolve them, and will learn from them. Let me give just one example from my own experience -- there've been scores like it over the years. Years ago, I was measuring the input impedance of a simple antenna (folded dipole, as I recall) through a one wavelength piece of coax. Assuming that the measured impedance was the same as at the antenna, the results were very different than modeling had shown. Some people, it seems, would have

immediately posted the results on the web, challenging the modeling and transmission line theory, loudly and forcefully demanding that everyone who doesn't believe the results should immediately go out and make measurements. After all, that's proof, is it not, that the modeling is bunk and transmission line theory is bunk.

Well, the reason for the strange results turned out to be coax loss. A bit of analysis (based on known principles) shows that even a small amount of transmission line loss will skew the measured Z toward the line's Z0. The effect is surprisingly strong when the impedance to be measured is quite different from the line's Z0, as it was in this case. Another thing I learned was that the coax I was using, a small diameter 75 ohm cable, was extraordinarily lossy at the low frequency of 7 MHz where I was making the measurements. I determined this to be due to the small center conductor, made of strands of tiny Copperweld wire. The copper coating was thick in terms of percentage, but thin in terms of skin depths at the low frequency because of the very small strand diameter. So current was flowing in the steel cores. I ended up learning two important things from the episode, which I've applied ever since to similar problems, and other ones too. If I were someone who was quick to throw out conventional theory or modeling results, I never would have learned from it, and I wouldn't be able to depend on either modeling or transmission line theory.

Now, getting to the issue at hand. Those of us who studied and understood basic circuit analysis know that a vanishingly small inductor or any other two-terminal component must have equal currents in and out. When measurements show results that differ from this, it means -- to we who understand and believe the principles -- that either there's something we don't know about the measurement method that's skewing the results, or the approximation of a vanishingly small component isn't valid. Of course a lengthy inductor in an antenna isn't vanishingly small, and it also couples strongly to the antenna above and below it. So no one who understands basic principles would be the least bit surprised to find different currents at the inductor ends. However, the statement that significant current differences were found at the ends of an apparently small toroid aroused my curiosity. Either there's a peculiarity in the measurement, or there's a sneak current path, such as stray capacitance, accounting for the current imbalance.

Being curious, I made some measurements of my own of a loading inductor at the base of an antenna. The details of the test are a bit lengthy, and this posting is already long, so I'll post it separately.

I feel kind of sorry for people who are quick to abandon established principles each time a casual measurement -- or even a careful one -- seems to contradict them. They're pretty much doomed to randomly trying this or that, without ever having the hope of understanding what they're doing. It's just the sort of thing that gives rise to astrology and phrenology, as ways to try to understand the mysteries around us. I greatly prefer science, but each to his own. It is true that a person

with marginal math skills might not be able to discover, let alone quantitatively prove, that coax loss was the culprit in the example I gave above. Without some background in math, as well as basic principles, it's not really possible to understand things on a very fundamental level. So a person without math skills is pretty much limited to general, rather than specific, understanding.

As a footnote, I was a technician for quite a few years, first self taught, and later going through the Air Force radar technician school. I worked as a broadcast engineer, and repaired various equipment from radios, TVs, and telephone answering machines to heavy ground military radar. (I was, incidentally, regarded as being a very good technician. One reason was that I did firmly believe in the basic principles as I was able to understand them, and applied them whenever possible.) But I was often frustrated because I kept encountering things I didn't understand as fully as I wanted, which is why I ended up working my way (with a little help from Uncle) through engineering school. It gave me the theoretical and mathematical tools to understand a whole lot more about how things work, and on a much deeper level. I use modeling extensively, as do nearly all my fellow engineers, and I've been able to consistently design quality electronic equipment in a wide variety of categories -- by understanding and applying basic principles. Far from converting me to the effete theoretician I'm seeing caricatured here, the education and engineering experience has added immeasurably to my ability to understand this fascinating field.

Roy Lewallen, W7EL

Art Unwin KB9MZ wrote:
> k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031107182621.13254.00000039@mb-m16.aol.com>...
>
>>>Yuri shouldn`t bemoan lack of response to his Antenna Group 7. It only
>>>shows there is not much to contradict.
>>>
>>>Best regards, Richard Harrison, KB5WZI
>>>
>>>
>>
>>
>>Hi Richard,
>>thanks very much for the positive reinforcement. Seems that those who get their
>>hands dirty from antenna grease know a thing or two, those who model their
>>world on the computer know their paper stuff.
>
>
> Yuri you make a very good point there. Those skilled in the
> arts have often used gimmicks or quasi ruses in their studies
> especialy in the use of mathematics where one can show on paper that
> one plus one equals three
> but cannot prove it factually. Engineers also use imaginary things in

> the search of knoweledge where those that use their hands have to deal
> with the real world. For many inductance is pure but imaginary as is
> capacitance, each of these in the real world is a network but
> engineers with the help of Laplace
> have learned to deal with the real world with altered equations yet
> use the same name such as inductance which in the real world there is
> no such thing.
> The fact that you used an imaginary term such as inductance instead of
> a network unfortunately placed you in their camp in the world of
> imagination.
> An example with respect to your subject is for you to ask them to
> provide you with an inductance of unlimited Q which in the imaginary
> world that they frequent is no big deal, where in the real world you
> are finding that Q beyond a 1000 is nigh impossible. Since speach
> itself cannot resolve factual things to the satisfaction of all then
> their will be no resolution.
> All this reminds me of a problem I had years ago when I reffered to
> capacitive coupling where its inherrent inductive component can be
> used for matching purposes.
> Now you tell me how you can convince experts that a capacitor is a
> network
> and thus has a usefull inductance component when they see for
> mathematical reasons that the word capacitance refers to an imaginary
> term to describe
> what cannot be in the real world?
> However Yuri your experimenting supplies an advantage over the experts
> in that
> it is in the real world that true invention has its value.
> Art

4108. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 01:54:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqr7igba9obha6@corp.supernews.com>
Source record: 104924

Top posting is a public service. It provides something for people who have nothing better to do to grouse about. Just imagine what they'd be griping about if they didn't have us!

Roy Lewallen, W7EL

Dave Shrader wrote:
> . . .
> For me Top Posting is the best solution.
>
> Deacon Dave, W1MCE

4109. Re: AEA Isoloop: Stepper Motor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 02:44:55 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311081844.7aedca41@posting.google.com>
Source record: 104925

Ouch ! I would have thought what you said was true...except
if he has the delux control unit then I would think that angle
displacement
would be extremely important. If you just have a std stepper motor
drive then aim for 200 steps per rev
Art

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:<AoidncfXNOhR_TCiRVn-iw@comcast.com>...
> > I am trying to find a replacement for it. (After I hung a large wire
> > antenna system my XYL suddenly became nostalgic about the Isoloop). I do
> > not have any technical info about what motor is needed. I can probably
> > figure it out when I pull everything apart, but I wondered if anyone had
> > access to this information?
>
> Check the winding resistance, and wether it's a bipolar (four wire) or
> unipolar (more than four wires) If the replacement is mechanically fit, and
> the same general resistance and scheme, you'll be fine.

4110. Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 03:09:17 UTC
From: Old Ed <eseniorsR-E-M-O-V-E@earthlink.net>
Message-ID: <xdirb.3646$nz.3545@newsread2.news.pas.earthlink.net>
Source record: 104926

Hello -

Is there anyone out there who has owned or used BOTH
a Hex-Beam HX5Bi and a Force 12 C-3SS? If so, I'd
appreciate hearing any comments you might have.

The spec's on these two are very close on 10/15/20...
but I'm guessing that the C-3SS would be better on 20.
The HX5Bi would slaughter the C-3SS on 17 and 12,
of course--since the C-3SS isn't really designed to
cover those bands.

73, Ed

4111. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 03:31:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqrd8vpsv4478c@corp.supernews.com>
Source record: 104927

Here are some preliminary details about the inductor current measurement I made.

My antenna isn't nearly as ideal as the one Yuri described. (But if my results are different from the ones reported at the web site Yuri referenced, I'll be eager to hear why.) It's about 33 feet high, and has only 7 buried radials. The feedpoint impedance indicates a loss of about 25 ohms at 7 MHz, so I'd expect it to be a bit more at 3.8. It's bolted to a galvanized fence line post which protrudes nearly four feet from the ground, with spacing between the antenna and the post of about 1/4". This mounting has only a minor effect on the feedpoint impedance at 7 MHz, which is the antenna's intended frequency of use. It's quite profound at 3.8 MHz, though. The expected 370 or so ohms of capacitive reactance is transformed to 185, while the feedpoint R is 35 ohms, not far from the expected value. So the overall feedpoint Z is 35 - j185 ohms at 3.8 MHz, measured with a GR 1606A impedance meter. (I found that my MFJ 269 was about right with the X, but measured R as zero -- apparently the combination of low frequency and large X is a problem for it in resolving the R.) So I built an inductor with measured impedance of 0.6 + j193 ohms. It's 26 turns on a T-106-6 toroid core. Q is a bit over 300. This was placed in series at the antenna feedpoint.

For current measurements, I made two identical current probes. Each one consists of 10 turns wound on an FT-37-73B ferrite core. The two leads from the winding are twisted and wound in bifilar fashion on another FT-37-73B core, 10 turns. This is then connected to an oscilloscope input via a two-foot (approx.) piece of RG-58. A 50 ohm termination is also at the scope input. This gives the probe a theoretical insertion impedance of 0.5 ohm. While making the measurements, I moved, grabbed, and re-oriented the coax cables, with no noticeable effect. This gave me confidence that the outsides of the coax weren't carrying any significant current.

One probe went to each channel of the scope. I left the two scope inputs in the cal position, put both probes on the wire at the input end of the inductor, and recorded the p-p values with the scope's digital measurement feature. Then I reversed the order of the probes and remeasured. I found a slight prejudice toward the probe closest to the source -- 1.2% in one ordering, and 2.1% in the other. Averaging the two channels, though, showed them to be the same within less than 1%. (Each probe was always connected to the same scope channel, so this is a test of the probe-scope channel combinations.)

Then I moved one probe to the output side of the inductor, and measured input and output current. And I reversed the probe positions on inductor

input and output. The ratio of output to input current in the two tests differed by only 1.4%.

When I encounter an astrologist, they invariably ask what "sign" I "am", then proceed to tell me how my personality meets their expectations. So what I do instead is to have them tell *me* what "sign" I "am" *first* -- which they should easily be able to do, based on my personality. Well, they don't find that to be fair, for some reason (although I certainly find it amusing). And so, I doubt if the following challenge will be regarded to be fair, for much the same reason. Those with alternative rules for solving circuit problems are challenged to predict what the ratio of output current to input current will be. I'm particularly targeting Cecil, and others who have bandied about a lot of pseudo-analysis about electrical length, reflections, and the like. And, Richard (Harrison), who said something like "an inductor without phase shift is like". . . I don't recall. . .hot dog without ketchup or something. Pull out your theories, and calculate it, like any competent engineer should be able to do. For cryin' out loud, it's a simple series circuit (except for Cecil, where it's some kind of distributed thing).

First post your answers, then I'll post the result of my measurements.

Roy Lewallen, W7EL

4112. Re: AEA Isoloop: Stepper Motor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 03:59:43 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <FsWdnVoToaEFJjCiRVn-sw@comcast.com>
Source record: 104928

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0311081844.7aedca41@posting.google.com...
> Ouch ! I would have thought what you said was true...except
> if he has the delux control unit then I would think that angle
> displacement
> would be extremely important. If you just have a std stepper motor
> drive then aim for 200 steps per rev
> Art

Ok, I wasn't aware they had two flavours.

You can tell the steps per rev by feeling the cogging with your fingers as
you turn the shaft.
Make a witness mark, and count the cogs over a revolution.

You won't find a 199 step/rev motor, so don't worry if you don't get exactly
200, it's still 200 if you're anywhere near.

4113. Re: 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 04:24:42 UTC
From: "www.ttdown.com" <blah@bleh.com>
Message-ID: <qbgrqvkgnd4m6tcdrn7fgfgjnf587f4o9r@4ax.com>
Source record: 104929

Thanks for your reply.
I'd still appreciate links to specific designs, if you or anyone
else has these...
It would be nice to know, for example, if someone has found
a pringles type can that has twice the radius and length of
the 2.4 Ghz design. Perhaps a German sausage co. uses
such cans for schnitzel...

I'm also not wedded to a cantenna type design.

If specific 1.2 Ghz design sites don't exist, how about a
reference to a good book on antenna design that won't
ignore 23 cm.

Thanks!

aw

On Sat, 08 Nov 2003 19:34:27 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 08 Nov 2003 08:45:10 -0500, www.ttdown.com <blah@bleh.com>
>wrote:
>>I don't see any on the web, and I'm not sure how to scale
>>the 2.4 Ghz design for 1.2 Ghz use.
>
>Hi OM,
>
>Scaling is simple. It means exactly what the descriptive term
>implies. Multiply EVERY dimension of EVERY element by 2 (but only if
>the frequencies are an order of 2, use other ratios as appropriate).
>This does not include the connector which should be isolated from the
>antenna through a BalUn or Choke (if not already evident, or if this
>is a new topic, research that separately, the connector is NOT an
>antenna element).
>
>73's
>Richard Clark, KB7QHC

4114. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 04:38:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fadc4e2$1_2@corp.newsgroups.com>
Source record: 104930

Roy Lewallen wrote:
> Pull out your theories, and calculate it, like any competent
> engineer should be able to do. For cryin' out loud, it's a simple series
> circuit (except for Cecil, where it's some kind of distributed thing).
>
> First post your answers, then I'll post the result of my measurements.

What is the value of the distributed capacitance between each two
turns on the toroid? That distributed capacitance is what makes a
75m mobile loading coil act like a transmission line.

Question: Why didn't you use a 75m bugcatcher coil for the experiment?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4115. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 05:17:24 UTC
From: Holley Wholee <NoEmail@NoAddress>
Message-ID: <bokil6$s5h$0@pita.alt.net>
Source record: 104931
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0311081420.7ca90ae7@posting.google.com...
FO&A.

This is why some many so called 'democrats'
do not like the Pledge of Allegiance.

For those simple words
"I Pledge of Allegiance to the Flag
of the United States of America,
and To The REPUBLIC For Which It Stands...

http://history.vineyard.net//pledge.htm
http://home.att.net/~poofcatt/july.html
http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_pledge.html

I Proudly Stand with My Hand over My Heart and Head Held High:

"I Pledge Allegiance to the Flag
of the United States of America,
and to the REPUBLIC for which it stands:
one Nation under "GOD", Indivisible,
With Liberty and Justice for ALL."
- - - amen, Amen. AMEN !

God Bless America - Just an old Boy Scout ~ RHF
.
.
Does anyone remember the "American Creed" ?

"I believe in the United States of America as a Government of the
People, by the People, for the People; whose Just Powers are Derived
from the Consent of the Governed; A Democracy in a Republic, a
Sovereign Nation of many Sovereign States; a Perfect Union, one and
inseparable; Established upon those Principles of Freedom, Equality,
Justice, and Humanity for which American Patriots Sacrificed their
Lives and Fortunes.

I therefore believe it is My Duty to My Country to Love it; to Support
its Constitution; to Obey its Laws; to Respect its Flag; and to Defend
it Against ALL Enemies."

.....

Good thoughts. Trouble is that the Socialist Democrats care not for these beliefs.
The greatest threat to our nation today is the touchy-feely political correctness movement being fomented by these hand-wringers.

--
"Throughout history, it has been the inaction of those who could have acted; the indifference of those who should have known better; the silence of the voice of justice when it mattered most; that has made it possible for evil to triumph."

4116. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 05:22:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fadcf45$1_2@corp.newsgroups.com>
Source record: 104932

Roy Lewallen wrote:
> I'm
> particularly targeting Cecil, and others who have bandied about a lot of
> pseudo-analysis about electrical length, reflections, and the like.

Balanis would be surprised to know that you consider the material that he teaches in his classes at ASU to be pseudo-analysis. Some of the stuff I have posted is in Balanis' book, _Antenna_Theory_ which you haven't read. In particular, he says: "Standing wave antennas, such as the dipole, can be analyzed as traveling wave antennas with waves propagating in opposite directions (forwards and backwards) as represented by traveling wave currents If and Ib in Figure 10.1(a)."

I'm just wondering how you can be so sure that what I have offered is pseudo-analysis and which of the following statements you disagree with. Please be specific.

1. The feedpoint impedance of a typical traveling wave antenna is in the hundreds of ohms since there are no reflected waves.

2. The feedpoint impedance of a standing wave antenna is the result of superposition of forward and reflected waves (which cause the observable standing waves).

3. At the feedpoint of a 1/2WL resonant dipole, the forward current, reflected current, and forward voltage are all in phase. The reflected voltage is 180 degrees out of phase. This results in a purely resistive low-voltage/high-current ratio for the feedpoint impedance.

4. The above relationship is true for any dipole, 1/2WL or physically shorter, that has a purely resistive feedpoint impedance. (No resistive loading)

5. The phases of the signals at the feedpoint are known. The phases of the signals at the open tips of the dipole are known. Any loading used in order to increase the electrical length to 1/2WL must maintain those known phase conditions in order to achieve a purely resistive feedpoint impedance.

On page 18, in Figure 1.15, Balanis shows how a 1/2WL dipole is achieved by flaring out the last ~1/4WL of an unterminated transmission line. He says: "As the section of the transmission line begins to flare, it can be assumed that the current distribution is essentially unaltered in form in each of the wires."
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!

------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4117. Re: 2m Yagi K3PF project question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 06:11:10 UTC
From: wntu4@yahoo.com
Message-ID: <6c7a372f.0311082211.4cd5c13e@posting.google.com>
Source record: 104933

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:<Kb2dnXkmxsXA8jCiRVn-uw@comcast.com>...
> <wntu4@yahoo.com> wrote in message
> news:6c7a372f.0311081312.5d8e92a1@posting.google.com...
> > I am converting a RS FM ant into a 2m yagi per the article. I have
> > worked out a way to flip flop the antenna from vertical to horizontal
> > and back as I like, but am concerned about interference from my 20
> > foot 'tower' when in horizontal mode, it being emt.
>
> >Would some kind of shielding on the emt work to prevent problems?
>
> I can think of ways to make the EMT not reflect, but they would also make it
> absorptive, which would also be not good.
>
> Fiberglass pole is pretty much the only way to be sure it dosen't interact.
>
> You have me interested though, what mechanism are you using?
> I've toyed with some ideas, but never hit anything I liked.
> I thought about using a crossed yagi, but that gives me a 3db penalty in
> both modes. :-P
> Also, birds and ice love horizontal elements. I'd like to be able to go
> horzontal, but stow it vertical to avoid those hazards.

Dave,
Just have it on a small hinged wood platform, one side on the mast,
the other side on a separate support forming a very narrow 'y' going
down to a cup support at ground level. normal postion would be up, for
vertical ops, just lift up (and out of the cup) and let it drop down.
Some details to work out, but it should work.

4118. Mosley TA-33

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 06:32:31 UTC
From: ImPhantom <DoubleDuce4u@hotmail.com>
Message-ID: <3clrb.8486$P%1.7648449@newssvr28.news.prodigy.com>
Source record: 104935

Does anyone have assembly instructions in .pdf for a Mosley TA33?

Would appreciate it.

4119. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 06:39:22 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <Q9lrb.51562$SV2.49458@bignews3.bellsouth.net>
Source record: 104934

What Dan just said is right.

Don't know if you want to take it down or not. You may have to. But, if it's down, you can do a reasonably good setup with an atenna analyzer with the Voyager laying on saw horses at strategic points.

What you do is get the swr as low as you can mid range on each of the bands. When you get it up, it may end up a little better or worse, but that will be about the best you can get it.

The reason they caution you not to use a tuner is because the swr slopes go up rapidly once you get outside the "flat" part of the window on each band. Higher swr means you can much more easily pop the caps. On bands where you get higher than about 1:3, you will need to lower power somewhat to keep from popping the caps. The tuner will probably bring in insofar as loading is concerned, so your rig is happy, but it does nothing for the swr. The only way the antenna can live with the higher swrs is through decreased power.

4120. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 07:18:17 UTC
From: robert_king@usa.com
Message-ID: <66dbd28a.0311082318.233b2d0c@posting.google.com>
Source record: 104936
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Danny and Chucky are in need of some serious help. Common knowledge....

Bob

larry_jefferies@yahoo.com (Larry) wrote in message
news:<61ed6067.0311061751.71066eca@posting.google.com>...
> You said it Jackie.
>
> Larry
>
> > > > > > Daniel L. Jeswald (W4NTI)
> > > > > > 89 Wildman Road
> > > > > > Anniston AL
> > > > > > 36201
> > > > > >
> > > > > > Charles D. Brabham (N5PVL)
> > > > > > Rt 2 Box 46
> > > > > > Lyford TX
> > > > > > 78569
> > > > > > Phone: 956-347-3612
>
> jackiew1@37.com (Jackie Ward) wrote in message
news:<12329882.0311021759.4eb43015@posting.google.com>...
> > Too funny. I hope you can get those two racist pigs off. Charles and
> > Daniel have been jacking around for months now.
> >
> > Now that their addresses are being posted I am sure someone will blow
> > the whistle on them.
> >
> > Jackie
> >
> >
> > robert_king@usa.com (Robert King) wrote in message
news:<66dbd28a.0311020825.a5dc994@posting.google.com>...
> > > Nice try Charles Brabham, we all know who the racists are around here.
> > > In fact anyone who has been on this newsgroup over the past month
> > > knows about the crap you and Daniel have been spreading.
> > >
> > > Captial "L" loser, the noose is closing..... Enjoy....
> > >
> > > Bob
> > >

> > > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> > >
> > > > Asked about his astounding success in mowing down thousands of screaming
> > > > raghead fanatics with very few casualties (sound familiar?) , the Israeli
> > > > general agreed to give the reporter the exclusive secret to his
> > > > unprecedented military success...
> > > >
> > > > "Fight Arabs." he said.
> > > >
> > > > Charles Brabham, N5PVL
> >
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> > > > > > > Rt 2 Box 46
> > > > > > > Lyford TX
> > > > > > > 78569
> > > > > > > Phone: 956-347-3612
> > > >
> > > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>...
> > > > "Robert King" <robert_king@usa.com> wrote in message
> > > > news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> > > > > You said it brother. Myself and a couple of the regulars are checking
> > > > > into a way to remove all their racist posts. I will keep you all
> > > > > posted.
> > > >
> > > > There is no way to remove racist posts by "Private" or "Larry". Sorry!
> > > >
> > > > The "regulars" here have been using usenet for years, and do not have to
> > > > speculate as to whether posts can be "removed" from usenet. They already
> > > > know better.
> > > >
> > > > Amazing how consistently ignorant the little "racist" group that has invaded
> > > > this newsgroup is.
> > > >
> > > > Sooner or later they will all take a hike, and we can get back to discussing
> > > > amateur radio.
> > > >
> > > > Charles Brabham, N5PVL

4121. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 07:46:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqrs6gpbd51p77@corp.supernews.com>
Source record: 104938

My challenge to you was rhetorical. Based on past experience, I had no real expectation that you'd be able to actually calculate a current.

Our educations differ a great deal. Mine enabled me to give a numerical prediction, which as anyone who has read my earlier postings, is 1. Yours has evidently not prepared you to meet this onerous challenge.

Does anyone else feel up to the task of calculating the currents in a simple circuit? It used to be that you'd have to be able to do this to get a first phone license, or probably an amateur extra. Now, it appears that even American engineering education isn't always up to the task.

Roy Lewallen, W7EL

Cecil Moore wrote:
> . . .
> Balanis would be surprised to know that you consider the material that
> he teaches in his classes at ASU to be pseudo-analysis. Some of the
> stuff I have posted is in Balanis' book, _Antenna_Theory_ which you
> haven't read. In particular, he says: "Standing wave antennas, such
> as the dipole, can be analyzed as traveling wave antennas with waves
> propagating in opposite directions (forwards and backwards) as represented
> by traveling wave currents If and Ib in Figure 10.1(a)."
> . . .

4122. Screw-Driver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 07:46:25 UTC
From: Kevin & Natalia Mitchell <sparcman@hotmail.com>
Message-ID: <3fadefdd$1@news.iconz.co.nz>
Source record: 104937

Hi All,

Can anyone point me in the direction, or forward any information on building my own Screw-Driver type antenna.

I would like a good across the board Mobile HF antenna.

Regards

Kevin. ZL1UDD

4123. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 08:23:54 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <uQmrb.4793$8X1.4195@newssvr14.news.prodigy.com>
Source record: 104939
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Robert King" <robert_king@usa.com> wrote in message
news:66dbd28a.0311082318.233b2d0c@posting.google.com...
> Danny and Chucky are in need of some serious help. Common knowledge....
>

The moron is sending posts to himself again...

That tells the whole story about this anti-ham troll.

Charles Brabham, N5PVL

4124. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL) ZZZZZZZZZZZZZZZZZ

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 08:40:33 UTC
From: CA <jck54@mcmedia.com.au>
Message-ID: <3fadfe1e$1@news.leadingedgeinternet.net.au>
Source record: 104940
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

.....enough please !
"Robert King" <robert_king@usa.com> wrote in message
news:66dbd28a.0311082318.233b2d0c@posting.google.com...
> Danny and Chucky are in need of some serious help. Common knowledge....
>
> Bob
>
> larry_jefferies@yahoo.com (Larry) wrote in message
news:<61ed6067.0311061751.71066eca@posting.google.com>...
> > You said it Jackie.
> >
> > Larry
> >
> > > > > > > > Daniel L. Jeswald (W4NTI)
> > > > > > > > 89 Wildman Road
> > > > > > > > Anniston AL
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> > > > > > > > Charles D. Brabham (N5PVL)
> > > > > > > > Rt 2 Box 46
> > > > > > > > Lyford TX
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> > > > > > > > Phone: 956-347-3612
> > >
> > jackiew1@37.com (Jackie Ward) wrote in message
news:<12329882.0311021759.4eb43015@posting.google.com>...
> > > Too funny. I hope you can get those two racist pigs off. Charles and
> > > Daniel have been jacking around for months now.
> > >
> > > Now that their addresses are being posted I am sure someone will blow
> > > the whistle on them.
> > >
> > > Jackie
> > >
> > >
> > > robert_king@usa.com (Robert King) wrote in message
news:<66dbd28a.0311020825.a5dc994@posting.google.com>...
> > > > Nice try Charles Brabham, we all know who the racists are around
here.
> > > > In fact anyone who has been on this newsgroup over the past month
> > > > knows about the crap you and Daniel have been spreading.

> > > >
> > > > Captial "L" loser, the noose is closing..... Enjoy....
> > > >
> > > > Bob
> > > >
> > > > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<I0Mmb.12434$%62.5271@newssvr29.news.prodigy.com>...
> > > >
> > > > > Asked about his astounding success in mowing down thousands of
screaming
> > > > > raghead fanatics with very few casualties (sound familiar?) ,
the Israeli
> > > > > general agreed to give the reporter the exclusive secret to his
> > > > > unprecedented military success...
> > > > >
> > > > > "Fight Arabs." he said.
> > > > >
> > > > > Charles Brabham, N5PVL
> > >
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> > > > > > > > 78569
> > > > > > > > Phone: 956-347-3612
> > > > >
> > > > "charlesb" <n5pvl@sbcglobal.net> wrote in message
news:<ZB5pb.9913$iQ7.109622406@newssvr21.news.prodigy.com>...
> > > > > "Robert King" <robert_king@usa.com> wrote in message
> > > > > news:66dbd28a.0311012302.82cd9c2@posting.google.com...
> > > > > > You said it brother. Myself and a couple of the regulars are
checking
> > > > > > into a way to remove all their racist posts. I will keep you
all
> > > > > > posted.
> > > > >
> > > > > There is no way to remove racist posts by "Private" or "Larry".
Sorry!
> > > > >
> > > > > The "regulars" here have been using usenet for years, and do not
have to
> > > > > speculate as to whether posts can be "removed" from usenet. They
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> > > > > know better.
> > > > >
> > > > > Amazing how consistently ignorant the little "racist" group that

has invaded
> > > > > this newsgroup is.
> > > > >
> > > > > Sooner or later they will all take a hike, and we can get back to
discussing
> > > > > amateur radio.
> > > > >
> > > > > Charles Brabham, N5PVL

4125. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 08:57:13 UTC
From: 25WPM <NoSpam@NoAddress>
Message-ID: <bokvhbtbh0@pita.alt.net>
Source record: 104941
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Robert King" <robert_king@usa.com> wrote in message
news:66dbd28a.0311082318.233b2d0c@posting.google.com...
Danny and Chucky are in need of some serious help. Common knowledge....

Bob

The persons in need of immediate help are the whiny-assed baby-like adults
that have a problem with Dan.
Dan did nothing wrong. He was honest.
He made a comment about "Ragheads". So what? He didn't hide behind the
cowardly Political Correctness shield.
You babies took it upon yourselves to chastise Dan for his choice of words.
What gives YOU the right?
Did Dan's choice of words cause you little politically correct babies to
fill your diapers? If so, too damned bad!
Dan is in no need of "some serious help" as you posit. The opposite is
true...it is YOU that needs to rethink your ideas.
Liberals are an odd sort...they claim to support freedom of speech...so long
as it is supportive of their ideology. They make no bones about trying to
stifle the ideas of others when it does not agree with their opinions.
Let's see...I will go for the shock value here...yes, Ragheads are a threat
to us...Muslims are involved in a religious war against us. Muslims/Ragheads
are convinced that it is their calling to kill us with any means available.
It is the duty of our Armed Forces to kill them before they visit upon us
another World Trade Center slaughter.
Dan...hats off to you. It is time we stood up to these heathens and call a
spade a spade.
During Clinton's 8 years in office 59 Americans were killed in terrorist
bombings. Clinton did nothing. He even ignored the first attack on the World
Trade Center.

I stand behind our President and our troops who are makng a stand.

Back to you, Bob. Want to wring your hands and whine?

4126. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 10:03:16 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311090203.585e2f6a@posting.google.com>
Source record: 104942
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
= = = Zoran Brlecic <...WA7AA...@get.lost>
= = = wrote in message news:<3FAD9B18.1070001@get.lost>...
> >
> > RHF wrote:
> >
> > I Proudly Stand with My Hand over My Heart and Head Held High:
> >
> > "I Pledge Allegiance [snip]
>
>
> Now that we established who the biggest American patriot is, when do we
> move on to the dick measuring contest? The rules are the same as in the
> patriotism game: he who shouts the loudest, wins.
>
>
> WA7AA
>
```

ZB,

The Biggest Patriots are Silent and they are Buried in Hallowed Ground.

Let Each of Us, Remember Them in Our Prayers ~ RHF

.

.

4127. Re: An Hentenna project

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 10:38:52 UTC
From: Helmut Wabnig <hXXXwabnig@aXXXon.at>
Message-ID: <gl5sqv4j81fig272o33akd7dlc95kot9jm@4ax.com>
Source record: 104946

On Sun, 9 Nov 2003 13:18:32 +0200, "emma"
<nonexistaccount@thedag.hellas.gr> wrote:

>Dear all,
>..............
>
>The Hentenna geometry is shown at
>
>http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry/Hentenna%20Geometry.htm
>
>.............

I tried it. Got some recipe from Internet, but then I noticed:

The coax cable has to be connected directly to the center grid,
e.g. "hot" wire left side, "shield" right side, or vice versa, if you
prefer.

Which of the 2 possibilities is the correct one?

Well, that is not a very serious question of course.
There is no "correct" answer.

The Hentenna geometry is symmetric,
the coax cable is unsymmetric,
and there is no symmetry transformer!!!!

What a piece of shit.

w.

4128. Re: 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 11:11:54 UTC
From: Atlas <shf@pandora.eb>
Message-ID: <_hprb.201$k%.69016877@hebe.telenet-ops.be>
Source record: 104944

Take a look here.
http://f5ad.free.fr/ANT-QSP_Descriptions_1200.htm

Or look here
The bandwith is about 20 MHz.That is enough for a fm video signal

http://www.sadona.com/news/ant_coaxcol.html

4129. An Hentenna project

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 11:18:32 UTC
From: emma <nonexistaccount@thedag.hellas.gr>
Message-ID: <bol7qk$1lc$1@nic.grnet.gr>
Source record: 104945

Dear all,

Mrs. yin,SV7DMC and Mr. pez,SV7BAX of TheDAG are strongly suggested
your newsgroup, to ask for support, help, comments or opinions
for the draft results I arrived at, for my DT project on the Hentenna,
before I start its construction and carry out the measurements.

The Hentenna geometry is shown at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry/Hentenna%20Geometry.htm

and my design results, for two different radius values,
of R, X, Z, Rho, SWR and Directivity, as they vary with the driving element position,
are shown at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaA/HentennaA.htm

and

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaB/HentennaB.htm

I would also appreciate any reference you may point at, in addition to those I collected at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/References/references.htm

Thank you in advance for your time,

Emma

4130. Re: 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 12:12:46 UTC
From: Atlas <shf@pandora.eb>
Message-ID: <2bqrb.265$Fx5.73528647@hestia.telenet-ops.be>
Source record: 104943

Take a look here.
http://f5ad.free.fr/ANT-QSP_Descriptions_1200.htm

Or look here
The bandwith is about 20 MHz.That is enough for a fm video signal

http://www.sadona.com/news/ant_coaxcol.html

4131. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 12:16:31 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <zeqrb.25595$OV7.2489@newssvr27.news.prodigy.com>
Source record: 104947
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"25WPM" <NoSpam@NoAddress> wrote in message
news:bokvhbtbh0@pita.alt.net...
>
> "Robert King" <robert_king@usa.com> wrote in message
> news:66dbd28a.0311082318.233b2d0c@posting.google.com...
> Danny and Chucky are in need of some serious help. Common knowledge....
>
> Bob
>
> The persons in need of immediate help are the whiny-assed baby-like adults
> that have a problem with Dan.

I don't think "they" have a problem with Dan, or myself either. I think that they are anti-ham trolls, out to disrupt these newsgroups with off-topic bullshit, any way "they" can.

That's just a theory, of course, but it fits the facts. Notice how they multi-post to ham radio newsgroups only? It's a troll, who should be reported to his ISP I suppose, since he won't take a hint and buzz off. (sigh)

Charles Brabham, N5PVL

4132. Re: Device By An Antenna: Patent WO0245210

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 12:19:37 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <HamdnR5-jv9CrTOiRVn-iw@crocker.com>
Source record: 104948

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0311081240.168dff97@posting.google.com...
> "David Robbins" <noone@nowhere.com> wrote in message
news:<DqydnWhrA-yomjCi4p2dnA@crocker.com>...
> > "PagCal" <pagcal@runbox.com> wrote in message
> > news:vqpubr5q6l8d66@corp.supernews.com...
> > > Has anyone looked at this patent?
> > >
> > > See http://l2.espacenet.com/espacenet/viewer?PN=WO0245210
> > >
> > > for details.
> > >
> > > It's basically a coil wrapped around a ferrite rod/tube
> > > that sensitive to the magnetic part of the electromagnetic
> > > field.
> > >
> > > The author claims it can be built small, handle high
> > > power, and is mostly omni-directional.
> > >
> > > They also went to the trouble of patenting it
> > > in Canada, number CA2427575, but I can find no US patent.
> > >
> > >
> >
> > doesn't look like anything special, but then
> again you don't have to have
> > anything really special to get a patent...
>
>
> Absolutely correct since every thing is now known !
> We have a lot of very educated experts in the antenna
> field that can attest to that. If it is not already
> printed in a book or was not presented as something
> new found by an expert then it most certainly a case of snake
> oil or something that was obvious but useless.
> Sounds like you have been succesful in the patent field
> and thus can talk from personal experience, care to share
> some of these 'useles' patents that you have to illustrate
> your point?
> Regards
> Art
>
>
not me, I work mostly in intellectual property... software, for those of you

in Rio Linda. while I believe there are some software patents, I am mostly an application engineer... that is, I take ideas and research that is already done and make something useful out of them. at my paying job I implement research that has been done on lightning hitting high voltage power lines. I also do various data collection and monitoring systems on substations and power lines. some of that work may be patentable by the company even though it is just basically plugging together off the shelf parts to do a new function. but since I hate having to be held to providing support and stuff that you have to do for paying customers, anything I have written for ham use is available free on my web site. (www.k1ttt.net)

4133. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 13:46:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae4569$1_7@corp.newsgroups.com>
Source record: 104949

Roy Lewallen wrote:
> My challenge to you was rhetorical. Based on past experience, I had no
> real expectation that you'd be able to actually calculate a current.

Here's how to mask the effects that we have been discussing:

1. Choose a small inductance that replaces a very small number of
degrees of the antenna.

2. Use a ferrite coil designed to minimize distributed effects.

3. Mount the coil at a place in the antenna where the slope of the
current is virtually zero.

That's what you have done.

Here's how to showcase the effects that we have been discussing:

1. Chose a large inductance that replaces an appreciable number of
degrees of the antenna.

2. Use a typical air-core loading coil like a bugcatcher that has
appreciable distributed effects.

3. Mount the coil at the center of the antenna where the slope of
the current curve is near maximum.

When you perform your experiment with an 8 foot center-loaded
bugcatcher on 75m, then you will be taken seriously.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4134. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 13:50:49 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <mtsrb.54568$SV2.53603@bignews3.bellsouth.net>
Source record: 104955
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Besides -- we don't want Zoran to feel even more frustrated.

Why is it that when somebody does show a basic love for our country, the
principles it stands for, and a respect for those that have fought to
maintain our freedoms, that some feel they have to try to belittle them?

-- Stinger
"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0311090203.585e2f6a@posting.google.com...
> = = = Zoran Brlecic <...WA7AA...@get.lost>
> = = = wrote in message news:<3FAD9B18.1070001@get.lost>...
> > >
> > > RHF wrote:
> > >
> > > I Proudly Stand with My Hand over My Heart and Head Held High:
> > >
> > > "I Pledge Allegiance [snip]
> >
> >
> > Now that we established who the biggest American patriot is, when do we
> > move on to the dick measuring contest? The rules are the same as in the
> > patriotism game: he who shouts the loudest, wins.
> >
> >
> > WA7AA
> >
>
>
> ZB,
>
> The Biggest Patriots are Silent and they are Buried in Hallowed Ground.
>
> Let Each of Us, Remember Them in Our Prayers ~ RHF
>
> .
>
> .

4135. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 13:55:14 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <ntsrb.54569$SV2.43429@bignews3.bellsouth.net>
Source record: 104956
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Exactly right, Holley.

Democratic Senator Zell Miller just published an excellent book that
basically says the same thing about his party. He's disgusted with it.

-- Stinger

"Holley Wholee" <NoEmail@NoAddress> wrote in message
news:bokil6$s5h$0@pita.alt.net...
> ....
>
> Good thoughts. Trouble is that the Socialist Democrats care not for these
> beliefs.
> The greatest threat to our nation today is the touchy-feely political
> correctness movement being fomented by these hand-wringers.
>
> --

4136. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:25:43 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <H7srb.1137$KN4.847495@news1.news.adelphia.net>
Source record: 104950

Roger Adam wrote:

> Mike,
>
> I don't see any mention of a fixed or variable capacitor. I take it that
> there is one fitted!

Of course! I have a 4 element trombone cap, powered by an electric screwdriver.

- Mike KB3EIA -

4137. Re: 1.2 Ghz antennas -- inexpensive designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:31:08 UTC
From: "www.ttdown.com" <blah@bleh.com>
Message-ID: <vsjsqv08q1tr791jn51gu5o7qvc69q1pqo@4ax.com>
Source record: 104951

Thanks for the links!

On Sun, 09 Nov 2003 12:12:46 GMT, "Atlas" <shf@pandora.eb> wrote:

>Take a look here.
>http://f5ad.free.fr/ANT-QSP_Descriptions_1200.htm
>
>Or look here
>The bandwith is about 20 MHz.That is enough for a fm video signal
>
>http://www.sadona.com/news/ant_coaxcol.html
>
>
>
>

4138. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:37:18 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <ijsrb.2498$643.1844@okepread03>
Source record: 104952
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

> This is why some many so called 'democrats'
> do not like the Pledge of Allegiance.

People don't like the "modified" pledge, because it brings
the Pope and the King of England into the Allegiance.

4139. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:38:33 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <sksrb.2499$643.1119@okepread03>
Source record: 104953
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote
> Gene Storey wrote:
> > The United states is a republic, and it is a democracy, ...
>
> It's not a democracy because some citizens are prohibited from voting.

Only because their too stupid, and 1% isn't going to change anything anyway.

4140. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:40:44 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <vmsrb.2500$643.1345@okepread03>
Source record: 104954
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

By rule of law.

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote
>
> For starters convicted felons, people under the age of 18...

4141. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:53:57 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <Vysrb.2501$643.996@okepread03>
Source record: 104957
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Because most of them have never served, nor supported. Now that
they are safe (too old for military service) they raise the flag and
proclaim their allegiance.

"Stinger" <contact@newsserveronly.com> wrote
> Besides -- we don't want Zoran to feel even more frustrated.
>
> Why is it that when somebody does show a basic love for our country, the
> principles it stands for, and a respect for those that have fought to
> maintain our freedoms, that some feel they have to try to belittle them?

4142. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 14:56:14 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <iAsrb.1142$KN4.854214@news1.news.adelphia.net>
Source record: 104958

Reg Edwards wrote:

> "Roger Adam" wrote -
>
>>I don't see any mention of a fixed or variable capacitor. I take it that
>>there is one fitted!
>>
>
>
> ================================
>
> Neither is there any mention of frequency. Where is the antenna analyser
> connected? What parameters are being measured. How long is the feedline,
> etc. ?

The frequency I chose for the *coupling* loop size was around 7 mhz in the 40 meter band. I chose this because of the wide variation in loop sizes called for by the program.

the antenna overall is designed to hit 75 meters, and at the other end, 17 meters. But 40 meters is the mainstay of this antenna.

The analyzer is connected to a piece of coax that is connected to the coupling loop, which is a Faraday loop.

The feedline for the testing is around 5 feet of 50 ohm cable. I don't doubt that my proximity to the antenna might have some effect, but I don't expect it to be that extreme.

> Does the antenna work when connected to a transmitter or receiver? If it
> doesn't what are the symptoms?

Haven't connected it yet. I wanted to see if I was in the ballpark. Initial tests suggested I probably aren't.

> A magloop has an extremely high Q and narrow bandwidth. Behaviour
> approaches that of a quartz crytal. If you don't get the expected
> measurement results then the most likely reason is the limited capabilty of
> the analyser. A precision, scientific-grade instrument is needed.

Now I am really perplexed! If I need an instrument such as you describe, how will I ever get this thing to tune with my lowly IC-745? It certainly isn't a scientific instrument. What I used to test the loop was a MFJ-259 analyzer. Not "lab grade", for sure, but not at the bottom of the barrel either. It has worked competently for everything else I've used it for.

- Mike KB3EIA -

4143. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 15:08:43 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <%Lsrb.1148$KN4.857236@news1.news.adelphia.net>
Source record: 104959

lysander@uk2.net wrote:

> On Sat, 8 Nov 2003 18:16:19 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>
>>"Roger Adam" wrote -
>>
>>>I don't see any mention of a fixed or variable capacitor. I take it that
>>>there is one fitted!
>>>
>>
>>==========
>>
>>Neither is there any mention of frequency. Where is the antenna analyser
>>connected? What parameters are being measured. How long is the feedline,
>>etc. ?
>>
>>Does the antenna work when connected to a transmitter or receiver? If it
>>doesn't what are the symptoms?
>>
>>A magloop has an extremely high Q and narrow bandwidth. Behaviour
>>approaches that of a quartz crytal. If you don't get the expected
>>measurement results then the most likely reason is the limited capabilty of
>>the analyser. A precision, scientific-grade instrument is needed.
>
>
>
> I've read a little about magloops (I'm a total dunce as far as aerials
> are concerned). It always mentions the fact that losses should be
> minimised on aerials made of copper tube by making sure that all the
> joints are well-made. Would it not be better to get a long piece of
> pipe and a plumber's pipebender and make the loop out of one piece of
> pipe to avoid joints?

You are right, but.....

If we look at the "best" setup, it would probably be one very wide
diameter (not talking about the perimeter of the loop itself) silver
loop. But these things work even with soldered copper pipe.

Plus with the perimeter of my loop (7.3 meters or almost 24 feet!)
getting one solid piece of pipe would be pretty hard, let alone forming
the loop. So I do a few tradeoffs.

- Mike KB3EIA -

4144. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 15:18:20 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <0Vsrb.1151$KN4.860176@news1.news.adelphia.net>
Source record: 104960

Richard Clark wrote:

> On Sat, 08 Nov 2003 19:39:39 +0000, lysander@uk2.net wrote:
>
>>Would it not be better to get a long piece of
>>pipe and a plumber's pipebender and make the loop out of one piece of
>>pipe to avoid joints?
>
>
> Hi OM,
>
> Solder is for weather sealing an already conductive join. Those who
> think of the solder as conductor then extend its resistive qualities
> into the equation (ignoring the massive surface area involved). If
> their solder jobs melt, it is only positive proof of the poor surface
> preparation, and/or subsequent oxidation following a poor solder job.
>
> Mike's 7 Meter diameter 40M loop hardly fits into the "mag loop"
> genre. The coupling loop comes closer, but then it has the advantage
> of being near the larger element which offloads the current demand.

Whoops! Typo alert! before we get too far, that is a 7.3 meter
circumfrence, not diameter. My bad. A 7.3 meter diameter loop would be
something indeed! And wouldn't work for anything higher than 6.5 mHz 8^)

- Mike KB3EIA -

4145. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 16:10:52 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vqspo4o6dmig55@corp.supernews.com>
Source record: 104962

Dear Jacques:
I think that best, portable, self contained analyzer that is
presently available is the "CIA-HF" from Tempo.
http://www.aea-wireless.com/cia.htm

The same company has other (more new) models that might be more suitable
for your tasks. I find it is far more easy to measure with the CIA-HF.
(I love my old GR bridge, but it is quite a task to use.)
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
>
> >Hi there,
> >
> >I want to buy an antenna analyser HF and/or VHF. Could be MFJ or
Autek. But
> >I don't have experience with theses equipments. Following you what
could be
> >the best one ?
> >
> >73 de ON5MJ - Jacques.
> >

4146. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 16:50:11 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109115011.29035.00000050@mb-m19.aol.com>
Source record: 104964

W5DXP wrote to W7EL:
>
>Question: Why didn't you use a 75m bugcatcher coil for the experiment?

And why did you put toroid at the base? We are talking about loading coils that are installed at half to 2/3 up the radiator. Try 12 foot radiator with loading inductor at ~65% up from the feedpoint. The results should be "magnified". Our theory is that the current drop across the inductor should be roughly proportional to
the current in the radiator (in degrees) that it replaces (Cosine law).

Judging by description, I would guess that there wasn't much difference. Put that coil up but don't use scope probes, they will detune the antenna, no wires, use thermocouple meters. Probes at the base they probably do not distort the measurements much.

Nice disertation on engineers and modeling. The only small problem is what and how you model. If your modeling uses 0 size inductance and real measurement shows something else, maybe there is a reason to question modeling how well it reflects reality. I went to university first, I designed parts that human life depended on, and I would think twice about relying on some numbers without testing and verifying it. Space shuttle tiles modeled OK?

Yuri

4147. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 16:56:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <2lurb.18761$9M3.3307@newsread2.news.atl.earthlink.net>
Source record: 104965
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"charlesb" <n5pvl@sbcglobal.net> wrote in message
news:zeqrb.25595$OV7.2489@newssvr27.news.prodigy.com...
>
> "25WPM" <NoSpam@NoAddress> wrote in message
> news:bokvhbtbh0@pita.alt.net...
> >
> > "Robert King" <robert_king@usa.com> wrote in message
> > news:66dbd28a.0311082318.233b2d0c@posting.google.com...
> > Danny and Chucky are in need of some serious help. Common knowledge....
> >
> > Bob
> >
> > The persons in need of immediate help are the whiny-assed baby-like
adults
> > that have a problem with Dan.
>
> I don't think "they" have a problem with Dan, or myself either. I think
that
> they are anti-ham trolls, out to disrupt these newsgroups with off-topic
> bullshit, any way "they" can.
>
> That's just a theory, of course, but it fits the facts. Notice how they
> multi-post to ham radio newsgroups only? It's a troll, who should be
> reported to his ISP I suppose, since he won't take a hint and buzz off.
> (sigh)
>
> Charles Brabham, N5PVL
>
>

I would enjoy applying some "PC' to him. Oh, thats paddle correction btw.

The guy doing this is obviously juvenile. Probably some young punk sneaking
into daddys room to play on the computer. A result of Canadian and now
Americas own creation. What a shame.

And I will continue to speak my mind. Whether it is politically correct or
not.

Thanks for the support.

Dan/W4NTI

4148. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 16:59:09 UTC
From: jackiew1@37.com
Message-ID: <12329882.0311090859.57803dbf@posting.google.com>
Source record: 104966
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Another moron to add to the pile.

How can you support Bush when he and the bin Laden family had oil
business dealings going back to the 70's?

Why did we give Osama bin Laden millions of dollars to fight the
Russians in Afganistan?

Why was Saddam Hussein awarded the keys to the City of Detroit in
1980?

Why did they blow up the World Trade Centre when there was 1000 other
buildings in hundreds of other countries to choose from?

Because of racist morons like you, thats why. Want some more apple
pie?

"25WPM" <NoSpam@NoAddress> wrote in message news:<bokvhbtbh0@pita.alt.net>...
> "Robert King" <robert_king@usa.com> wrote in message
> news:66dbd28a.0311082318.233b2d0c@posting.google.com...
> Danny and Chucky are in need of some serious help. Common knowledge....
>
> Bob
>
> The persons in need of immediate help are the whiny-assed baby-like adults
> that have a problem with Dan.
> Dan did nothing wrong. He was honest.
> He made a comment about "Ragheads". So what? He didn't hide behind the
> cowardly Political Correctness shield.
> You babies took it upon yourselves to chastise Dan for his choice of words.
> What gives YOU the right?
> Did Dan's choice of words cause you little politically correct babies to
> fill your diapers? If so, too damned bad!
> Dan is in no need of "some serious help" as you posit. The opposite is
> true...it is YOU that needs to rethink your ideas.
> Liberals are an odd sort...they claim to support freedom of speech...so long
> as it is supportive of their ideology. They make no bones about trying to
> stifle the ideas of others when it does not agree with their opinions.
> Let's see...I will go for the shock value here...yes, Ragheads are a threat
> to us...Muslims are involved in a religious war against us. Muslims/Ragheads
> are convinced that it is their calling to kill us with any means available.
> It is the duty of our Armed Forces to kill them before they visit upon us
> another World Trade Center slaughter.

> Dan...hats off to you. It is time we stood up to these heathens and call a
> spade a spade.
> During Clinton's 8 years in office 59 Americans were killed in terrorist
> bombings. Clinton did nothing. He even ignored the first attack on the World
> Trade Center.
>
> I stand behind our President and our troops who are makng a stand.
>
> Back to you, Bob. Want to wring your hands and whine?

4149. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:14:38 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <NCurb.2563$643.1518@okepread03>
Source record: 104967
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

So you're saying a republic can't be a democracy?

"Ralph Mowery" <rmowery@ctc.net> wrote
>
> It is a republic because we have the electorial college to do the actual
> voting instead of having the population as a whole to do the voting.

Well no shit Sherlock.

4150. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:15:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae7662$1_3@corp.newsgroups.com>
Source record: 104968
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote
>>It's not a democracy because some citizens are prohibited from voting.
>
> Only because their too stupid, and 1% isn't going to change anything anyway.

My 16 year old grand neice has a MENSA level IQ and is certainly not
"too stupid". She is probably more knowledgeable than 50% of Democrats. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4151. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:17:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae76b0_3@corp.newsgroups.com>
Source record: 104969
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:

> By rule of law.

That law would be illegal in a democracy.

> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote
>>For starters convicted felons, people under the age of 18...
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4152. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:20:00 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <XsGdnVqzm57N9DOiRVn-vA@ctc.net>
Source record: 104963
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

> > > The United states is a republic, and it is a democracy, ...
> >
> > It's not a democracy because some citizens are prohibited from voting.
>
> Only because their too stupid, and 1% isn't going to change anything
anyway.
>

Less than 1% changed the president in the last election.

It is a republic because we have the electorial college to do the actual voting instead of having the population as a whole to do the voting. Even if the college did vote in porportion of the people in their state, some states have a larger percentage of the votes. This way it is possiable for a president to have the most votes of the people and still not be elected president.

Also congress does the voting on the laws. It would take forever to get anything done if a country the size of the US had the whole population voting on every Bill in congress. Sometimes this does not seem like a bad idea :-)

4153. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:31:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae79fc$1_3@corp.newsgroups.com>
Source record: 104970

Yuri Blanarovich wrote:
> Judging by description, I would guess that there wasn't much difference.

The feedpoint of the radiator alone is 35-j185. The impedance of the loading toroid is 0.6+j193. Assuming perfect predictability, that gives the antenna system a feedpoint impedance of 35.6+j8, i.e. it is *longer* than resonant. That moves the current maximum point inside the toroid making the current in and out even closer to equal. If a coil is installed at a current maximum point or a current minimum point, the current in and out will be the same. If a coil is installed at a place where the slope of the current envelope is positive, the current will actually increase through the coil.
--
73, Cecil http://www.qsl.net/w5dxp

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4154. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:41:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae7c63_3@corp.newsgroups.com>
Source record: 104971
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> So you're saying a republic can't be a democracy?

Yes, a cat cannot be a dog. The two terms are mutually
exclusive by the purest of definitions. (If this was a
democracy, Gore, having won the popular vote, would be
president.)
--
73, Cecil http://www.qsl.net/w5dxp

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4155. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 17:48:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae7e12_3@corp.newsgroups.com>
Source record: 104972

Roy Lewallen wrote:
> Our educations differ a great deal. Mine enabled me to give a numerical
> prediction, which as anyone who has read my earlier postings, is 1.
> Yours has evidently not prepared you to meet this onerous challenge.

Roy, I have repeated a statement three or four times earlier on this newsgroup.
My statement predicts a result of 1. Here is that statement again:

"If a loading coil is placed at a current maximum point, the current in and
out of the coil will be equal." I have been assuming that is why your coil
was placed at the current maximum point, to ensure that the currents would
be equal. Depending upon where the coil is placed, the currents in and out
of the coil can be equal, greater than, or less than.
--
73, Cecil http://www.qsl.net/w5dxp

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4156. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:16:27 UTC
From: richardharrison@webtv.net
Message-ID: <23540-3FAE847B-72@storefull-2315.public.lawson.webtv.net>
Source record: 104975

Roy, W7EL wrote:
"And, Richard (Harrison), who said something like "an inductor without phase shift is like"...I don`t recall ; hot dog without ketchup or something."

My analogy may not have been apt, but fact is that you don`t have an inductor without phase shift. The current lags the voltage in an inductor.

My dictionary says that phase is a particular stage or point of adbvancement in a cycle; the fractional part of the period through which the time has advanced, measured from some arbitrary origin.

Apply a voltage or the voltage across the inductance. Current does not change instantaneously in an inductance, but it lags the imposed voltage change.

Lag is to move slowly or fall behind. In a circuit containing resistance and inductance, almost all real world circuits, current lags the voltage. This is phase shift by definition. We correct power factor to overcome phase lag and to eliminate the excess current and loss from the inductive charging and discharging current of an inductive circuit. Reactance only stores energy and does no useful work.

I reiterate the accuracy of my postings in this thread, and indeed, inductance and phase shift are inseparable. Please note that inductance can be neutralized with capacitance.

Best regards, Richard Harrison, KB5WZI

4157. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:16:55 UTC
From: tdonaly@aol.com
Message-ID: <20031109131655.06479.00000098@mb-m13.aol.com>
Source record: 104973

Yuri wrote,
>Our
>theory is that the current drop across the inductor should be roughly
>proportional to
>the current in the radiator (in degrees) that it replaces (Cosine law).

That's a pretty good theory, Yuri. I'd like to know where you got
this "Cosine law" you keep talking about. I can't seem to find
mention of any such _law_ anywhere but on this newsgroup. Does
that mean I should throw away my method of moments software
because I don't need it any more? And what is a current
drop? I've heard of voltage drops and cough drops but never
current drops. Finally, how do you measure the "current in
the radiator (in degrees)?" Why not use amperes like everyone
else?
I won't believe your theory, Yuri, until you and Cecil take the
time to present it in terms of field theory. Since you guys have taken
EM classes in college you should have no trouble doing this, right?
73,
Tom Donaly, KA6RUH

4158. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:19:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae8541_7@corp.newsgroups.com>
Source record: 104974
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Walt Davidson wrote:

> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>My 16 year old grand neice has a MENSA level IQ
>
> Pity she didn't teach you spelling! ;-)

Strangely, Netscape 7.1 didn't catch that one.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4159. FS: Five YO-YO-VEE prototypes...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:26:43 UTC
From: wa8mea@hotmail.com
Message-ID: <8a260fb2.0311091026.7458b765@posting.google.com>
Source record: 104976
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Greetings:

I've got 5 YO-YO-VEE prototypes I'd like to sell at discount. I wouldn't feel right selling them as new, because we did take them out in the field and test them. So even though they look new, technically they are used.

Some of you might be asking; "What the Sam Hill is a YO-YO-VEE?" If you're familiar with the Yo-Yo-Tenna Deluxe being featured in Worldradio magazine, or on banner ads at QTH.com and Eham.com, we've taken THAT antenna and placed a Budwig center insulator in the middle to make Inverted Vee operation a lot easier. (Easy mental picture to make since we don't yet have a "real" photo available. B&W AND color photos of the "Deluxe" also available at our website.)

Our retail on this will be $39.95 plus $7.95 shipping when available after the holidays. I'm selling these VERY SLIGHTLY "used" prototypes for $29.95 each plus HALF the shipping: $3.97

You're more than welcome to call me or even use our secure online form at our website. BE SURE to mention YO-YO-VEE prototype for the product description.

Again, I've only got five of these. We had six, but gave one away at our local club meeting for a door prize. So first e-mails get them!

73, Bill - WA8MEA - DWM Communications
Phone -- 1.517.563.2613
e-mail -- wa8mea@hotmail.com
website -- http://qth.com/dwm

4160. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:27:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bom0tobp1@hercules.btinternet.com>
Source record: 104977

Mike,

Ignore the old wives. The extra resistance due to soldered joints around a copper octogon is unmeasurable. Wipe off any visible surplus solder while hot or use fine glass-paper. I finish off with metal polish and a coating of clear yatch laquer. A beautiful, long lasting appearance .

The usual conductor material in commercial magloops is an aluminium alloy. Its lighter, cheaper, weather resistant and you can't tell the difference in radio performance. By far the best way of improving magloop performance is to increase the circumference of the main loop. Double the circumference, half the capacitance and the difference will astound you. However there's nothing more to be gained after the circumference has increased above about 3/8ths wavelength at the frequency of interest.

Just make the main loop diameter, capacitor value, conductor diameter and coupling loop diameter according to program Magloop4.

Ideally, there should be no direct connection between coupling loop and main loop. Otherwise RF currents will flow on the coax feedline and can make a mess of the null in radiation pattern. A few ferrite sleeves over the antenna end of the coax will help.

The coax used in the coupling loop can be junked. The Faraday thing is a waste of time and material. Just use a length of wire stiff enough for it to be self-supporting. It can then be easily adjusted for diameter. Alternatively, if made a little oversize, it can easily be rotated a little relative to the main loop to vary the coupling coefficient.

If the loop diameter is adjusted for the 80m band it will be near enough for the 160m and 40m bands too. If you do nothing with the program except change frequency you will see the diameter of the coupling loop changes very little from one band to another.

But if you have some wierd, bulky, home-brew contraption for the tuning capacitor then in practice things may behave less conveniently.

You won't need an antenna analyser. Just connect a transceiver with its ordinary SWR meter to the antenna and it should work right away. Don't take undue notice of the SWR meter till exceeds 1.5 : 1.

It is the transceiver with its own SWR meter which has to be kept happy - NOT the analyser.

If you've never used a magloop before then it may take a little time to get used to the VERY narrow bandwidth especially on 160m and 80m.

Just go ahead, finish construction and stop worrying.

Reg, G4FGQ

4161. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:31:05 UTC
From: No Felons Here <"Bubba Loves You"@Crooks.coms>
Message-ID: <bom15b$rj9$0@pita.alt.net>
Source record: 104978
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Gene Storey" <nospam@cox.net> wrote in message
news:ijsrb.2498$643.1844@okepread03...
> This is why some many so called 'democrats'
> do not like the Pledge of Allegiance.

People don't like the "modified" pledge, because it brings
the Pope and the King of England into the Allegiance.

Meaning...YOU don't like it, not the "people" you speak of.
The Pope? My, oh my. You really ARE off the wall, aren't you?

4162. Re: Screw-Driver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:38:20 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fad3888_1@newsfeed.slurp.net>
Source record: 104999

Sure - Contact Don Johnson, W6AAQ, who designed the original screwdriver antenna, and still makes/sells them. He can sell you a set of plans for cheap...

Or, pick up his book (also a good idea, because it discusses many other related mobile HF concepts) - 40+5 Years of Mobileering. from WorldRadio Publishing.

73,
Mike KI6PR
El Rancho R.F., CA

"Kevin & Natalia Mitchell" wrote
> Hi All,
>
> Can anyone point me in the direction, or forward any information on
building
> my own Screw-Driver type antenna.
>
> I would like a good across the board Mobile HF antenna.
>
> Regards
>
> Kevin. ZL1UDD
>
>

4163. Re: AEA Isoloop: Stepper Motor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:43:58 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fad39e1_3@newsfeed.slurp.net>
Source record: 105007

Contact M2 (m-squared) Antennas; they actually manufactured the Isoloop for AEA.

73,
Mike KI6PR
El Rancho R.f., CA

"Charles Wittnam" wrote
> I have an old AEA Isoloop that I bought 14 years ago. The stepper
> motor that moves the large central tuning capacitor has gone to the great
> antenna farm in the sky.
> I am trying to find a replacement for it. (After I hung a large wire
> antenna system my XYL suddenly became nostalgic about the Isoloop). I do
> not have any technical info about what motor is needed. I can probably
> figure it out when I pull everything apart, but I wondered if anyone had
> access to this information?
>
>
> Charlie KD7HU
>
>

4164. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:44:36 UTC
From: No Felons Here <"Bubba Loves You"@Crooks.coms>
Message-ID: <bom1umtoe0@pita.alt.net>
Source record: 104979
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Jackie Ward" <jackiew1@37.com> wrote in message
news:12329882.0311090859.57803dbf@posting.google.com...
Another moron to add to the pile.

How can you support Bush when he and the bin Laden family had oil
business dealings going back to the 70's?
/
The same way idiots like you can support a rapist who gave top-secret
missile technology to a nation that is sworn to go to war with us.
/

Why did we give Osama bin Laden millions of dollars to fight the
Russians in Afganistan?

/
Why did Clinton accept hundreds of thousands of dollars from the Communist
Chinese?
/

Why was Saddam Hussein awarded the keys to the City of Detroit in
1980?

/
Why did Clinton pardon convicted felons who had "donated" monies to his
libraryl?
/

Why did they blow up the World Trade Centre when there was 1000 other
buildings in hundreds of other countries to choose from?

/
Because they didn't get it right the first time they tried. And they got
away with it because Clinton was a spineless pussy.
/

Because of racist morons like you, thats why. Want some more apple
pie?

/
Sure. I like apple pie. Make it a double helping.
What is your favorite...cream puff?

4165. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:48:06 UTC
From: No Felons Here <"Bubba Loves You"@Crooks.coms>
Message-ID: <bom258$u57$0@pita.alt.net>
Source record: 104980
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fae7c63_3@corp.newsgroups.com...
Gene Storey wrote:
> So you're saying a republic can't be a democracy?

Yes, a cat cannot be a dog. The two terms are mutually
exclusive by the purest of definitions. (If this was a
democracy, Gore, having won the popular vote, would be
president.)
--
73, Cecil http://www.qsl.net/w5dxp

That is debatable. Especially considering the huge amount of voter fraud the
Democrats were found to have instigated.

4166. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 18:51:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fae8cc2_7@corp.newsgroups.com>
Source record: 104981

Tdonaly wrote:
> And what is a current
> drop? I've heard of voltage drops and cough drops but never
> current drops.

It's is the decrease in current due to the attenuation
(alpha) factor in equation 1.22 (2) in Ramo, Whinnery, & Van Duzer.
It's all covered in any distributed networks course. According to
Balanis, antennas have an attenuation factor due to radiation and
is similar to (slightly more complicated than) this familiar
transmission line equation for lossy lines.

I = Im(e^-az)d^j(wt-bz)

where a is alpha, w is omega (2*pi*f), and b is beta (phase factor).

> I won't believe your theory, Yuri, until you and Cecil take the
> time to present it in terms of field theory. Since you guys have taken
> EM classes in college you should have no trouble doing this, right?

Please reference Chapter 1 of _Fields_and_Waves_... by Ramo,
Whinnery, and Van Duzer. Start with equations 1.18 (4)&(5)
and 1.22 (1) & (2). Also _Antenna_Theory_ by Balanis, equations
4-81 and 10-1 and one other that I cannot locate right now. :-)
The one I cannot locate is the simplified one for a 1/2WL dipole.
--
73, Cecil http://www.qsl.net/w5dxp

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4167. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 19:40:51 UTC
From: assar@eiscat.com
Message-ID: <4e9f8ac8.0311091140.49d6d4d4@posting.google.com>
Source record: 104982

"RB" <rbig@bellsouth.nospam.net> wrote in message
news:<Q9lrb.51562$SV2.49458@bignews3.bellsouth.net>...

Thanks all for your answers.
How good can I expect the SWR to be when the antenna is on the ground?
In principle how much will the antenna be detuned? I have an MFJ SWR
analyzer and I did some measurements on the antenna when it was laying
on the ground with the same bad result as when it was standing up. I
did not take that big notice about these bad readings then, as I
thought the antenna was to close to ground and I had not the
counterpoises in place yet. The antenna is still up but it will be
taken down at some time.

Best regards Assar W. SM2LTA

> What Dan just said is right.
>
> Don't know if you want to take it down or not. You may have to. But, if
> it's down, you can do a reasonably good setup with an atenna analyzer with
> the Voyager laying on saw horses at strategic points.
>
> What you do is get the swr as low as you can mid range on each of the bands.
> When you get it up, it may end up a little better or worse, but that will be
> about the best you can get it.
>
> The reason they caution you not to use a tuner is because the swr slopes go
> up rapidly once you get outside the "flat" part of the window on each band.
> Higher swr means you can much more easily pop the caps. On bands where you
> get higher than about 1:3, you will need to lower power somewhat to keep
> from popping the caps. The tuner will probably bring in insofar as loading
> is concerned, so your rig is happy, but it does nothing for the swr. The
> only way the antenna can live with the higher swrs is through decreased
> power.

4168. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 19:59:30 UTC
From: tdonaly@aol.com
Message-ID: <20031109145930.04643.00000432@mb-m02.aol.com>
Source record: 104983

>
>> I won't believe your theory, Yuri, until you and Cecil take the
>> time to present it in terms of field theory. Since you guys have taken
>> EM classes in college you should have no trouble doing this, right?
>
>Please reference Chapter 1 of _Fields_and_Waves_... by Ramo,
>Whinnery, and Van Duzer. Start with equations 1.18 (4)&(5)
>and 1.22 (1) & (2). Also _Antenna_Theory_ by Balanis, equations
>4-81 and 10-1 and one other that I cannot locate right now. :-)
>The one I cannot locate is the simplified one for a 1/2WL dipole.
>--
>73, Cecil http://www.qsl.net/w5dxp

I don't have Ramo et al's book, but I do have Balanis' book. I think
anyone who wants to understand equation 4-81 should read the whole
section: 4.5.6 where he makes it clear these equations are
approximations that are pretty good under some circumstances
and lousy under others. The standards he judges them on
are the techniques of Integral Equations and Moment Method
which he explains in another part of the book. He doesn't say
a single thing about a "cosine law" for a real antenna, as Yuri
does.
I think I'll keep my EZNEC.
73,
Tom Donaly, KA6RUH
(P.S. I looked, in Balanis, for a section on inductively loaded
antennas and couldn't find one. That doesn't mean it doesn't exist.
If anyone knows where to look in that book for information on such
I'd be obliged for the information.)

4169. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 20:25:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6u7tqv4pu36mvcpllgu2b9gvjuv9udkps1@4ax.com>
Source record: 104984

On Sun, 09 Nov 2003 14:56:14 GMT, Mike Coslo <mcoslo@adelphia.net>
wrote:

>> A precision, scientific-grade instrument is needed.
>
> Now I am really perplexed! If I need an instrument such as you
>describe, how will I ever get this thing to tune with my lowly IC-745?

Hi Mike,

Don't get hung up in the Cassandra cries of impossible. Your receiver
will tell you quite well where the loop is resonant. You will get
much more background noise as you tune the band across that frequency;
and if you cannot tune your receiver with such restraint to observe
this, prospects for transmission tuning are far bleaker. Shelling out
bucks for "scientific-grade" instrumentation does nothing to improve
the situation when your receiver has more than enough "precision."

There are zero-power tuners on the market that have adjunct white
noise generators to allow you to tune an antenna system using the
receiver employing this same method. But as that is for antenna
systems of broader Q's, their the additional noise is useful for
emphasizing the resonant peak. Your Loop comes with an advantage
(more Q) in that regard.

73's
Richard Clark, KB7QHC

4170. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 20:40:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faea651_5@corp.newsgroups.com>
Source record: 104985

Tdonaly wrote:
> He doesn't say
> a single thing about a "cosine law" for a real antenna, ...

I didn't say a single thing about a "cosine law" either.

> If anyone knows where to look in that book for information on such
> I'd be obliged for the information.)

Information on inductively loaded antennas seems to be sadly lacking.
But I have found one in _Antennas_ by Kraus & Marhefka, third edition.
I trust that will be a good enough reference for everyone.

On page 823 under "23-13 TRAPS", what he says about traps is not relevant.
But what he says about traps on half their resonant frequency is absolutely
choice.

"At frequency F1, for which the dipole is 1/2WL long, the traps introduce
some inductance so that the resonant length of the dipole is reduced."

On the next page, the current distribution is shown for the trapped dipole
on 1/2 the trap's resonant frequency. Needless to say, it clearly shows
a current drop through the inductive trap.

And talking about phasing using coils: "A coil can also act as a 180 degree
phase shifter as in the collinear array of 4 in-phase 1/2WL elements in Fig.
23-21b. ... THE COIL MAY ALSO BE THOUGHT OF AS A COILED-UP 1/2WL ELEMENT."

Emphasis mine. Now you guys can stop pulling our legs and confess that it
was all a joke.
--
73, Cecil http://www.qsl.net/w5dxp
"One thing I have learned in a long life: that all our science, measured against
reality, is primitive and childlike ..." Albert Einstein

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4171. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 20:50:18 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311091250.443f4ec9@posting.google.com>
Source record: 104986

= = = Bob Miller <bxmiller@texas.netNOSPAM>
= = = wrote in message news:<p01uqv8q981r8ttnue8ua7uj7j9d7pue41@4ax.com>...
> On Sun, 9 Nov 2003 07:50:49 -0600, "Stinger"
> <contact@newsserveronly.com> wrote:
>
> Well, when RHF proclaims his patriotism, he insults patriotic, veteran
> Democrats, such as myself. Disrespect for others breeds the same.
>
> Bob
> k5qwg
>

BM/K5QWG,

If I have offended you, then you read too much into what I wrote.

I note that you Capitalized the first letter in the word "Democrats"
by not the words 'patriotic' and 'veteran'.

I my original post I used the words [so called 'democrats'] not
meaning the party title "Democrats"; but those who use the label
[democrat] and espouse non-democratic views and ideas.

I am reminded of former Congressman Ron Dellums, who said that the
only reason he ran as a "Democrat" was the fact that he could not get
Elected as a "Socialist".

As for me, never wore our Nation's Uniform and can not call myself a
Veteran.
- - - But I did get 'drafted' out of high school into Federal Service
at the Age of 18 and worked for the Military for 32 Years. Would
still be working for the government had they not reduce the size of
our Nation's Military Services and the DoD Base Structure under former
president Bill Clinton.

gba ~ RHF

.

.

4172. FS: Cushcraft Ringo 6m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 20:52:18 UTC
From: edflicek@wmconnect.com
Message-ID: <20031109155218.09103.00000382@mb-m21.wmconnect.com>
Source record: 104987

I am moving and need to sell my antennas, prefer not to ship, I live in St.Paul, MN.

Thanks,

Ed

4173. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 20:55:32 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311091255.18c16014@posting.google.com>
Source record: 104988
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

```
= = = "Gene Storey" <nospam@cox.net>
= = = wrote in message news:<ijsrb.2498$643.1844@okepread03>...
> > This is why some many so called 'democrats'
> > do not like the Pledge of Allegiance.
>
> People don't like the "modified" pledge, because it brings
> the Pope and the King of England into the Allegiance.
>
```

GS,

? the Pope ?

? King of England ?

How ?

! Amplify and Expand Please !

iwtk ~ RHF

.

.

4174. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 21:06:29 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <ZYxrb.50450$BX.23011@bignews5.bellsouth.net>
Source record: 104989
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Actually, most people are able to grasp the concept of "representative democracy." Keep trying.

-- Stinger
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fae7c63_3@corp.newsgroups.com...
> Gene Storey wrote:
> > So you're saying a republic can't be a democracy?
>
> Yes, a cat cannot be a dog. The two terms are mutually
> exclusive by the purest of definitions. (If this was a
> democracy, Gore, having won the popular vote, would be
> president.)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4175. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 21:09:50 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <60yrb.50467$BX.46426@bignews5.bellsouth.net>
Source record: 104990
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Oh, man. This is going to be funny.

Please don't keep us in suspense.

-- Stinger
"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0311091255.18c16014@posting.google.com...
> = = = "Gene Storey" <nospam@cox.net>
> = = = wrote in message news:<ijsrb.2498$643.1844@okepread03>...
> > > This is why some many so called 'democrats'
> > > do not like the Pledge of Allegiance.
> > >
> > > People don't like the "modified" pledge, because it brings
> > > the Pope and the King of England into the Allegiance.
> > >
> >
> > GS,
> >
> > ? the Pope ?
> >
> > ? King of England ?
> >
> >
> > How ?
> >
> > ! Amplify and Expand Please !
> >
> >
> > iwtk ~ RHF
> >
> > .
> >
> > .

4176. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 21:45:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtdd6dcdj6f0a@corp.supernews.com>
Source record: 104992

And so your prediction is. . . ?

Roy Lewallen, W7EL

Richard Harrison wrote:
> Roy, W7EL wrote:
> "And, Richard (Harrison), who said something like "an inductor without
> phase shift is like"...I don`t recall ; hot dog without ketchup or
> something."
>
> My analogy may not have been apt, but fact is that you don`t have an
> inductor without phase shift. The current lags the voltage in an
> inductor.
>
> My dictionary says that phase is a particular stage or point of
> adbvancement in a cycle; the fractional part of the period through which
> the time has advanced, measured from some arbitrary origin.
>
> Apply a voltage or the voltage across the inductance. Current does not
> change instantaneously in an inductance, but it lags the imposed voltage
> change.
>
> Lag is to move slowly or fall behind. In a circuit containing resistance
> and inductance, almost all real world circuits, current lags the
> voltage. This is phase shift by definition. We correct power factor to
> overcome phase lag and to eliminate the excess current and loss from the
> inductive charging and discharging current of an inductive circuit.
> Reactance only stores energy and does no useful work.
>
> I reiterate the accuracy of my postings in this thread, and indeed,
> inductance and phase shift are inseparable. Please note that inductance
> can be neutralized with capacitance.
>
> Best regards, Richard Harrison, KB5WZI
>

4177. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 22:43:27 UTC
From: uce@ftc.gov
Message-ID: <9f6dnaBidJGWXjOi4p2dnA@comcast.com>
Source record: 104993
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

To repeat my earlier question, how is this going to help me work more DX?

In article <e5e13af8.0311091255.18c16014@posting.google.com>,
rhf-mail@pacbell.net (RHF) wrote:
>= = = "Gene Storey" <nospam@cox.net>
>= = = wrote in message news:<ijsrb.2498$643.1844@okepread03>...
>> > This is why some many so called 'democrats'
>> > do not like the Pledge of Allegiance.
>>
>> People don't like the "modified" pledge, because it brings
>> the Pope and the King of England into the Allegiance.
>>
>
>GS,
>
>? the Pope ?
>
>? King of England ?
>
>
>How ?
>
>! Amplify and Expand Please !
>
>
>iwtk ~ RHF
>
>..
>
>..

Spammers - reply freely and often to my e-mail address
Everyone else - look me up on qrz.com

Peace - Those rare moments in history when everyone is rearming....

4178. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 22:49:28 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAEC47D.4070904@get.lost>
Source record: 104994
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:

> Why is it that when somebody does show a basic love for our country, the
> principles it stands for, and a respect for those that have fought to
> maintain our freedoms, that some feel they have to try to belittle them?

Uhm... because "a basic love for our country", much like any other love,
is supposed to be shown by actions and deeds, not by words, pledges and
by worshipping flags, politicians and deities. Especially not by straw
man arguments on why "so called democrats do not like the Pledge of
Allegiance". Words mean shit and nationalism is the last refuge of a
scoundrel.
And now, back to that other game: I claim 15 inches. What do you say? It
must be true, since I claim it. Waiter, another round!

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4179. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 22:52:20 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3faec848$0$32182$ba620e4c@reader3.news.skynet.be>
Source record: 104997

To J. McLaughlin

Thank you for your reply,

I have seen this analyser already on the web but it seems that their web site doens't display the prices. On the other hand I think the connector is a BNC type, which is not usual at HF.

73 de Jacques - ON5MJ

4180. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 22:54:25 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqthdtpvlprt45@corp.supernews.com>
Source record: 104995

Can I conclude from this that if I were to make a coil with more or less inductance, then I would see a current difference between the ends of the coil?

So tell you what. If you'll pull out your equations and calculate the expected current difference, I'll replace the coil with one of 100 ohms reactance and remeasure. How much current difference (magnitude andd phase, of course) between the ends of a 100 ohm inductor at the base of that same antenna?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> Judging by description, I would guess that there wasn't much difference.
>
>
> The feedpoint of the radiator alone is 35-j185. The impedance of the
> loading
> toroid is 0.6+j193. Assuming perfect predictability, that gives the antenna
> system a feedpoint impedance of 35.6+j8, i.e. it is *longer* than resonant.
> That moves the current maximum point inside the toroid making the current
> in and out even closer to equal. If a coil is installed at a current
> maximum
> point or a current minimum point, the current in and out will be the same.
> If a coil is installed at a place where the slope of the current envelope
> is positive, the current will actually increase through the coil.

4181. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:03:59 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <BIzrb.71966$un.2812@bignews6.bellsouth.net>
Source record: 104996
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Wow, you've never heard of poetry?

BTW -- you should buy a vowel ;^)

-- Stinger

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FAEC47D.4070904@get.lost...
> Uhm... because "a basic love for our country", much like any other love,
> is supposed to be shown by actions and deeds, not by words, pledges and
.....

4182. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:05:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqti1r4iejo6eb@corp.supernews.com>
Source record: 104998

I'll accept your prediction. It doesn't seem to correlate with your disagreement with Ian that the current into and out of a lumped inductor are equal. You accused him of "mental masterbation" and being "seduced by the steady state model" for even thinking such thoughts.

I also asked you a while back if we should expect a very small inductor to act the same when connected at the base of an antenna as when connected to a simple series RC or RL. Your response was that the analysis couldn't be done using conventional circuit theory, but required "distributed network analysis". Conventional circuit theory predicts equal currents going in and out, so from your response I had presumed that the fancier analysis would predict something else.

You've also stated that the current shift through the inductor should equal the "electrical length" of the antenna "replaced" by the inductor. In this case, the inductor is "electrically lengthening" the antenna by either about 45 degrees, or about half that amount, depending on how you assign the effect of the mounting arrangement.

So in the past, you've predicted no difference, something like 20 or 45 degrees phase shift, or an indeterminate amount. It's good to see you've settled on one figure.

My inductor was placed at the antenna base because I could measure the currents there with reasonable accuracy. The inductor size was chosen to resonate the antenna, hopefully duplicating the situation reported by Yuri in his quote of W9UCW's measurements.

On his web site, Yuri quoted W9UCW as measuring the currents at the ends of a toroid mounted at the base of the antenna as being 100 mA at the bottom and 79 at the top. You must, then, believe these measurements to be in error.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Our educations differ a great deal. Mine enabled me to give a
>> numerical prediction, which as anyone who has read my earlier
>> postings, is 1. Yours has evidently not prepared you to meet this
>> onerous challenge.
>
>
> Roy, I have repeated a statement three or four times earlier on this
> newsgroup.

> My statement predicts a result of 1. Here is that statement again:
>
> "If a loading coil is placed at a current maximum point, the current in and
> out of the coil will be equal." I have been assuming that is why your coil
> was placed at the current maximum point, to ensure that the currents would
> be equal. Depending upon where the coil is placed, the currents in and out
> of the coil can be equal, greater than, or less than.

4183. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:08:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqti7ee2u0lnf6@corp.supernews.com>
Source record: 105000

Yuri, the inductor I put at the base of the antenna "replaced" something like 20 - 45 degrees, depending on how you judge the effect of the mounting arrangement. Barry, W9UCW also measured a substantial current magnitude difference between the ends of a base-mounted toroid.

So, as a successful and award-winning engineer, what do you calculate as being the ratio of currents across my inductor, and how did you calculate it?

Roy Lewallen, W7EL

Tdonaly wrote:
> Yuri wrote,
>
>>Our
>>theory is that the current drop across the inductor should be roughly
>>proportional to
>>the current in the radiator (in degrees) that it replaces (Cosine law).
>
>
> That's a pretty good theory, Yuri. I'd like to know where you got
> this "Cosine law" you keep talking about. I can't seem to find
> mention of any such _law_ anywhere but on this newsgroup. Does
> that mean I should throw away my method of moments software
> because I don't need it any more? And what is a current
> drop? I've heard of voltage drops and cough drops but never
> current drops. Finally, how do you measure the "current in
> the radiator (in degrees)?" Why not use amperes like everyone
> else?
> I won't believe your theory, Yuri, until you and Cecil take the
> time to present it in terms of field theory. Since you guys have taken
> EM classes in college you should have no trouble doing this, right?
> 73,
> Tom Donaly, KA6RUH
>
>

4184. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:10:40 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAEC96F.7040707@get.lost>
Source record: 105001
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:
> Wow, you've never heard of poetry?

Yeah, I have. One of the greatest American poets, Ezra Pound, was a
fascist and stood trial for treason. So much for that.

> BTW -- you should buy a vowel ;^)

As funny as the first hundred thousand times I heard it.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4185. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:18:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faecb54$1_7@corp.newsgroups.com>
Source record: 105002

Roy Lewallen wrote:
> Can I conclude from this that if I were to make a coil with more or less
> inductance, then I would see a current difference between the ends of
> the coil?
>
> So tell you what. If you'll pull out your equations and calculate the
> expected current difference, I'll replace the coil with one of 100 ohms
> reactance and remeasure. How much current difference (magnitude andd
> phase, of course) between the ends of a 100 ohm inductor at the base of
> that same antenna?

I know you are not that naive, Roy. I have said many times over the past few days that if you locate a coil at a current maximum point, the current will be approximately equal at each end. So what did you do? You locate your coil at a current maximum point and I assume your measurements proved me to be correct. As long as you install the coil at the base of the antenna, the currents are guaranteed to be close to equal as I have said any number of times.

If you place the coil at a location where the slope of the current is maximum and positive, the current through the coil will *INCREASE*.

If you place the coil at a location where the slope of the current is maximum and negative, the current through the coil will decrease. This is typical of center-loaded mobile HF antennas.

Incidentally, Kraus engages in some of your alleged "pseudo-analysis" in his book. He clearly shows the current drop through loading coils. He even says a coil can be used to shift the current by 180 degrees. Come to think of it, my 440 MHz mobile antenna has a coil in the center that shifts the current by 180 degrees yielding considerable gain from those two phased elements.
--
73, Cecil http://www.qsl.net/w5dxp

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4186. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:23:46 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <9%zrb.72054$un.48337@bignews6.bellsouth.net>
Source record: 105003
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

So much for what?

You whined about RHF posting patriotic notes (you were wanting deeds, etc....pretty silly, since this IS a newsgroup), saying that words weren't enough to profess love (of country) -- I mentioned poetry, which is a great way to do so. In fact, I found RHF's post and some of the links therin pretty inspirational.

But you just seem to want to bitch about him posting it.

Even your call sign looks like you're crying.

-- Stinger

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message news:3FAEC96F.7040707@get.lost...
> Stinger wrote:
> > Wow, you've never heard of poetry?
>
> Yeah, I have. One of the greatest American poets, Ezra Pound, was a
> fascist and stood trial for treason. So much for that.
>
> > BTW -- you should buy a vowel ;^)
>
> As funny as the first hundred thousand times I heard it.
>
> 73 ... WA7AA
>
>
>
> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

4187. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:31:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtjjkfivkg74@corp.supernews.com>
Source record: 105004

I've uploaded a closeup photograph of the inductor and current probes to my web site. You can view it at http://eznec.com/rraa/Inductor_Current_Measurement.html.

Roy Lewallen, W7EL

4188. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:39:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faed035_7@corp.newsgroups.com>
Source record: 105005

Roy Lewallen wrote:

> I'll accept your prediction. It doesn't seem to correlate with your
> disagreement with Ian that the current into and out of a lumped inductor
> are equal. You accused him of "mental masterbation" and being "seduced
> by the steady state model" for even thinking such thoughts.

Yes, for center-loaded electrical 1/4WL mobile antennas, that is true.
You seem to be protecting the same sacred cow as Ian.

For the sixth time: If a loading coil is located at a current maximum
or current minimum point, the current into and out of the coil will
be approximately the same.

If a loading coil is located where the slope of the current is positive,
the current will actually increase through the coil.

If a loading coil is located where the slope of the current is negative,
the current will decrease through the coil. This is typical of center-
loaded mobile HF antennas.

> Conventional circuit theory
> predicts equal currents going in and out, so from your response I had
> presumed that the fancier analysis would predict something else.

Not if the coil is located at a current maximum or current minimum point.
How many times do I have to say that before it soaks in?

> You've also stated that the current shift through the inductor should
> equal the "electrical length" of the antenna "replaced" by the inductor.
> In this case, the inductor is "electrically lengthening" the antenna by
> either about 45 degrees, or about half that amount, depending on how you
> assign the effect of the mounting arrangement.

Nope, it isn't. You antenna is somehow already loaded and is equivalent
to a 50 foot unloaded antenna. Your feedpoint reactance should be around
+j370 for an unloaded antenna so you have about 27 degrees of extraneous
loading somewhere.

> So in the past, you've predicted no difference, something like 20 or 45
> degrees phase shift, or an indeterminate amount. It's good to see you've
> settled on one figure.

There are three possibilities listed earlier. What happens with a coil
depends upon where it is located. Please read that over and over until
it soaks in.

> My inductor was placed at the antenna base because I could measure the
> currents there with reasonable accuracy.

Yep, you are looking for your keys under the streetlight because the light
is better there than it is where you really lost the keys.

> On his web site, Yuri quoted W9UCW as measuring the currents at the ends
> of a toroid mounted at the base of the antenna as being 100 mA at the
> bottom and 79 at the top. You must, then, believe these measurements to
> be in error.

If the toroid is not mounted at a current maximum point, i.e. if the feedpoint
impedance is slightly capacitive, then those figures could be accurate. I
didn't pay any attention to them. Could be his coil causes a larger phase
shift than your coil. You making your antenna too long ensured that
the current maximum point would fall inside the coil. Whether you realize
it or not, you are biasing the outcome of your experiment to agree with your
pre-conceived (sacred cow) notions.

Please note that I am not defending everything Yuri and W9UCW have said so
don't treat that set of three people as a lumped constant. I am not guilty
by association. My postings stand on their own merits or lack thereof.
--
73, Cecil http://www.qsl.net/w5dxp

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4189. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:39:17 UTC
From: richardharrison@webtv.net
Message-ID: <23539-3FAED025-262@storefull-2315.public.lawson.webtv.net>
Source record: 105008

Tdonaly wrote:
"He doesn`t say a single thing about a "cosine law" for a real antenna...."

Like Cecil, I didn`t either, but I am surprised a challenge exists to sine or cosine current distribution which most serious antenna authors assume and illustrate.

If the projected height of of a sine wave is cast upon a circle, its amplitude is completely described by the projection of the radius on the diameter of the circle.

A sine wave amplitude is the vertical or "y" value of the (x,y) coordinates of the tip of a radius vector rotating counter-clockwise in a circle of unit value.

The angle considered is that made by the radius vector with the "x" axis.

Antenna discussions often use cosine waves. These are identical to sine waves except that they are displaced by 90-degrees, or 1/4-cycle, or pi radians (all different names for the same thing). When sine equals +1, the cosine equals 0-degrees, and it is about to go negative. This is because the sine starts at a value of zero at zero degrees. At the same 0-degree start, cosine is +1.

There is no difference between a sine and a cosine wave except for 90-degrees phase lead of the cosine wave. The sine of an angle is the same as the cosine of (that angle minus 90-degrees). Example: sine of 90-degrees = 1.
Cosine of 0-degrees = 1 also, etc. etc. etc.

Ed Laport in "Radio Antenna Engineering" says on page 19:

"The principles of the electrically short antenna are better understood from Fig.1.1, in which the natural sinusoidal current distribution along a straight uniform section quarter-wavelength vertical is used for reference. A straight uniform vertical antenna with a height of 20 degrees would have the relative current distribution shown for the sine curve above the 20-degree level A."

And in John Devoldere, ON4UN`s now famous Fig 9-22:

"Short loaded verticals with their current distribution." Note the cosines given for each antenna height demarcation.

Best regards, Richard Harrison, KB5WZI

4190. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:41:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faed0c4_7@corp.newsgroups.com>
Source record: 105006

Roy Lewallen wrote:

> Yuri, the inductor I put at the base of the antenna "replaced" something
> like 20 - 45 degrees,

Nope, it didn't, Roy. Your 33' vertical was already equivalent to a 50'
vertical apparently due to extraneous loading. I calculate that your
coil replaced 18 degrees of wire with a current maximum point located
inside the coil.
--
73, Cecil http://www.qsl.net/w5dxp

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4191. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:44:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtkc249gpg8be@corp.supernews.com>
Source record: 105009

Ah,

So now you're saying that any coil at the base of a short vertical antenna, regardless of its value, will have equal currents at the input and output?

Ok, suppose I make the measurement at, say, 10 MHz, where the coil is no longer at the current maximum. Tell you what. I'll set up a 33 foot wire vertical, to eliminate the difficulty of the mounting arrangement. I'll furnish you the base impedance at 10 MHz, and even let you choose the inductor value. Be sure and choose a value that will clearly illustrate your point. Using the fine education you received from Balanis et al, calculate the current into and out of the inductor (phase and magnitude), and I'll set it up and measure it. Since it is a fair amount of work on my part, though, I'd like to do a dry run first, using, say, the base impedance predicted by EZNEC. Then, after you've shown us how you make the calculations, I'll build the antenna and do the measurement. I'd hate to go to the considerable trouble of setting it up and find that you somehow aren't able to do the calculation.

Other predictions would be welcome, too, such as Yuri's, based on the "missing antenna length" theory of inductor currents.

Better yet, you can do the measurement yourself. As you can see from the picture I just posted to my web site, the measurement ain't exactly rocket science. I don't have much time to burn, but still shook loose enough to set it up. Anybody with a two channel scope, a soldering iron, and a signal generator or transmitter can do just what I've done. You can too.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Can I conclude from this that if I were to make a coil with more or
>> less inductance, then I would see a current difference between the
>> ends of the coil?
>>
>> So tell you what. If you'll pull out your equations and calculate the
>> expected current difference, I'll replace the coil with one of 100
>> ohms reactance and remeasure. How much current difference (magnitude
>> andd phase, of course) between the ends of a 100 ohm inductor at the
>> base of that same antenna?
>
>

> I know you are not that naive, Roy. I have said many times over the past
> few days that if you locate a coil at a current maximum point, the current
> will be approximately equal at each end. So what did you do? You locate
> your coil at a current maximum point and I assume your measurements proved
> me to be correct. As long as you install the coil at the base of the
> antenna, the currents are guaranteed to be close to equal as I have
> said any number of times.
>
> If you place the coil at a location where the slope of the current is
> maximum and positive, the current through the coil will *INCREASE*.
>
> If you place the coil at a location where the slope of the current is
> maximum and negative, the current through the coil will decrease. This
> is typical of center-loaded mobile HF antennas.
>
> Incidentally, Kraus engages in some of your alleged "pseudo-analysis"
> in his book. He clearly shows the current drop through loading coils.
> He even says a coil can be used to shift the current by 180 degrees.
> Come to think of it, my 440 MHz mobile antenna has a coil in the center
> that shifts the current by 180 degrees yielding considerable gain
> from those two phased elements.

4192. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-09 23:55:43 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109185543.21893.00000383@mb-m16.aol.com>
Source record: 105010

>On his web site, Yuri quoted W9UCW as measuring the currents at the ends
>of a toroid mounted at the base of the antenna as being 100 mA at the
>bottom and 79 at the top. You must, then, believe these measurements to
>be in error.
>
>Roy Lewallen, W7EL
>

Not!
Here what Yuri has on his web site, quote by W9UCW:

"Because of the constant claim that this must be due to the fact that the coil
is so big compared to a wavelength, I measured the in and out current on a
TOROIDAL loading coil used on a 20m mobile antenna. It was a 78" base mast
(including spring and mount) with a 38" top whip (including 12" of alum. tubing
for adjustment).
Below --100ma & Above --79ma
When I moved the coil to the top of the mast and made a horizontal "X" top hat
to resonate it back on the same freq, I got
Below --100ma & Above --47ma

So, It happens even in a totally shielded loading coil with miniscule power
going thru it! Kirchoff has no laws about current being the same on both ends
of inductors. His current law is about one POINT in a circuit and his voltage
law is about a closed loop."

He described exactly how it was done, definitely not at the base.

Yuri

4193. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:16:53 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109191653.21893.00000384@mb-m16.aol.com>
Source record: 105011

>
>That's a pretty good theory, Yuri. I'd like to know where you got
>this "Cosine law" you keep talking about.

From ancient Greeks I presume, it was way before my time.
ON4UN has it shown in his book and pictures.
Current in the radiator Ir = Imax x cos Alpha
where Imax is the maximum current (like on the bottom of quarter wave radiator)
Alpha is the angle (distance) in degrees like from 0 to 90 in quarter wave
radiator.

> I can't seem to find
>mention of any such _law_ anywhere but on this newsgroup.

It is one of the first things in trigonometry books, look into your high school
library.

> Does
>that mean I should throw away my method of moments software
>because I don't need it any more?

No, keep it. It is good for number of things, like arguing against reality. If
you threw it away, what would you use as an argument?

> And what is a current
>drop? I've heard of voltage drops and cough drops but never
>current drops.

It is right next to voltage drops. If it drops from one of the component to the
other, that is called current drop across the component, like loading coil in
the antenna, or coil in PI network, or in RF chokes, etc.

>Finally, how do you measure the "current in
>the radiator (in degrees)?" Why not use amperes like everyone
>else?

We use amperes like everyone else. My ammeters are calibrated in A. Radiator
length can be expressed in electrical degrees, if Roy claims that it can't be
expressed in electrical length.
Like quarter wave vertical would be 90 deg., half wave dipole would be 180 deg,
Full wave quad would be 360 deg or 2 x 180 deg (same thing :-)

> I won't believe your theory, Yuri, until you and Cecil take the
>time to present it in terms of field theory. Since you guys have taken
>EM classes in college you should have no trouble doing this, right?

You can worship what you wish, itsa free country. Or you can measure things and
then you can choose whom to believe and where to send your contribution.

>73,
>Tom Donaly, KA6RUH

Yuri, K3BUm

4194. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:19:25 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <KQArb.1542$Tc2.11086@newsfep4-glfd.server.ntli.net>
Source record: 105012

Mike,

to celebrate the change in my license conditions which allowed me to access HF freqs this year (no code experience), I decided to put up a long wire transmitting antenna (30metres long).

This was connected via an Icom ATU connected to the Icom IC 725 rig. I also decided to have a go at building a Magloop as an alternative, to experience the trial and tribulations of getting it to work at minimum cost. I could also gain experience as to the ability for the loop to "null" out interference.

Having no experience of operating on the HF bands, I was not sure what range of frequencies this antenna should be designed for.

Initially, using freeware software, I could see the efficiency rapidly changing for the worse, as the operating frequency went lower, for a given size of loop. Having decided to choose a square loop of 1.33mtrs sides, using 22mm copper pipe for practical reasons, I set about making a piston capacitor. This consisted of approx 2x300mm of insulated 15mm pipe, fitted within 22mm outer tubes, being part of the main loop at the top.

I had hoped to cover the 20metre to 40 metre bands. It actually did this, but the piston caps were either fully in or fully out and tuning at these extremes was very, very touchy.

I discarded the piston idea and bought a single vacuum variable cap (5-100pf), a 12v geared motor, insulated coupling spindle and built a pulse width modulator kit from Vellerman to drive the motor.

It was at this time that I decided that the way forward for me was to make this a monoband antenna (20M) with a reasonably high efficiency (The 40metre band seemed so busy at the time).
I used some external 3 core copper cable (pyro) for the gamma match and using a MFJ 259 analyzer via 3mtrs of feed coax set about setting it up. A very obvious VSWR dip was found at an indicated resistance of 50 ohm, around 14 MHz. The analyzer could track the changing frequency when volts were applied to the motor. The antenna was tested in open space, but at ground level + 1 metre.

This system is now installed at the top of the garden and via its connecting cables can be tuned from the shack. In operation, I usually find a reasonable station around 14.250 on the long wire, connect the MFJ and set it to the chosen freq, connect the magloop feed to the analyzer and adjust the PWM up and down to find best VSWR. Then switch the magloop to the rig and wait for the opportunity for a "break". It's fair to say that the received signal appears a few "s points" down compared to the long wire.

The predicted spec of the antenna is as follows:-

Circumference=5.33mtrs
Conductor dia=22mm
Band =20m (around 14 MHz)
Bandwidth=44.1kHz
Cap value 15.4pF
Cap voltage=3.6kV
Efficiency=87.3%
Inductance=-4.325uH
Inductive reactance=390ohms
Loop area=5.8mtrs
Loop dia=1.3mtrs
Loop Q value=325.2Qres
Radiation resistance=0.524 ohms
Resistance loss=0.076 ohms

So from my experience, you should see a tuning dip when using the MFJ Analyzer. I'm getting around 1.2:1 at around 50 ohms at the chosen freq. But I will say that when coming away from that freq, the VSWR rockets skywards very suddenly. As REG points out, the Q is extremely high and the bandwidth very narrow

In the early days, if I attempted to transmit without getting the magloops' vswr down to a reasonable level, the Icom IC725 would go into protection mode and then it was impossible to determine in which direction the variable cap should be adjusted. I have never tried using the receiver to tune the loop.

Well that was a long "over" from me, maybe some of it may help.

The icing on the cake would be if we establish contact via the loops on 20 metres!!

regards,

Roger G7JAQ

4195. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:22:42 UTC
From: Jer <abuse@supernews.com>
Message-ID: <mTArb.4815$pE3.3156@twister.socal.rr.com>
Source record: 105013

I think I'm learning something, but I'm getting a headache trying to follow
you guys!

de jerry...

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vqthdtpvlprt45@corp.supernews.com...
> Can I conclude from this that if I were to make a coil with more or less
> inductance, then I would see a current difference between the ends of
> the coil?
>
> So tell you what. If you'll pull out your equations and calculate the
> expected current difference, I'll replace the coil with one of 100 ohms
> reactance and remeasure. How much current difference (magnitude andd
> phase, of course) between the ends of a 100 ohm inductor at the base of
> that same antenna?
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
> > Yuri Blanarovich wrote:
> >
> >> Judging by description, I would guess that there wasn't much
difference.
> >
> >
> > The feedpoint of the radiator alone is 35-j185. The impedance of the
> > loading
> > toroid is 0.6+j193. Assuming perfect predictability, that gives the
antenna
> > system a feedpoint impedance of 35.6+j8, i.e. it is *longer* than
resonant.
> > That moves the current maximum point inside the toroid making the
current
> > in and out even closer to equal. If a coil is installed at a current
> > maximum
> > point or a current minimum point, the current in and out will be the
same.
> > If a coil is installed at a place where the slope of the current
envelope
> > is positive, the current will actually increase through the coil.
>

4196. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:23:08 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109192308.21893.00000385@mb-m16.aol.com>
Source record: 105014

>
>So, as a successful and award-winning engineer, what do you calculate as
>being the ratio of currents across my inductor, and how did you
>calculate it?
>
>Roy Lewallen, W7EL

Judging by the picture, I wouldn't be able to include all the variables present in the setup.

I will first measure it in same way as W9UCW did, about 2/3 up the mast and no wires hanging.

Yuri

4197. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:32:23 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109193223.21893.00000387@mb-m16.aol.com>
Source record: 105015

>
>Roy Lewallen wrote:
>
>> Yuri, the inductor I put at the base of the antenna "replaced" something
>> like 20 - 45 degrees,
>
>Nope, it didn't, Roy. Your 33' vertical was already equivalent to a 50'
>vertical apparently due to extraneous loading. I calculate that your
>coil replaced 18 degrees of wire with a current maximum point located
>inside the coil.
>--
>73, Cecil http://www.qsl.net/w5dxp

In that case,
If the feedpoint current was at 0 deg of the radiator length, and coil replaces
18 deg of wire, the cos 18 deg = 0.951 which should make difference, drop in
the coil current 5% (or half, 2.5 deg?)
Providing current maximum is exactly at the bottom end of the coil.

Yuri, K3BU.us

4198. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:37:18 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109193718.21893.00000388@mb-m16.aol.com>
Source record: 105016

>
>I think I'm learning something, but I'm getting a headache trying to follow
>you guys!
>
>de jerry...

It not our fault, it is them :-)

Yuri

4199. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:41:42 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109194142.21893.00000389@mb-m16.aol.com>
Source record: 105017

> 2.5 deg?)

make that
2.5%?)

4200. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:44:14 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <icBrb.2$6p6.1@okepread03>
Source record: 105018
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote
> Gene Storey wrote:
> > So you're saying a republic can't be a democracy?
>
> Yes, a cat cannot be a dog. The two terms are mutually
> exclusive by the purest of definitions. (If this was a
> democracy, Gore, having won the popular vote, would be
> president.)

and there-in lies your problem. A republic is a merely how a majority is achieved. A Democracy is how the government is formed. The existence of a legislature, an executive, and a supreme court, are the only things that identify a Democracy (each with their checks and balances). A Democracy can have a direct vote, or a representative vote.

A Republic is a tamed cat, a direct Democracy is a wild cat. The dog would be an executive who tried to manipulate the Supreme Court, or other federal courts.

4201. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 00:50:31 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <biBrb.3$6p6.1@okepread03>
Source record: 104869
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote
>
> My 16 year old grand neice has a MENSA level IQ and is certainly not
> "too stupid". She is probably more knowledgeable than 50% of Democrats. :-)

IQ has nothing to do with it, and MENSA membership would make her
a handicapped person in my book, as who would want to brag about such
a thing.

If enough people wanted to change things, I believe 16 year olds could be
free to vote, but then they must also be free to draft into the military, or
other service to the country.18 year olds got the right to vote because they
were dying for their country. Your niece would have to show cause.

I personally think that only those who are 18 and above, and are not on
Social Security should be allowed to vote.

4202. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 01:10:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtpdko7pe1329@corp.supernews.com>
Source record: 104870

Well, what would it be if my setup was perfect?

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>So, as a successful and award-winning engineer, what do you calculate as
>>being the ratio of currents across my inductor, and how did you
>>calculate it?
>>
>>Roy Lewallen, W7EL
>
>
> Judging by the picture, I wouldn't be able to include all the variables present
> in the setup.
>
> I will first measure it in same way as W9UCW did, about 2/3 up the mast and no
> wires hanging.
>
> Yuri

4203. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 01:22:45 UTC
From: Hacksaw <Hack@comecast.net>
Message-ID: <FLBrb.116585$ao4.357305@attbi_s51>
Source record: 104871

We have built Quads for thirty years, and NO fucking Balun was ever needed.
Go and read the books there mentioned. Needing a balun is bull shit ad you
must be brainwashed on all that crap. Some say not to eat bad food also, but
it all bad. Yes some books say to use a balun, and say all things about how
bad it is, but in expirence not much difference was found.
Read the history on the first Quad , they did not build a balun. In fact
we have tested some Quads using 10,000 watts, 40 meters, and there was no
balun available for that power, and guess what there was hardly no power
coming back either, F/D was great. Used that for four years.
Look at some of the two meter quads driven elements, or some of the 432
driven elements or 1296 loop yagi NO balun was used either.
Amazing .

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:8u-dnSQ7FbGeujCiRVn-hQ@comcast.com...
>
> "Hacksaw" <Hack@comecast.net> wrote in message
> news:z69rb.107068$ao4.322274@attbi_s51...
> > Just go and feed the wires direct, no balum needed at all. Works just
> > fine with out all that crap.
>
> Until you start wondering why you have so much RF in the shack, and why
you
> don't get the directivity you ought to..
>
> Your inability to see the difference does not mean that there is no
> difference.
>
>

4204. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 01:29:10 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <CQBrb.72273$un.41016@bignews6.bellsouth.net>
Source record: 104872
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I can't really agree with you about the "no Social Security" idea, Gene. My father is 76 and is still one of the sharpest, clearest thinkers that I know. Also, I could not imagine telling someone with the military service of Chuck Yeager that he couldn't vote.

I assume your idea is that if they're on an entitlement program, they shouldn't be voting -- the principle being that "any system that robs Peter to pay Paul can always count on the support of Paul." I agree, that is a problem.

We have greatly wavered from the voting system of our forefathers. You used to have to be male, a substantial landowner, a veteran, or a combination of the above to vote. Of course, now we've gone too far -- in California, any illegal immigrant that doesn't mind showing their new driver's license and lying to a voter registrar will soon be able to vote.

There should be some sort of educational requirement for voting. I've heard plenty of radio stunts where they send a reporter out to ask people on the street who (as an example) Dick Cheney is, and about one in six knows that he's the vice president of the United States. If these people are voting, that's a travesty.

I disagree with the campaigns the continually say "go vote." If you can't do it as an informed citizen, please don't.

-- Stinger

"Gene Storey" <nospam@cox.net> wrote in message
news:biBrb.3$6p6.1@okepread03...
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote
> >
> > My 16 year old grand neice has a MENSA level IQ and is certainly not
> > "too stupid". She is probably more knowledgeable than 50% of Democrats.
:-)
>
> IQ has nothing to do with it, and MENSA membership would make her
> a handicapped person in my book, as who would want to brag about such
> a thing.
>
> If enough people wanted to change things, I believe 16 year olds could be
> free to vote, but then they must also be free to draft into the military,
or
> other service to the country.18 year olds got the right to vote because

they
> were dying for their country. Your niece would have to show cause.
>
> I personally think that only those who are 18 and above, and are not on
> Social Security should be allowed to vote.
>
>

4205. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 01:50:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtro2dcko8qaf@corp.supernews.com>
Source record: 104873

I apologize. I read and was referring to the same quote, and interpreted
it to mean that the first measurement was made with the coil at the base
of the antenna. So where was it -- 78" from the bottom?

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>On his web site, Yuri quoted W9UCW as measuring the currents at the ends
>>of a toroid mounted at the base of the antenna as being 100 mA at the
>>bottom and 79 at the top. You must, then, believe these measurements to
>>be in error.
>>
>>Roy Lewallen, W7EL
>>
>
>
>
> Not!
> Here what Yuri has on his web site, quote by W9UCW:
>
> "Because of the constant claim that this must be due to the fact that the coil
> is so big compared to a wavelength, I measured the in and out current on a
> TOROIDAL loading coil used on a 20m mobile antenna. It was a 78" base mast
> (including spring and mount) with a 38" top whip (including 12" of alum. tubing
> for adjustment).
> Below --100ma & Above --79ma
> When I moved the coil to the top of the mast and made a horizontal "X" top hat
> to resonate it back on the same freq, I got
> Below --100ma & Above --47ma
>
> So, It happens even in a totally shielded loading coil with miniscule power
> going thru it! Kirchoff has no laws about current being the same on both ends
> of inductors. His current law is about one POINT in a circuit and his voltage
> law is about a closed loop."
>
> He described exactly how it was done, definitely not at the base.
>
> Yuri

4206. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 01:53:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtruaivp2aqe8@corp.supernews.com>
Source record: 104874

I'm sorry, I didn't catch the step where you got from cos(18 degrees) =
0.951 to 2.5%.

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>2.5 deg?)
>
>
> make that
> 2.5%?)

4207. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 02:14:53 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109211453.08116.00000650@mb-m15.aol.com>
Source record: 104875

>
>I apologize. I read and was referring to the same quote, and interpreted
>it to mean that the first measurement was made with the coil at the base
>of the antenna. So where was it -- 78" from the bottom?
>
>Roy Lewallen, W7EL
>

Yes,
mast 78" - coil - 38" top whip
we keep saying, looking at typical mobile antenna with loading coil about 2/3 up the quarter wave radiator. The lower the frequency, more loading, more pronounced effect.

Caution, using toroid current transformers with scope leads would detune the antenna setup and introduce errors. You can get away with this at the base, but any stray capacitance up the radiator will detune it and skew the results. Need to use thermal RF current ammeters or current probe with detector and small meter together, no wires.

Yuri, K3BU

4208. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 02:17:07 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109211707.08116.00000651@mb-m15.aol.com>
Source record: 104876

>
>I'm sorry, I didn't catch the step where you got from cos(18 degrees) =
>0.951 to 2.5%.
>
>Roy Lewallen, W7EL
>

Just (in case) speculating that because of reflected wave either 5 or 2.5%
reduction.
I have not done the measurements yet.

Yuri

4209. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 02:46:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqtv1f1abstj5c@corp.supernews.com>
Source record: 104877

Thanks for the clarification.

I'm not entirely convinced that the ammeter is the best idea. There are enough internal wires and coils to introduce a real possibility of error when in close proximity to an inductor. It shouldn't be as much of a problem with a toroid, but I'm still a little leery. I agree it would be difficult to do the measurements well with a scope anywhere but at the base of the antenna. Current probes and a detecting meter might be ok, but you'd have to take a lot of care to avoid making an unintentional loop which would couple to the inductor, and you'd have to calibrate the potentially nonlinear detector. Phase information would be lacking, too. I'm waiting for Cecil's response, since by his theory, as I understand it, we should be able to get a decent phase shift through an inductor at the base of an antenna providing the antenna is significantly longer than a quarter wavelength. And if I understand your theory, we should be able to see a full 30% change in magnitude and 45 degree change in phase in the current through a base mounted inductor, if it's loading a 45 degree radiatior to resonance. Am I correct? I could measure that with the same setup but with an antenna removed from the mount. And 30% and 45 degrees should be much easier to resolve with any accuracy than the 2.5 or 5 percent you predict for the setup I did measure.

Incidentally, I take it that your prediction for the setup I did measure includes an 18 degree phase shift of current from input to output of the inductor?

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>I apologize. I read and was referring to the same quote, and interpreted
>>it to mean that the first measurement was made with the coil at the base
>>of the antenna. So where was it -- 78" from the bottom?
>>
>>Roy Lewallen, W7EL
>>
>
>
>
> Yes,
> mast 78" - coil - 38" top whip
> we keep saying, looking at typical mobile antenna with loading coil about 2/3
> up the quarter wave radiator. The lower the frequency, more loading, more
> pronounced effect.
>
> Caution, using toroid current transformers with scope leads would detune the

> antenna setup and introduce errors. You can get away with this at the base, but
> any stray capacitance up the radiator will detune it and skew the results.
> Need to use thermal RF current ammeters or current probe with detector and
> small meter together, no wires.
>
> Yuri, K3BU

4210. Looking for a Screwdriver-type Hf antenna at an affordable price??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 03:03:05 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <4VDrb.57044$SV2.14565@bignews3.bellsouth.net>
Source record: 104880

I would like you to take a look at my Carolina Cyclone line of HF Mobile antennas! You will find them to be reliable, esthetically pleasing, and do a
great job on all HF bands + 6 Meters.

While you are spending "extra" money on materials such as Teflon, I use tough, UV resistant Nylon (some have argued with me about this, but I have many antennas after 6 years that show no ill effects or wear). Just as tough,
and costs less! Ever wonder why *some* antennas are so expensive? For one thing, some of the materials used to make loading coils come off the lathe in great big strings. The lathe has to be stopped periodically to clean up the "wrap-around", and clean up the huge mess it creates. It also contributes to
the $300-$500 price charged for many of the screwdrivers out there.

A few of the antennas are those "skinny" 1 1/2" dia coils based on the DK3 and #16 wire. also wound on PVC forms. Not really all that good for antenna work.
Try running......say..... 500 watts on one and watch it MELT. Not even good as a slinky toy! The Carolina Cyclone I is warranted for 900 watts SSB. It is a full
2" dia, uses #14 wire wound at 8 TPI, and costs only $240--compare to those $400 units. The Carolina Cyclone II is 3" dia, still with #14 wire and wound at
8 TPI. Run this one at 1500 watts all day long! And both antennas have a pleasing profile for the picky spouse. Again, compare prices of those expensive
antennas out there. Cyclone II costs only $350! And that includes shipping to the lower 48 states. Alaska or Hawaii are extra.

Please visit my website at www.qsl.net/k4kwh .

73

Jerry
K4KWH

if you are not satisfied, I will replace or repair your antenna free of charge--no questions! See my review on Eham.

4211. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 03:23:55 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <p01uqv8q981r8ttnue8ua7uj7j9d7pue41@4ax.com>
Source record: 104961

On Sun, 9 Nov 2003 07:50:49 -0600, "Stinger"
<contact@newsserveronly.com> wrote:

>Besides -- we don't want Zoran to feel even more frustrated.
>
>Why is it that when somebody does show a basic love for our country, the
>principles it stands for, and a respect for those that have fought to
>maintain our freedoms, that some feel they have to try to belittle them?

Well, when RHF proclaims his patriotism, he insults patriotic, veteran
Democrats, such as myself. Disrespect for others breeds the same.

Bob
k5qwg

>
>-- Stinger
>"RHF" <rhf-mail@pacbell.net> wrote in message
>news:e5e13af8.0311090203.585e2f6a@posting.google.com...
>> = = = Zoran Brlecic <...WA7AA...@get.lost>
>> = = = wrote in message news:<3FAD9B18.1070001@get.lost>...
>> > >
>> > > RHF wrote:
>> > >
>> > > I Proudly Stand with My Hand over My Heart and Head Held High:
>> > >
>> > > "I Pledge Allegiance [snip]
>> >
>> >
>> > Now that we established who the biggest American patriot is, when do we
>> > move on to the dick measuring contest? The rules are the same as in the
>> > patriotism game: he who shouts the loudest, wins.
>> >
>> >
>> > WA7AA
>> >
>>
>>
>> ZB,
>>
>> The Biggest Patriots are Silent and they are Buried in Hallowed Ground.
>>
>> Let Each of Us, Remember Them in Our Prayers ~ RHF
>>
>> .

>>
>> .
>

4212. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 03:44:05 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031109224405.07556.00000604@mb-m15.aol.com>
Source record: 104878

>Incidentally, I take it that your prediction for the setup I did measure
>includes an 18 degree phase shift of current from input to output of the
>inductor?
>
>Roy Lewallen, W7EL
>

Yes, I used Cecil estimate/calculation and taking
cos 18 = 0.951056516 which is 4.8943483%

Yuri

4213. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 03:49:15 UTC
From: jackiew1@37.com
Message-ID: <12329882.0311091949.6910365e@posting.google.com>
Source record: 104879
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I don't get your post? What does Clinton have to do with this? We
already know he was an idiot too. All American presidents are fools,
just like you.

Jackie

"No Felons Here" <Bubba Loves You@Crooks.coms> wrote in message
news:<bom1umtoe0@pita.alt.net>...
> "Jackie Ward" <jackiew1@37.com> wrote in message
> news:12329882.0311090859.57803dbf@posting.google.com...
> Another moron to add to the pile.
>
> How can you support Bush when he and the bin Laden family had oil
> business dealings going back to the 70's?
> /
> The same way idiots like you can support a rapist who gave top-secret
> missile technology to a nation that is sworn to go to war with us.
> /
>
> Why did we give Osama bin Laden millions of dollars to fight the
> Russians in Afganistan?
>
> /
> Why did Clinton accept hundreds of thousands of dollars from the Communist
> Chinese?
> /
>
>
> Why was Saddam Hussein awarded the keys to the City of Detroit in
> 1980?
>
> /
> Why did Clinton pardon convicted felons who had "donated" monies to his
> libraryl?
> /
>
> Why did they blow up the World Trade Centre when there was 1000 other
> buildings in hundreds of other countries to choose from?
>
> /
> Because they didn't get it right the first time they tried. And they got
> away with it because Clinton was a spineless pussy.

> /
>
> Because of racist morons like you, thats why. Want some more apple
> pie?
>
> /
> Sure. I like apple pie. Make it a double helping.
> What is your favorite...cream puff?

4214. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:05:44 UTC
From: Android Cat <androidcat99@hotmail.com>
Message-ID: <fcErb.579$kA6.78055@news20.bellglobal.com>
Source record: 104882
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Please play nice people.

Look at your current thread topic and then look at the list of newsgroups
you are crossposting into. Then remove any newsgroup in your reply where
this thread is completely off-topic.

If this leaves you with no groups remaining, oh well. (Pick one newsgroup
to sacrifice and converge on it.)

--
Ron Sharp.
IIWANK #31: I will attempt to stay vaguely on-topic for the
newsgroup/forum. Cats are always on-topic.

4215. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:19:32 UTC
From: RB <rbig@bellsouth.nospam.net>
Message-ID: <0dErb.57086$SV2.17339@bignews3.bellsouth.net>
Source record: 104881

Saw horses will give you better decoupling from ground, thereby putting you a little closer to the erected swr. Besides, it the best you can do, probably.

4216. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:36:16 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FAF15C0.75812460@cwis.net>
Source record: 104883

Hacksaw,
Congratulations! You made it.
'Doc

4217. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:37:17 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <AzErb.51897$BX.25694@bignews5.bellsouth.net>
Source record: 104884
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Jackie, the sad fact is each of the Clinton statements is (as you also indicate) true.

Unfortunately the ridiculous statements you made are not.

"<<SNIP>>
> > How can you support Bush when he and the bin Laden family had oil
> > business dealings going back to the 70's?

Should they have a crystal ball? I know of no such deals, however, because the Bush family invested in domestic oil in central and southern Texas. I do know that the Bin Laden family controls one of the largest Middle-Eastern construction companies. If they did build a refinery overseas in the 70's, it would not surprise me if they did business -- especially since Usama Bin Laden didn't activate Al Qaeda until the late 80's.

> > Why did we give Osama bin Laden millions of dollars to fight the
> > Russians in Afganistan?
> >

We didn't. However, we did supply weapons to an opposition faction of Afghanistan freedom fighters that eventually splintered into several warring factions. Years later, one of these factions became the Taliban, which eventually allied with Al Qaeda, years after the Russians had gone. The northern Afghan freedom fighters allied with our troops to help overthrow Al Qaeda and the Taliban.

> >
> > Why was Saddam Hussein awarded the keys to the City of Detroit in
> > 1980?
> >

Because Cleveland managed to outbid them?

I can find no evidence of this, even on the urban legends page at snopes.com. However, knowing something of the Democrat shenanigans in the city politics of Detroit, it wouldn't have surprised me...

> >
> > Why did they blow up the World Trade Centre when there was 1000 other
> > buildings in hundreds of other countries to choose from?
> >
Actually, I need to leave the previous, correct answer here...
> Because they didn't get it right the first time they tried. And they got

> away with it because Clinton was a spineless pussy.
> /

Now, stop reading the Weekly World News and start watching Fox News, and I won't have to embarrass you again.

-- Stinger

4218. Re: Looking for a Screwdriver-type Hf antenna at an affordable price??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:38:16 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FAF1638.BAE93C88@cwis.net>
Source record: 104885

Jerry,
Read the post 4 up from here. Think you can
help him out?
'Doc

4219. Re: ANTENNA BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 04:44:51 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bon54u$af28$1@news3.infoave.net>
Source record: 104886

As a professional curmudgeon I make no apologies for my misanthropy.

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:B_SdnbTMJOwlwjCiRVn-uw@comcast.com...
>
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bojcf3$8oks$1@news3.infoave.net...
> > As I have always stated to anti top posters, learn to quote and I will
> stop
> > top posting.
>
> Call us back when you learn the basics of social interaction.
>
>

4220. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 05:16:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf1f38_1@corp.newsgroups.com>
Source record: 104887

Roy Lewallen wrote:
> So now you're saying that any coil at the base of a short vertical
> antenna, regardless of its value, will have equal currents at the input
> and output?

No, I didn't say that. I wish you would read what I say. If the coil is
a low reactance (not many degrees) and the current maximum point is inside
the coil, the two currents will tend to be equal.

> Ok, suppose I make the measurement at, say, 10 MHz, where the coil is no
> longer at the current maximum. Tell you what. I'll set up a 33 foot wire
> vertical, to eliminate the difficulty of the mounting arrangement. I'll
> furnish you the base impedance at 10 MHz, and even let you choose the
> inductor value. Be sure and choose a value that will clearly illustrate
> your point. Using the fine education you received from Balanis et al,
> calculate the current into and out of the inductor (phase and
> magnitude), and I'll set it up and measure it. Since it is a fair amount
> of work on my part, though, I'd like to do a dry run first, using, say,
> the base impedance predicted by EZNEC. Then, after you've shown us how
> you make the calculations, I'll build the antenna and do the
> measurement. I'd hate to go to the considerable trouble of setting it up
> and find that you somehow aren't able to do the calculation.

I can't do the calculation because I don't know the attenuation factor.
Do you think my inability to do the calculation proves anything about
what's happening in reality at the antenna? You guys need to turn loose
of the concept that what happens or doesn't happen on a piece of paper
dictates reality.

I can describe a base-loaded configuration that will demonstrate the
principle. Take a 75m bugcatcher coil, one of the 6"x6" models, and
choose a stinger that resonants the antenna in the 75m-80m band. Then
measure the in and out currents at a frequency a little below resonance.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4221. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 05:19:47 UTC
From: Hacksaw <Hack@comecast.net>
Message-ID: <TdFrb.155920$HS4.1290936@attbi_s01>
Source record: 104888

Still going and going

"'Doc" <w5lz@cwis.net> wrote in message news:3FAF15C0.75812460@cwis.net...
>
>
> Hacksaw,
> Congratulations! You made it.
> 'Doc

4222. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 05:21:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf2057_1@corp.newsgroups.com>
Source record: 104889

Yuri Blanarovich wrote:
> If the feedpoint current was at 0 deg of the radiator length, and coil replaces
> 18 deg of wire, the cos 18 deg = 0.951 which should make difference, drop in
> the coil current 5% (or half, 2.5 deg?)
> Providing current maximum is exactly at the bottom end of the coil.

It wasn't. The coil made the antenna too long so the current maximum
was inside the coil. But this points up a measurement problem. I
doubt that these measurements are 5% accurate.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4223. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 05:24:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf210b_1@corp.newsgroups.com>
Source record: 104890
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> and there-in lies your problem. A republic is a merely how a
> majority is achieved. A Democracy is how the government is
> formed. The existence of a legislature, an executive, and a
> supreme court, are the only things that identify a Democracy

Find out what happened to Socrates and get back to us. I don't
remember Athens having a supreme court.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4224. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 05:27:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf21c0_1@corp.newsgroups.com>
Source record: 104891
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> I personally think that only those who are 18 and above, and are not on
> Social Security should be allowed to vote.

Your posting is irrelevant. If *any* citizen is prohibited from voting
on each and every law, it is not a pure democracy. You are prohibited
from voting on each and every law.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4225. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 06:32:13 UTC
From: John Barnard <jfjb@shaw.ca>
Message-ID: <3FAF30ED.596EC178@shaw.ca>
Source record: 104892
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Maybe you Yanks can start an Operation "Vowel Storm" in certain parts of the world?

Regards

John Barnard

Stinger wrote:

> Wow, you've never heard of poetry?
>
> BTW -- you should buy a vowel ;^)
>
> -- Stinger
>
> "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> news:3FAEC47D.4070904@get.lost...
> > Uhm... because "a basic love for our country", much like any other love,
> > is supposed to be shown by actions and deeds, not by words, pledges and
> ......

4226. Re: BALUN ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 06:40:42 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <BZudnUNgfbtWrzKiRVn-gQ@comcast.com>
Source record: 104893

"Hacksaw" <Hack@comecast.net> wrote in message
news:FLBrb.116585$ao4.357305@attbi_s51...
> We have built Quads for thirty years, and NO fucking Balun was ever
needed.

I'm sorry.

> > Your inability to see the difference does not mean that there is no
> > difference.

4227. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 07:01:56 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAF37E9.5030107@get.lost>
Source record: 104894
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:

> You whined about RHF posting patriotic notes

No, I simply felt that he clearly won the Biggest Patriot of the Year
contest, and I offered to start another one, in the good old-fashioned
beer-swillin', cousin-marryin', Confederate flag-carryin', gun-totin',
liberal-lynchin' way.

> (you were wanting deeds,
> etc....pretty silly, since this IS a newsgroup), saying that words weren't
> enough to profess love (of country) -- I mentioned poetry, which is a great
> way to do so. In fact, I found RHF's post and some of the links therin
> pretty inspirational.

Excuse me while I go throw up.

> But you just seem to want to bitch about him posting it.
>
> Even your call sign looks like you're crying.

Ah, yes, hit me where it hurts: buy a vowel, callsign too whiny... what
else have you learned on that fat-ass junkie hypocrite Limbaugh channel?

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4228. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 07:36:40 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <2nfuqvoin1m2vidtso5oam97gok7o47an0@4ax.com>
Source record: 104895

On Sun, 9 Nov 2003 13:31:05 -0500, "No Felons Here" <Bubba Loves
You@Crooks.coms> wrote:

>
>"Gene Storey" <nospam@cox.net> wrote in message
>news:ijsrb.2498$643.1844@okepread03...
>> This is why some many so called 'democrats'
>> do not like the Pledge of Allegiance.
>
>People don't like the "modified" pledge, because it brings
>the Pope and the King of England into the Allegiance.

I've only posted this to the NG I read.

Personally... I don't like the modified pledge because... it's
modified. My disliking it has absolutely nothing to do with religion.
The founders of our country saw fit to craft the pledge to say what
they wanted. For us to improve on it is "to me", showing lack of
respect for our founders regardless of the motives behind the
modification.

Now, lets get back to DX
Roger (K8RI)

>
>--------
>
>Meaning...YOU don't like it, not the "people" you speak of.
>The Pope? My, oh my. You really ARE off the wall, aren't you?
>

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

4229. Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 08:01:10 UTC
From: emma <emma_hentenna@hotmail.com>
Message-ID: <booqk5$4ef$1@nic.grnet.gr>
Source record: 104844

In the picture below appears the geometry of the Hentenna.
No constructional details are given.

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
/Hentenna%20Geometry.htm

However I can use a balun to connect the coaxial line with the connector.
Because of the skin effect there is current in the interior and the exterior
of the conductor.
Firstly this current is only superficial.A part of it ends into one of two
wires.
As result we connect an unbalanced system(coaxial line) with a balanced
one(conductor).
In order to avoid this we use a balun which is a geometry transformer.

I ask for more comments.

Emma

4230. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 08:26:25 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311100026.48da6eb@posting.google.com>
Source record: 104896

Bob Miller <bxmiller@texas.netNOSPAM> wrote in message
news:<ijjuqvgv9seu5aid3hjsq5icao7sta0l0f@4ax.com>...
> On 9 Nov 2003 12:50:18 -0800, rhf-mail@pacbell.net (RHF) wrote:
>
> >= = = Bob Miller <bxmiller@texas.netNOSPAM>
> >= = = wrote in message news:<p01uqv8q981r8ttnue8ua7uj7j9d7pue41@4ax.com>...
> >> On Sun, 9 Nov 2003 07:50:49 -0600, "Stinger"
> >> <contact@newsserveronly.com> wrote:
> >>
> >> Well, when RHF proclaims his patriotism, he insults patriotic, veteran
> >> Democrats, such as myself. Disrespect for others breeds the same.
> >>
> >> Bob
> >> k5qwg
> >>
> >>
> >>
> >BM/K5QWG,
> >
> >If I have offended you, then you read too much into what I wrote.
> >
> >I note that you Capitalized the first letter in the word "Democrats"
> >by not the words 'patriotic' and 'veteran'.
> >
> >I my original post I used the words [so called 'democrats'] not
> >meaning the party title "Democrats"; but those who use the label
> >[democrat] and espouse non-democratic views and ideas.
>
> I'm trying to recall whether I've ever met a conservative, Republican
> or Libertarian who called him/herself a democrat, capped or not.
>

BM,

This is where I may disagree with you.

For I believe that the vast majority of Americans would call
themselves 'democrats' regardless of their political party label.

* To the extent that they understand that they democratically elect
Representatives to act as Leaders on their behalf.
- NOTE - This second statement also implies, that the vast majority of
Americans would also call themselves 'republicans' regardless of their
political party label.

* The "Democracy" in this democratic election of Representatives is based in the fact that a majority of the people's vote determines the winner of the election.

* This is consistent for all national elections within the USofA with one exception: The Electoral College and the 'election by representatives' of the President of the USofA as confirmed by the US Congress.

ptbaa ~ RHF

>
> Oh, well, no great offense. Have a great day
>
> Bob
> k5qwg
>
> >
> >I am reminded of former Congressman Ron Dellums, who said that the
> >only reason he ran as a "Democrat" was the fact that he could not get
> >Elected as a "Socialist".
> >
> >As for me, never wore our Nation's Uniform and can not call myself a
> >Veteran.
> >- - - But I did get 'drafted' out of high school into Federal Service
> >at the Age of 18 and worked for the Military for 32 Years. Would
> >still be working for the government had they not reduce the size of
> >our Nation's Military Services and the DoD Base Structure under former
> >president Bill Clinton.
> >
> >
> >gba ~ RHF
> >
> >.
> >
> >.

4231. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 08:44:00 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ijjuqvgv9seu5aid3hjsq5icao7sta0l0f@4ax.com>
Source record: 104991

On 9 Nov 2003 12:50:18 -0800, rhf-mail@pacbell.net (RHF) wrote:

>= = = Bob Miller <bxmiller@texas.netNOSPAM>
>= = = wrote in message news:<p01uqv8q981r8ttnue8ua7uj7j9d7pue41@4ax.com>...
>> On Sun, 9 Nov 2003 07:50:49 -0600, "Stinger"
>> <contact@newsserveronly.com> wrote:
>>
>> Well, when RHF proclaims his patriotism, he insults patriotic, veteran
>> Democrats, such as myself. Disrespect for others breeds the same.
>>
>> Bob
>> k5qwg
>>
>
>
>BM/K5QWG,
>
>If I have offended you, then you read too much into what I wrote.
>
>I note that you Capitalized the first letter in the word "Democrats"
>by not the words 'patriotic' and 'veteran'.
>
>I my original post I used the words [so called 'democrats'] not
>meaning the party title "Democrats"; but those who use the label
>[democrat] and espouse non-democratic views and ideas.

I'm trying to recall whether I've ever met a conservative, Republican
or Libertarian who called him/herself a democrat, capped or not.

Oh, well, no great offense. Have a great day

Bob
k5qwg

>
>I am reminded of former Congressman Ron Dellums, who said that the
>only reason he ran as a "Democrat" was the fact that he could not get
>Elected as a "Socialist".
>
>As for me, never wore our Nation's Uniform and can not call myself a
>Veteran.
>- - - But I did get 'drafted' out of high school into Federal Service
>at the Age of 18 and worked for the Military for 32 Years. Would
>still be working for the government had they not reduce the size of
>our Nation's Military Services and the DoD Base Structure under former
>president Bill Clinton.

>
>
>gba ~ RHF
>
>.
>
>.

4232. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 08:50:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqukchoh7qtn11@corp.supernews.com>
Source record: 104897

Ok. So far, we have your calculation that the output current should be 5% smaller, and 18 degrees shifted in phase (lagging, I presume) from the input; and Cecil's, that the output current should equal the current, both in phase and magnitude. I don't know if Richard is going to do the calculation or not, so I'll wait a little longer. Anyone else like to hazard a prediction?

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>Incidentally, I take it that your prediction for the setup I did measure
>>includes an 18 degree phase shift of current from input to output of the
>>inductor?
>>
>>Roy Lewallen, W7EL
>>
>
>
> Yes, I used Cecil estimate/calculation and taking
> cos 18 = 0.951056516 which is 4.8943483%
>
> Yuri
>
>

4233. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 08:56:56 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vquknr7qud6v38@corp.supernews.com>
Source record: 104898

Cecil Moore wrote:
> Roy Lewallen wrote:
> . . .
>> So in the past, you've predicted no difference, something like 20 or
>> 45 degrees phase shift, or an indeterminate amount. It's good to see
>> you've settled on one figure.
>
>
> There are three possibilities listed earlier. What happens with a coil
> depends upon where it is located. Please read that over and over until
> it soaks in.

That's the problem. The more times I read what you've posted, the more confused I've gotten.

>> My inductor was placed at the antenna base because I could measure the
>> currents there with reasonable accuracy.
>
>
> Yep, you are looking for your keys under the streetlight because the light
> is better there than it is where you really lost the keys.

You have a unique talent for turning an honest effort at being truthful and accurate into an insult, as you did with Ian.

>> On his web site, Yuri quoted W9UCW as measuring the currents at the
>> ends of a toroid mounted at the base of the antenna as being 100 mA at
>> the bottom and 79 at the top. You must, then, believe these
>> measurements to be in error.
>
>
> If the toroid is not mounted at a current maximum point, i.e. if the
> feedpoint
> impedance is slightly capacitive, then those figures could be accurate. I
> didn't pay any attention to them. Could be his coil causes a larger phase
> shift than your coil. You making your antenna too long ensured that
> the current maximum point would fall inside the coil. Whether you realize
> it or not, you are biasing the outcome of your experiment to agree with
> your
> pre-conceived (sacred cow) notions.

This is precisely why I've given you the opportunity to choose the inductor for the 10 MHz test. You choose it so that it will best illustrate what you say is true. Shucks, I even encourage you to do the experiments yourself.

> . . .

Roy Lewallen, W7EL

4234. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 09:15:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqulq3svhv54c5@corp.supernews.com>
Source record: 104899

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So now you're saying that any coil at the base of a short vertical
>> antenna, regardless of its value, will have equal currents at the
>> input and output?
>
>
> No, I didn't say that. I wish you would read what I say. If the coil is
> a low reactance (not many degrees) and the current maximum point is inside
> the coil, the two currents will tend to be equal.
>
I did read what you said. You said that it wouldn't exhibit a phase shift if placed at a current maximum. The current at the base of a short vertical antenna is at its maximum there. So now if you're saying that it *won't* exhibit a phase shift if placed at the base of a short antenna, let's try this. Suppose I remount my antenna to eliminate the shunting effect of the mounting, and do my measurements at 3.8 MHz as before. Suppose the base input Z is, say, 35 -j380. You choose any inductor value you'd like, that will best illustrate your method, and tell me what output to input current ratio to expect.

>> Ok, suppose I make the measurement at, say, 10 MHz, where the coil is
>> no longer at the current maximum. Tell you what. I'll set up a 33 foot
>> wire vertical, to eliminate the difficulty of the mounting
>> arrangement. I'll furnish you the base impedance at 10 MHz, and even
>> let you choose the inductor value. Be sure and choose a value that
>> will clearly illustrate your point. Using the fine education you
>> received from Balanis et al, calculate the current into and out of the
>> inductor (phase and magnitude), and I'll set it up and measure it.
>> Since it is a fair amount of work on my part, though, I'd like to do a
>> dry run first, using, say, the base impedance predicted by EZNEC.
>> Then, after you've shown us how you make the calculations, I'll build
>> the antenna and do the measurement. I'd hate to go to the considerable
>> trouble of setting it up and find that you somehow aren't able to do
>> the calculation.
>
>
> I can't do the calculation because I don't know the attenuation factor.

What "attenuation factor" is it you need? Is it something that can be measured? If not, how about an equation or prediction with the "attenuation factor" as a variable? We can estimate a probable range of values, then see if the measurement results are within them.

> Do you think my inability to do the calculation proves anything about
> what's happening in reality at the antenna? You guys need to turn loose
> of the concept that what happens or doesn't happen on a piece of paper
> dictates reality.

I hope to demonstrate what constitutes reality by theoretical analysis and by measurement. Where I come from, that counts much more than arm-waving, insulting, and vague explanations. Ultimately, each of the readers of these exchanges will decide what to believe, and I'm sure you will have convinced some.

> I can describe a base-loaded configuration that will demonstrate the
> principle. Take a 75m bugcatcher coil, one of the 6"x6" models, and
> choose a stinger that resonants the antenna in the 75m-80m band. Then
> measure the in and out currents at a frequency a little below resonance.

I have no disagreement that a "bugcatcher" coil, or any coil of physically significant size, will exhibit a phase shift and magnitude change of current from one end to the other. Where we disagree is that you believe that a physically very small inductor will also exhibit this. I don't. I'm proposing a test which will show, with reasonable certainty, which viewpoint is correct. I fully expect every test I make to bring forth a flurry of objections. So I'm giving you the opportunity to choose the inductor which will best illustrate your point of view. I want to limit the parameters of the test to conditions I think I can measure with reasonable accuracy. With the equipment I've got, that pretty much limits me to doing measurements at the antenna base. But I think (although I'm still not sure) that you're now saying that there should be a substantial current difference between the input and output of a small inductor at the base of an antenna, if the antenna and inductor are properly chosen. So, you choose. And if you won't make the measurement, I will.

Roy Lewallen, W7EL

4235. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 09:21:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqum6qmdjabifb@corp.supernews.com>
Source record: 104900

The absolute accuracy of the measurement isn't important. All that matters is the accuracy of the ratio of currents at input and output, which is a lot easier to get with reasonable accuracy.

What I'm looking for now, however, is your recommendation for a test which will clearly show the current ratio you claim will happen, of such a magnitude that the result will be clear even in the presence of a few percent error.

Based on my measurements of currents with both probes on the same lead, and averaging results with probes reversed, I think I can measure the ratio within about 2% at ratios near 1, and resolve phase shifts of a few degrees. If you can come up with a test that'll produce 30% amplitude change and 45 degrees phase shift, I guarantee I tell whether the result is closer to that or to the zero amplitude change and zero phase shift I predict.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> If the feedpoint current was at 0 deg of the radiator length, and coil
>> replaces
>> 18 deg of wire, the cos 18 deg = 0.951 which should make difference,
>> drop in
>> the coil current 5% (or half, 2.5 deg?) Providing current maximum is
>> exactly at the bottom end of the coil.
>
>
> It wasn't. The coil made the antenna too long so the current maximum
> was inside the coil. But this points up a measurement problem. I
> doubt that these measurements are 5% accurate.

4236. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 11:19:47 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311100319.41bfabb8@posting.google.com>
Source record: 104901

= = = Roger Halstead <newsgroup@rogerhalstead.com>
= = = wrote in message news:<2nfuqvoin1m2vidtso5oam97gok7o47an0@4ax.com>...
> On Sun, 9 Nov 2003 13:31:05 -0500, "No Felons Here" <Bubba Loves
> You@Crooks.coms> wrote:
>
> I've only posted this to the NG I read.
>
> Personally... I don't like the modified pledge because... it's
> modified. My disliking it has absolutely nothing to do with religion.
> The founders of our country saw fit to craft the pledge to say what
> they wanted. For us to improve on it is "to me", showing lack of
> respect for our founders regardless of the motives behind the
> modification.
>
> Now, lets get back to DX
> Roger (K8RI)
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

RH, (No "F" :o)

If you go back to my 'original'Post there is a Link/URL that expands
on the original "Pledge of Alligiance"; its History and Changes oover
the years.
- - - The Pledge of Allegiance - A Short History
GoTo=> http://history.vineyard.net//pledge.htm

"Francis Bellamy (1855 - 1931), a Baptist minister, wrote the original
Pledge in August 1892. He was a Christian Socialist. In his Pledge,
he is expressing the ideas of his first cousin, Edward Bellamy,
author of the American socialist utopian novels, Looking Backward
(1888) and Equality (1897)."

NOTE: This was over a Century after the Founding of the Republic.

As a Child I Loved to Say "The Pledge of Allegiance" !
? ? ? ? ? ? Does That Make Me A Socialist ? ? ? ? ? ?

alioli-mcrow ~ RHF

.

.

4237. Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 11:25:42 UTC
From: Troy - VK2HXY <NOSPAMvk2hxy@hotmail.com>
Message-ID: <CAKrb.213$zR6.8220@nnrp1.ozemail.com.au>
Source record: 104902

Hi there ladies and gents. I have a question that has most likely come up here before, and I do apologise if this is visiting old ground.

I am a novice limited license holder in Australia and pretty soon I will have access to the 10-15 and 80M bands. I would like to know what you consider as being the best all round antenna for my purpose? I have plenty of room to mount an 80M dipole antenna, although height is a problem. I can go up no more than about 50 feet.

I also have a mast and rotator, so a triband yagi is also on the cards.

Just looking for decent ideas here guy's. I know the question is fairly open ended, but I would like to consider all my options from those who have all the best knowledge of what works and what doesn't. To wire or not to wire? To beam or not to beam? To G5RV??????

I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.

Thanks very much for your time and I really appreciate your response to my questions.

Warmest regards

73 de VK2HXY
Troy

4238. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 11:37:58 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <istuqv8qbcacm7kdk1rnobtmbdv9nn9m10@4ax.com>
Source record: 104903

On Mon, 10 Nov 2003 22:25:42 +1100, "Troy - VK2HXY"
<NOSPAMvk2hxy@hotmail.com> wrote:

>Hi there ladies and gents. I have a question that has most likely come up
>here before, and I do apologise if this is visiting old ground.
>
>I am a novice limited license holder in Australia and pretty soon I will
>have access to the 10-15 and 80M bands. I would like to know what you
>consider as being the best all round antenna for my purpose? I have plenty
>of room to mount an 80M dipole antenna, although height is a problem. I can
>go up no more than about 50 feet.
>
>I also have a mast and rotator, so a triband yagi is also on the cards.
>
>Just looking for decent ideas here guy's. I know the question is fairly
>open ended, but I would like to consider all my options from those who have
>all the best knowledge of what works and what doesn't. To wire or not to
>wire? To beam or not to beam? To G5RV??????
>
>I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
>
>Thanks very much for your time and I really appreciate your response to my
>questions.
>
>Warmest regards
>
>73 de VK2HXY
>Troy
>

Hi Troy,

As you said in your post you will get all kinds of answers. And a lot
will depend upon factors that you do not mention.. I.E. what's your
purpose, DX, RagChew Local or distance ??

The G5RV does a decent job on 80m but is not the best choice for 10
and 15m.. on those too bands the beam-- yagi or quad would be best if
you can get the up at least 25 feet. Dipole is a good choice on
80meters even thought 50 feet is not really high on that band. if you
looking for DX on 80 I would put in a vertical with good ground
system as well.

Just some suggestions,
73 Dave kc1di

4239. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 11:39:08 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311100339.7c0117a2@posting.google.com>
Source record: 104904
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

FO&A,

I guess, I Owe Everyone an Apology.

It is No Longer COOL to Love My Country.
- - - Hell Cool isn't 'Cool' anymore !

Today's Definition of a Patriot seems to be:
- - Someone Who Criticizes the USofA and Disparages Our Leaders.

I 'resist' this Change because I grew up in a time when
- I was Proud to Be a Boy Scout
- - A Matter of Personal Honor.
- - - But Does Personal Honor, Matter Anymore ?

Today the Boy Scouts are Labeled as Bigots.
- - - And some go so far to call them a HATE Group.

Once Again I Apologize for Loving My Country.
- - - And having Faith in Our Leaders.

alioli ~ mcrow ~ RHF
.
.
= = = rhf-mail@pacbell.net (RHF)
= = = wrote in message news:<e5e13af8.0311081420.7ca90ae7@posting.google.com>...
> FO&A.
>
> This is why some many so called 'democrats'
> do not like the Pledge of Allegiance.
>
> For those simple words
> "I Pledge of Allegiance to the Flag
> of the United States of America,
> and To The REPUBLIC For Which It Stands...
>
>
> http://history.vineyard.net//pledge.htm
> http://home.att.net/~poofcatt/july.html
> http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_pledge.html
>
>
> I Proudly Stand with My Hand over My Heart and Head Held High:
>

> "I Pledge Allegiance to the Flag
> of the United States of America,
> and to the REPUBLIC for which it stands:
> one Nation under "GOD", Indivisible,
> With Liberty and Justice for ALL."
> - - - amen, Amen. AMEN !
>
>
> God Bless America - Just an old Boy Scout ~ RHF
> .
> .
> Does anyone remember the "American Creed" ?
>
> "I believe in the United States of America as a Government of the
> People, by the People, for the People; whose Just Powers are Derived
> from the Consent of the Governed; A Democracy in a Republic, a
> Sovereign Nation of many Sovereign States; a Perfect Union, one and
> inseparable; Established upon those Principles of Freedom, Equality,
> Justice, and Humanity for which American Patriots Sacrificed their
> Lives and Fortunes.
>
> I therefore believe it is My Duty to My Country to Love it; to Support
> its Constitution; to Obey its Laws; to Respect its Flag; and to Defend
> it Against ALL Enemies."
>
> http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_creed.html
> http://www.homeofheroes.com/hallofheroes/1st_floor/flag/1bfc_creed_print.html
> .
> .
> = = = "Dan/W4NTI" <w4nti@get rid of this mindspring.com>
> = = = wrote in message news:<q4arb.16853$Oo4.16408@newsread1.news.atl.earthlink.net>...
> > Per Websters Dictionary;
> >
> > Democracy
> >
> > 1. Rule by the people.
> > 2. A community so governed.
> > 3. The quality of being democratic.
> >
> >
> > Republic;
> >
> > A state in which the sovereign power is vested in representatives chosen by
> > the people.
> >
> > Constitution;
> >
> > The system of fundamental laws of a nation or society.
> >
> > Thus, we are indeed, a Constitutional Republic.

> >
> > We vote for and elect REPRESENTITIVES. These folks are 'supposed' to vote
> > in congress, either state or federal, what the electorate wants.
> >
> > We are a representitive form of government.
> >
> > A true democracy is one where everyone gets a vote, and the majority wins.
> >
> > Can you imagine how much fun it would be to have to vote on every single
> > issue, local, state, federal? There wouldn't be enough time in a lifetime
> > to do it.
> >
> > Our representitives are 'supposed' to base their lawmaking on the
> > CONSTITUTION. Obviously this is not working.
> >
> > What is happening is the judiciary of APPOINTED, not elected, judges are
> > actually making the law.
> >
> > In reality this country should stand up and revolt. We are NOT following
> > our constitution.
> >
> > So...what sort of government do we REALLY have?
> >
> > Dan/W4NTI
> >
> >
> > Dan/W4NTI
> >
> >
> > Dan/W4NTI
> >
> > "RHF" <rhf-mail@pacbell.net> wrote in message
> > news:e5e13af8.0311080245.298adcb6@posting.google.com...
> > > GS,
> > >
> > > "The US is a democracy.
> > > Any country is a democracy,
> > > which has a legislature,
> > > an executive,
> > > and a supreme court."
> > >
> > > I see you have ADDED to your 'original definition' of a "Democracy"
> > > :o)
> > >
> > > But, All of the Countries, Nations, Systems
> > >
> > > * Had Equality Before the Law - As Defined by Their Laws.
> > > - - - In Cuba - Fidel just place 1000s in Prison - For Thinking Wrong.
> > > - - - In Iran - Citizens have Equality before Civil Law and "The
> > > Faithful" may be 'judged' before Shari`ah (Islamic Religious) Law.

> > > (What could be more Equal?)
> > >
> > > * Had the Right To Vote - And The Responsibility to Vote.
> > > - - - In Iraq - Saddam was recently Re-Elected by 99.46% of the Vote
> > > and 99.73% (Nearly Everyone) Voted.
> > > - - - The Peoples "Democratic" [Republics] always have Higher Voter
> > > Turn-Outs than the USofA, Canada, The UK, EURO-Land, Japan and other
> > > so called western democracies. These Peoples Democratic Republics are
> > > evidently more democratic then the USofA an the others western
> > > democracies.
> > >
> > > * * Think of the USofA:
> > > - - - Jimmy Carter has had to "Monitor" elections in the USofA.
> > > - - - Look at the last Presidential Election in the USofA and the
> > > Missed Votes in the State of Florida.
> > >
> > >
> > > Proud to say: I Am American ~ RHF
> > > Simply an Old Retired Blue Collar Union Member - Tovarisch
> > > .
> > > .
> > > = = = "Gene Storey" <nospam@cox.net>
> > > = = = wrote in message news:<6MXqb.2160$643.1262@okepread03>...
> > > > Not true. None of those systems are/were a democracy because they
> > > > did/do not have equality before the law, nor the right to vote.
> > > >
> > > > "RHF" <rhf-mail@pacbell.net> wrote
> > > > > GS,
> > > > >
> > > > > Ah then by using your definition: NAZI Germany was a Democracy !
> > > > > - The USSR was a Democracy.
> > > > > - - The Peoples "Democratic" [Republic] of North Korea is a Democracy.
> > > > > (Alone with many other nations that call themselves Peoples
> > > > > "Democratic" [Republics]}
> > > > > - - - Islamic Republic of Iran is a Democracy.
> > > > >
> > > > > Fidel Castro should be honored as the longest living Leader of a
> > > > > Democracy.
> > > > > - - - The Republic of Cuba.
> > > > >
> > > > > Why the World is Full of Democracies ~ RHF
> > > >

4240. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 12:24:50 UTC
From: Troy - VK2HXY <NOSPAMvk2hxy@hotmail.com>
Message-ID: <SrLrb.239$zR6.9164@nnrp1.ozemail.com.au>
Source record: 104905

Thanks for the reply Dave. Well my intended purpose is for DX, although Ragchew is definitely a bonus. I have a 80M (inverted V) about 10 foot off the ground that I am currently using for receive only and am getting great receive results from VK6,5,4 and 3, all coming in when the band is open here with 40 over 9 signal reports, not bad for such a noisy band. So if I can get that up to 50 feet that should take care of 80 for the time being I guess. I guess my questions were intended to get some discussion going for people to offer up suggestions (for and against) for my intended band usage. I have heard that many use the G5RV with a tuner with good results, although there may be better bang for the buck with other wire type antennas, or conversely, am I better running a vertical? You see my quandary?

Are there any better brands of antenna for 10-15-20M in a tri-band that I should be looking for? Or rather the question should be, one's I should steer clear of?

Thanks again for the advice, that's what the hobby is all about, sharing the knowledge...

73

Troy
VK2HXY
Sydney, Australia

"KC1DI" <elbc2@gwi.net> wrote in message
news:istuqv8qbcacm7kdk1rnobtmbdv9nn9m10@4ax.com...
> On Mon, 10 Nov 2003 22:25:42 +1100, "Troy - VK2HXY"
> <NOSPAMvk2hxy@hotmail.com> wrote:
>
> >Hi there ladies and gents. I have a question that has most likely come
up
> >here before, and I do apologise if this is visiting old ground.
> >
> >I am a novice limited license holder in Australia and pretty soon I will
> >have access to the 10-15 and 80M bands. I would like to know what you
> >consider as being the best all round antenna for my purpose? I have
plenty
> >of room to mount an 80M dipole antenna, although height is a problem. I
can
> >go up no more than about 50 feet.
> >
> >I also have a mast and rotator, so a triband yagi is also on the cards.
> >
> >Just looking for decent ideas here guy's. I know the question is fairly
> >open ended, but I would like to consider all my options from those who

have
> >all the best knowledge of what works and what doesn't. To wire or not to
> >wire? To beam or not to beam? To G5RV??????
> >
> >I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
> >
> >Thanks very much for your time and I really appreciate your response to
my
> >questions.
> >
> >Warmest regards
> >
> >73 de VK2HXY
> >Troy
> >
>
>
> Hi Troy,
>
> As you said in your post you will get all kinds of answers. And a lot
> will depend upon factors that you do not mention.. I.E. what's your
> purpose, DX, RagChew Local or distance ??
>
> The G5RV does a decent job on 80m but is not the best choice for 10
> and 15m.. on those too bands the beam-- yagi or quad would be best if
> you can get the up at least 25 feet. Dipole is a good choice on
> 80meters even thought 50 feet is not really high on that band. if you
> looking for DX on 80 I would put in a vertical with good ground
> system as well.
>
> Just some suggestions,
> 73 Dave kc1di
>

4241. Re: Mosley TA-33

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 12:31:52 UTC
From: John Fallows <remove3_ve6mba@hotmail.com>
Message-ID: <YyLrb.360734$9l5.20327@pd7tw2no>
Source record: 104906

I have TA33 JUNIOR in pdf if it helps you.

"ImPhantom" <DoubleDuce4u@hotmail.com> wrote in message
news:3clrb.8486$P%1.7648449@newssvr28.news.prodigy.com...
> Does anyone have assembly instructions in .pdf for a Mosley TA33?
>
> Would appreciate it.
>
>

4242. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 13:13:51 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <haMrb.21534$mb5.18922@fed1read02>
Source record: 104907
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3faf21c0_1@corp.newsgroups.com...
> Gene Storey wrote:
> > I personally think that only those who are 18 and above, and are not on
> > Social Security should be allowed to vote.
>
> Your posting is irrelevant. If *any* citizen is prohibited from voting
> on each and every law, it is not a pure democracy. You are prohibited
> from voting on each and every law.
> --
> 73, Cecil http://www.qsl.net/w5dxp

But any warm body is not necessarily a citizen. The democracy can create rules, democratically approved, which limit the participation in the society. If you do not abide by the rules, you may become ineligible to continue participation within the democracy. Indeed, the simple democracy can do anything it (collectively) wants. Therein lies the reason for modifying a pure democracy with a set of fixed rules (possibly called a constitution).

Ed
wb6wsn

4243. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 13:26:43 UTC
From: "T.E.O" <rfmscpa@earthlink.net>
Message-ID: <nmMrb.19684$Oo4.1470@newsread1.news.atl.earthlink.net>
Source record: 104908

One man's opinion -

Put up a 268'+/- horizontal loop, 67'+/- per side, feed it with open wire/ladder line through your tuner. Get it as high as you can.

Suspend the corners of the loop through pulleys so that you can move the feed point along the circumference of the loop. Moving the feed point will shift the lobes & nulls along the azimuth (i.e. rotate the pattern). This will be a good 80 meter antenna for local work & a good DX antenna on 10, 12 & 15.

4244. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 13:43:12 UTC
From: Nisse <nisse@nospam.com>
Message-ID: <3FAF95F0.5DB332F1@nospam.com>
Source record: 104909

GAP also sells the Super "C" antenna. This thingamajig looks like a CFA (hoax) antenna in my eyes...

Comments, anyone?

/N

Dan/W4NTI wrote:

> If you followed the instructions you will have a very good SWR. I did with
> mine.
>
> I do not have the paperwork available, but I'm sure GAP does. Check their
> site via Google.
>
> The cap at the top is for 160 meters only.
>
> The side rods are for the various bands. It is the linear loading. The
> longer the rod, the lower the frequency.
>
> Dan/W4NTI
>
> "Assar W." <assar@eiscat.com> wrote in message
> news:4e9f8ac8.0311080736.70378187@posting.google.com...
> > Hi every one
> > I have just bought a GAP voyager DX antenna which I have just put up.
> > At the moment I am rather disapointed, due to really high SWR on all
> > bands (160m, 80m, 40m and 20m). I am wondering if some one have a
> > schematic on this antenna, so I could do some inital measurements
> > between the terminals on the coax and to the different aluminum pipes
> > to see if something is wrong there. I forgot to make some drawings on
> > how things was actually connected especially for the top part with the
> > capacitor and the coaxial feed, and also how the thin loading pipes on
> > the sides are connected. This antenna is a real beast to put up and
> > probaply the same to take down so I do not look forward to try to take
> > it down to find the fault.
> >
> > Best regards Assar W. SM2LTA

4245. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:08:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf9c14_3@corp.newsgroups.com>
Source record: 104910

Roy Lewallen wrote:
> and Cecil's, that the output current should equal the
> current, both in phase and magnitude.

Hold the presses! That was a rounded off ballpark value.
You haven't told us what the feedpoint impedance is yet
so an accurate estimate is impossible so far. Is the
feedpoint impedance 35.6+j8? Is that the impedance into
which you are shoving one amp?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4246. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:10:59 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <nZMrb.53453$BX.2628@bignews5.bellsouth.net>
Source record: 104911
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Good to see your true colors.

By the way (since you say I'm on a roll), this is an amazing coincidence,
but your name sounds exactly like someone throwing up.

I would be ashamed to have written what you have posted.

Have a nice day.

-- Stinger

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FAF37E9.5030107@get.lost...
> Stinger wrote:
>
> > You whined about RHF posting patriotic notes
>
> No, I simply felt that he clearly won the Biggest Patriot of the Year
> contest, and I offered to start another one, in the good old-fashioned
> beer-swillin', cousin-marryin', Confederate flag-carryin', gun-totin',
> liberal-lynchin' way.
>
> > (you were wanting deeds,
> > etc....pretty silly, since this IS a newsgroup), saying that words
weren't
> > enough to profess love (of country) -- I mentioned poetry, which is a
great
> > way to do so. In fact, I found RHF's post and some of the links therin
> > pretty inspirational.
>
> Excuse me while I go throw up.
>
> > But you just seem to want to bitch about him posting it.
> >
> > Even your call sign looks like you're crying.
>
> Ah, yes, hit me where it hurts: buy a vowel, callsign too whiny... what
> else have you learned on that fat-ass junkie hypocrite Limbaugh channel?
>
>
>
>
>
>

> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

4247. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:25:09 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3faf9fe1_3@corp.newsgroups.com>
Source record: 104912

Roy Lewallen wrote:
> That's the problem. The more times I read what you've posted, the more
> confused I've gotten.

Use EZNEC to display the current distribution for a 102 ft center-fed dipole on 20m. Assume the origin is the feedpoint. Turn the current phase on. You have 270 degrees of a cosine wave for the current to the right of the feedpoint. You have a current maximum at zero degrees and 180 degrees. The current magnitude decreases to zero in the first 90 degrees. The current magnitude increases to a maximum negative value in the second 90 degrees. The current magnitude decreases to zero in the third 90 degrees. Where one locates a loading coil and how many degrees it replaces will determine the magnitude and phase of the current into the coil and the current out of the coil. There are three possibilities.

> You have a unique talent for turning an honest effort at being truthful
> and accurate into an insult, as you did with Ian.

Roy, honest efforts are not always valid and the truth sometimes hurts.

> This is precisely why I've given you the opportunity to choose the
> inductor for the 10 MHz test. You choose it so that it will best
> illustrate what you say is true. Shucks, I even encourage you to do the
> experiments yourself.

I have some 1.5" diameter, 6 tpi stock. Get a one foot stinger and use enough of that kind of stock to resonate on 10 MHz. I guarantee the current will be different into and out of the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4248. Dealing with off topic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:27:41 UTC
From: ricknj10@hotmail.com
Message-ID: <3faf9ead.157113671@news.optonline.net>
Source record: 104913

Legitimate users of this newsgroup surely have noticed the proliferation of off topic postings (Racist, etc.). I looked at headers and most are crossposted to 5+ newsgroups. This stuff runs rampant in r.r.a.misc. If some of us posted replies (kept the thread going real good) but edited the posting to ONLY post to r.r.a.misc then later followups (made by people who have no idea where their replies are crossposted to) will only go to that newsgroup, and they might go away from here.
Of course the real solution is for NO ONE to post a reply in this antenna newsgroup to an off topic posting, but the temptation is apparently too much for some.
I've started it today. My reply posting can be seen only in r.r.a.misc.
Does this make any sense? BTW - my hotmail account is real but worthless, so I don't care what flame or spam I get to it.
Rick K2XT

4249. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:30:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fafa128$1_3@corp.newsgroups.com>
Source record: 104914

Roy Lewallen wrote:
> What I'm looking for now, however, is your recommendation for a test
> which will clearly show the current ratio you claim will happen, of such
> a magnitude that the result will be clear even in the presence of a few
> percent error.

Assuming the test is on 10 MHz, use a one foot stinger and enough 1.5"
diameter, 6 tpi air-core stock to resonate the vertical on 10 MHz. I
guarantee there is a difference in current in and out of the coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4250. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:40:47 UTC
From: richardharrison@webtv.net
Message-ID: <24944-3FAFA36F-144@storefull-2314.public.lawson.webtv.net>
Source record: 104917

Roy, W7EL wrote:
"Other predictions would be welcome, too, such as Yuri`s based on the "missing antenna length" theory of inductor current."

It`s desirable to resonate a standing-wave antenna to reduce impediment to antenna current.

In the 19th edition of the ARRL Antenna Book, there is a section on "Base Loading and Center Loading" beginning on page 16-4.

First point is that current is not uniform in a ground mounted whip because the bottom section of the whip is closest to the ground, and so has more capacitance to the ground.

Next point is that raising the coil up in the whip improves current distribution. The high voltage which boosts capacitive current is moved farther away from the earth or ground plane. Lower voltage below the coil has less capacitive current between the earth and whip than before the coil was boosted. Current below the coil is now almost uniform.

Table 1 gives coil values for base loading and center loading an 8-ft whip in amateur bands between 1.8 and 29 MHz.

There is a CD-ROM attached to the rear cover of the ARRL Antenna Book which includes a program, MOBILE.EXE, for optimization of coil placement.

There is much practical information in this Antenna Book section. I`d speculate it was tried and proved useful before it was included in the Antenna Book. Has anyone found faults?

Best regards, Richard Harrison, KB5WZI

4251. Re: Dealing with off topic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:51:29 UTC
From: KeyBoard In The Wilderness <KTW@zilch.com>
Message-ID: <QBNrb.17135$0K6.180@fed1read06>
Source record: 104916

Gosh when it is free and unmoderated -- tis an invitation for the OTers to spew their spin.

The OTers will tell you -- guidelines guidelines -- we don't need no stinkin guidelines.

Which incidentally are at URL:

http://faqs.jmas.co.jp/FAQs/radio/personal-intro

For whatever good that may do !!!
--
73 From The Keyboard In The Wilderness

"Rick " <ricknj10@hotmail.com> wrote in message
news:3faf9ead.157113671@news.optonline.net...
> Legitimate users of this newsgroup surely have noticed the
> proliferation of off topic postings (Racist, etc.). I looked at
> headers and most are crossposted to 5+ newsgroups. This stuff runs
> rampant in r.r.a.misc. If some of us posted replies (kept the thread
> going real good) but edited the posting to ONLY post to r.r.a.misc
> then later followups (made by people who have no idea where their
> replies are crossposted to) will only go to that newsgroup, and they
> might go away from here.
> Of course the real solution is for NO ONE to post a reply in this
> antenna newsgroup to an off topic posting, but the temptation is
> apparently too much for some.
> I've started it today. My reply posting can be seen only in
> r.r.a.misc.
> Does this make any sense? BTW - my hotmail account is real but
> worthless, so I don't care what flame or spam I get to it.
> Rick K2XT

4252. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 14:56:51 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <HZOdnTbpe5mgOjKiRVn-tA@comcast.com>
Source record: 104918

Troy,

You really want 2 antennas.

1. A dipole for 80 meters. 50 feet is not that bad; there are many that are lower.

2. A rotatable antenna of some kind for 10/15. At this point, I don't know of any that don't also work 20, but then, you might upgrade. If you want to keep cost down, I would get a 2 element triband beam. These are light enough to mount on a TV rotator.

Doing it this way you don't have to mess around with antenna tuners. The money you save will pay for the tribander. I have a Hygain TH3MK4 at about 42 feet. This appears to be about optimum for 15 meters.

Tam/WB2TT
"Troy - VK2HXY" <NOSPAMvk2hxy@hotmail.com> wrote in message news:CAKrb.213$zR6.8220@nnrp1.ozemail.com.au...
> Hi there ladies and gents. I have a question that has most likely come up
> here before, and I do apologise if this is visiting old ground.
>
> I am a novice limited license holder in Australia and pretty soon I will
> have access to the 10-15 and 80M bands. I would like to know what you
> consider as being the best all round antenna for my purpose? I have plenty
> of room to mount an 80M dipole antenna, although height is a problem. I
can
> go up no more than about 50 feet.
>
> I also have a mast and rotator, so a triband yagi is also on the cards.
>
> Just looking for decent ideas here guy's. I know the question is fairly
> open ended, but I would like to consider all my options from those who
have
> all the best knowledge of what works and what doesn't. To wire or not to
> wire? To beam or not to beam? To G5RV??????
>
> I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
>
> Thanks very much for your time and I really appreciate your response to my
> questions.
>
> Warmest regards
>
> 73 de VK2HXY
> Troy

>
>

4253. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:06:36 UTC
From: desmoface@aol.com
Message-ID: <20031110100636.06344.00000430@mb-m19.aol.com>
Source record: 104819

You can build a fan dipole for 1, 15, and 80..that would give you the bands you are looking for..here's a link to one:
http://www.hamuniverse.com/multidipole.html

I just completed my 80 meter loop but can't comment on the performance as I have to run the feedline through the wall before I can put her on the air.

Good luck...

Steve
kb8viv

4254. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:09:36 UTC
From: desmoface@aol.com
Message-ID: <20031110100936.06344.00000431@mb-m19.aol.com>
Source record: 104820

>You can build a fan dipole for 1, 15, and 80..

Thats supposed to be 10,15, and 80.

Steve
kb8viv

4255. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:30:54 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <rcbvqv00pi62ofl72v7jtvcpqdlf8b0543@4ax.com>
Source record: 104821

On Sat, 08 Nov 2003 19:48:52 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"W6DKN" <w6dkn-nospam-@qsl.net> wrote in message
>news:vqqgpddonrqf5c@corp.supernews.com...
>> Dan/W4NTI wrote:

>> But you don't need a revolution to fix it, only a few changes.
>>
>> First, a law that no person of title could hold public office (this was in
>> the original Constitution). This would eliminate all the lawyers
>> (Esquires) - a key step in fixing things.

I believe it was Jefferson that proposed politicians got o school to
learn how to be politicians. The original draft was to keep the upper
class from ruing the masses, but was rejected. We need more
knowledgeable public officials, not fewer. Maybe if they knew what
they were doing we wouldn't get so many idiotic laws and if they had
to operate a budget like the rest of us they'd have paid off the
national debt when they could afford to instead of giving away the
excess.

>>
>> Next, a single term limit on all public offices - including judges. This
>> would eliminate the career politicians and demigod judicial mentality.

We tried that in Michigan and are thinking of throwing it out.
>>
>> Lastly, elimination of all exemptions from common law and special perks
>> that those in office have granted themselves. Want to fix Social Security?
>> Make all those in Congress have to give up their Congressional retirement
>> plan (full annual salary for life) and live off Social Security like the
>> masses...
>
I worked all my life, retired and now live on a pension and SS.
However I was smart enough to invest, so I can afford to do *most* of
the things I want.

>And of course all union and non-union employees will give up their pensions
>too. If the politicians have to give up their retirement plans, the
>autoworkers etc should be equally willing to give up theirs.

Certainly. That would only be fair.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com

N833R World's oldest Debonair? (S# CD-2)

>
>Dee D. Flint, N8UZE

4256. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:34:05 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <7sbvqv4g6ilk9dsg62f93rt1qn3rqvgv56@4ax.com>
Source record: 104826
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On Mon, 10 Nov 2003 05:13:51 -0800, "Ed Price" <edprice@cox.net>
wrote:

>
>"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
>news:3faf21c0_1@corp.newsgroups.com...
>> Gene Storey wrote:
>> > I personally think that only those who are 18 and above, and are not on
>> > Social Security should be allowed to vote.
>>
>> Your posting is irrelevant. If *any* citizen is prohibited from voting
>> on each and every law, it is not a pure democracy. You are prohibited
>> from voting on each and every law.

In the first place we are a "Republic", remember the pledge "and to
the Republic for which it stands".which is ruled by a "Representative
Democracy", not a pure democracy.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>
>But any warm body is not necessarily a citizen. The democracy can create
>rules, democratically approved, which limit the participation in the
>society. If you do not abide by the rules, you may become ineligible to
>continue participation within the democracy. Indeed, the simple democracy
>can do anything it (collectively) wants. Therein lies the reason for
>modifying a pure democracy with a set of fixed rules (possibly called a
>constitution).
>
>Ed
>wb6wsn

4257. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:39:10 UTC
From: David <rickets@knac.com>
Message-ID: <07cvqvcn0n1dqjmk50necevp50spo02h9g@4ax.com>
Source record: 104822
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

One entry found for plutocracy.

Main Entry: pluï¿½tocï¿½raï¿½cy
Pronunciation: plï¿½-'tï¿½-kr&-sE
Function: noun
Inflected Form(s): plural -cies
Etymology: Greek ploutokratia, from ploutos wealth; akin to Greek
plein to sail, float -- more at FLOW
Date: 1652
1 : government by the wealthy
2 : a controlling class of the wealthy
- pluï¿½toï¿½crat /'plï¿½-t&-"krat/ noun
- pluï¿½toï¿½cratï¿½ic /"plï¿½-t&-'kra-tik/ adjective
- pluï¿½toï¿½cratï¿½iï¿½caliï¿½ly /-ti-k(&-)lE/ adverb

Whoever gave corporations First Amendment rights sealed our doom.

On Sat, 08 Nov 2003 17:53:26 GMT, "Dan/W4NTI" <w4nti@get rid of this
mindspring.com> wrote:

>Per Websters Dictionary;
>
>Democracy
>
>1. Rule by the people.
>2. A community so governed.
>3. The quality of being democratic.
>
>
>Republic;
>
>A state in which the sovereign power is vested in representatives chosen by
>the people.
>
>Constitution;
>
>The system of fundamental laws of a nation or society.
>
>Thus, we are indeed, a Constitutional Republic.
>

4258. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:49:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fafb3a2_2@127.0.0.1>
Source record: 104823

Roy Lewallen wrote:
> I did read what you said. You said that it wouldn't exhibit a phase
> shift if placed at a current maximum.

I'm sorry, there is a misunderstanding that is my fault. When I say "current is the same.", I'm implying magnitude only. That's a convention left over from my college days and may not be a convention any longer. If I said anything at all about phase, I used the word, "phase", in my posting. So I will stop omitting the word, "magnitude", when I am talking about magnitude.

So do a system reset on what you think I said. There is always a phase shift through a real-world inductor. Whether it can be measured accurately is another matter. When I said: "If the current maximum point is located in the middle of a coil, the current (implied magnitude) in and out of a coil will be equal.", I was implying current magnitude only. I didn't imply or say anything about phase unless I used the word, "phase" in the sentence.

I also have not said anything about the phase of the currents into and out of your toroidal inductance except to say it replaces approximately 18 degrees of antenna.

> The current at the base of a short
> vertical antenna is at its maximum there. So now if you're saying that
> it *won't* exhibit a phase shift if placed at the base of a short
> antenna, let's try this.

As you can see above, I never said anything like that.

> Suppose I remount my antenna to eliminate the
> shunting effect of the mounting, and do my measurements at 3.8 MHz as
> before. Suppose the base input Z is, say, 35 -j380. You choose any
> inductor value you'd like, that will best illustrate your method, and
> tell me what output to input current ratio to expect.

I am still leery about your ability to separate small phase shifts from noise. We need to make the inductor large enough to ensure the phase shift measurements are above the noise level.

> I have no disagreement that a "bugcatcher" coil, or any coil of
> physically significant size, will exhibit a phase shift and magnitude
> change of current from one end to the other.

Huh?????? I thought that was what the argument was all about. What triggered this whole discussion was W8JI's alleged assertion that a loading coil like a bugcatcher doesn't affect the current at all.

> Where we disagree is that
> you believe that a physically very small inductor will also exhibit
> this. I don't.

The effect of a very small inductor may be too small to measure in
the presence of strong fields and noise. Ask yourself, at exactly
what value of inductor does the phase shift completely disappear?
+j1? +j10? +j100? +j1000? What is the crossover point from some
phase shift to zero phase shift? Can you measure a phase shift of
0.1 degree at HF? Zero phase implies faster than light propagation
through the coil.
--
73, Cecil, W5DXP

4259. Re: Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:54:35 UTC
From: Old Ed <eseniorsR-E-M-O-V-E@earthlink.net>
Message-ID: <%wOrb.7651$6c3.3398@newsread1.news.pas.earthlink.net>
Source record: 104824

OK, I guess there are no dual users out there who care
to comment.

How about single users? Is there anyone who owns or has used
EITHER of these antennas who can provide some feedback?
(I am aware of such resources as eHam.net Reviews, but I'm
curious about inputs from this NG.)

"Old Ed" <eseniorsR-E-M-O-V-E@earthlink.net> wrote in message
news:xdirb.3646$nz.3545@newsread2.news.pas.earthlink.net...
> Hello -
>
> Is there anyone out there who has owned or used BOTH
> a Hex-Beam HX5Bi and a Force 12 C-3SS? If so, I'd
> appreciate hearing any comments you might have.
>
> The spec's on these two are very close on 10/15/20...
> but I'm guessing that the C-3SS would be better on 20.
> The HX5Bi would slaughter the C-3SS on 17 and 12,
> of course--since the C-3SS isn't really designed to
> cover those bands.
>
> 73, Ed
>
>

4260. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 15:56:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fafb524_2@127.0.0.1>
Source record: 104825

Bob Miller wrote:
> If you simply feed your 80m dipole entirely with 450-ohm ladderline,
> and run it through your 989c tuner, it should tune the higher bands,
> as well, without any great feedline loss. Check your tuner manual for
> feedline lengths to avoid.

Or vary the length of the feedline as shown on my web page and
enjoy all HF bands without the need for a conventional tuner.
--
73, Cecil, http://www.qsl.net/w5dxp

4261. Re: Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 16:19:43 UTC
From: desmoface@aol.com
Message-ID: <20031110111943.07627.00000388@mb-m07.aol.com>
Source record: 104827

"OK, I guess there are no dual users out there who care
to comment.

How about single users? Is there anyone who owns or has used
EITHER of these antennas who can provide some feedback?"

There, now I can comment hehe...I had the full size c3 and it was a very nice antenna..tuned up nicely on 10-20, the tuner in me rig even tuned it on 40 meters, not sure how but it did..of course it didn't work very well on 40..

It's probably comparable to a 2 element yagi on 20 and 3 elelments on 10 and 15..if you look at the specific elements you'll probably see that it has 2 20 meter elements and three for the other bands..

That said, I had no complaints, it was kind of large but it had no traps so its a trade off..I didn't want traps and the other antenna's that were trapless (at the time) were pretty complex..I figured there would be more stuff to go wrong..

If I was doing it again I'd probably consider the c3s or ideally I'd look at a quad. The only problem I had with the triband quad designs was that they didn't have a great way of feeding them with one feedline...ideally a quad wants to have three seperate feedlines..but maybe someone in the group has successfully done it with a single feedline?? I know cubex and lightning bolt have a single feedline network that feeds all the elements...not sure how good that works ??

Good luck..

Steve
kb8viv

4262. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 16:39:01 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <booevl$b1ob$1@news3.infoave.net>
Source record: 104828
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

How is it that the same people who love to quote the "N", word to show how enlightened they are, figure that they have the right to denigrate Southerners with impunity?

I suspect that with your supercilious attitude, you have to look down on someone. Ergo, find a group that is not protected by politically correct speech and stereotype them.

Your sophomoric rhetoric is trite and boring, I suspect your total experience with 4 land has been what you have garnered from the liberal media via TV or movies.

I do note that the most egregious violations of civil rights occur in places other than 4 land...

Many of us lost ancestors in the war of northern aggression, the flag is a source of pride to a people that resisted the imposition of unfair tariffs, made it illegal to import Africans, and wanted to protect their homes. The Stars and Bars are a point of pride, and the strains of Dixie (written by a damyankee) played on a town square warms our heart.

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FAF37E9.5030107@get.lost...
> Stinger wrote:
>
> > You whined about RHF posting patriotic notes
>
> No, I simply felt that he clearly won the Biggest Patriot of the Year
> contest, and I offered to start another one, in the good old-fashioned
> beer-swillin', cousin-marryin', Confederate flag-carryin', gun-totin',
> liberal-lynchin' way.
>

4263. Re: Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 16:41:25 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <VcPrb.118767$275.344331@attbi_s53>
Source record: 104829

"Old Ed" <eseniorsR-E-M-O-V-E@earthlink.net> wrote in message
news:%wOrb.7651$6c3.3398@newsread1.news.pas.earthlink.net...
> OK, I guess there are no dual users out there who care
> to comment.
>
> How about single users? Is there anyone who owns or has used
> EITHER of these antennas who can provide some feedback?
> (I am aware of such resources as eHam.net Reviews, but I'm
> curious about inputs from this NG.)
>
> "Old Ed" <eseniorsR-E-M-O-V-E@earthlink.net> wrote in message
> news:xdirb.3646$nz.3545@newsread2.news.pas.earthlink.net...
> > Hello -
> >
> > Is there anyone out there who has owned or used BOTH
> > a Hex-Beam HX5Bi and a Force 12 C-3SS? If so, I'd
> > appreciate hearing any comments you might have.
> >
> > The spec's on these two are very close on 10/15/20...
> > but I'm guessing that the C-3SS would be better on 20.
> > The HX5Bi would slaughter the C-3SS on 17 and 12,
> > of course--since the C-3SS isn't really designed to
> > cover those bands.
> >
> > 73, Ed
> >

Hexbeam HX5Bi:
Very easy to put together (and take apart for that matter). It took me
<2 hours and I am the supreme klutz.
No tuning needed. I assumed this was marketing hype, but it turned out
to be completely true.
Low wind load and not a lot of places to grow an ice garden. (I live in
Minnesota so this is important)
Excellent front to side. Front to back is not as good as the specs
claim.
Fairly wide 1/2 power beam width, so does not have quite the gain of a
"real" yagi.
Excellent customer support.
No email address which can be a PITA sometimes.
Easily loaded on 6m (omni-directional--seems as good as the horizontal
loop I have).
Loads reasonably well on 30m. Not terribly efficient there, but ok for
occasional non-critical use.

Loads on 40m if you insist (but then, so will a bed spring if you try hard enough).
Excellent band width. The only time I use a tuner on the designed bands (20->10 inclusive) is the very bottom of 20m (as in <14.025 and the 10m FM section).
Very light weight.

Given my need for a very small turning radius, low maintenance and gain on the WARC bands as well as 20m and 15m, it is an excellent choice.

Comments on Force 12 in general (I use two of their verticals):
Excellent technical support; customer support leaves a bit to be desired at times.
Seems to have the most honest gain claims in the industry (something I like to support).
The 40m vertical is built like a tank. (The 20-10 vertical I have is intended to be a portable no-tools-needed beast, so it is a different animal).

Paul AB0SI

4264. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 16:44:22 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <boofjk$b2js$1@news3.infoave.net>
Source record: 104830

Roger, Roger, Roger... "The way the founders wanted it"?
The pledge was written in the late 1800's by a Baptist Minster, hardly a "founder".

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message news:2nfuqvoin1m2vidtso5oam97gok7o47an0@4ax.com...
> On Sun, 9 Nov 2003 13:31:05 -0500, "No Felons Here" <Bubba Loves
> You@Crooks.coms> wrote:
> Personally... I don't like the modified pledge because... it's
> modified. My disliking it has absolutely nothing to do with religion.
> The founders of our country saw fit to craft the pledge to say what
> they wanted. For us to improve on it is "to me", showing lack of
> respect for our founders regardless of the motives behind the
> modification.
>
> Now, lets get back to DX
> Roger (K8RI)
>
> >
> >--------
> >
> >Meaning...YOU don't like it, not the "people" you speak of.
> >The Pope? My, oh my. You really ARE off the wall, aren't you?
> >
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)

4265. 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 17:17:37 UTC
From: Robert Lyons <boblyons@duct.umich.edu.tape>
Message-ID: <hKPrb.4927$H91.101878@news.itd.umich.edu>
Source record: 104831

I'm hoping someone can enlighten me. I frequently see Yagi antennas mounted on commercial buildings. They are usually relatively simple, probably mono-band units, aimed at the horizon. What's puzzling is that many of these tend to be polarized *not* vertically or horizontally, but at a 45 degree tilt! Can anyone explain that?

(I know nothing about the specific busineses or the purpose of the antennas, so I can't speculate about what's at the other end of the radio signal).

Bob, KI8AB

(remove 'duct tape' to respond)

4266. Re: Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 17:24:02 UTC
From: G&R <spam@limbo.hell>
Message-ID: <MQPrb.2982$fB3.286460@news20.bellglobal.com>
Source record: 104832

If you are considering these beams you may want to consider the BBQ101520 by Degen Designs.

This antenna is a true shrunken quad designed for 10, 15 and 20m with tunability on 12 and 17m.

Durability wise it is tough and has survived 87mph winds and ice (we are a Caandian Company).

Erection wise it can be assembled in 1/2 hour (as it is prestrung, just unfold and bolt).

www.degendesigns.com

Thanks you for your consideration.

73,
Guenther VE3CVS
info@degendesigns.com
www.degendesigns.com

"Old Ed" <eseniorsR-E-M-O-V-E@earthlink.net> wrote in message news:xdirb.3646$nz.3545@newsread2.news.pas.earthlink.net...
> Hello -
>
> Is there anyone out there who has owned or used BOTH
> a Hex-Beam HX5Bi and a Force 12 C-3SS? If so, I'd
> appreciate hearing any comments you might have.
>
> The spec's on these two are very close on 10/15/20...
> but I'm guessing that the C-3SS would be better on 20.
> The HX5Bi would slaughter the C-3SS on 17 and 12,
> of course--since the C-3SS isn't really designed to
> cover those bands.
>
> 73, Ed
>
>

4267. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 17:43:34 UTC
From: BobS <bobs711@comcastXXX.net>
Message-ID: <09jvqvk3vjb7486bd8l04ph60f4nmcv53d@4ax.com>
Source record: 104833
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

On 10 Nov 2003 03:39:08 -0800, rhf-mail@pacbell.net (RHF) wrote:

>FO&A,
>
>I guess, I Owe Everyone an Apology.
>
>It is No Longer COOL to Love My Country.
>- - - Hell Cool isn't 'Cool' anymore !
>
>Today's Definition of a Patriot seems to be:
>- - Someone Who Criticizes the USofA and Disparages Our Leaders.
>
>I 'resist' this Change because I grew up in a time when
>- I was Proud to Be a Boy Scout
>- - A Matter of Personal Honor.
>- - - But Does Personal Honor, Matter Anymore ?
>
>Today the Boy Scouts are Labeled as Bigots.
>- - - And some go so far to call them a HATE Group.
>
>
>Once Again I Apologize for Loving My Country.
>- - - And having Faith in Our Leaders.
>
>
>alioli ~ mcrow ~ RHF
>.
Oh pleeeeeze! Take the heart off of your sleave and just DO IT
rather than talk about it.

Bob

4268. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:06:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <booo4gfeo1@news.service.uci.edu>
Source record: 104835

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vqulq3svhv54c5@corp.supernews.com...
> I did read what you said. You said that it wouldn't exhibit a phase
> shift if placed at a current maximum. The current at the base of a short
> vertical antenna is at its maximum there. So now if you're saying that
> it *won't* exhibit a phase shift if placed at the base of a short
> antenna, let's try this.

Naturally, the inductance of the coil and the resistance of the circuit determine how much of a phase shift there will be. But the amount of resulting change in current magnitude will depend on where on the cosine curve this shift occurs. A 10 degree phase shift from 40 to 50 degrees generates almost an order of magnitude greater change in current that it does shifting from 0 to 10 degrees. Obviously, the closer the center of the coil is to zero (or 180) degrees, the smaller the resulting differential in current across the coil.

73, Jim AC6XG

4269. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:08:47 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAFE245.7060803@get.lost>
Source record: 104834
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:

> I would be ashamed to have written what you have posted.

The feeling is mutual.

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4270. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:20:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqvp8hraiaqi60@corp.supernews.com>
Source record: 104836

Hopefully your skills extend beyond looking up values in books, to being able to do actual calculations. Given the measured antenna impedance I reported and the inductor I used, what should we expect as the ratio (magnitude and phase) of output to input current at the two inductor leads?

Roy Lewallen, W7EL

Richard Harrison wrote:
> Roy, W7EL wrote:
> "Other predictions would be welcome, too, such as Yuri`s based on the
> "missing antenna length" theory of inductor current."
>
> It`s desirable to resonate a standing-wave antenna to reduce impediment
> to antenna current.
>
> In the 19th edition of the ARRL Antenna Book, there is a section on
> "Base Loading and Center Loading" beginning on page 16-4.
>
> First point is that current is not uniform in a ground mounted whip
> because the bottom section of the whip is closest to the ground, and so
> has more capacitance to the ground.
>
> Next point is that raising the coil up in the whip improves current
> distribution. The high voltage which boosts capacitive current is moved
> farther away from the earth or ground plane. Lower voltage below the
> coil has less capacitive current between the earth and whip than before
> the coil was boosted. Current below the coil is now almost uniform.
>
> Table 1 gives coil values for base loading and center loading an 8-ft
> whip in amateur bands between 1.8 and 29 MHz.
>
> There is a CD-ROM attached to the rear cover of the ARRL Antenna Book
> which includes a program, MOBILE.EXE, for optimization of coil
> placement.
>
>
> There is much practical information in this Antenna Book section. I`d
> speculate it was tried and proved useful before it was included in the
> Antenna Book. Has anyone found faults?
>
> Best regards, Richard Harrison, KB5WZI
>

4271. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:21:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqvpbfo410ref0@corp.supernews.com>
Source record: 104837

So, you've retracted your prediction. What's your new one, then?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> I did read what you said. You said that it wouldn't exhibit a phase
>> shift if placed at a current maximum.
>
>
> I'm sorry, there is a misunderstanding that is my fault. When I say
> "current is the same.", I'm implying magnitude only. That's a
> convention left over from my college days and may not be a
> convention any longer. If I said anything at all about phase, I
> used the word, "phase", in my posting. So I will stop omitting
> the word, "magnitude", when I am talking about magnitude.
>
> So do a system reset on what you think I said. There is always a
> phase shift through a real-world inductor. Whether it can be
> measured accurately is another matter. When I said: "If the
> current maximum point is located in the middle of a coil, the
> current (implied magnitude) in and out of a coil will be equal.",
> I was implying current magnitude only. I didn't imply or say anything
> about phase unless I used the word, "phase" in the sentence.
>
> I also have not said anything about the phase of the currents into
> and out of your toroidal inductance except to say it replaces
> approximately 18 degrees of antenna.
>
>> The current at the base of a short vertical antenna is at its maximum
>> there. So now if you're saying that it *won't* exhibit a phase shift
>> if placed at the base of a short antenna, let's try this.
>
>
> As you can see above, I never said anything like that.
>
>> Suppose I remount my antenna to eliminate the shunting effect of the
>> mounting, and do my measurements at 3.8 MHz as before. Suppose the
>> base input Z is, say, 35 -j380. You choose any inductor value you'd
>> like, that will best illustrate your method, and tell me what output
>> to input current ratio to expect.
>
>
> I am still leery about your ability to separate small phase shifts

> from noise. We need to make the inductor large enough to ensure
> the phase shift measurements are above the noise level.
>
>> I have no disagreement that a "bugcatcher" coil, or any coil of
>> physically significant size, will exhibit a phase shift and magnitude
>> change of current from one end to the other.
>
>
> Huh?????? I thought that was what the argument was all about. What
> triggered this whole discussion was W8JI's alleged assertion that
> a loading coil like a bugcatcher doesn't affect the current at all.
>
>> Where we disagree is that you believe that a physically very small
>> inductor will also exhibit this. I don't.
>
>
> The effect of a very small inductor may be too small to measure in
> the presence of strong fields and noise. Ask yourself, at exactly
> what value of inductor does the phase shift completely disappear?
> +j1? +j10? +j100? +j1000? What is the crossover point from some
> phase shift to zero phase shift? Can you measure a phase shift of
> 0.1 degree at HF? Zero phase implies faster than light propagation
> through the coil.
> --
> 73, Cecil, W5DXP
>

4272. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:26:08 UTC
From: Paul Landregan <plandregan@hotmail.com>
Message-ID: <booood$1gp6p6$1@ID-198833.news.uni-berlin.de>
Source record: 104838

"Robert Lyons" <boblyons@duct.umich.edu.tape> wrote in message
news:hKPrb.4927$H91.101878@news.itd.umich.edu...
> I'm hoping someone can enlighten me. I frequently see Yagi antennas
mounted
> on commercial buildings. They are usually relatively simple, probably
mono-
> band units, aimed at the horizon. What's puzzling is that many of these
> tend to be polarized *not* vertically or horizontally, but at a 45 degree
> tilt! Can anyone explain that?
>
> (I know nothing about the specific busineses or the purpose of the
antennas,
> so I can't speculate about what's at the other end of the radio signal).
>
> Bob, KI8AB
>
> (remove 'duct tape' to respond)
To have some signal for both Horizontal and vertical.

>

4273. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:27:50 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAFE6BC.700@get.lost>
Source record: 104839
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

w4jle wrote:
> How is it that the same people who love to quote the "N", word to show how
> enlightened they are, figure that they have the right to denigrate
> Southerners with impunity?

Whatever happened to the free speech that was banded around like a three-dollar whore when this whole thread started by a Southerner denigrating other cultures? Or is this just another Limbaughesque fakery: free speech applies to only what we like and drug wars don't apply to white middle-age millionaire hypocrites.

> I suspect that with your supercilious attitude, you have to look down on
> someone. Ergo, find a group that is not protected by politically correct
> speech and stereotype them.

There is no such thing as a "group that is not protected by politically correct speech". It is a figment of your imagination and the result of mistaking paraliberals' bullshit for what liberals stand for. Sort of as if I assumed all conservatives were moral freaks like Ashcroft and Santorum.

> Your sophomoric rhetoric is trite and boring, I suspect your total
> experience with 4 land has been what you have garnered from the liberal
> media via TV or movies.

Yes, it must be that damn liberal media: Fox News, CNBC, every Christian channel anywhere, every Hz on AM, the Washington Post, etc.

> Many of us lost ancestors in the war of northern aggression, the flag is a
> source of pride to a people that resisted the imposition of unfair tariffs,
> made it illegal to import Africans, and wanted to protect their homes. The
> Stars and Bars are a point of pride, and the strains of Dixie (written by a
> damyankee) played on a town square warms our heart.

Wait, I'm confused... Are you complaining that you can't legally import slaves anymore or that the aggressors' flag is a point of pride?

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4274. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:31:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqvpuf3fmo7ie0@corp.supernews.com>
Source record: 104840

The feedpoint impedance without the inductor was 35 - j185. The inductor was 0.6 + j192. Sorry, I had left it up to you to add the two together, to get 35.6 + j7 ohms.

It would be nice to have something better than a ballpark value, since I think I can get the ratio of output to input to within a couple of percent or so, and resolve two or three degrees of phase shift. Anything more precise than that, though, I won't be able to resolve anyway. Which is why the next test might be better, since you'll be choosing the inductor size to make the shift very apparent. Won't you?

So what's your new, more precise prediction of the output:input current ratio (magnitude and phase) for the system I did measure?

Incidentally, I've now also made a measurement using the same system on the bench, substituting a series RC with the same Z as the antenna feedpoint for the antenna. You've stated that you expect to see a difference between this setup and the antenna (the former being "lumped" and the latter "distributed"). Do you, Yuri? How about you, Richard? If so, what should I be seeing for the ratio of output:input current in the lumped setup?

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> and Cecil's, that the output current should equal the current, both in
>> phase and magnitude.
>
>
> Hold the presses! That was a rounded off ballpark value.
> You haven't told us what the feedpoint impedance is yet
> so an accurate estimate is impossible so far. Is the
> feedpoint impedance 35.6+j8? Is that the impedance into
> which you are shoving one amp?

4275. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:38:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fafe950_2@127.0.0.1>
Source record: 104841

Roy Lewallen wrote:
> So, you've retracted your prediction. What's your new one, then?

No, you misunderstood my prediction. I cannot make an accurate
prediction until you tell us the feedpoint impedance of the
antenna including the coil. Is it 34.6+j8 or what? You have
told us the feedpoint impedance of the antenna without the
coil and the impedance of the coil but we still don't have
an accurate measurement for the feedpoint impedance of the
antenna including the coil. Did you measure it? If not, any
estimate is not going to be very accurate.
--
73, Cecil, W5DXP

4276. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:39:26 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311101139.2bc0b9ff@posting.google.com>
Source record: 104842
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

EP,

In a PURE "Democracy", [The Law] is anything the Majority of Citizens
decide to Vote on at Anytime [.]

With the Words "Lets Vote" The World Changes.

An Anarchist Dream . . .
- - - Let There Be Chaos !

alioli-mcrow ~ RHF
.
.
= = = "Ed Price" <edprice@cox.net>
= = = wrote in message news:<haMrb.21534$mb5.18922@fed1read02>...
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3faf21c0_1@corp.newsgroups.com...
> > Gene Storey wrote:
> > > I personally think that only those who are 18 and above, and are not on
> > > Social Security should be allowed to vote.
> >
> > Your posting is irrelevant. If *any* citizen is prohibited from voting
> > on each and every law, it is not a pure democracy. You are prohibited
> > from voting on each and every law.
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
>
> But any warm body is not necessarily a citizen. The democracy can create
> rules, democratically approved, which limit the participation in the
> society. If you do not abide by the rules, you may become ineligible to
> continue participation within the democracy. Indeed, the simple democracy
> can do anything it (collectively) wants. Therein lies the reason for
> modifying a pure democracy with a set of fixed rules (possibly called a
> constitution).
>
> Ed
> wb6wsn

4277. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 19:44:06 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FAFEA8C.9050004@get.lost>
Source record: 104843
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

RHF wrote:

> Today's Definition of a Patriot seems to be:
> - - Someone Who Criticizes the USofA and Disparages Our Leaders.

If I have any say in this, a patriot is someone who, among other things, applies critical thinking to the actions his country is taking (and let's not make a mistake of equating a group of corrupt politicians with the whole country) and has a courage to make a stand against the obvious mistakes that his "Leaders" are making, especially when the "Leaders" are waging wars in the interest of a foreign power and contrary to the interests of ours. Supporting "Leaders" at all cost leads to tyranny.

> Today the Boy Scouts are Labeled as Bigots.
> - - - And some go so far to call them a HATE Group.

You tell me:

From Webster, bigot (noun): a person obstinately or intolerantly devoted to his or her own opinions and prejudices.

Prejudice (noun): 1 injury or damage resulting from some judgment or action of another in disregard of one's rights; especially : detriment to one's legal rights or claims
2 a (1) : preconceived judgment or opinion (2) : an adverse opinion or leaning formed without just grounds or before sufficient knowledge b : an instance of such judgment or opinion c : an irrational attitude of hostility directed against an individual, a group, a race, or their supposed characteristics
---
Since the Boy Scouts specifically refuse membership to atheists and homosexuals, what does that make them?

WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4278. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 20:02:24 UTC
From: Sparks <sparksw4eas@mindspring.com>
Message-ID: <3FB01902.6D37@mindspring.com>
Source record: 104845

They are usually for the reception of background/storecasting music from a broadcast FM station. Regards, Sparks

4279. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 20:13:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqvsc8bf901c56@corp.supernews.com>
Source record: 104846

Jim, it sounds like you're firmly in the camp that believes that a phase and/or magnitude shift will occur from one terminal to the other of a physically very small inductor. Your participation in the predictions will be welcome. Perhaps you can also propose an inductor I can put at the base of a short antenna that would guarantee a large phase shift which would be large and easily seen in a measurement.

Roy Lewallen, W7EL

Jim Kelley wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vqulq3svhv54c5@corp.supernews.com...
>
>>I did read what you said. You said that it wouldn't exhibit a phase
>>shift if placed at a current maximum. The current at the base of a short
>>vertical antenna is at its maximum there. So now if you're saying that
>>it *won't* exhibit a phase shift if placed at the base of a short
>>antenna, let's try this.
>
>
> Naturally, the inductance of the coil and the resistance of the circuit
> determine how much of a phase shift there will be. But the amount of
> resulting change in current magnitude will depend on where on the cosine
> curve this shift occurs. A 10 degree phase shift from 40 to 50 degrees
> generates almost an order of magnitude greater change in current that it
> does shifting from 0 to 10 degrees. Obviously, the closer the center of
> the coil is to zero (or 180) degrees, the smaller the resulting differential
> in current across the coil.
>
> 73, Jim AC6XG
>
>
>

4280. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 20:16:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vqvsibojkjela7@corp.supernews.com>
Source record: 104847

Yes, I did measure it. But how much difference in your prediction would, say, +/- 10 ohms of reactance make -- I can't guarantee my measurements any closer than that in any case. So why not make your predictions for 35 - j2 and 35 + j18, and let's see just how much difference it makes.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So, you've retracted your prediction. What's your new one, then?
>
>
> No, you misunderstood my prediction. I cannot make an accurate
> prediction until you tell us the feedpoint impedance of the
> antenna including the coil. Is it 34.6+j8 or what? You have
> told us the feedpoint impedance of the antenna without the
> coil and the impedance of the coil but we still don't have
> an accurate measurement for the feedpoint impedance of the
> antenna including the coil. Did you measure it? If not, any
> estimate is not going to be very accurate.
> --
> 73, Cecil, W5DXP
>

4281. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 20:31:05 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <9zSrb.82940$un.50081@bignews6.bellsouth.net>
Source record: 104848
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FAFEA8C.9050004@get.lost...
> ---
> Since the Boy Scouts specifically refuse membership to atheists and
> homosexuals, what does that make them?
>

It makes them an organization that has gained the trust of generations of
parents of teenaged males.

-- Stinger

4282. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 20:59:42 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311101259.3a5fdbec@posting.google.com>
Source record: 104849

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fafb3a2_2@127.0.0.1>...
> Roy Lewallen wrote:
> > I did read what you said. You said that it wouldn't exhibit a phase
> > shift if placed at a current maximum.
>
> I'm sorry, there is a misunderstanding that is my fault. When I say
> "current is the same.", I'm implying magnitude only. That's a
> convention left over from my college days and may not be a
> convention any longer. If I said anything at all about phase, I
> used the word, "phase", in my posting. So I will stop omitting
> the word, "magnitude", when I am talking about magnitude.
>
> So do a system reset on what you think I said. There is always a
> phase shift through a real-world inductor. Whether it can be
> measured accurately is another matter. When I said: "If the
> current maximum point is located in the middle of a coil, the
> current (implied magnitude) in and out of a coil will be equal.",
> I was implying current magnitude only. I didn't imply or say anything
> about phase unless I used the word, "phase" in the sentence.
>
> I also have not said anything about the phase of the currents into
> and out of your toroidal inductance except to say it replaces
> approximately 18 degrees of antenna.
>
> > The current at the base of a short
> > vertical antenna is at its maximum there. So now if you're saying that
> > it *won't* exhibit a phase shift if placed at the base of a short
> > antenna, let's try this.
>
> As you can see above, I never said anything like that.
>
> > Suppose I remount my antenna to eliminate the
> > shunting effect of the mounting, and do my measurements at 3.8 MHz as
> > before. Suppose the base input Z is, say, 35 -j380. You choose any
> > inductor value you'd like, that will best illustrate your method, and
> > tell me what output to input current ratio to expect.
>
> I am still leery about your ability to separate small phase shifts
> from noise. We need to make the inductor large enough to ensure
> the phase shift measurements are above the noise level.
>
> > I have no disagreement that a "bugcatcher" coil, or any coil of
> > physically significant size, will exhibit a phase shift and magnitude

> > change of current from one end to the other.
>
> Huh?????? I thought that was what the argument was all about. What
> triggered this whole discussion was W8JI's alleged assertion that
> a loading coil like a bugcatcher doesn't affect the current at all.
>
> > Where we disagree is that
> > you believe that a physically very small inductor will also exhibit
> > this. I don't.
>
> The effect of a very small inductor may be too small to measure in
> the presence of strong fields and noise. Ask yourself, at exactly
> what value of inductor does the phase shift completely disappear?
> +j1? +j10? +j100? +j1000? What is the crossover point from some
> phase shift to zero phase shift? Can you measure a phase shift of
> 0.1 degree at HF? Zero phase implies faster than light propagation
> through the coil.

Cecil
Is not the group straying somewhat from the initial discussion
on E ham? That discussion that started all this was with regard to a
whip antenna and the coil on it. Why has the discussion been pulled
away from the original coil to a torroid of all things ? The basic
discussion was on a inductor of length which can be considered a major
part of the antennas length. It is this situation that Yuri stated
that he measured a current difference at the inductors end, to which
Tom replied that it was probably capacitive coupling to ground, so
even Tom did not dispute the possibility of a current drop per Yuri's
measurements !
Maneuvering to to a toroid style of inductance is placing darkness
over the original statement, probably to prevent the application of
light by others. Now the playing on words is intruding again (phase)
so I suggest that in that atmosphere one should relate to a inductive
network to prevent
the accusation of a 'pure' inductance which is a whole different ball
game as conditions imposed in the solution of such a network is
certainly not the same.
Best regards and have fun.
Please do not pull into the discussion the root of minus one or all
the answers given by the application of a quadratic equation since
many will go crazy by taking them to the lab and measuring them. Grin
Art

4283. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 21:37:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb0051b_2@127.0.0.1>
Source record: 104850

Roy Lewallen wrote:
> So what's your new, more precise prediction of the output:input current
> ratio (magnitude and phase) for the system I did measure?

I don't see any way to make a precise prediction given that the
antenna doesn't exhibit the expected characteristics of a
33' vertical on 75m.

I don't see that your experiment makes a lot of difference now
that you have said that a 75m bugcatcher coil causes a current
magnitude change and a phase shift. That was the original argument.
--
73, Cecil, W5DXP

4284. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 21:43:32 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb00672_2@127.0.0.1>
Source record: 104851

Art Unwin KB9MZ wrote:
> Is not the group straying somewhat from the initial discussion
> on E ham? That discussion that started all this was with regard to a
> whip antenna and the coil on it. Why has the discussion been pulled
> away from the original coil to a torroid of all things ?

Because someone can't stand to be wrong?
--
73, Cecil, W5DXP

4285. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 22:57:21 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <lJUrb.20479$Oo4.15235@newsread1.news.atl.earthlink.net>
Source record: 104852
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

And now you will be insulted and possibly harassed. By those that know it all.

I have been a proud resident of Alabama since the mid 70s (with a detour in/out a few times). I have learned a LOT from the fine folks down this way. And what you say is true.

Dan/W4NTI

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message news:booevl$b1ob$1@news3.infoave.net...
> How is it that the same people who love to quote the "N", word to show how
> enlightened they are, figure that they have the right to denigrate
> Southerners with impunity?
>
> I suspect that with your supercilious attitude, you have to look down on
> someone. Ergo, find a group that is not protected by politically correct
> speech and stereotype them.
>
> Your sophomoric rhetoric is trite and boring, I suspect your total
> experience with 4 land has been what you have garnered from the liberal
> media via TV or movies.
>
> I do note that the most egregious violations of civil rights occur in
places
> other than 4 land...
>
> Many of us lost ancestors in the war of northern aggression, the flag is a
> source of pride to a people that resisted the imposition of unfair
tariffs,
> made it illegal to import Africans, and wanted to protect their homes. The
> Stars and Bars are a point of pride, and the strains of Dixie (written by
a
> damyankee) played on a town square warms our heart.
>
>
>
> "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> news:3FAF37E9.5030107@get.lost...
> > Stinger wrote:
> >
> > > You whined about RHF posting patriotic notes
> >

> > No, I simply felt that he clearly won the Biggest Patriot of the Year
> > contest, and I offered to start another one, in the good old-fashioned
> > beer-swillin', cousin-marryin', Confederate flag-carryin', gun-totin',
> > liberal-lynchin' way.
> >
>
>

4286. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 23:05:45 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <ZXUrb.56069$BX.33200@bignews5.bellsouth.net>
Source record: 104855
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

They are good people. I have a very good friend from Alabama. His two
favorite football teams are Alabama and whoever's playing Auburn ;^)

-- Stinger

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:lJUrb.20479$Oo4.15235@newsread1.news.atl.earthlink.net...
> And now you will be insulted and possibly harassed. By those that know
it
> all.
>
> I have been a proud resident of Alabama since the mid 70s (with a detour
> in/out a few times). I have learned a LOT from the fine folks down this
> way. And what you say is true.
>
> Dan/W4NTI
>
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:booevl$b1ob$1@news3.infoave.net...
> > How is it that the same people who love to quote the "N", word to show
how
> > enlightened they are, figure that they have the right to denigrate
> > Southerners with impunity?
> >
> > I suspect that with your supercilious attitude, you have to look down on
> > someone. Ergo, find a group that is not protected by politically correct
> > speech and stereotype them.
> >
> > Your sophomoric rhetoric is trite and boring, I suspect your total
> > experience with 4 land has been what you have garnered from the liberal
> > media via TV or movies.
> >
> > I do note that the most egregious violations of civil rights occur in
> places
> > other than 4 land...
> >
> > Many of us lost ancestors in the war of northern aggression, the flag is
a
> > source of pride to a people that resisted the imposition of unfair
> tariffs,
> > made it illegal to import Africans, and wanted to protect their homes.
The
> > Stars and Bars are a point of pride, and the strains of Dixie (written

by
> a
> > damyankee) played on a town square warms our heart.
> >
> >
> >
> > "Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> > news:3FAF37E9.5030107@get.lost...
> > > Stinger wrote:
> > >
> > > > You whined about RHF posting patriotic notes
> > >
> > > No, I simply felt that he clearly won the Biggest Patriot of the Year
> > > contest, and I offered to start another one, in the good old-fashioned
> > > beer-swillin', cousin-marryin', Confederate flag-carryin', gun-totin',
> > > liberal-lynchin' way.
> > >
> >
> >
>
>

4287. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 23:08:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bop5q1$8gi$1@titan.btinternet.com>
Source record: 104853

In some cases the fixing nuts and bolts have come loose.

My next door neighbour's TV antenna was hanging off the chimney for years with perfectly satisfactory reception.

I've never had an outside TV antenna. A length of wire hanging out of the socket on the back of the receiver always worked for me until the cotton curtains were replaced by aluminium venetian blinds.

A polarisation error of 45 degrees of a dipole results in only 3 dB smaller signal. This is not noticed in areas of good signal strength where most people live. Polarisation doesn't seem to bother mobile phone users very much either.

It is necessary only that interfering signals and echos, if there are any, are minimised. And that depends more on the direction from which waves are received.

Reg.

4288. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 23:14:32 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <ZXUrb.56070$BX.13261@bignews5.bellsouth.net>
Source record: 104854
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Wrong again, Walt.

I assume you're talking about Lord Baden-Powell, who some believe was a "repressed" homosexual.

Lord Robert Baden-Powell did not found Boy Scouts of America (or Girl Scouts), but he founded the larger scouting movement that began in England and upon which scouting programs worldwide are based.

Nice try.

-- Stinger

"Walt Davidson" <g3nyy@despammed.com> wrote in message news:6r30rvcbr3uneupjqsin8e0jeieuaa0gn5@4ax.com...
> On Mon, 10 Nov 2003 14:31:05 -0600, "Stinger"
> <contact@newsserveronly.com> wrote:
>
> >"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
> >news:3FAFEA8C.9050004@get.lost...
> >> ---
> >> Since the Boy Scouts specifically refuse membership to atheists and
> >> homosexuals, what does that make them?
> >>
> >
> >It makes them an organization that has gained the trust of generations of
> >parents of teenaged males.
>
> Strange, bearing in mind that the organization was founded by a
> homosexual who wrote a book entitled "Scouting for Boys".
>
> 73 de G3NYY
>
> --
> Walt Davidson Email: g3nyy @despammed.com

4289. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 23:38:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr08ckcsik5b26@corp.supernews.com>
Source record: 104856

So your math is good only for an ideal antenna? That's a sad state of affairs.

Ok, let's suppose I build an ideal antenna that's about 33 feet high, with a feedpoint impedance of 35 - j370 ohms at 3.8 MHz. Choose an inductor value and let me know what the output:input current ratio would be for that inductor at the base of the antenna. Assume that the inductor is physically very small. You have such a clear understanding of what's happening, it should be a simple calculation. Then I'll do my best to build the antenna and make the measurement. Or you can.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> So what's your new, more precise prediction of the output:input
>> current ratio (magnitude and phase) for the system I did measure?
>
>
> I don't see any way to make a precise prediction given that the
> antenna doesn't exhibit the expected characteristics of a
> 33' vertical on 75m.
>
> I don't see that your experiment makes a lot of difference now
> that you have said that a 75m bugcatcher coil causes a current
> magnitude change and a phase shift. That was the original argument.
> --
> 73, Cecil, W5DXP
>

4290. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-10 23:58:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr09ijmpj6ibd@corp.supernews.com>
Source record: 104857

Chuckle.

I'm continually amazed at how different our backgrounds are. Whenever I've encountered a complex system I don't understand, I try to begin with a simple system, to make sure I understand it first. Only after I know how a simple one will behave do I have a chance of understanding the more complex one. This is the method adopted by virtually all the capable engineers I've had the pleasure to work with over the years.

In contrast, complexity is embraced by people who have a need to conceal a lack of understanding. By resisting simplification and constantly pleading that the system is too complex to analyze, fundamental understanding isn't required, and one can never be shown to be wrong. If the best you can do in any case is to give vague answers and wave hands, it doesn't really make any difference whether you understand it or not -- it's impossible to tell. On the other hand, if it's necessary to actually calculate values (as I've had to do for years as a design engineer) and truly understand what's happening, there's no way I'll be able to do it for a complex system if I can't even do it for a simple one.

As for standing to be wrong, I'm willing to post my measurements and my predictions, and be wrong. So far, only Yuri has joined me.

And, Art, I'm surprised at your objecting to my bringing up the dreaded complexity of -- gasp -- phase. You should rejoice, because it gives me twice the opportunity to show just how wrong I am. If the small inductor shows a measureable phase shift from input to output, I'll be just as wrong as I'll be if it shows a magnitude change. So I've doubled the odds I'll fall on my face. At the same time, it puts Cecil at no extra risk at all, since he won't venture a prediction of either magnitude or phase, and I feel confident in my assumption that you won't, either. I'm the only one (except Yuri, who has bravely given a range of magnitude values at least) who *can* be wrong, and including phase makes it all the more likely. Surely, that should cheer you up a bit.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Art Unwin KB9MZ wrote:
>
>> Is not the group straying somewhat from the initial discussion
>> on E ham? That discussion that started all this was with regard to a
>> whip antenna and the coil on it. Why has the discussion been pulled
>> away from the original coil to a torroid of all things ?
>
>

> Because someone can't stand to be wrong?
> --
> 73, Cecil, W5DXP
>

4291. Re: Gap voyager DX antenna schematics?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:21:28 UTC
From: jgboyles@aol.com
Message-ID: <20031110192128.02435.00000107@mb-m26.aol.com>
Source record: 104858

>GAP also sells the Super "C" antenna. This thingamajig looks like a CFA
>(hoax)
>antenna in my eyes...

Well, the CFA "works", and the "C" works. Anything works to an extent. The
CFA works like any short fat vertical, and so does the Super "C". The CFA does
not work as the inventors describe, the C may.
The "C" works 20 meters thru 10 meters, and if you look at the dimensions of
the radiator and ground plane, the efficiency shouldn't be that bad. I have
not measured ,,just guessing. No worse than my 8' mobile antenna on 20-10m.
The "C" should put out a decent signal on 20-10m.
Small antennas have efficiency problems. A "C" on 20M or a CFA of comparable
size and properly matched will work ok on 20, but try them on 80m :-(.
73 Gary N4AST

4292. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:22:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb02be3_3@corp.newsgroups.com>
Source record: 104859

Roy Lewallen wrote:
> So your math is good only for an ideal antenna? That's a sad state of
> affairs.

Heck, I'll just supply you with ten dimensions and virtual photons and see just how well your math works. :-) This discussion has very little to do with math equations. The orbits of the planets got along just fine before man ever walked the earth and came up with the math to explain them. Reality rules! Here's what Einstein said:

"One thing I have learned in a long life: that all our science, measured against reality, is primitive and childlike ..."

> Ok, let's suppose I build an ideal antenna that's about 33 feet high,
> with a feedpoint impedance of 35 - j370 ohms at 3.8 MHz. Choose an
> inductor value and let me know what the output:input current ratio would
> be for that inductor at the base of the antenna. Assume that the
> inductor is physically very small.

Why? The argument is/was about bugcatcher coils which are NOT small.
Who uses a physically small toroid in his center-loaded mobile antenna?
Not that it wouldn't be an interesting experiment.

Roy, it appears to me that you are trying to win the last battle after the war is over, like the South did weeks after Lee surrendered. Please feel free to proceed with whatever mission that you are trying to complete. Whatever it is, it is a diversion from the original argument based on W8JI's alleged assertion that the current magnitude and phase doesn't change through an HF mobile antenna's loading coil. That argument has been lost.

It appeared that you jumped in and defended W8JI and called everyone who disagreed, "ignorant engineers", or something to that effect. The issue between you and me was settled when you posted that you had no argument with current magnitude and phase changes through HF mobile antenna loading coils. (Now if we can just get W8JI to agree with you.)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4293. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:23:48 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vr0b7vm38d9h1c@corp.supernews.com>
Source record: 104860

Dear Jacques (ON5MJ):
I must start with the observation that the name of the company has changed back to the original name.
On their site you will find distributors located all over the world.
I expect that you will find one close to you that takes Euros. My guess is that the CIA-HF model will be about E400 prior to the huge tax typical of Europe.
A BNC connector is to be preferred. It is a 50 ohm connector. One can have a BNC on one end of a 50 ohm cable with the other end terminated in your favorite connector with only one impedance bump. Adaptors also exist.
Note that the instrument has the capability of being read by a computer and controlled by a computer. This makes comparisons over time (or after adjustments) easy.
Note also that the instrument may be used (and usually is used) as a swept measuring instrument. One may see the entire 3.5 to 4 MHz band while adjusting an antenna with updates about every 2 seconds.
As is always the case: one should use the tool that is appropriate for the task. Let us all know what you end up doing. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

"ON5MJ" <on5mj_no_more _spam_in_stock_sorry_@skynet.be> wrote in message news:3faec848$0$32182$ba620e4c@reader3.news.skynet.be...
> To J. McLaughlin
>
> Thank you for your reply,
>
> I have seen this analyser already on the web but it seems that their web
> site doens't display the prices. On the other hand I think the connector is
> a BNC type, which is not usual at HF.
>
> 73 de Jacques - ON5MJ

4294. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:31:46 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <H76dnb4GTpdhsC2iRVn-hg@comcast.com>
Source record: 104861

Many, if not all, FM broadcast stations in the US transmit both a vertically and horizontally polarized signal. So, rotating the antenna 45 degrees is not giving up anything. You also see other fixed direction VHF antennas on businesses, that have nothing to do with broadcasting.

Tam/WB2TT
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bop5q1$8gi$1@titan.btinternet.com...

>
> A polarisation error of 45 degrees of a dipole results in only 3 dB smaller
> signal. This is not noticed in areas of good signal strength where most
> people live. Polarisation doesn't seem to bother mobile phone users very
> much either.
>
> It is necessary only that interfering signals and echos, if there are any,
> are minimised. And that depends more on the direction from which waves are
> received.
> ----
> Reg.
>
>

4295. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:39:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb02fdf_3@corp.newsgroups.com>
Source record: 104862

Roy Lewallen wrote:
> As for standing to be wrong, I'm willing to post my measurements and my
> predictions, and be wrong. So far, only Yuri has joined me.

You asked me to suggest an antenna system used on 10 MHz that would
demonstrate the current decrease and phase shift. I did, more than
once, and have seen zero responses from you about it. In fact, you
implied that the other side was wrong when you said you had no problem
with decreasing current and phase shifts through the average HF mobile
antenna coil. That settled the entire argument between you and me. There
is nothing left for me to disagree with you about except maybe that zero
delay through a real-world physically small toroidal coil.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4296. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:42:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb03090_3@corp.newsgroups.com>
Source record: 104863

Tarmo Tammaru wrote:
> Many, if not all, FM broadcast stations in the US transmit both a vertically
> and horizontally polarized signal. So, rotating the antenna 45 degrees is
> not giving up anything.

It's giving up 3 dB. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4297. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:43:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bopbb1eju1@hercules.btinternet.com>
Source record: 104864
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

I am just a curious foreigner, ie., not a USA citizen.

I've just had a quick speed-read down this thread.

Are you all about to start another civil war?

These things have a habit of spreading.

4298. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:52:38 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <qpWrb.20674$Oo4.7685@newsread1.news.atl.earthlink.net>
Source record: 104865
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

No we are not. You see 'Reg' what worldwide folks don't understand about
the USA is that inbetween wars we fight with each other.

Dan/W4NTI

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bopbb1eju1@hercules.btinternet.com...
> I am just a curious foreigner, ie., not a USA citizen.
>
> I've just had a quick speed-read down this thread.
>
> Are you all about to start another civil war?
>
> These things have a habit of spreading.
>
>

4299. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 00:58:20 UTC
From: Gene Storey <nospam@cox.net>
Message-ID: <vvWrb.318$6p6.61@okepread03>
Source record: 104866
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Nope. Just the ignorant learning stuff they should have mastered at
age 10. I'm amazed at some of the invented terms for a Democracy,
but then I'm amazed that 14% of American adults can't read at the
4th grade level.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
> I am just a curious foreigner, ie., not a USA citizen.
>
> I've just had a quick speed-read down this thread.
>
> Are you all about to start another civil war?
>
> These things have a habit of spreading.

4300. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 01:10:15 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB036FD.5060100@get.lost>
Source record: 104867
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:

>>Since the Boy Scouts specifically refuse membership to atheists and
>>homosexuals, what does that make them?
>
> It makes them an organization that has gained the trust of generations of
> parents of teenaged males.

Evading the straightforward question duly noted. It is interesting,
though, that all those parents screaming against admitting fairies into
the Boy Scouts don't think twice before sending their boys to the
Pedof... pardon me, Catholic church. Makes you think...

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4301. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 01:11:51 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <JFWrb.59308$SV2.10@bignews3.bellsouth.net>
Source record: 104868
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

All too true.

And if they're at least 18, they can vote.

-- Stinger
"Gene Storey" <nospam@cox.net> wrote in message
news:vvWrb.318$6p6.61@okepread03...
> Nope. Just the ignorant learning stuff they should have mastered at
> age 10. I'm amazed at some of the invented terms for a Democracy,
> but then I'm amazed that 14% of American adults can't read at the
> 4th grade level.
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
> > I am just a curious foreigner, ie., not a USA citizen.
> >
> > I've just had a quick speed-read down this thread.
> >
> > Are you all about to start another civil war?
> >
> > These things have a habit of spreading.
>
>

4302. Re: Dealing with off topic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 01:26:13 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3faeec3c_1@newsfeed.slurp.net>
Source record: 104783

I wouldn't even bother downloading the posting. That way, you're not even tempted to respond.

- KI6PR

"Rick " wrote
> Legitimate users of this newsgroup surely have noticed the
> proliferation of off topic postings (Racist, etc.). I looked at
> headers and most are crossposted to 5+ newsgroups. This stuff runs
> rampant in r.r.a.misc. If some of us posted replies (kept the thread
> going real good) but edited the posting to ONLY post to r.r.a.misc
> then later followups (made by people who have no idea where their
> replies are crossposted to) will only go to that newsgroup, and they
> might go away from here.
> Of course the real solution is for NO ONE to post a reply in this
> antenna newsgroup to an off topic posting, but the temptation is
> apparently too much for some.
> I've started it today. My reply posting can be seen only in
> r.r.a.misc.
> Does this make any sense? BTW - my hotmail account is real but
> worthless, so I don't care what flame or spam I get to it.
> Rick K2XT

4303. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 01:34:55 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3faeee4e_2@newsfeed.slurp.net>
Source record: 104786

Troy, for 10/15 meters, it's tough to beat a directed array (i.e., a beam). To that end, you'll get the most bang for your buck from a quad. Period.

If you're looking at a G5RV, look instead at a Skelton Cone. With your current transmitter/tuner combo, it will go from 10 through 80 meters, and in fact, naturally resonates somewhere in the 10/12 meter area. I haven't run any models on it myself, but others have told me that it actually shows gain on 40 and 75/80 meters. I don't have any e-files on it, but I can snaily a drawing to you if you can't find any other info on it.

Of course, these are just my own opinions, and are based solely on emperical performance observations. Your mileage may vary...

73,
Mike KI6PR
El Rancho R.F., CA

"Troy - VK2HXY" wrote
> Hi there ladies and gents. I have a question that has most likely come up
> here before, and I do apologise if this is visiting old ground.
>
> I am a novice limited license holder in Australia and pretty soon I will
> have access to the 10-15 and 80M bands. I would like to know what you
> consider as being the best all round antenna for my purpose? I have plenty
> of room to mount an 80M dipole antenna, although height is a problem. I
can
> go up no more than about 50 feet.
>
> I also have a mast and rotator, so a triband yagi is also on the cards.
>
> Just looking for decent ideas here guy's. I know the question is fairly
> open ended, but I would like to consider all my options from those who
have
> all the best knowledge of what works and what doesn't. To wire or not to
> wire? To beam or not to beam? To G5RV??????
>
> I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
>
> Thanks very much for your time and I really appreciate your response to my
> questions.
>
> Warmest regards
>
> 73 de VK2HXY
> Troy

>
>

4304. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 01:36:22 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <H0Xrb.59488$SV2.50177@bignews3.bellsouth.net>
Source record: 104769
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

How is that an evasion? It's the truth (and thank you for helping to illustrate my point with the Roman Catholic Church).

The Boy Scouts organization have made their wholesome policies perfectly clear and have defended them sucessfully in court.

However, the Roman Catholic Church chose to ignore their own policies, cover up transgressions, and betray many of their members (and have been very, very unsuccessful in court). If they had been true to their faith, they would never have had any trouble.

By the way, Zoran -- I'm sorry for the harsh words earlier -- I was pretty pissed off with the way you trashed RHF for expressing his love for his country. We now live in a country where in some neighborhoods displaying the American flag is considered a vulgar irritation to others. I saw your sarcasm at his post as more of the same wrongheaded thinking.

Whatcha say we talk about radios?

-- Stinger

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FB036FD.5060100@get.lost...
> Stinger wrote:
>
> >>Since the Boy Scouts specifically refuse membership to atheists and
> >>homosexuals, what does that make them?
> >
> > It makes them an organization that has gained the trust of generations
of
> > parents of teenaged males.
>
> Evading the straightforward question duly noted. It is interesting,
> though, that all those parents screaming against admitting fairies into
> the Boy Scouts don't think twice before sending their boys to the
> Pedof... pardon me, Catholic church. Makes you think...
>
>
>
>
> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

4305. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:01:07 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <DpXrb.21455$KN4.1346279@news1.news.adelphia.net>
Source record: 104770

Roger Adam wrote:

<a bunch of good info snipped>

Thanks for all that Roger.

> The icing on the cake would be if we establish contact via the loops on 20
> metres!!

That would be great, Roger! I'm in the middle of Pennsylvania, and I take it you're in Great Britain. The path should be good in my afternoon/your evening.

I'm taking Reg's suggestion and skipping the Farady loop, and going to plain wire. My coax just keeps getting shorter... and shorter, so I'll switch before I have to buy new!

- Mike KB3EIA -

4306. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:17:37 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <99h0rvoinrmo3m66mjromi0okm2gdsdtev@4ax.com>
Source record: 104915

On Mon, 10 Nov 2003 23:24:50 +1100, "Troy - VK2HXY"
<NOSPAMvk2hxy@hotmail.com> wrote:

>Thanks for the reply Dave. Well my intended purpose is for DX, although
>Ragchew is definitely a bonus. I have a 80M (inverted V) about 10 foot off
>the ground that I am currently using for receive only and am getting great
>receive results from VK6,5,4 and 3, all coming in when the band is open here
>with 40 over 9 signal reports, not bad for such a noisy band. So if I can
>get that up to 50 feet that should take care of 80 for the time being I
>guess. I guess my questions were intended to get some discussion going for
>people to offer up suggestions (for and against) for my intended band usage.
>I have heard that many use the G5RV with a tuner with good results, although
>there may be better bang for the buck with other wire type antennas, or
>conversely, am I better running a vertical? You see my quandary?

If you simply feed your 80m dipole entirely with 450-ohm ladderline,
and run it through your 989c tuner, it should tune the higher bands,
as well, without any great feedline loss. Check your tuner manual for
feedline lengths to avoid.

You might see how well that works for you, and then if it's not the
best on the dx bands, go for the beam.

Bob
k5qwg

>
>Are there any better brands of antenna for 10-15-20M in a tri-band that I
>should be looking for? Or rather the question should be, one's I should
>steer clear of?
>
>Thanks again for the advice, that's what the hobby is all about, sharing the
>knowledge...
>
>73
>
>Troy
>VK2HXY
>Sydney, Australia
>
>
>
>
>"KC1DI" <elbc2@gwi.net> wrote in message
>news:istuqv8qbcacm7kdk1rnobtmbdv9nn9m10@4ax.com...
>> On Mon, 10 Nov 2003 22:25:42 +1100, "Troy - VK2HXY"

>> <NOSPAMvk2hxy@hotmail.com> wrote:
>>
>> >Hi there ladies and gents. I have a question that has most likely come
>up
>> >here before, and I do apologise if this is visiting old ground.
>> >
>> >I am a novice limited license holder in Australia and pretty soon I will
>> >have access to the 10-15 and 80M bands. I would like to know what you
>> >consider as being the best all round antenna for my purpose? I have
>plenty
>> >of room to mount an 80M dipole antenna, although height is a problem. I
>can
>> >go up no more than about 50 feet.
>> >
>> >I also have a mast and rotator, so a triband yagi is also on the cards.
>> >
>> >Just looking for decent ideas here guy's. I know the question is fairly
>> >open ended, but I would like to consider all my options from those who
>have
>> >all the best knowledge of what works and what doesn't. To wire or not to
>> >wire? To beam or not to beam? To G5RV??????
>> >
>> >I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
>> >
>> >Thanks very much for your time and I really appreciate your response to
>my
>> >questions.
>> >
>> >Warmest regards
>> >
>> >73 de VK2HXY
>> >Troy
>> >
>>
>>
>> Hi Troy,
>>
>> As you said in your post you will get all kinds of answers. And a lot
>> will depend upon factors that you do not mention.. I.E. what's your
>> purpose, DX, RagChew Local or distance ??
>>
>> The G5RV does a decent job on 80m but is not the best choice for 10
>> and 15m.. on those too bands the beam-- yagi or quad would be best if
>> you can get the up at least 25 feet. Dipole is a good choice on
>> 80meters even thought 50 feet is not really high on that band. if you
>> looking for DX on 80 I would put in a vertical with good ground
>> system as well.
>>
>> Just some suggestions,
>> 73 Dave kc1di

>>
>

4307. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:41:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311101841.a08e990@posting.google.com>
Source record: 104771

Roy Lewallen <w7el@eznec.com> wrote in message news:<vr09ijmpj6ibd@corp.supernews.com>...
> Chuckle.
>
> I'm continually amazed at how different our backgrounds are. Whenever
> I've encountered a complex system I don't understand, I try to begin
> with a simple system, to make sure I understand it first. Only after I
> know how a simple one will behave do I have a chance of understanding
> the more complex one. This is the method adopted by virtually all the
> capable engineers I've had the pleasure to work with over the years.
>
> In contrast, complexity is embraced by people who have a need to conceal
> a lack of understanding. By resisting simplification and constantly
> pleading that the system is too complex to analyze, fundamental
> understanding isn't required, and one can never be shown to be wrong. If
> the best you can do in any case is to give vague answers and wave hands,
> it doesn't really make any difference whether you understand it or not
> -- it's impossible to tell. On the other hand, if it's necessary to
> actually calculate values (as I've had to do for years as a design
> engineer) and truly understand what's happening, there's no way I'll be
> able to do it for a complex system if I can't even do it for a simple one.
>
> As for standing to be wrong, I'm willing to post my measurements and my
> predictions, and be wrong. So far, only Yuri has joined me.
>
> And, Art, I'm surprised at your objecting to my bringing up the dreaded
> complexity of -- gasp -- phase. You should rejoice, because it gives me
> twice the opportunity to show just how wrong I am.

From my point of view you are rarely wrong and should be admired on
how knoweledgable you have become despite insurmountable hardships
that
make mine a a Sunday morning walk despite the war.
I agreed with your posting regarding an inductance but then realised
that Yuri was talking about what is really a network and thus he could
take measurements.
Now I am hoping that Yuri will get a true explanation of what he has
observed
which in the real world is a circuit containing capacitance,resistance
and inductance and where he is unable to separate the parts as you are
doing on
paper.
From an engineering stand point I am not willing to discard
fundamentals as you would suggest as their use provides solutions even
to one such as I who wasted my younger year by not going to school. My

point is that you are playing with Yuri because he used the term
inductance instead of a circuit which would then
prevented your present tack.
For some reason you take offense at that suggestion given in the
starting
post nd I really do not know why until you come up with an explosive
point..
Regards
Art

If the small inductor
> shows a measureable phase shift from input to output, I'll be just as
> wrong as I'll be if it shows a magnitude change. So I've doubled the
> odds I'll fall on my face. At the same time, it puts Cecil at no extra
> risk at all, since he won't venture a prediction of either magnitude or
> phase, and I feel confident in my assumption that you won't, either. I'm
> the only one (except Yuri, who has bravely given a range of magnitude
> values at least) who *can* be wrong, and including phase makes it all
> the more likely. Surely, that should cheer you up a bit.
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
> > Art Unwin KB9MZ wrote:
> >
> >> Is not the group straying somewhat from the initial discussion
> >> on E ham? That discussion that started all this was with regard to a
> >> whip antenna and the coil on it. Why has the discussion been pulled
> >> away from the original coil to a torroid of all things ?
> >
> >
> > Because someone can't stand to be wrong?
> > --
> > 73, Cecil, W5DXP
> >

4308. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:42:43 UTC
From: Roger <NoEmail@AnonlymousRemailer.co>
Message-ID: <bopib7hbu0@pita.alt.net>
Source record: 104772
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FAFEA8C.9050004@get.lost...
RHF wrote:

> Today's Definition of a Patriot seems to be:
> - - Someone Who Criticizes the USofA and Disparages Our Leaders.

If I have any say in this, a patriot is someone who, among other things, applies critical thinking to the actions his country is taking (and let's not make a mistake of equating a group of corrupt politicians with the whole country) and has a courage to make a stand against the obvious mistakes that his "Leaders" are making, especially when the "Leaders" are waging wars in the interest of a foreign power and contrary to the interests of ours. Supporting "Leaders" at all cost leads to tyranny.

> Today the Boy Scouts are Labeled as Bigots.
> - - - And some go so far to call them a HATE Group.

You tell me:

From Webster, bigot (noun): a person obstinately or intolerantly devoted to his or her own opinions and prejudices.

Prejudice (noun): 1 injury or damage resulting from some judgment or action of another in disregard of one's rights; especially : detriment to one's legal rights or claims
2 a (1) : preconceived judgment or opinion (2) : an adverse opinion or leaning formed without just grounds or before sufficient knowledge b : an instance of such judgment or opinion c : an irrational attitude of hostility directed against an individual, a group, a race, or their supposed characteristics
---
Since the Boy Scouts specifically refuse membership to atheists and homosexuals, what does that make them?

WA7AA

Answer: Free to make their own choices of association.

4309. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:45:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb04d75_7@corp.newsgroups.com>
Source record: 104773
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Gene Storey wrote:
> I'm amazed at some of the invented terms for a Democracy,

Study the Athens system that voted to require Socrates to
drink Hemlock and die. That's pure democracy in action.
If we democratically voted for you to drink Hemlock,
would you do it? I didn't think you believed in democracy.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4310. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:52:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bopit9$bhqv$1@news3.infoave.net>
Source record: 104774
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Reading comprehension challenged?
I will break it down for you.

See Dick with the Confederate flag.

Jane said "It was illegal to import slaves under the constitution of the confederacy."

Spot said " The war was about unfair tariffs against the South and aggression by the Northern invaders."

Dick said "Even blacks fought on the Southern side to protect their homes."

Jane said "You mean all those people that said it was about slavery are wrong?"

Spot said "You got it Jane"

I forgot you were educated in the land of fruits and nuts and humbly apologize for writing beyond your grade level.

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message news:3FAFE6BC.700@get.lost...

> > Many of us lost ancestors in the war of northern aggression, the flag is a
> > source of pride to a people that resisted the imposition of unfair tariffs,
> > made it illegal to import Africans, and wanted to protect their homes. The
> > Stars and Bars are a point of pride, and the strains of Dixie (written by a
> > damyankee) played on a town square warms our heart.
>
> Wait, I'm confused... Are you complaining that you can't legally import
> slaves anymore or that the aggressors' flag is a point of pride?
>
>
> WA7AA
>
>
> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

4311. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 02:55:09 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bopj2s$bi49$1@news3.infoave.net>
Source record: 104775
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Reg, we haven't finished the last one. The South shall rise again, and this time we have Cape Canaveral...:>)

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bopbb1eju1@hercules.btinternet.com...
> I am just a curious foreigner, ie., not a USA citizen.
>
> I've just had a quick speed-read down this thread.
>
> Are you all about to start another civil war?
>
> These things have a habit of spreading.
>
>

4312. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 03:01:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bopjdoals1@sparta.btinternet.com>
Source record: 104776

> Many, if not all, FM broadcast stations in the US transmit both a
vertically
> and horizontally polarized signal. So, rotating the antenna 45 degrees is
> not giving up anything.

==========

Simultaneous transmission of vertical and and horizontal polarised signals from a single antenna system is impossible without upsetting the desired radiation coverage pattern.

What you mean is your clever US broadcasting engineers have designed antennas which radiate "Circularly Polarised" signals.

As Cecil says, nobody gains anything power-wise. For the same transmitter radiated power everybody's signals are 3 dB down (half-power) relative to simple linear polarision when both transmitting and receiving antennas have the same polarisation.

The advantage of circular polarisation is that it doesn't matter which polarisation your antenna is orientated because, in practice, when erecting it, the polarisation received by your antenna is usually a matter of guesswork anyway.

Only with relatively-rare, direct line-of-sight broadcasting propagation is there any certainty in the polarisation of received signals.

Reg.

4313. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 04:39:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb06810$1_8@corp.newsgroups.com>
Source record: 104777

Roy Lewallen wrote:
> If the small inductor
> shows a measureable phase shift from input to output, I'll be just as
> wrong as I'll be if it shows a magnitude change.

And if the small inductor shows a phase shift too small to be
measured, you will have invented faster than light transmission
because inches per nanosecond is easy to measure nowadays. Heck,
my old bench scope will display two nanoseconds per division.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4314. Re: Looking for a Screwdriver-type Hf antenna at an affordable price??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 05:59:33 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <bU_rb.86941$un.26300@bignews6.bellsouth.net>
Source record: 104778

"'Doc" <w5lz@cwis.net> wrote in message news:3FAF1638.BAE93C88@cwis.net...
>
>
> Jerry,
> Read the post 4 up from here. Think you can
> help him out?
> 'Doc

Well,

I build them myself. I would be reluctant to give out any
info other than what was provided by "Mikey". Mine are
not quite like the DK3. And there is the shipping and
exchange rate.............

Jerry
K4KWH

4315. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 06:03:33 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB07BBB.8060405@get.lost>
Source record: 104779
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Roger wrote:

>> Since the Boy Scouts specifically refuse membership to atheists and
>> homosexuals, what does that make them?
>
> Answer: Free to make their own choices of association.

The issue being discussed is not whether they're free to make their choices, but whether excluding people based on religion and sexual orientation makes them bigots. Pay attention.

--

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4316. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 06:26:26 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB08119.40303@get.lost>
Source record: 104780
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

w4jle wrote:
> Reading comprehension challenged?

No, it's just that I don't speak Yokel very well.

> I will break it down for you.
> See Dick with the Confederate flag.
> Jane said "It was illegal to import slaves under the constitution of the
> confederacy."
> Spot said " The war was about unfair tariffs against the South and
> aggression by the Northern invaders."
> Dick said "Even blacks fought on the Southern side to protect their homes."
> Jane said "You mean all those people that said it was about slavery are
> wrong?"
> Spot said "You got it Jane"

Seems to me you have problems reading. I never said the US civil war was about freeing slaves - we'll put that excuse in the same bin from which you pulled out the "blacks fought on the Southern side to protect their homes" bullshit. Yes, that same bin that is the source of "imminent danger", "nuclear weapons program", "terrorist connection", etc.

> I forgot you were educated in the land of fruits and nuts and humbly
> apologize for writing beyond your grade level.

Wherever I was educated really makes no difference to what you wrote in your previous post:

>>>Many of us lost ancestors in the war of northern aggression, the flag is
>>>a source of pride to a people that resisted the imposition of unfair
>>>tariffs, made it illegal to import Africans, and wanted to protect their homes.
>>>The Stars and Bars are a point of pride, and the strains of Dixie (written
>>>by a damyankee) played on a town square warms our heart.

So you see my dilemma: on one hand you're stating that the North was the aggressor against the innocent Southerners who just wanted to protect their homes, and on the other you're supporting the exact same war White House is waging in Iraq. Not to mention that defending a regime that was based on slavery in this day and age is really, oh how shall I put this... idiotic. So there's my position - I don't have a problem with Southerners, only with the ones still fighting for their precious Dixie that was built on human misery. Sorry - it must be my education.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4317. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Brabham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 06:55:59 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <borq9k$1gm7n3$5@ID-189073.news.uni-berlin.de>
Source record: 104720
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Jackie Ward" <jackiew1@37.com> wrote in message
news:12329882.0311090859.57803dbf@posting.google.com...
> Another moron to add to the pile.
>
> How can you support Bush when he and the bin Laden family had oil
> business dealings going back to the 70's?

Really.... proof of this?

>
> Why did we give Osama bin Laden millions of dollars to fight the
> Russians in Afganistan?

Why have we armed others that are now our enemies?? Unless I am wrong,
wasn't actually Iraq a friend of the USA at one point? Isn't some of the
stuff they are using now stuff we sold them?

>
> Why was Saddam Hussein awarded the keys to the City of Detroit in
> 1980?

Who the hell else would want them? :) (Hell, it seems half of Detroit is
Chaldean (sp.?) anyways.)

>
> Why did they blow up the World Trade Centre when there was 1000 other
> buildings in hundreds of other countries to choose from?
>

Dunno, but it might have something to do with all of the financial related
companies there.......

--
Ryan KC8PMX

Some people are like Slinkies . . . not really good for anything, but you
still can't help but smile when you see one tumble down the stairs.

4318. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 07:00:21 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB0890A.4040406@get.lost>
Source record: 104781
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Stinger wrote:
> How is that an evasion? It's the truth (and thank you for helping to
> illustrate my point with the Roman Catholic Church).

Well, by substituting an irrelevant answer to a clear question. For example: John X murdered 20 women - what does that make him? The red herring answer is: a perfect father because he raised five great children.

> The Boy Scouts organization have made their wholesome policies perfectly
> clear and have defended them sucessfully in court.

The issue is very gray and the only reason they've been successful (5 to 4 in the Supreme Court, btw) is that atheists and homosexuals in this country (the only one among the Western nations, btw.) are still considered abnormal by the Christian majority. Had they excluded blacks or Jews, for example, no "private organization" status would help them in the outrage they would raise. Read up on the "public accommodation" issue in this case and realize that the Boy Scouts are indirectly funded by the public.

> By the way, Zoran -- I'm sorry for the harsh words earlier -- I was pretty
> pissed off with the way you trashed RHF for expressing his love for his
> country. We now live in a country where in some neighborhoods displaying
> the American flag is considered a vulgar irritation to others. I saw your
> sarcasm at his post as more of the same wrongheaded thinking.

There's no need to apologize - it's a free country and sometimes some of us learn something new in the process. My primary reason for getting involved in this pathetic thread is that I hate hypocrisy and inconsistency. So when the political discussion inevitably turns into the bashing of liberals, ACLU, etc. for their alleged anti-Americanism, I can't keep quiet. In my opinion, the average ACLU volunteer is a bigger American Patriotï¿½ that ten thousand Limbaugh wannabes. Also, as a sort of an impartial observer, I can say that the biggest problem of the US partisan voter is that he sees the other party as a devil incarnate, and his own as an infallible moral beacon. Hence, this entire thread.

> Whatcha say we talk about radios?

Yeah, but the dx conditions suck lately.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4319. Re: Magloop woes

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 11:49:38 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <v14sb.2609$Tc2.19634@newsfep4-glfd.server.ntli.net>
Source record: 104782

Mike,

I sure you're right in thinking that the coupling system is the cause of your problems.

As far as the ability to "null" out any unwanted sigs, I have fitted a Yaesu rotator (which when bought was fully rusted up inside!) to the vertical drainpipe support of the loop, but haven't yet tried it out. Thanks to TAM WB2TT for help on the Yaesu.

Friends have said why don't I position the loop horizontal and do away with the rotator. I may post a request asking for REG's advice on that!

I was working on the principal that with the long wire being horizontal, then the loop should be vertical to give me a different polorisation.

However, after looking through the books and 'net, It appears that the initial polorisation becomes changed within a short distance of being launched and that there is little point in spending a lot of time on this aspect.

As far as a possible future QSO is concerned, I'll be monitoring around 14.325MHz from 20.00hrs UTC most evenings.

That will most probably put you under pressure to get the loop up and running!

By the way, my QTH is Surrey, 10 miles south of London.

Good luck,

Roger G7JAQ

4320. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 12:45:13 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <rel1rv8kqse9984dncmhg3ti09tqfrv4v2@4ax.com>
Source record: 104784

On Mon, 10 Nov 2003 00:50:55 -0800, Roy Lewallen <w7el@eznec.com>
wrote:

>Ok. So far, we have your calculation that the output current should be
>5% smaller, and 18 degrees shifted in phase (lagging, I presume) from
>the input; and Cecil's, that the output current should equal the
>current, both in phase and magnitude. I don't know if Richard is going
>to do the calculation or not, so I'll wait a little longer. Anyone else
>like to hazard a prediction?
>
>Roy Lewallen, W7EL
>
(1) Input current = output current
(2) No phase shift.

If you model the circuit using the lumped values for the antenna R and
jX components it's easy to see this.

Anyone not believing this can try modeling the base inductor as:
O----[0.3 ohms R']--[+j192 ohms]---[0.3 ohms R'']----0
Put current through it using your favorite SPICE simulator and compare
the current through the R' and the R''. The two plots coincide.

Jack K8ZOA

4321. Re: Racist Amateur Radio Operators Daniel L. Jeswald (W4NTI) & Charles D. Braham (N5PVL)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 13:16:13 UTC
From: Mike O'sullivan <mike.osullivan3@btopenworld.com>
Message-ID: <boqnes$g4l$1@hercules.btinternet.com>
Source record: 104785
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3faf21c0_1@corp.newsgroups.com...
> Gene Storey wrote:
> > I personally think that only those who are 18 and above, and are not on
> > Social Security should be allowed to vote.
>
> Your posting is irrelevant. If *any* citizen is prohibited from voting
> on each and every law, it is not a pure democracy. You are prohibited
> from voting on each and every law.

Correct. In a republic, voters choose a government to take decisions for
them.

4322. Re: 100 w, Automatic Ladder line HF tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 14:09:30 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FB0EF2E.C4DE2EE4@uwe.ac.uk>
Source record: 104787

> Tom - KS5x wrote:
>
> Looking for info, experience with a 100 watt automatic tuner for twin lead (ladder line) to an 80 meter dipole. Would like to work all HF bands, if possible without manually tuning.
>
> Tom ks5x@cox.net

I use an SGC 230 for this sort of thing. Antenna is 105' of wire center fed with about 30' of 600 ohm home brew line. The SGC is mounted on the gable end of the house. One side of the ladder to the 'hot' connection, the other to the ground connection. The SGC is 'floated' by a choke balun in the feed. The feed to the SGC is RG213 and it and the 4 core control cable are wound into choke baluns immediately below the SGC. I used 11 turns about 12" in diameter. This seems to prevent any RF coming back down the control cable and the outside of the coax. I've had no problems with RF in the shack. It tunes all the amateur bands 160 - 10. Operating convenience is a revelation after using a manual 'T' match tuner for some time. It only needs a whiff of RF to tune. My rig is an FT-920AF. I made a home-brew control box (Smartlock) for the 230 - circuit in the manual save $60.

http://www.sgcworld.com/products/230/sg230.html

HTH

Andy, M1EBV

4323. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 16:07:30 UTC
From: richardharrison@webtv.net
Message-ID: <1117-3FB10942-571@storefull-2318.public.lawson.webtv.net>
Source record: 104788

Roy, W7EL wrote:
"---feedpoint impedance of 35-j370 at 3.8 MHz. Choose an inductor value and let me know what the output : input current ratio would be for that inductor at the base of the antenna. Assume that the inductor is physically small."

I`ll assume the inductor has no resistance, loss or radiation.

No loss or radiation means the inductance only delays current in the antenna circuit by the phase angle impedance makes with resistance in the circuit.

We need 370 ohms of inductive reactance to counteract the capacitive reactance of the too short antenna. That calculates to 10.926 microhenry.

The current into the resonant antenna circuit is E/R = E/35

The current into the too short antenna alone is E/Z = E/ 371.65

The output : input ratio of the inductor is very nearly one because the coil is lossless and its size is insignificant in terms of wavelength.

Best regards, Richard Harrison, KB5WZI

4324. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 16:28:30 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <wbidnamqQ9elkyyiRVn-hQ@comcast.com>
Source record: 104789

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bopjdoals1@sparta.btinternet.com...
> > Many, if not all, FM broadcast stations in the US transmit both a
> vertically
> > and horizontally polarized signal. So, rotating the antenna 45 degrees
is
> > not giving up anything.
>
> ================================
>
> Simultaneous transmission of vertical and and horizontal polarised signals
> from a single antenna system is impossible without upsetting the desired
> radiation coverage pattern.
>
> What you mean is your clever US broadcasting engineers have designed
> antennas which radiate "Circularly Polarised" signals.
>

If you go to a broadcaster's web site, they will say X KW horizontal, and X
KW vertical, with no reference to right or left hand polarization. I take
that to mean cross polarized, rather than circular. Obviously, the reason
for the vertical component is car radios. As for messing up the pattern, I
would think that in the majority of cases they want equal propagation in all
directions

Tam/WB2TT
> As Cecil says, nobody gains anything power-wise. For the same transmitter
> radiated power everybody's signals are 3 dB down (half-power) relative to
> simple linear polarision when both transmitting and receiving antennas
have
> the same polarisation.
>
> The advantage of circular polarisation is that it doesn't matter which
> polarisation your antenna is orientated because, in practice, when
erecting
> it, the polarisation received by your antenna is usually a matter of
> guesswork anyway.
>
> Only with relatively-rare, direct line-of-sight broadcasting propagation
is
> there any certainty in the polarisation of received signals.
> ----
> Reg.
>
>

4325. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 16:31:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb10f0a_6@corp.newsgroups.com>
Source record: 104790

Jack Smith wrote:
> (1) Input current = output current
> (2) No phase shift.
>
> If you model the circuit using the lumped values for the antenna R and
> jX components it's easy to see this.
>
> Anyone not believing this can try modeling the base inductor as:
> O----[0.3 ohms R']--[+j192 ohms]---[0.3 ohms R'']----0
> Put current through it using your favorite SPICE simulator and compare
> the current through the R' and the R''. The two plots coincide.

We know what the model says. The original argument was over whether a
75m bugcatcher coil, containing distributed resistance, inductance, and
capacitance, actually possesses those same characteristics in reality.
A statement by a ham over on eham.net triggered the argument:

"If you look at HOW an inductor works, the current flowing in one terminal
ALWAYS equals the current flowing out the other terminal. "

That is how a lumped inductor works in a model. That is not how a distributed
inductor works in reality.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4326. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 16:50:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1138e_6@corp.newsgroups.com>
Source record: 104791

Roy Lewallen wrote:
> And, Art, I'm surprised at your objecting to my bringing up the dreaded
> complexity of -- gasp -- phase.

Here's a bench experiment that could be done concerning phase.
Create artificial standing waves with two signal generators equipped
with circulator loads (SGCL).

I1 I2
SGCL1-->--coil--<--SGCL2

Vary the phase of one of the signal generators while monitoring the
total current at each end of the coil. The equation for the total
current will be similar to the equation for total current in a
standing wave antenna, i.e. the phasor difference of I1 - I2. The
delay through the coil takes the two currents in opposite phase
directions.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4327. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 17:27:36 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bor5jv$pa8$1@news.service.uci.edu>
Source record: 104792

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vqvsc8bf901c56@corp.supernews.com...
> Jim, it sounds like you're firmly in the camp that believes that a phase
> and/or magnitude shift will occur from one terminal to the other of a
> physically very small inductor.

Physically very small.....what is that? Is it an inductor that behaves
as if it has no physical dimensions? Does it comprise a coil of wire that
has zero length?

> Perhaps you can also propose an inductor I can put at
> the base of a short antenna that would guarantee a large phase shift
> which would be large and easily seen in a measurement.

How about if I just refer you to one of the many manufacturers of such
things?

73, Jim AC6XG

> Roy Lewallen, W7EL
>
> Jim Kelley wrote:
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:vqulq3svhv54c5@corp.supernews.com...
> >
> >>I did read what you said. You said that it wouldn't exhibit a phase
> >>shift if placed at a current maximum. The current at the base of a short
> >>vertical antenna is at its maximum there. So now if you're saying that
> >>it *won't* exhibit a phase shift if placed at the base of a short
> >>antenna, let's try this.
> >
> >
> > Naturally, the inductance of the coil and the resistance of the circuit
> > determine how much of a phase shift there will be. But the amount of
> > resulting change in current magnitude will depend on where on the cosine
> > curve this shift occurs. A 10 degree phase shift from 40 to 50 degrees
> > generates almost an order of magnitude greater change in current that it
> > does shifting from 0 to 10 degrees. Obviously, the closer the center
of
> > the coil is to zero (or 180) degrees, the smaller the resulting
differential
> > in current across the coil.
> >
> > 73, Jim AC6XG
> >
> >

> >
>

4328. Where to find microwave (10-25 GHz) phased array help?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 17:29:19 UTC
From: Scott Kelley <scottk@iccom.com>
Message-ID: <3_OdnZhB5_bkgSyiRVn-tA@centurytel.net>
Source record: 104793

Looking for someone *experienced* in the design of phased array antennas at or above 10-24 GHz. Need to consult on the potential for using a phased array antenna in place of a horn antenna at 10.5 and/or 24 GHz.

Does anyone here have that experience, or can anybody refer me to someone?

Thanks,
Scott Kelley

PS I will try to check the newsgroup for replies, but if you could also respond directly to my email, I would appreciate it.

4329. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:14:56 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <ge92rv0tdpfbp6162v86h9ipvrrv856ld2@4ax.com>
Source record: 104794

On Tue, 11 Nov 2003 10:31:35 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Jack Smith wrote:
>> (1) Input current = output current
>> (2) No phase shift.
>>
>> If you model the circuit using the lumped values for the antenna R and
>> jX components it's easy to see this.
>>
>> Anyone not believing this can try modeling the base inductor as:
>> O----[0.3 ohms R']--[+j192 ohms]---[0.3 ohms R'']----0
>> Put current through it using your favorite SPICE simulator and compare
>> the current through the R' and the R''. The two plots coincide.
>
>We know what the model says. The original argument was over whether a
>75m bugcatcher coil, containing distributed resistance, inductance, and
>capacitance, actually possesses those same characteristics in reality.
>A statement by a ham over on eham.net triggered the argument:
>
>"If you look at HOW an inductor works, the current flowing in one terminal
>ALWAYS equals the current flowing out the other terminal. "
>
>That is how a lumped inductor works in a model. That is not how a distributed
>inductor works in reality.

My understanding of the particular question being debated is that the
loading coil is physically small and at the frequency in question may
be safely treated as a lumped element, and that some have said that
current-in <> current-out.

The fact that the small coil is connected to an antenna which is not
physically small is immaterial.

I apologize if I've misunderstood where this topic is at; it's been
very difficult to follow as it drifts back and forth.

Jack

4330. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:15:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr29se2lnk7f1b@corp.supernews.com>
Source record: 104796

Jim Kelley wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vqvsc8bf901c56@corp.supernews.com...
>
>>Jim, it sounds like you're firmly in the camp that believes that a phase
>>and/or magnitude shift will occur from one terminal to the other of a
>>physically very small inductor.
>
>
> Physically very small.....what is that? Is it an inductor that behaves
> as if it has no physical dimensions? Does it comprise a coil of wire that
> has zero length?
>
>
>>Perhaps you can also propose an inductor I can put at
>>the base of a short antenna that would guarantee a large phase shift
>>which would be large and easily seen in a measurement.
>
>
> How about if I just refer you to one of the many manufacturers of such
> things?
>
> 73, Jim AC6XG

I was looking for a value, not a part number.

You've said that because the inductor I chose is something like 4%
larger than necessary to resonate the antenna, the magnitude and phase
shift from input to output would be very nearly zero (although the
reasoning is contrary to conventional electrical circuit theory, and I
don't follow it at all). So what I'm asking for is an inductor value
which would exhibit a large enough phase and/or magnitude shift that
would be easily seen in a measurement. I'll be constructing a more ideal
33 foot vertical in the near future, and making similar measurements at
3.8 MHz. So if its feedpoint impedance is, let's say, 35 - j370, what
would be the input to output current ratio (magnitude and phase) for a
physically very small base inductor of, say, +j300 ohms? If it's very
small, then pick an inductor value which would exhibit a substantial
input:output current ratio.

Roy Lewallen, W7EL

4331. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:17:05 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <BI9sb.173073$Tr4.462708@attbi_s03>
Source record: 104795

Yeah, that 1 megahertz dipole might be a little large for the average yard
:)

"Desmoface" <desmoface@aol.com> wrote in message
news:20031110100936.06344.00000431@mb-m19.aol.com...
> >You can build a fan dipole for 1, 15, and 80..
>
> Thats supposed to be 10,15, and 80.
>
> Steve
> kb8viv

4332. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:21:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr2a6i7ifbecc2@corp.supernews.com>
Source record: 104797

Hm. Let's suppose the inductor had a loss resistance of, say, 35 ohms (equal to the resistive part of the antenna input Z). What would the ratio be then? This is assuming the loss is dissipative and not "loss" due to radiation.

Roy Lewallen, W7EL

Richard Harrison wrote:
> . . .
> The output : input ratio of the inductor is very nearly one because the
> coil is lossless and its size is insignificant in terms of wavelength.

4333. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:26:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr2agegulhcd5e@corp.supernews.com>
Source record: 104798

Anyone who understands basic circuit theory knows this. But that doesn't include a number of the participants of this newsgroup. Otherwise, the thread would have been about two postings long.

Roy Lewallen, W7EL

Jack Smith wrote:
> On Mon, 10 Nov 2003 00:50:55 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
>
>>Ok. So far, we have your calculation that the output current should be
>>5% smaller, and 18 degrees shifted in phase (lagging, I presume) from
>>the input; and Cecil's, that the output current should equal the
>>current, both in phase and magnitude. I don't know if Richard is going
>>to do the calculation or not, so I'll wait a little longer. Anyone else
>>like to hazard a prediction?
>>
>>Roy Lewallen, W7EL
>>
>
> (1) Input current = output current
> (2) No phase shift.
>
> If you model the circuit using the lumped values for the antenna R and
> jX components it's easy to see this.
>
> Anyone not believing this can try modeling the base inductor as:
> O----[0.3 ohms R']--[+j192 ohms]---[0.3 ohms R'']----0
> Put current through it using your favorite SPICE simulator and compare
> the current through the R' and the R''. The two plots coincide.
>
>
>
>
>
> Jack K8ZOA
>
>

4334. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:33:17 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311111033.13d7ac40@posting.google.com>
Source record: 104799

Jack Smith <Jack.Smith@cox.net> wrote in message
news:<rel1rv8kqse9984dncmhg3ti09tqfrv4v2@4ax.com>...
> On Mon, 10 Nov 2003 00:50:55 -0800, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >Ok. So far, we have your calculation that the output current should be
> >5% smaller, and 18 degrees shifted in phase (lagging, I presume) from
> >the input; and Cecil's, that the output current should equal the
> >current, both in phase and magnitude. I don't know if Richard is going
> >to do the calculation or not, so I'll wait a little longer. Anyone else
> >like to hazard a prediction?
> >
> >Roy Lewallen, W7EL
> >
> (1) Input current = output current
> (2) No phase shift.
>
> If you model the circuit using the lumped values for the antenna R and
> jX components it's easy to see this.
>
> Anyone not believing this can try modeling the base inductor as:
> O----[0.3 ohms R']--[+j192 ohms]---[0.3 ohms R'']----0
> Put current through it using your favorite SPICE simulator and compare
> the current through the R' and the R''. The two plots coincide.
>

Very good Jack,
Now use your skills on a inductance that is NOT
a lumped load, and don't forget its orientation so that any
coupling to ground shows up since the subject of discussion
is a loaded whip antenna.
Ofcourse if you have a pure lumped load
kindly take it to the lab for measurement purposes.
Not sure if it will be too heavy now that you have removed
the resistance , capacitance and non current carrying parts
so keep a wheel barrow at hand. grin
Art
>
>
>
>
> Jack K8ZOA

4335. To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:34:13 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20031111133413.12035.00000021@mb-m03.aol.com>
Source record: 104801

I have an Icom 718 hooked through a tuner (mfj-901b) to an SWR meter. When tuning my 50ft. attic dipole, the external swr meter reads differently than the 718's. Which one do I gauge measurements?

Thank
73
G. Doughty
KI4BBL@arrl.net

4336. Looking for Ameco TPA pre-amp/active antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:34:33 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <bora1i$si6$1@news.oregonstate.edu>
Source record: 104800

Does anyone know where I might be able to purchase an Ameco model TPA tunable pre-amp/active antenna? Apparently they're no longer able to obtain a particular component in it and therefore it's no longer being manufactured. I'll probably end up using an MFJ-1020C instead, but from reading reviews on the 'net the Ameco TPA is really the better device.

I'd also be happy to purchase someone's used unit!

Thanks,
---Joel Kolstad

4337. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:50:51 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311111050.4195a330@posting.google.com>
Source record: 104803

"Mikey" <ki6pr@arrl.net> wrote in message news:<3faeee4e_2@newsfeed.slurp.net>...
> Troy, for 10/15 meters, it's tough to beat a directed array (i.e., a beam).
> To that end, you'll get the most bang for your buck from a quad. Period.
>
> If you're looking at a G5RV, look instead at a Skelton Cone. With your
> current transmitter/tuner combo, it will go from 10 through 80 meters, and
> in fact, naturally resonates somewhere in the 10/12 meter area. I haven't
> run any models on it myself, but others have told me that it actually shows
> gain on 40 and 75/80 meters. I don't have any e-files on it, but I can
> snaily a drawing to you if you can't find any other info on it.
>
> Of course, these are just my own opinions, and are based solely on emperical
> performance observations. Your mileage may vary...
>
> 73,
> Mike KI6PR
> El Rancho R.F., CA
>
> "Troy - VK2HXY" wrote
> > Hi there ladies and gents. I have a question that has most likely come up
> > here before, and I do apologise if this is visiting old ground.
> >
> > I am a novice limited license holder in Australia and pretty soon I will
> > have access to the 10-15 and 80M bands. I would like to know what you
> > consider as being the best all round antenna for my purpose? I have plenty
> > of room to mount an 80M dipole antenna, although height is a problem. I
> can
> > go up no more than about 50 feet.
> >
> > I also have a mast and rotator, so a triband yagi is also on the cards.
> >
> > Just looking for decent ideas here guy's. I know the question is fairly
> > open ended, but I would like to consider all my options from those who
> have
> > all the best knowledge of what works and what doesn't. To wire or not to
> > wire? To beam or not to beam? To G5RV??????
> >
> > I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
> >
> > Thanks very much for your time and I really appreciate your response to my
> > questions.
> >
> > Warmest regards
> >

> > 73 de VK2HXY
> > Troy
> >
> >

Troy,
Before you do anything check what directions will provide
the most enjoyment. From where you in front and beyond Perth
that would gain your attention? Same goes for the Northern
territories or the interior.
You could also take bands above 20 out of
consideration as the 11 year cycle now provides diminishing
returns. So in your particular case there is more to an
antenna selection than say in Europe and the U.S.
A wet noodle will only give you something to chew on
and not the customary ragchew.
Cheers
Art

4338. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:55:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <boraun$rs7$1@news.service.uci.edu>
Source record: 104802

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vr29se2lnk7f1b@corp.supernews.com...
> You've said that because the inductor I chose is something like 4%
> larger than necessary to resonate the antenna, the magnitude and phase
> shift from input to output would be very nearly zero (although the
> reasoning is contrary to conventional electrical circuit theory, and I
> don't follow it at all).

Don't know. Didn't say it. Can't help.

> So what I'm asking for is an inductor value
> which would exhibit a large enough phase and/or magnitude shift that
> would be easily seen in a measurement.

Do we agree that the amount of differential will depend on the number of
'degrees missing' from the length of the antenna?

Do we agree that the position of the loading coil plays a significant.
role in determining how much of a current differential will appear across
it?

> I'll be constructing a more ideal
> 33 foot vertical in the near future, and making similar measurements at
> 3.8 MHz. So if its feedpoint impedance is, let's say, 35 - j370, what
> would be the input to output current ratio (magnitude and phase) for a
> physically very small base inductor of, say, +j300 ohms? If it's very
> small, then pick an inductor value which would exhibit a substantial
> input:output current ratio.

Are you going to insist that it be one of these ferrite core jobs, or is it
more like ones on a HF6V?

73, Jim AC6XG

4339. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:55:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr2c6v6fird4c5@corp.supernews.com>
Source record: 104805

It sounds like the predictions are in. Among the several people who believe that the current out of a small inductor doesn't equal the current in, only Yuri was able to calculate a predicted value for the test, of 2.5 - 5% reduction in current at the output compared to the input, with a phase shift of about 18 degrees.

What I measured was a 3.1% reduction in magnitude from input to output, with no discernible phase shift. The 3.1% is an average of two readings, with the input and output probes exchanged. The output was smaller than the input in both measurements, about 2% and 4%. So I believe there's a real difference between output and input current, although with the accuracy of my measurements, I only have reasonable confidence it's somewhere between 1 and 5%. I can resolve about 2-3 degrees of phase shift, though, and I couldn't discern any at all. (Yes, the scope trigger was from one channel, not alternating.) So I have very high confidence that Yuri's prediction of 18 degrees is incorrect.

I don't subscribe to the notion that the current out of a very small inductor should be different than the current in due to some magical property it acquires when connected to an antenna. My working hypothesis is that the currrent difference I did see was due to stray capacitance, either from the probes or simply to the Earth and other objects. It would take an equivalent of 6.8 pF at the output of the coil (that is, between the coil output and the current probe) to get 3% reduction, and only about 1/3 that amount to see the minimum value of reduction of 1% I estimate was actually present.

I repeated the test on the bench, with a 36 ohm resistor in series with a 220 pF capacitor substituting for the antenna. The result was a 2.3% output:input reduction, again with no discernible phase shift. This is within the measurement error of being the same result. This is what should be expected -- except for unintentional coupling to the antenna's field, the inductor's environment is the same on the bench as at the antenna base, in these single frequency, steady state tests. (That also contradicts what some newsgroup participants have been claiming.)

So, although the small output:input current reduction was within Yuri's prediction, the phase shift certainly wasn't. If time permits, I'll make a more idealized antenna and repeat the measurements with a larger inductor at the base of a more reactive antenna. I'll predict in advance that if I double the amount of loading L, I'll approximately double the amount of current magnitude attenuation -- that is, to somewhere around 6%. That's what should be expected if the cause of the attenuation is stray C or a similar phenomenon.

I've added a picture to the
http://eznec.com/rraa/Inductor_Current_Measurement.html page, showing
the overall setup including the scope. It gives a little better
perspective on the relative sizes of various objects.

Roy Lewallen, W7EL

4340. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 18:56:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i1c2rvs79t14lqg22hamkrvs3ob6tb34k1@4ax.com>
Source record: 104804

On 11 Nov 2003 18:34:13 GMT, nightowls627@aol.comnojunk (G. Doughty)
wrote:

>I have an Icom 718 hooked through a tuner (mfj-901b) to an SWR meter. When
>tuning my 50ft. attic dipole, the external swr meter reads differently than the
>718's. Which one do I gauge measurements?
>

Hi OM,

Two questions come to mind:
1. Which one is calibrated?
2. Which one has the larger meter?

A third question also begs to be offered. Why do you have a SWR meter
after the tuner?

73's
Richard Clark, KB7QHC

4341. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 19:00:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gac2rvkuknpf345c5duju13pmr58e7jc0s@4ax.com>
Source record: 104806

On Tue, 11 Nov 2003 11:28:30 -0500, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:
>As for messing up the pattern, I
>would think that in the majority of cases they want equal propagation in all
>directions

That would certainly account for the term "broadcasting."

However, many, many stations use directional antenna systems (speaking
of at least the AM broadcasters) that change their pattern at
sunset/sunrise.

73's
Richard Clark, KB7QHC

4342. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 19:03:32 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20031111140332.12035.00000022@mb-m03.aol.com>
Source record: 104807

sorry. meter is between icom and tuner. meter is an rs model so not so sure
how accurate it may be. It does allow for calibration though.
73
G. Doughty
KI4BBL@arrl.net

4343. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 19:18:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8pc2rv41fdp7700ci1mc4d5snr64getgk8@4ax.com>
Source record: 104808

On Mon, 10 Nov 2003 17:34:55 -0800, "Mikey" <ki6pr@arrl.net> wrote:

>If you're looking at a G5RV, look instead at a Skelton Cone. With your
>current transmitter/tuner combo, it will go from 10 through 80 meters, and
>in fact, naturally resonates somewhere in the 10/12 meter area. I haven't
>run any models on it myself, but others have told me that it actually shows
>gain on 40 and 75/80 meters. I don't have any e-files on it, but I can
>snaily a drawing to you if you can't find any other info on it.
>
>Of course, these are just my own opinions, and are based solely on emperical
>performance observations. Your mileage may vary...

Hi Mike,

Skeleton Cone????

I presume you mean Discone. Either way, and as a vertical, this would
not work very well to enjoy that "paper gain." If it works at 80M
(which would mean it is roughly 50 feet tall covering 8000 sq feet -
about one large, or two small residential lots) would suggest its best
radiation advantage for 10M is straight up.

Even though Discones (or other broadband antennas) have wide matching
characterisitics, their actual radiation performance varies
considerable over that same span of frequency.

If you expect to find significant gain, you need the discone to be
significantly larger, with a significantly wide cone skirt. In other
words, something on the order of an HF Horn design.

73's
Richard Clark, KB7QHC

4344. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 19:48:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q0e2rvci6bggiaam86s0souo845iioc1g6@4ax.com>
Source record: 104809

On Tue, 11 Nov 2003 13:14:56 -0500, Jack Smith <Jack.Smith@cox.net>
wrote:

>On Tue, 11 Nov 2003 10:31:35 -0600, Cecil Moore
><Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
>> The original argument was over whether a
>>75m bugcatcher coil, containing distributed resistance, inductance, and
>>capacitance, actually possesses those same characteristics in reality.
>
>I apologize if I've misunderstood where this topic is at; it's been
>very difficult to follow as it drifts back and forth.

Hi Jack,

No apology is required from you. This thread has a very specific
question from a single correspondent (Roy). The substituted topic
that you find confusion with is a common form of (Cecil's) not being
responsive to the topic by deflection to other issues. The comedy
consists of the "gentlemen's agreement" to not cut this short when
this occurs.

But such is the gamesmanship that is being conducted, from the start.
The withholding of data to embarrass correspondents is not uncommon.
Lord knows how many I've embarrassed with simpler topics (the current
crew being only a subset). However, I generally restrain my
participation such that those threads are smaller. Otherwise the
posting of:
>On Tue, 11 Nov 2003 10:26:32 -0800, Roy Lewallen <w7el@eznec.com> wrote:
>
>>Otherwise, the
>>thread would have been about two postings long.
which totals 75 (soon to be 76 with this), and for which Roy has
contributed very little new details, nor any data across the majority
of 27 of his own (appealing for inductor values to force the issue
would have made the thread three postings long, c'mon now) obviously
reveals that entertainment is being served. OK, OK, for the sake of
the mythical lurker, we can all give a wink and a nod that it is
"edutainment."

I hope none expect an Emmy for these sweeps. [I would like to thank
all my books and their authors; and especially the large supporting
cast, all the little people, for making this possible.]

73's
Richard Clark, KB7QHC

4345. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 20:17:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <borg5l$6ui$1@sparta.btinternet.com>
Source record: 104810

GD, you are asking the wrong question.

It doesn't matter two hoots which meter gives the correct indication. Almost certainly neither of them do. And if by some remote chance their indications were identical they would be no more likely to be correct.

But your transmitter will feel far safer, much happier and comfortable, if its own internal meter, provided by the manufacturer, is used for tuning-up purposes.

The purpose of the meter is NOT to measure SWR on a transmission line which doesn't exist, but to indicate whether or not the transmitter is loaded with its correct value of resistance.

(The best way of checking a so-called SWR meter is to locate it as near as possible to the transmitter and replace the feedline+antenna with a 50-ohm resistor.)

Reg, G4FGQ

4346. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 20:19:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ncf2rv86bhm3u0qcmi1bu8mjsosim6mq09@4ax.com>
Source record: 104811

On 11 Nov 2003 19:03:32 GMT, nightowls627@aol.comnojunk (G. Doughty)
wrote:

>sorry. meter is between icom and tuner. meter is an rs model so not so sure
>how accurate it may be. It does allow for calibration though.
>73
>G. Doughty
>KI4BBL@arrl.net

Hi OM,

Calibration is simple enough. Load into a good dummy load and observe
any residual SWR. Residual SWR is either the product of poor
connections, poor calibration, or a poor load.

Using a known, good wattmeter in series with the SWR meter, adjust the
drive of your source to obtain full scale deflection of the SWR meter.
Observe its power reading and compare to the known wattmeter.

If it is off, there is generally a range adjustment for correcting
that error. However, as power measurement has easily the worst chance
of being confirmed, there is very little merit (and only ego to be
served) in making any change on the basis of accuracy. You may if you
wish, but it offers every prospect of upsetting the SWR display.

If you are testing scales, it also is incumbent upon you to reverse
the SWR meter connections and confirm there is no Residual SWR in that
direction too. Few aficionados travel this path and rely wholly on
manufactured mismatches to perform to worse performance. You can also
repeat the power scaling in this direction too (be aware that it will
be a smaller full-scale swing). There may, or may not be another
range adjustment available to you.

You don't even need a second wattmeter if you simply discard the
notion of absolute "accuracy." You can use the forward scale to
calibrate the reverse scale (after having reversed the input/outputs
too) to sufficient relative "accuracy" for most needs (like measuring
SWR).

If you had no residual SWR, and did make an adjustment, you should
then repeat the step above to confirm no residual SWR has crept into
the mix.

Needless to say, there are a variety of meter designs. Some will have
up to 3 adjustments: one for each range (forward/reverse) and one for
overall gain (actually a variable cap to adjust for the meter's
frequency characteristics, usually at the high end of its service

range). No calibration is done with three tweaks. You will have to repeat the steps above to drive out the interactions of each adjustment with the other. You will have to repeat all the steps above on each band. You will encounter "some" error somewhere (you WILL measure Residual SWR). What this means is that you will have to spread that error such that all operating scenarios will contain some, but not all of it. On the other hand, if you use a wide range meter on one or two neighboring bands alone, you can indeed drive out the error.

Focus on the meter with the most readable scale. The Radio Shack meter's I've seen have fairly good 'tronics even in those specifically for the low end, CB market. What you should look for is complete shielding, bypassed meter wiring, and robust connectors. You can even replace their resistors with small Cermet trimmers (choose a replacement value of 80% to 120% of original value).

73's
Richard Clark, KB7QHC

4347. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 20:38:57 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb148fe_4@corp.newsgroups.com>
Source record: 104812

Jack Smith wrote:
> My understanding of the particular question being debated is that the
> loading coil is physically small and at the frequency in question may
> be safely treated as a lumped element, and that some have said that
> current-in <> current-out.

A 200 cubic inch 75m bugcatcher coil is NOT physically small and should
NOT be treated as a lumped element if one desires real-world results.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4348. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 20:48:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb14b2f_4@corp.newsgroups.com>
Source record: 104813

Roy Lewallen wrote:
> So what I'm asking for is an inductor value
> which would exhibit a large enough phase and/or magnitude shift that
> would be easily seen in a measurement.

How about a coil with 180 degree phase shift as described by Kraus?

"A coil can also act as a 180 degree phase shifter as in the collinear
array of 4 in-phase 1/2WL elements in Fig. 23-21b. Here the elements
present a high impedance to the coil which may be resonated without
an external capacitance due to its distributed capacitance. The coil
may also be thought of as a coiled-up 1/2WL element."

Here's the diagram in 23-21b

```
--------------coil-------------FP---------------coil----------------
1/2WL 1/2WL 1/2WL 1/2WL
```

The coils are designated as "Phase-reversing". Each coil occupies 1/2WL
electrically.

Have you never encountered phased arrays like the above or understood
that the coils are causing a 180 degree phase shift? That's the way
my Diamond 440 MHz mobile antenna works.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4349. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 20:56:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb14d0d_4@corp.newsgroups.com>
Source record: 104814

Roy Lewallen wrote:
> Anyone who understands basic circuit theory knows this. But that doesn't
> include a number of the participants of this newsgroup. Otherwise, the
> thread would have been about two postings long.

Too bad lumped inductors bear absolutely no resemblance in reality to
75m bugcatcher coils. Don't you believe Kraus when he says 180 degrees
of current phase shift can be accomplished by a single coil in a wire
antenna?

I once had an engineer like you working for me. He took four man-months
to engineer and breadboard a design that was over budget and out of spec.
I, a VP, turned out another design (from scratch) in one long weekend that
was under budget and exceeded the specs.
--
73, Cecil http://www.qsl.net/w5dxp

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4350. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 21:05:58 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb14f52$1_4@corp.newsgroups.com>
Source record: 104815

Richard Clark wrote:
> This thread has a very specific
> question from a single correspondent (Roy).

Huh? This thread is a direct result of W8JI's alleged assertion that
the current into a coil and out of a coil is always the same or else
Kirchhoff's law is violated. Here is the quote, allegedly from W8JI,
that started this whole discussion.

"If you look at HOW an inductor works, the current flowing in one terminal
ALWAYS equals the current flowing out the other terminal."

Have you been on vacation or what?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4351. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 21:26:01 UTC
From: Ian Jackson <REMOVEPLEASE@g3ohx.demon.co.uk>
Message-ID: <IP3ZidFpPVs$EwRz@g3ohx.demon.co.uk>
Source record: 104816

In message <wbidnamqQ9elkyyiRVn-hQ@comcast.com>, Tarmo Tammaru
<t-tammaru@home.com> writes
>
>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>news:bopjdoals1@sparta.btinternet.com...
>> > Many, if not all, FM broadcast stations in the US transmit both a
>> vertically
>> > and horizontally polarized signal. So, rotating the antenna 45 degrees
>is
>> > not giving up anything.
>>
>> ================================
>>
>> Simultaneous transmission of vertical and and horizontal polarised signals
>> from a single antenna system is impossible without upsetting the desired
>> radiation coverage pattern.
>>
>> What you mean is your clever US broadcasting engineers have designed
>> antennas which radiate "Circularly Polarised" signals.
>>
>
>If you go to a broadcaster's web site, they will say X KW horizontal, and X
>KW vertical, with no reference to right or left hand polarization. I take
>that to mean cross polarized, rather than circular. Obviously, the reason
>for the vertical component is car radios. As for messing up the pattern, I
>would think that in the majority of cases they want equal propagation in all
>directions
>
>Tam/WB2TT

Transmission of vertical and horizontal, with no phase shift, produces
slant polarization. The degree of slant depends on the ratio of the
powers (ie equal powers give 45 degrees).

Transmission of vertical and horizontal, with 90 degrees phase shift,
produces elliptical polarization. Equal powers produces circular.

In the UK, most transmitters use slant or elliptical (to improve
reception for cars etc). Generally, I think that the only
horizontal-only transmissions are from a few low power 'fill-in'
transmitters. Most UK transmissions give more power to the horizontal
(so you don't see vertical domestic antennas).

Circular/elliptical is better than slant as the relationship of the
'slant' of the transmitting and receiving antennas don't matter. The

first UK transmitter to use it gave noticeably consistent signals in
difficult places (eg built-up areas).

Where slant polarization is used, I suspect that it is because it is
easier to transmit (just by slanting the antenna).

I think I'm right in saying the Irish Republic generally uses vertical
for FM (or at least used to). This obviously helps a lot for reception
in vehicles.

>> As Cecil says, nobody gains anything power-wise. For the same transmitter
>> radiated power everybody's signals are 3 dB down (half-power) relative to
>> simple linear polarision when both transmitting and receiving antennas
>have
>> the same polarisation.
>>
>> The advantage of circular polarisation is that it doesn't matter which
>> polarisation your antenna is orientated because, in practice, when
>erecting
>> it, the polarisation received by your antenna is usually a matter of
>> guesswork anyway.
>>
>> Only with relatively-rare, direct line-of-sight broadcasting propagation
>is
>> there any certainty in the polarisation of received signals.
>> ----
>> Reg.
>>
>>
>
>

Ian.
--

4352. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 21:30:35 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fb15548$0$9783$ba620e4c@reader1.news.skynet.be>
Source record: 104817

Hi over there,

My son will depart soon for a trip to Florida for renewal of his flying license, so CIA-HF has to be considered again (at the american price !). Some nice featers too. How much are they in US$?

73 de ON5MJ - Jacques.

4353. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 22:20:16 UTC
From: PMac <NOSPAMvk2evb@nella.net.au>
Message-ID: <3fb160a2@usenet.per.paradox.net.au>
Source record: 104818

HI, I have always found the first SWR meter in line is the correct reading, the second one's reading is affected by the first......meaning the one in the transceiver should be correct..... several of my recent rigs with inbuilt SWR meters have indicated this. If you tune your ATU to the second meter in line your PA may not be as happy....cya Peter

"G. Doughty" <nightowls627@aol.comnojunk> wrote in message news:20031111133413.12035.00000021@mb-m03.aol.com...
> I have an Icom 718 hooked through a tuner (mfj-901b) to an SWR meter. When
> tuning my 50ft. attic dipole, the external swr meter reads differently than the
> 718's. Which one do I gauge measurements?
>
> Thank
> 73
> G. Doughty
> KI4BBL@arrl.net

4354. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-11 22:54:14 UTC
From: richardharrison@webtv.net
Message-ID: <12177-3FB16896-256@storefull-2311.public.lawson.webtv.net>
Source record: 104719

Cecil, W5DXP wrote:
"Here is the diagram in 23-21b."

Thanks, Cecil. My copy of Kraus is new and I`d not yet read page 824. Kraus says:

"The coil may also be thought of as a coiled-up halfwave element."

I like his preceding sentence:

"Here the elements present a high impedance to the coil which may be resonated without external capacitance due to its distributed capacitance."

A "phase reversing coil" does present a 180-degree phase shift between its ends.

Best regards, Richard Harrison, KB5WZI

4355. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:03:04 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311111603.36412349@posting.google.com>
Source record: 104721

(I assume "a" in the diagram you linked to is the wire radius or
diameter, though it probably is not critical.)

Yes, it appears that it would be best if the feed is balanced. A
balun to transform from an unbalanced feed to a balanced one is a good
idea for this antenna. You can put the balun at the antenna, or some
distance away and feed from the balun to the antenna with balanced
line, if the line is arranged symmetrically with respect to the
antenna. It would also be good to know the approximate feedpoint
impedance of the antenna. An eznec (or similar) model of the antenna
should give you an idea about the feedpoint impedance. If you use
coaxial feedline to the balun, which connects in turn directly to the
antenna, and if you dress the feedline so it runs away from the
antenna perpendicular to the wire where the feed point is, a single
balun is likely enough, but if the feedline runs away from the antenna
at an angle, it may be advisable to also use a choke-type balun
perhaps 1/4 wavelength from the feedpoint. On the other hand, I would
not expect enough gain from this antenna that it would matter a lot,
and you may do fine not using a balun at all and just letting the
feedline radiate a little.

Cheers,
Tom

"emma" <emma_hentenna@hotmail.com> wrote in message news:<booqk5$4ef$1@nic.grnet.gr>...
> In the picture below appears the geometry of the Hentenna.
> No constructional details are given.
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> /Hentenna%20Geometry.htm
>
> However I can use a balun to connect the coaxial line with the connector.
> Because of the skin effect there is current in the interior and the exterior
> of the conductor.
> Firstly this current is only superficial.A part of it ends into one of two
> wires.
> As result we connect an unbalanced system(coaxial line) with a balanced
> one(conductor).
> In order to avoid this we use a balun which is a geometry transformer.
>
> I ask for more comments.
>
> Emma

4356. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:39:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <borvfc$b2i$1@hercules.btinternet.com>
Source record: 104722

> I, a VP, turned out another design (from scratch) in one long weekend that
> was under budget and exceeded the specs.
> --
> 73, Cecil http://www.qsl.net/w5dxp

==========

A design which 'exceeds' specified performance is as poor as one which
'under exceeds'.

Significant deviations in either direction are sure indications of poor
engineering education and incompetence.

Both deviations are equally expensive and wasteful in terms of time,
materials and labour.

Even kids living with rats in the sewers of Rio de Janerio know this.

Rats themselves are highly intelligent, abundent, successful animals.

Should our campuses be transferred? ;o)

Reg.

4357. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:48:28 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <9d6dnZ7bi6_AHiyiRVn-sQ@comcast.com>
Source record: 104723

"PMac" <NOSPAMvk2evb@nella.net.au> wrote in message
news:3fb160a2@usenet.per.paradox.net.au...
> HI, I have always found the first SWR meter in line is the correct
reading,
> the second one's reading is affected by the first......meaning the one in
> the transceiver should be correct..... several of my recent rigs with
> inbuilt SWR meters have indicated this. If you tune your ATU to the
second
> meter in line your PA may not be as happy....cya Peter

Two birds in line will read the same thing.
Meter B is not affected by meter A.
I think one or more of your meters needs work, or you have a lot of RF on
the outside of the shield?

Maybe the meter's sampling section isn't designed for the band it's being
used in?

4358. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:53:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr314bfqu64d6a@corp.supernews.com>
Source record: 104725

Now, that's quite an insult, based on a total lack of information about my career and what I've accomplished.

I'm going to do my best to ignore Cecil's postings from here on. They're abusive and insulting. And any time he's asked for a number, calculation, or equation to back his point of view, he dodges, ducks, and diverts -- and insults.

Some of the readers are undoubtedly impressed by this. That's fine -- those readers won't benefit from my postings anyway.

Roy Lewallen, W7EL

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Anyone who understands basic circuit theory knows this. But that
>> doesn't include a number of the participants of this newsgroup.
>> Otherwise, the thread would have been about two postings long.
>
>
> Too bad lumped inductors bear absolutely no resemblance in reality to
> 75m bugcatcher coils. Don't you believe Kraus when he says 180 degrees
> of current phase shift can be accomplished by a single coil in a wire
> antenna?
>
> I once had an engineer like you working for me. He took four man-months
> to engineer and breadboard a design that was over budget and out of spec.
> I, a VP, turned out another design (from scratch) in one long weekend that
> was under budget and exceeded the specs.

4359. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:54:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr316dgmh6kqe3@corp.supernews.com>
Source record: 104724

Can we make a physically small "phase reversing coil" that has 180
degree phase shift between its ends? If so, how?

Roy Lewallen, W7EL

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "Here is the diagram in 23-21b."
>
> Thanks, Cecil. My copy of Kraus is new and I`d not yet read page 824.
> Kraus says:
>
> "The coil may also be thought of as a coiled-up halfwave element."
>
> I like his preceding sentence:
>
> "Here the elements present a high impedance to the coil which may be
> resonated without external capacitance due to its distributed
> capacitance."
>
> A "phase reversing coil" does present a 180-degree phase shift between
> its ends.
>
> Best regards, Richard Harrison, KB5WZI
>

4360. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 00:59:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr31fonr28gvf7@corp.supernews.com>
Source record: 104726

Jim Kelley wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:vr29se2lnk7f1b@corp.supernews.com...
>
>>You've said that because the inductor I chose is something like 4%
>>larger than necessary to resonate the antenna, the magnitude and phase
>>shift from input to output would be very nearly zero (although the
>>reasoning is contrary to conventional electrical circuit theory, and I
>>don't follow it at all).
>
>
> Don't know. Didn't say it. Can't help.

I apologize. I looked back at what I thought you had said, and I was
mistaken.

>
>>So what I'm asking for is an inductor value
>>which would exhibit a large enough phase and/or magnitude shift that
>>would be easily seen in a measurement.
>
>
> Do we agree that the amount of differential will depend on the number of
> 'degrees missing' from the length of the antenna?

No. In a few minutes, I'll post a description of a more recent
measurement I made that refutes this. Of course, elementary circuit
theory refutes it also, which is the basis for my disagreement.

> Do we agree that the position of the loading coil plays a significant.
> role in determining how much of a current differential will appear across
> it?

If you're talking about a physically long coil, yes. If you're talking
about a physically small coil, no.

But if you believe that the amount of antenna the coil "replaces"
determines the differential, wouldn't this be true regardless of the
placement of the coil in the antenna?
>
>>I'll be constructing a more ideal
>>33 foot vertical in the near future, and making similar measurements at
>>3.8 MHz. So if its feedpoint impedance is, let's say, 35 - j370, what
>>would be the input to output current ratio (magnitude and phase) for a
>>physically very small base inductor of, say, +j300 ohms? If it's very
>>small, then pick an inductor value which would exhibit a substantial

>>input:output current ratio.
>
>
> Are you going to insist that it be one of these ferrite core jobs, or is it
> more like ones on a HF6V?

Is there something about a "ferrite job" that makes it follow different rules? But the answer is no to both. I insist on using a physically small toroid wound on a powdered iron core. Only after people understand how a physically small inductor works will they have any chance of understanding how a physically long one does.

Roy Lewallen, W7EL

4361. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 01:08:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bos15t$dv4$1@hercules.btinternet.com>
Source record: 104727

And so you see, all this clever radio engineering on both sides of the Atlantic has come about to just to cover up the disorientated shortcomings of TV and FM antenna installers, and inadequate tightening of fixing bolts.
;o)

Isn't Yagi a Japanese name?

4362. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 01:28:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr3369rdnukd06@corp.supernews.com>
Source record: 104728

Today's project was to construct and measure a more idealized antenna.

The antenna is 33 feet high, made of #16 insulated wire. I put out 23 radials on the surface of the wet ground. Radials were of various lengths, most about 30 feet long. The feedpoint impedance of the antenna, measured with a GR bridge, was 15.8 - j437 ohms at 3.8 MHz. Allowing 3% lengthening effect for insulation, EZNEC says a lossless vertical of that height and diameter should have an input Z of 7.5 - j478. 8.3 ohms loss resistance is reasonable for that number of radials, and the somewhat lower than predicted reactance is likely due to the fact that the radial wires were grouped together as they came up a few inches to the antenna base, and not immediately coming in contact with the ground. That would add a bit of inductive reactance.

I wound an inductor on a T-106-6 core as before, but with more turns, for a measured Z of 1.3 + j387 ohms. After putting it in series with the antenna at the base, the base impedance measured 17.1 - j54 ohms. This is only 4 ohms from the expected reactance, and spot on the expected resistance, so measurements are consistent.

Analyzing verticals with EZNEC, made from #16 wire at 3.8 MHz, shows that:

-- An antenna 63.2' high is resonant.
-- An antenna 35.9' high has a feedpoint reactance of -j437 ohms.
-- An antenna 59.35' high has a feepoint reactance of -j54 ohms.

With a resonant height of 63.2', you could say that 63.2' is "90 electrical degrees" as far as the antenna is concerned. So you might say that my inductor has "replaced 33.4 electrical degrees" of the antenna.

Using Yuri's cosine rule, we should then expect the inductor output current to be cos(33.4 deg) times the input current, or 16.5% less. Also, we should expect to see those 33 degrees of "replaced antenna" as phase shift from the input to the output of the inductor. That is, the current change from the input to output of the inductor is the same as it would be for the portion of the antenna it "replaces". (I think Jim Kelley subscribes to this theory also, but I'm not sure.)

In contrast, conventional electrical circuit theory predicts no current difference between the input and output for a physically very small inductor with no radiation or stray coupling. I saw about 3% in the previous measurement, which I believe can be attributed to stray capacitance. So I predicted that we should see about twice that amount with the higher valued inductor used for this experiment (387 vs 192 ohms reactance). I didn't see any measurable phase shift between input and output before, so I didn't expect to see it this time.

So for this test, there's quite a difference in predictions for output:input current --

**Yuri's method predicts a reduction of output current magnitude of 16.5% and a phase shift of 33 degrees.

**I predict around 6% magnitude reduction (due to stray C) and no measurable phase shift (less than 2 or 3 degrees).

I have very high confidence that my measurements are good enough to resolve the difference between these two possibilities.

Would anyone care to comment before I post the measurement results? And, Yuri, please correct me if I've misinterpreted your theory.

Roy Lewallen, W7EL

4363. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 01:31:35 UTC
From: richardharrison@webtv.net
Message-ID: <660-3FB18D77-319@storefull-2313.public.lawson.webtv.net>
Source record: 104730

Roy, W7EL wrote:
"Can we make a physically small "phase reversing coil" that has 180 degree phase shift between its ends? If so, how?"

Yes. Kraus was discussing collinear arrays composed of 1/2-wave elements interconnected by phase inverters to keep the currents in all elements in-phase, that is, flowing in the same direction.

More than the phase delay of the coil is involved. Its self-capacitance is involved in making a parallel resonant circuit at the operating frequency.

The phase relations would be the same for a smaller inductance shunted with a larger capacitance.

Two reasons for using self resonance; simplicity and wider bandwidth with the low-C circuit.

These parallel resonant circuits replace short-circuit 1/4-wave stubs in some collinears.

Best regards, Richard Harrison, KB5WZI

4364. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 01:44:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr3433r9bu1dfd@corp.supernews.com>
Source record: 104729

I apologize if the reason for my delay in posting measurement results is seen as being to embarrass people. That's not at all the purpose. The intent is simply to force people to make numerical predictions based on their theories, rather than explaining the results after the fact. As it turns out, Yuri is the only one confident enough of his theory to make a numerical prediction(*). I happen to believe it's wrong, but by making it he's earned my respect. A theory can be tested only if it predicts results which can be tested. Whether it turns out to be right or wrong, we learn from it. Those who've waffled and dodged the issue aren't in my opinion worthy of the respect Yuri is.

When all this is done, I hope that readers come away with some assurance that circuit theory does work and can be applied to antenna problems -- provided that the assumptions made for the components are valid. If all that's taken away is a feeling that I've been doing this to try and embarrass people, then it's been worse even than a monumental waste of time. I really did have other things I wanted to do today besides make antenna measurements, and I spent the time doing it only in the hope that it would open some eyes.

Roy Lewallen, W7EL

(*) I've really solicited predictions only from people who don't agree with conventional circuit theory, and believe that there will be a difference in current from input to output. So there are also a number of people who agree with me that conventional circuit theory holds, but haven't explicitly made a prediction.

Richard Clark wrote:
> . . .
> But such is the gamesmanship that is being conducted, from the start.
> The withholding of data to embarrass correspondents is not uncommon.
> Lord knows how many I've embarrassed with simpler topics (the current
> crew being only a subset). However, I generally restrain my
> participation such that those threads are smaller. Otherwise the
> posting of:
> . . .

4365. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 02:22:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1997a$1_7@corp.newsgroups.com>
Source record: 104731

Reg Edwards wrote:
> A design which 'exceeds' specified performance is as poor as one which
> 'under exceeds'.

It would have cost money and space to add the circuits to bring the
measurable jitter up to the RS232 specification allowable threshold.
You really think I should have done that?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4366. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 02:50:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb19ff8$1_7@corp.newsgroups.com>
Source record: 104732

Roy Lewallen wrote:
> Now, that's quite an insult, based on a total lack of information about
> my career and what I've accomplished.

Why is it OK for you to insult my engineering capabilities but not
vice versa? How does it feel?

> I'm going to do my best to ignore Cecil's postings from here on. They're
> abusive and insulting.

Yours were abusive and insulting first and second. I did this one just
to let you know how your insults feel. If you will stop saying
things to me like, "I am continually amazed at how truly ignorant
some engineers are ...", I will not feel the need to retaliate.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4367. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 02:53:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1a0a6$1_7@corp.newsgroups.com>
Source record: 104733

Roy Lewallen wrote:
> Can we make a physically small "phase reversing coil" that has 180
> degree phase shift between its ends? If so, how?

Why are you so hung up on physically small coils? The subject is
center-loading coils on mobile antennas, like bugcatchers.
--
73, Cecil http://www.qsl.net/w5dxp

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4368. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:03:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1a32d$1_7@corp.newsgroups.com>
Source record: 104734

Roy Lewallen wrote:
> When all this is done, I hope that readers come away with some assurance
> that circuit theory does work and can be applied to antenna problems --
> provided that the assumptions made for the components are valid.

Roy, isn't everything moot after Kraus tells us that an antenna coil
can cause a 180 degree phase reversal? Plus his graph of current in
a loaded antenna that shows a step function in the current at the
loading coils? The entire purpose of this discussion was to determine
if the following statement, allegedly made by W8JI, is true or false.

"This is in any book, including the ARRL Handbook. If you look at HOW
an inductor works, the current flowing in one terminal ALWAYS equals
the current flowing out the other terminal."

That's the very clear statement that was questioned by Yuri. And you
have already proved it not to be true even with your toroidal coil.

Incidentally, given a 180 degree phase reversing coil, the current
is flowing into both ends at the same time.
--
73, Cecil http://www.qsl.net/w5dxp

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4369. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:05:32 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031111220532.11646.00000047@mb-m22.aol.com>
Source record: 104735

>
>Would anyone care to comment before I post the measurement results? And,
>Yuri, please correct me if I've misinterpreted your theory.
>
>Roy Lewallen, W7EL
>

It is not my theory. My argument with W8JI and his followers: is the current in typical loading coil in quarter wave radiator same at both ends or does it drop with distance from the feedpoint. I have made temperature observations, W9UCW measured the difference, W5DXP provided some explanation. Based on Cecils analysis of data you provided, and on my understanding of the phenomena I guestimated drop in current in your setup. No theory, no mathematical procedure (yet) just attempt (using degrees replaced by coil in a radiator) at explanation of what is happening. I will measure things myself, try to verify previous measurements and then come up with conclusions and "theory". So far Cecils (and ON4UN book) theory seems to be closest to the truth.

As far as your measurements, it appears that you are trying to use the worse case extreme situation (feed point, toroid) to prove your case. Why don't you use thermo ammeters or current probe without leads and normal coil and do it on typical mobile whip antenna.
Here is the info on homebrew current probe:
http://www.isd.net/~lyle/currprob/currprob.htm

I am going to build one too, it is handy to check the current while sliding along the radiator, which easier than inserting ammeter.

I posted my 7 points, so far not one argument against, had few agreements.

What's this guessing game anyway? Why don't you try to prove that W9UCW measurements are off the rocker?

Yuri, K3BU

4370. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:15:25 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031111221525.11646.00000048@mb-m22.aol.com>
Source record: 104736

>
>A design which 'exceeds' specified performance is as poor as one which
>'under exceeds'.
>
>Significant deviations in either direction are sure indications of poor
>engineering education and incompetence.
>
>Both deviations are equally expensive and wasteful in terms of time,
>materials and labour.
>

Now that is some "wisdom" coming out of FGQ think tank :-)
All the briliant engineers and inventors? Shame on you!
You come up with better and cheaper solution, you are incompetent!
(must be union mentality)

BUm

4371. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:26:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <vr3a35ore4aa6a@corp.supernews.com>
Source record: 104737

Ok,

For anyone who cares, the magnitude of the current out of the inductor in the later test measured 5.4% less than the current in. No phase shift was discernible. An analytical person could build on this information to investigate the properties of longer inductors placed elsewhere in the antenna.

Thank you for the comments, Cecil, Yuri, Richards, Art, and others. I've learned a good lesson from this -- that this isn't an appropriate forum or appropriate audience for the sort of quantitative analysis and reasoning I'm familiar and comfortable with. And that the considerable time and effort required to make careful measurements is really of very little benefit -- certainly not anywhere near enough to justify it.

With a great sigh of relief from everyone, I'm sure, I'll now turn this thread back over to Yuri, Cecil, et al.

My apologies to everyone for taking up so much bandwidth.

73,
Roy Lewallen, W7EL

Yuri Blanarovich wrote:
>>Would anyone care to comment before I post the measurement results? And,
>>Yuri, please correct me if I've misinterpreted your theory.
>>
>>Roy Lewallen, W7EL
>>
>
>
>
> It is not my theory. My argument with W8JI and his followers: is the current in
> typical loading coil in quarter wave radiator same at both ends or does it drop
> with distance from the feedpoint. I have made temperature observations, W9UCW
> measured the difference, W5DXP provided some explanation. Based on Cecils
> analysis of data you provided, and on my understanding of the phenomena I
> guestimated drop in current in your setup. No theory, no mathematical procedure
> (yet) just attempt (using degrees replaced by coil in a radiator) at
> explanation of what is happening. I will measure things myself, try to verify
> previous measurements and then come up with conclusions and "theory". So far
> Cecils (and ON4UN book) theory seems to be closest to the truth.
>
> As far as your measurements, it appears that you are trying to use the worse
> case extreme situation (feed point, toroid) to prove your case. Why don't you
> use thermo ammeters or current probe without leads and normal coil and do it on

> typical mobile whip antenna.
> Here is the info on homebrew current probe:
> http://www.isd.net/~lyle/currprob/currprob.htm
>
> I am going to build one too, it is handy to check the current while sliding
> along the radiator, which easier than inserting ammeter.
>
> I posted my 7 points, so far not one argument against, had few agreements.
>
> What's this guessing game anyway? Why don't you try to prove that W9UCW
> measurements are off the rocker?
>
> Yuri, K3BU

4372. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:30:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1a979$1_7@corp.newsgroups.com>
Source record: 104738

Yuri Blanarovich wrote:
> What's this guessing game anyway?

If you can talk an astronomer into predicting the day in 2004 when
the first level 3 solar storm will hit earth, you can discredit him
when his prediction falls through.
--
73, Cecil http://www.qsl.net/w5dxp

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4373. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:34:08 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031111223408.11646.00000049@mb-m22.aol.com>
Source record: 104739

>>Roy Lewallen wrote:
>> Now, that's quite an insult, based on a total lack of information about
>> my career and what I've accomplished.
>

>Cecil wrote:
>Why is it OK for you to insult my engineering capabilities but not
>vice versa? How does it feel?
>

I wrote:
Ditto happened to me, started with W8JI (they can do that) but when I responded in kind, they don't like it and the cultists join in choir, defending their favorite "guru", ignoring the facts.
If it works on transmit, it should work on receive too :-)

I mentioned on the outset, if we can exchange arguments in a civil manner, I am for it and will respond in kind, but when someone pulls out ridicule, snotty remarks and insults, then the gloves are off.
As the famous King said: "Can we all get along?"

Yuri

4374. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:37:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1ab0d_7@corp.newsgroups.com>
Source record: 104740

Roy Lewallen wrote:
> For anyone who cares, the magnitude of the current out of the inductor
> in the later test measured 5.4% less than the current in. No phase shift
> was discernible.

A better way to measure phase shift is to measure the delay between
the zero-crossings of the two currents.
--
73, Cecil http://www.qsl.net/w5dxp

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4375. Re: MFJ or Autek

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:41:43 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vr3avb8360gv55@corp.supernews.com>
Source record: 104741

Dear Jacques:
Here is the URL for New World distributors of AEA products:
http://www.aea-wireless.com/distributors_am.htm

Burghardt and RF Specialties of Florida are mentioned. The use of
Google produced these URLs:
http://www.burghardt-amateur.com/
Asking price for CIA-HF is $450. They are good people.

http://www.rfspec.com/
They seem to be more of a consulting service than a vendor. However,
they might be located near to your son's airport.

It continues to be interesting to see the number of people who come to
the US for flying. It is vastly less expensive here than in Europe.
73 Mac N8TT
--
J. Mc Laughlin - Michigan USA

"ON5MJ" <on5mj_no_more _spam_in_stock_sorry_@skynet.be> wrote in message
news:3fb15548$0$9783$ba620e4c@reader1.news.skynet.be...
> Hi over there,
>
> My son will depart soon for a trip to Florida for renewal of his
flying
> license, so CIA-HF has to be considered again (at the american price
!).
> Some nice featers too. How much are they in US$?
>
> 73 de ON5MJ - Jacques.
>
>

4376. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:52:24 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bosaq8$cq53$1@news3.infoave.net>
Source record: 104742
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Time for me to follow an old Southern expression, when arguing with a Jackass - make sure he is not doing the same. On that note I conclude further response to your inane rantings.

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message news:3FB08119.40303@get.lost...
> w4jle wrote:
> > Reading comprehension challenged?
>
> No, it's just that I don't speak Yokel very well.
>

4377. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 03:58:05 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bosb4s$cpta$1@news3.infoave.net>
Source record: 104743

or approximately 22 inches per division...at the speed of light.

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fb06810$1_8@corp.newsgroups.com...
> Roy Lewallen wrote:
> > If the small inductor
> > shows a measureable phase shift from input to output, I'll be just as
> > wrong as I'll be if it shows a magnitude change.
>
> And if the small inductor shows a phase shift too small to be
> measured, you will have invented faster than light transmission
> because inches per nanosecond is easy to measure nowadays. Heck,
> my old bench scope will display two nanoseconds per division.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4378. Re: Where to find microwave (10-25 GHz) phased array help?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 04:31:48 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fb1ba2b_3@news1.prserv.net>
Source record: 104745

Scott:

Many of the microwave design shops have been disbanded or consolidated, and I have not had direct contact with them in a few years, but Ball in Denver, Raytheon in Falls Church (the old Melpar bunch), Hughes and TRW in the LA area and AEL in Pa. all have built successful arrays in this frequency range. I can't guarantee that any of them are still operational at this point in time. Dimensional tolerances are the big problem, especially with printed techniques as the substrate dielectric characteristics are not uniform. CNC techniques have made all metal designs practical, finally. Get recent copies of IEEE MTTS and look for authors of articles in the area of interest.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Scott Kelley" <scottk@iccom.com> wrote in message
news:3_OdnZhB5_bkgSyiRVn-tA@centurytel.net...
>
> Looking for someone *experienced* in the design of phased array antennas
at
> or above 10-24 GHz. Need to consult on the potential for using a phased
> array antenna in place of a horn antenna at 10.5 and/or 24 GHz.
>
> Does anyone here have that experience, or can anybody refer me to someone?
>
> Thanks,
> Scott Kelley
>
> PS I will try to check the newsgroup for replies, but if you could also
> respond directly to my email, I would appreciate it.
>
>

4379. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 04:36:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1b8cf_3@corp.newsgroups.com>
Source record: 104744

Yuri Blanarovich wrote:
> I mentioned on the outset, if we can exchange arguments in a civil manner, I am
> for it and will respond in kind, but when someone pulls out ridicule, snotty
> remarks and insults, then the gloves are off.

It gets downright aggravating to hear over and over just how competent the
guru side is compared to the other (implied) ignorant side (as if gurus
cannot possibly be wrong).
--
73, Cecil http://www.qsl.net/w5dxp

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4380. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 04:37:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb1b93a$1_3@corp.newsgroups.com>
Source record: 104746

w4jle wrote:
> or approximately 22 inches per division...at the speed of light.

Hard to believe RF can propagate through a coil faster than that, eh?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4381. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 05:00:18 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <od-dnX62pO7-IyyiRVn-sw@comcast.com>
Source record: 104624

I've seen this also, and wondered about it.
Dipoles, or 3 element yagis usually, mounted at 45 degree polarization, on commercial buildings.

I did some wierd things in my MATV days.. YOU try getting a nice clean signal in downtown Honolulu..

4382. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 07:25:55 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bosnai$ctqa$1@news3.infoave.net>
Source record: 104747

If it is proved that the coil works differently than my assumptions, will my radio stop working?

Why bother with an expensive loading coil if nothing changes through it? I may as well take down my bug catcher and replace it with a hunk of pipe. That way I can put an even bigger capacitance hat on it.

I am resuming the count of pirouetting angels...If only the darn pin would quit sticking me!

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fb1b93a$1_3@corp.newsgroups.com...
> w4jle wrote:
> > or approximately 22 inches per division...at the speed of light.
>
> Hard to believe RF can propagate through a coil faster than that, eh?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4383. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 10:21:38 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <LQnsb.23361$mb5.12394@fed1read02>
Source record: 104748
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:booevl$b1ob$1@news3.infoave.net...
> How is it that the same people who love to quote the "N", word to show how
> enlightened they are, figure that they have the right to denigrate
> Southerners with impunity?
>
> I suspect that with your supercilious attitude, you have to look down on
> someone. Ergo, find a group that is not protected by politically correct
> speech and stereotype them.
>
> Your sophomoric rhetoric is trite and boring, I suspect your total
> experience with 4 land has been what you have garnered from the liberal
> media via TV or movies.
>
> I do note that the most egregious violations of civil rights occur in
places
> other than 4 land...
>
> Many of us lost ancestors in the war of northern aggression, the flag is a
> source of pride to a people that resisted the imposition of unfair
tariffs,
> made it illegal to import Africans, and wanted to protect their homes. The
> Stars and Bars are a point of pride, and the strains of Dixie (written by
a
> damyankee) played on a town square warms our heart.

Have been staying out of this, but your Leninist historical revisionism is
too much. Having lost ancestors on BOTH sides, I calls that conflict the War
of Stupid Secession. And while Dixie is a bright & lively tune, it's sound
should forever evoke memories of the dark heart of the Confederacy.

Ed
wb6wsn

4384. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 10:23:58 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <XSnsb.23362$mb5.10743@fed1read02>
Source record: 104749
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bopbb1eju1@hercules.btinternet.com...
> I am just a curious foreigner, ie., not a USA citizen.
>
> I've just had a quick speed-read down this thread.
>
> Are you all about to start another civil war?
>
> These things have a habit of spreading.
>
>

Whatsamattter Reg, you still scared of Cromwell?

Ed
wb6wsn

4385. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 10:33:21 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <M%nsb.23363$mb5.6205@fed1read02>
Source record: 104750
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

> .
> .
> = = = "Ed Price" <edprice@cox.net>
> = = = wrote in message news:<haMrb.21534$mb5.18922@fed1read02>...
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> > news:3faf21c0_1@corp.newsgroups.com...
> > > Gene Storey wrote:
> > > > I personally think that only those who are 18 and above, and are not
on
> > > > Social Security should be allowed to vote.
> > >
> > > Your posting is irrelevant. If *any* citizen is prohibited from voting
> > > on each and every law, it is not a pure democracy. You are prohibited
> > > from voting on each and every law.
> > > --
> > > 73, Cecil http://www.qsl.net/w5dxp
> >
> > But any warm body is not necessarily a citizen. The democracy can create
> > rules, democratically approved, which limit the participation in the
> > society. If you do not abide by the rules, you may become ineligible to
> > continue participation within the democracy. Indeed, the simple
democracy
> > can do anything it (collectively) wants. Therein lies the reason for
> > modifying a pure democracy with a set of fixed rules (possibly called a
> > constitution).
> >
> > Ed
> > wb6wsn

"RHF" <rhf-mail@pacbell.net> wrote in message
news:e5e13af8.0311101139.2bc0b9ff@posting.google.com...
> EP,
>
> In a PURE "Democracy", [The Law] is anything the Majority of Citizens
> decide to Vote on at Anytime [.]
>
> With the Words "Lets Vote" The World Changes.
>
> An Anarchist Dream . . .
> - - - Let There Be Chaos !
>
>
> alioli-mcrow ~ RHF

Why thanks, but you could have said it quicker. Next time, just say "Me too."

Ed
wb6wsn

4386. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 10:45:22 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <%aosb.23364$mb5.5675@fed1read02>
Source record: 104751

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:7sbvqv4g6ilk9dsg62f93rt1qn3rqvgv56@4ax.com...
> On Mon, 10 Nov 2003 05:13:51 -0800, "Ed Price" <edprice@cox.net>
> wrote:
>
> >
> >"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> >news:3faf21c0_1@corp.newsgroups.com...
> >> Gene Storey wrote:
> >> > I personally think that only those who are 18 and above, and are not
on
> >> > Social Security should be allowed to vote.
> >>
> >> Your posting is irrelevant. If *any* citizen is prohibited from voting
> >> on each and every law, it is not a pure democracy. You are prohibited
> >> from voting on each and every law.
>
> In the first place we are a "Republic", remember the pledge "and to
> the Republic for which it stands".which is ruled by a "Representative
> Democracy", not a pure democracy.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
> >> --
> >> 73, Cecil http://www.qsl.net/w5dxp
> >
> >But any warm body is not necessarily a citizen. The democracy can create
> >rules, democratically approved, which limit the participation in the
> >society. If you do not abide by the rules, you may become ineligible to
> >continue participation within the democracy. Indeed, the simple democracy
> >can do anything it (collectively) wants. Therein lies the reason for
> >modifying a pure democracy with a set of fixed rules (possibly called a
> >constitution).
> >
> >Ed
> >wb6wsn

Roger:

If you were replying to anything I posted, your intent was unclear. I have
been attempting to show that the USA is NOT, by careful plan, a democracy.
We have a constitutional republic, despite the blatherings of the civically
challenged. Those who bleat the merits of a pure democracy would be the
first to bitch about an infringement of their "rights." Democracy knows no

rights, only majorities.

Ed
wb6wsn

4387. Re: Racist (severely trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 11:06:54 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <bvosb.23365$mb5.18381@fed1read02>
Source record: 104752

"Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net> wrote in message
news:borq9k$1gm7n3$5@ID-189073.news.uni-berlin.de...
>
> "Jackie Ward" <jackiew1@37.com> wrote in message
> news:12329882.0311090859.57803dbf@posting.google.com...
> > Another moron to add to the pile.
> >
> > How can you support Bush when he and the bin Laden family had oil
> > business dealings going back to the 70's?
>
> Really.... proof of this?
>
> >
> > Why did we give Osama bin Laden millions of dollars to fight the
> > Russians in Afganistan?

Would you have felt better if we had sent American soldiers instead of cash?

>
> Why have we armed others that are now our enemies?? Unless I am wrong,
> wasn't actually Iraq a friend of the USA at one point?

The enemy of my enemy is not necessarily my friend. The fact that Iraqiis were happily willing to screw the Iranians was a nice deal for us. Perhaps our biggest mistake was in failing to give the Northern half of Iraq to the Kurds. Then we could have been the Kurd's buddies for 10 years or so. Sure, they would likely turn out to hate us, but hey, meanwhile, they would have screwed Iraq big time. And we surely could have found somebody who hated the Kurds. Hey, what about the Iranians?

Sure, we COULD try to bring peace, love, respect, harmony and tranquility to the Mid East. Trouble is, nobody there seems to believe in those values. Our policy ought to be to keep the oil flowing while we desperately modify our economy to lessen our dependence of foreign oil. If that time ever comes, then we could just let the whole region escape back to the 13th century while we explore the universe.

SNIP

> > Why did they blow up the World Trade Centre when there was 1000 other
> > buildings in hundreds of other countries to choose from?

Well, it was a big, attractive, highly symbolic structure. And, from an engineering analysis standpoint, an eminently vulnerable target. OTOH, the Pentagon, being built to a more functional and less ornamental standard, took a similar blow with far less damage.

Ed
wb6wsn

4388. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 13:24:26 UTC
From: a <a@a.a.a.a>
Message-ID: <botfpufio1@nic.grnet.gr>
Source record: 104755

a!

"Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
news:q4qnqvc20tm660urgg4mn5phf453388q35@4ax.com...
> On Thu, 06 Nov 2003 13:36:17 -0500, Robert Lyons
> <boblyons@duct.umich.edu.tape> wrote:
>
> >W1RFI wrote:
> >
> >> I have not looked at a plasma TV, Chip, but I would make that diagnosis
> >> primarily on on the basis of the sphere of influence. In the BPL test
areas,
> >> the interference was heard over the entire area that had the BPL
couplers in
> >> place.
> >
> >
> >Hmmm - I wonder ... presumably the BPL couplers are capacitors coupling
> >appropriate RF from one leg of the power system to the next. Would they
> >also couple spuriously-generated RF at similar frequencies? (yeah, I'm
> >sure the couplers are more involved than simple RF bypass caps - that's
> >not the question here.)
> >
> >The PPL rep accused you of mis-interpreting the RF from a neon sign as a
> >BPL signal. What DOES happen to the hash generated by a neon sign, then?
> >is it propagated through the power grid much further when BPL couplers
> >are present? How about other sources of broadband noise, like loose
wires,
> >arcing insulators, etc? Will the entire BPL scheme spread all these other
> >spurious emissions far and wide?
> >
> >And, by the way, since aircraft use AM, do they receive hash when they
> >fly over BPL lines? Are our brethren in aviation potentially useful
> >allies in this war?
>
> We'd basically have to identify an area close to an airport.
> IF it were to interfere it would be more likely to interfere with nav
> radios such as the ILS and VORs.
>
> Even small planes are likely to be several thousand feet above any
> current test area and as the areas are small any interference would be
> brief and quite likely unnoticed.
>
> Now, if they'd put one off the approach end of a runway using an ILS

> and screw up the glide slope indication for an airliner, I think the
> PBL experiment would be over in a hurry.
>
> I don't think that is going to happen.
> Even if those frequencies are "notched out" I think it would affect an
> ILS indicator and I emphasize the "I think" part. I also think they
> will avoid putting anything near an airport until the system is in
> widespread use with the hopes that sheer pressure would force the
> continuance of the service. These people "ain't dumb". They are going
> to play everything to their advantage including attempts to discredit
> any testing that shows them in a bad light, as we've already seen. I
> wouldn't call them dishonest, or that they would resort to
> "prefabrication, or prevarication". I think everyone can draw their
> own conclusions.
>
> I would hope the FAA and FCC would require specific testing be done
> both in the laboratory and in the field due to the quite possible
> severe consequences were interference to aviation to occur.
>
> Roger Halstead (K8RI EN73 & ARRL Life Member)
> www.rogerhalstead.com
> N833R World's oldest Debonair? (S# CD-2)
>
> >
> >Bob, KI8AB
>

4389. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 13:54:26 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bote2a$1gbthc$1@ID-175933.news.uni-berlin.de>
Source record: 104753

Please see comments below...

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote (in part):

> Simultaneous transmission of vertical and and horizontal polarised
> signals from a single antenna system is impossible without upsetting
> the desired radiation coverage pattern.

Sorry, but that statement is incorrect as it applies to FM broadcasting, at least. There are many commercial FM broadcast transmit antenna designs capable of doing so, for example the cavity-backed radiator (CBR) introduced by Harris Corporation in the U.S, and used for simultaneous transmission of 8-10 FM channels in r.h. circular polarization at 100kW ERP each. Examples are the Senior Road Tower Group in Houston, and Master FM sites in Miami and St Louis.

The CBR is a panel type antenna designed to mount on and around the faces of a tower, and has azimuth pattern circularity and axial ratio of less than ~1.5dB on a tower of ~2 meter face width. Other OEMs such as Kathrein, SIRA, ERI, Dielectric etc supply other designs nearly as good.

> As Cecil says, nobody gains anything power-wise. For the same
>transmitter radiated power everybody's signals are 3 dB down
>(half-power) relative to simple linear polarision when both transmitting
>and receiving antennas have the same polarisation.

Incorrect again, at least in the US, where FM broadcast ERP is defined only for horizontally polarized radiation. Therefore the output power of the transmitter itself is raised 3dB so that the station's full, authorized ERP is produced in all radiation planes. In theory, a r.h. CP receiving antenna actually will receive 3dB MORE signal from CP transmission than when linear polarization is used. For CP transmit and linear receive, received field strength would be the same as if the transmit antenna also was linear, with the same ERP in the same plane.

> The advantage of circular polarisation is that it doesn't matter which
> polarisation your antenna is orientated because, in practice, when
> erecting it, the polarisation received by your antenna is usually a matter
> of guesswork anyway. Only with relatively-rare, direct line-of-sigh
> it broadcasting propagation is there any certainty in the polarisation
> of received signals.

The full benefit of CP transmission is realized only when a CP receive antenna is used. A CP receive antenna will tend to reject reflections of the transmitted signal (multipath), because the physics of producing the reflection causes a reversal of its polarization sense -- which the CP

receive antenna will reject. Reduced multipath content makes for "cleaner" reception. Not too practical in automobiles, though, where it is most needed.

RF (retired broadcast engineer - RCA and Harris Corp)

Visit http://rfry.org for FM broadcast RF system papers.

4390. We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 14:19:13 UTC
From: desmoface@aol.com
Message-ID: <20031112091913.17228.00000040@mb-m19.aol.com>
Source record: 104754

Hey kids, it's finally on the air..My electrician ran my coax and the loop is up and running..She's cut for 75/80 and I originally came up with about 260 ft of wire but I must have measured wrong cause she show's the lowest swr of ~1.7 to 1 at around 3650..my calculations showed it should have been around 3850...Oh well, maybe its because it's not really as high as it should be??..I noticed after a good rain there appeared to be a lot of slack in one area..could be that the wire stretched a bit?? It's 13 gauge 19 strand copper clad steel so I was hoping stretch would be minimal..Oh well..

Anyway, I'm just running straight coax with no balun (except for several loops of coax at the feed point) so I'm pleased so far with the swr readings..As a plus, my old kenwood ts450sat tunes her up on most of the bands without the use of my outboard tuner..although I will use the outboard tuner to get it close...

Anyway, she plays nice on 80..signals that were barely readable on my butternut vertical were 20 over on the loop..but that was to be expected I guess? Suprisingly, the vertical seems to work a little better on 40..I say "seems" because the static noise was a little higher on the vertical and the qso I had with a friend about 10 miles away confirmed that the vertical was a few s units stronger..he was running a dipole so I would have thought that the loop would have been stronger as its also horizonitaly polarized..

Same with the upper hf bands(10-20)..seems to be a little more noise in the recieve with the vertical..but the bands were in pretty bad shape so It could be that the loop is just that much quieter than the vertical..time will tell..

Thanks to the group for all the advice/help during the construction phase, it's definitely paid off..73's

Steve
kb8viv

4391. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 14:28:55 UTC
From: richardharrison@webtv.net
Message-ID: <521-3FB243A7-1@storefull-2312.public.lawson.webtv.net>
Source record: 104756

Roy, W7EL wrote:
"When all this is done, I hope that readers come away with some assurance that circuit theory does work and can be applied to antenna problems -- provided that the assumotions made for the components are valid."

Yes. And, there is another proviso. The reflected energy must be considered along with the incident energy. Antenna problems are relatives of transmission line problems.

Terman wrote of impedance in a transmission line with a reflection:
"When a reflected wave is present, the impedance will be alternately greater and lower than the characteristic impedance, as illustrated in Fig. 4-10."

This is also true of standing-wave antennas but is complicated by r-f radiation from the antenna.

Early in this thread, I gave the example of W5LIT`s mobile antenna which was all coil. It was a bamboo pole wound end to end with wire. At the feed end its impedance was low. Approximately 90-degrees away at the tip end, impedance was very high as indicated by the corona often produced by the high voltage.

The current at the tip end was much less than at the feed point. The ARRL Antenna Book shows how this can happen in Fig 6 on page 16-4 of the 19th edition.

I admire and appreciate Roy`s experimental verification of antenna speculations and predictions. Until demonstrated, theory is only theory and all such explanations are not necessarily so.

Best regards, Richard Harrison, KB5WZI

4392. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 14:39:20 UTC
From: mxduffie@axtxom.net
Message-ID: <afh4rvkbo83kf6r6n0gdbc6mstnp6it0du@4ax.com>
Source record: 104758

On Wed, 12 Nov 2003 01:08:13 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

> Isn't Yagi a Japanese name?

Japanese-Italian. Antennio Yagimoto.

gm
--
Replace x in adr with c

4393. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 14:44:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb2475d$1_5@corp.newsgroups.com>
Source record: 104757

Roy Lewallen wrote:
> Now, that's quite an insult, based on a total lack of information about
> my career and what I've accomplished.

I freely admit that there was absolutely no truth or validity to the insult.
It was a less than subtle response to your subtle put-downs of some engineers
whose thoughts, style, and results differs from yours. An appropriate response
was difficult to gage. I'm not very subtle and I apologize if the magnitude of
my response was unjustified.

To all readers of this newsgroup:
I have been an admirer and supporter of Roy's contributions to amateur
radio for decades and I will continue to be. This is a public apology.
Roy doesn't really remind me of that engineer who used to work for me.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4394. Re: We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:07:48 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <tpudnVh7S8xT0S-i4p2dnA@comcast.com>
Source record: 104759

"Desmoface" <desmoface@aol.com> wrote in message
news:20031112091913.17228.00000040@mb-m19.aol.com...
> Hey kids, it's finally on the air..My electrician ran my coax and the
> loop is up and running..She's cut for 75/80 and I originally came up
> with about 260 ft of wire but I must have measured wrong cause she
> show's the lowest swr of ~1.7 to 1 at around 3650..my calculations
> showed it should have been around 3850...

Steve,

I had about the same results with my loop. I ended up whacking off about 5 feet after I put it up, and a year later whacked off another 5. There is some confusion as to what the length should be. Also, several people on this newsgroup say that if you use insulated wire, you need to make it shorter. I am using #14 stranded, insulated copper wire.

I wonder where you are feeding it. I started out with the bottom center, and later changed it to a bottom corner. This gives me both horizontal and vertical polarization, and no sag in the wire due to the weight of the coax. EZNEC showed this to be slightly better. I have the center conductor of the coax going to the vertical wire.

Tam/WB2TT

4395. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:15:55 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112101555.29052.00000071@mb-m10.aol.com>
Source record: 104760

>
>To all readers of this newsgroup:
>I have been an admirer and supporter of Roy's contributions to amateur
>radio for decades and I will continue to be. This is a public apology.
>Roy doesn't really remind me of that engineer who used to work for me.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

Same here, ditto!

Just that one would expect from a person like that to be more open minded and less infected by W8JI/G4FGQ (ridiculing absolute knowitalls) virus. We live, learn and still die stupid (who said that? :-)

Yuri

4396. Re: We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:25:42 UTC
From: desmoface@aol.com
Message-ID: <20031112102542.14015.00000071@mb-m15.aol.com>
Source record: 104761

Hi Tam, I'm feeding it at a corner. It's situated horziontally so its horizontally polarized...The difference on paper and actual operation is about 15 feet for me...After the winter's passed I may go out and start pruning the wire a bit..I was originally aiming at 3750/The middle of the band so it looks like if I trim off about 8 ft that should do it...We'll see...Thanks again for the info..

Steve
kb8viv

>Steve,
>
>I had about the same results with my loop. I ended up whacking off about 5
>feet after I put it up, and a year later whacked off another 5. There is
>some confusion as to what the length should be. Also, several people on this
>newsgroup say that if you use insulated wire, you need to make it shorter. I
>am using #14 stranded, insulated copper wire.
>
>I wonder where you are feeding it. I started out with the bottom center, and
>later changed it to a bottom corner. This gives me both horizontal and
>vertical polarization, and no sag in the wire due to the weight of the coax.
>EZNEC showed this to be slightly better. I have the center conductor of the
>coax going to the vertical wire.
>
>Tam/WB2TT

4397. Re: We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:28:44 UTC
From: desmoface@aol.com
Message-ID: <20031112102844.14015.00000072@mb-m15.aol.com>
Source record: 104762

>>Steve,
>>
>>I had about the same results with my loop. I ended up whacking off about 5
>>feet after I put it up, and a year later whacked off another 5.

Tam, sounds like your loop is situated vertically?? What did you use for a feedline? Did you use a balun? What was the lowest swr you obtained?? Thanks again..

Steve
kb8viv

4398. Re: We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:30:20 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112103020.29052.00000072@mb-m10.aol.com>
Source record: 104763

>Also, several people on this
>newsgroup say that if you use insulated wire, you need to make it shorter. I
>am using #14 stranded, insulated copper wire.

Typical insulated wire should be shortened by about 5%.

Yuri

4399. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:31:20 UTC
From: richardharrison@webtv.net
Message-ID: <1701-3FB25248-26@storefull-2317.public.lawson.webtv.net>
Source record: 104764

Cecil, W5DXP wrote:
"---isn`t everything moot after Kraus tells us that the antenna coil can cause a 180 degree phase reversal?"

Yes. The Kraus example is a resonant circuit of a coil which with its inherent self capacitance which can produce a leading or lagging total impedance, depending on frequency.

B. Whitfield Griffith, Jr. demonstrates this with a series LRC circuit on page 108 of "Radio-Electronic Transmission Fundamentals".

Total impedance, Zt = R+jomegaL-J/omegaC.

Griffith tabulates ZL, ZC, and Zt for 2.4, 2.5, 2.6, 2.7, and 2.8 MHz. R=30 ohms at all frequencies.

2.4 MHz, j226ZL, -265ZC, 30-j39Zt
2.5 MHz, j236ZL, -j255ZC, 30-j19Zt
2.6 MHz, j245ZL, -j245ZC, 30-j0Zt
2.7 MHz, j254ZL, -j236ZC, 30+j18Zt
2.8 MHz, j264ZL, -j227ZC, 30+j37Zt

Griffith also gives Zt in polar coordinates but I don`t need to copy that to show that reactance can be either positive or negative in a circuit with both inductance and capacitance.

Best regards, Richard Harrison, KB5WZI

4400. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 15:43:22 UTC
From: richardharrison@webtv.net
Message-ID: <1701-3FB2551A-27@storefull-2317.public.lawson.webtv.net>
Source record: 104765

Reg wrote:
"Isn`t Yagi a Japanese name?"

Uda though so!

Best regards, Richard Harrison, KB5WZI

4401. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:00:40 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <qpl4rvgieujg75e79t043sv31d15q4ctq7@4ax.com>
Source record: 104767

On Mon, 10 Nov 2003 23:08:49 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>

>A polarisation error of 45 degrees of a dipole results in only 3 dB smaller
>signal. This is not noticed in areas of good signal strength where most
>people live. Polarisation doesn't seem to bother mobile phone users very
>much either.
>
>It is necessary only that interfering signals and echos, if there are any,
>are minimised. And that depends more on the direction from which waves are
>received.
>----
>Reg.
>
Reg-

In the mobile radio world, where you do not generally have line of
sight propagation the polarization is best described as random, as it
arrives via multiple paths that change as the user moves or the
surroundings change. Hence, there is no preferred polarization
orientation for the mobile handset.

In fact, you'll find polarization diversity receiving antennas at base
stations, with either switched receivers or maximal ratio combining,
using two receivers, one fed with a vertically polarized antenna and
one with a co-located horizontally polarized antenna. Usually this
works pretty well, just a bit inferior to space diversity, but it's
quite a bit cheaper for the operator, as the V and H antennas can be
put into the same radome, thereby saving antenna rental space.

And, yes, I know polarization diversity goes way back in history and
has been used in HF diversity reception, but it has come back into
widespread use in cellular and PCS base stations.

Jack K8ZOA

4402. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:03:36 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <botl2k$5tf$1@news.service.uci.edu>
Source record: 104766

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vr31fonr28gvf7@corp.supernews.com...
>
> > Are you going to insist that it be one of these ferrite core jobs, or is
it
> > more like ones on a HF6V?
>
> Is there something about a "ferrite job" that makes it follow different
> rules? But the answer is no to both. I insist on using a physically
> small toroid wound on a powdered iron core. Only after people understand
> how a physically small inductor works will they have any chance of
> understanding how a physically long one does.

The discussion is about 'long' inductors. You continue to try to steer the
discussion away from them. Why is that?

73, Jim AC6XG

4403. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:12:15 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <botljc$65s$1@news.service.uci.edu>
Source record: 104768

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fb1997a$1_7@corp.newsgroups.com...
> Reg Edwards wrote:
> > A design which 'exceeds' specified performance is as poor as one which
> > 'under exceeds'.
>
> It would have cost money and space to add the circuits to bring the
> measurable jitter up to the RS232 specification allowable threshold.
> You really think I should have done that?

Designs which overachieve are an embarrassment to the proletariat, and are
to be discouraged.

73, ac6xg

4404. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:17:55 UTC
From: richardharrison@webtv.net
Message-ID: <25623-3FB25D33-29@storefull-2315.public.lawson.webtv.net>
Source record: 104620

mcduffie wrote:
"Japanese-Italian. Antonio Yagimoto."

Kraus wrote:
"Hidetsugu Yagi, professor of electrical engineering at Tohoku University and 10 years Uda`s senior, presented a paper with Uda at the Imperial Academy on "Projector of Sharpest Beam of Electric Waves" in 1926, and in the same year they both presented a paper before the Third Pan-Pacific Congress in Tokyo titled "On the Feasibility of Power Transmission by Electric Waves."

Best regards, Richard Harrison, KB5WZI

4405. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:23:05 UTC
From: jder8745@aol.com
Message-ID: <20031112112305.27776.00000082@mb-m06.aol.com>
Source record: 104619

Howdy, Toy

Best all around antenna is a center fed doublet fed with balanced TL such as transmitting twin lead, ladder line, or open wire line.

Make sure that the sending end of this TL "sees" balanced source.

Mine is 130 ft long fed with 300-Ohm transmitting twin lead. I use it on all bands 80 thru 10. I have also used it on 6M with my tuner straining to get a match.

On 40 the theoretical gain over a dipole is said to be 1.8 dB.

If you can only have one antenna, this is your best bet.

73 es gud luck, Jack K9CUN

4406. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:24:20 UTC
From: Robert Lyons <boblyons@duct.umich.edu.tape>
Message-ID: <g8tsb.5042$H91.103397@news.itd.umich.edu>
Source record: 104623

Reg Edwards wrote:
> In some cases the fixing nuts and bolts have come loose.

So ... with regards to my original question, one respondant voted that those slant-polarized antennas are for reception of 'storecasting' music, one felt it was just an attempt to cover both vertical and horizontally-polarized sources, and one who thinks it's just loose nuts. (and a whole lot of topic-drift discussion about the type of polarization used in broadcast stations).

With regard to Reg's nuts-n-bolts suggestion, I've seen these antennas far too often and in far too exact a 45 degree state for them to be simply loose hardware.

So - other suggestions? Any support for the 'storecasting' idea? One place I saw one of these was on a MacDonalds, another was a bank, so Muzak would make sense. Still, why would so many be off-polarized? Clueless installers covering both bases when they don't know the 'real' polarization? Some special service that transmits at that odd angle?

Bob, KI8AB

4407. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:28:23 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb25fc1$1_2@corp.newsgroups.com>
Source record: 104621

JDer8745 wrote:
> Best all around antenna is a center fed doublet fed with balanced TL such as
> transmitting twin lead, ladder line, or open wire line.

He asked for the best all *round* antenna.
Your antenna is not round at all. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4408. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:33:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb260d9$1_2@corp.newsgroups.com>
Source record: 104622

Yuri Blanarovich wrote:
> We live, learn and still die stupid (who said that? :-)

Einstein, in so many words.
--
73, Cecil http://www.qsl.net/w5dxp

"One thing I have learned in a long life: that all our science, measured
against reality, is primitive and childlike ..." Albert Einstein

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4409. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:50:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb264df_2@corp.newsgroups.com>
Source record: 104626

Roy Lewallen wrote:
> For anyone who cares, the magnitude of the current out of the inductor
> in the later test measured 5.4% less than the current in.

That would be one amp in and 0.9460 amps out. The angle whose cosine
is 1 is zero deg. The angle whose cosine is 0.9460 is 18.9 degrees.
So Yuri's estimate of an 18 degree effect was pretty accurate.
--
73, Cecil http://www.qsl.net/w5dxp

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4410. re: test

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 16:50:17 UTC
From: Richard Hathaway <ricky_hathaway@yahoo.co.uk>
Message-ID: <a57bbad0ae25a9d850682232e6b33475.26492@mygate.mailgate.org>
Source record: 104625

testing

--
Posted via Mailgate.ORG Server - http://www.Mailgate.ORG

4411. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 17:40:23 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <bgusb.22989$Oo4.16018@newsread1.news.atl.earthlink.net>
Source record: 104627

"Ed Price" <edprice@cox.net> wrote in message
news:%aosb.23364$mb5.5675@fed1read02...
>
> "Roger Halstead" <newsgroup@rogerhalstead.com> wrote in message
> news:7sbvqv4g6ilk9dsg62f93rt1qn3rqvgv56@4ax.com...
> > On Mon, 10 Nov 2003 05:13:51 -0800, "Ed Price" <edprice@cox.net>
> > wrote:
> >
> > >
> > >"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> > >news:3faf21c0_1@corp.newsgroups.com...
> > >> Gene Storey wrote:
> > >> > I personally think that only those who are 18 and above, and are
not
> on
> > >> > Social Security should be allowed to vote.
> > >>
> > >> Your posting is irrelevant. If *any* citizen is prohibited from
voting
> > >> on each and every law, it is not a pure democracy. You are prohibited
> > >> from voting on each and every law.
> >
> > In the first place we are a "Republic", remember the pledge "and to
> > the Republic for which it stands".which is ruled by a "Representative
> > Democracy", not a pure democracy.
> >
> > Roger Halstead (K8RI EN73 & ARRL Life Member)
> > www.rogerhalstead.com
> > N833R World's oldest Debonair? (S# CD-2)
> > >> --
> > >> 73, Cecil http://www.qsl.net/w5dxp
> > >
> > >But any warm body is not necessarily a citizen. The democracy can
create
> > >rules, democratically approved, which limit the participation in the
> > >society. If you do not abide by the rules, you may become ineligible to
> > >continue participation within the democracy. Indeed, the simple
democracy
> > >can do anything it (collectively) wants. Therein lies the reason for
> > >modifying a pure democracy with a set of fixed rules (possibly called a
> > >constitution).
> > >
> > >Ed
> > >wb6wsn

>
>
> Roger:
>
> If you were replying to anything I posted, your intent was unclear. I have
> been attempting to show that the USA is NOT, by careful plan, a democracy.
> We have a constitutional republic, despite the blatherings of the
civically
> challenged. Those who bleat the merits of a pure democracy would be the
> first to bitch about an infringement of their "rights." Democracy knows no
> rights, only majorities.
>
> Ed
> wb6wsn
>

Very true....but you can't blame folks for not grasping the facts. Our own representatives call the USA a Democracy. Oh well.

Dan/W4NTI

4412. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 18:03:40 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311121003.417beae9@posting.google.com>
Source record: 104628

Roy Lewallen <w7el@eznec.com> wrote in message news:<vr3a35ore4aa6a@corp.supernews.com>...
> Ok,
>
> For anyone who cares, the magnitude of the current out of the inductor
> in the later test measured 5.4% less than the current in. No phase shift
> was discernible. An analytical person could build on this information to
> investigate the properties of longer inductors placed elsewhere in the
> antenna.
>
> Thank you for the comments, Cecil, Yuri, Richards, Art, and others. I've
> learned a good lesson from this -- that this isn't an appropriate forum
> or appropriate audience for the sort of quantitative analysis and
> reasoning I'm familiar and comfortable with. And that the considerable
> time and effort required to make careful measurements is really of very
> little benefit -- certainly not anywhere near enough to justify it.

Interesting though. I think I may try to rig up some couplers so I can
do this myself. I have the dual channel scope, but I need to build the
couplers.
>
> With a great sigh of relief from everyone, I'm sure, I'll now turn this
> thread back over to Yuri, Cecil, et al.
>
> My apologies to everyone for taking up so much bandwidth.

None needed. If the group can have multiple postings on amateur
racists, and other assorted problem children, then I see no problem
with this thread, no matter how long it gets. So far, your tests,
while not being a bugcatcher type coil seem to match my expectations
fairly closely. I never expected to see no reduction at all. In my
view, even a large 75m bugcatcher coil is still a lumped coil, and
will pretty much act as one. Why do I think this? Because the overall
form is still very small per wavelength. IE: 90 degrees is appx 65 ft.
So far no one has argued that the current taper UNDER the coil is
suspect when modeled. Most all seem to agree that the current
distribution is dramatically improved when the coil is raised up the
mast. If you model a 10 ft whip, using a center load coil, the model
will show max current at the coil. Here is an example using eznec....

EZNEC Demo ver. 3.0

Vertical over real ground 11/12/03 11:30:20 AM

--------------- CURRENT DATA ---------------

Frequency = 3.85 MHz.

Wire No. 1:
Segment Conn Magnitude (A.) Phase (Deg.)
1 Ground 1 0.00
2 1.0013 -0.01
3 1.0036 -0.02
4 1.0072 -0.03
5 1.0122 -0.04
6 1.0192 -0.04
7 1.029 -0.05
8 1.0432 -0.06
9 1.0691 -0.06
10 1.1036 -0.07 ......coil is at segment 10
11 .98384 -0.07
12 .87242 -0.07
13 .77233 -0.07
14 .67604 -0.07
15 .58163 -0.07
16 .48789 -0.08
17 .3938 -0.08
18 .2982 -0.08
19 .19932 -0.08
20 Open .08787 -0.08

OK. Lets say the coil in the real world is one foot long. That is appx 1/10 of the total antenna length. Will there be any argument that max current will occur at the coil? I hope not...
OK. Lets say that Yuri, et el, are correct and there is a noticable taper of current across the coil from bottom to top. I still think they are being fooled by the capacitance above the coil, which is where they are testing, but thats another issue.
Say you have a 1 ft section of the antenna, "coil" and it is found that there is a noticable current taper across it. What would this amount to in the real world? To me, nothing much at all. I don't think it would have any effect on the way I build mobile antennas. It won't have any effect on where I mount my coil, because I am already using the best locations possible. These "best" coil locations are old news and easily calculated using a program such as Reg's "vertload" or even info in the ARRL antenna handbook.
Would this current taper in a 1/10 section of the antenna drastically skew any modeling done of this antenna? It's possible, but again, I really doubt it.
BTW, I think I said earlier that the modeling of these mobile whips didn't do a good job of showing increases in performance due to changes in coil position.
But that seems to not be the case. I may have been thinking of something else. I do show increases in gain when the coil is raised from a base load, to a center load. As far as the reflected currents, and phase, etc, I just don't see that causing a major difference in the current across the coil. Some difference I'm sure, but I don't think it would be enough to cause a difference in either the calculation of best coil location, or in the modeling of the antenna.

I'm still of the opinion that if you measure the current at the top of the coil, where it is attached to the capacitance section, this will slightly stunt the upper coil measurement. The eznec plot *seems* to agree. I'm still of the opinion that the current is *fairly* constant across the coil, but I'm not losing any sleep over it. I'll still be building my antennas the same way I have been. Nothing will change, even if it's determined they are correct about this current taper across the coil. MK

4413. Quad length ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 18:08:48 UTC
From: "Johnny V. Mullins" <jvm333@alltel.net>
Message-ID: <1068660546.824477@cache6.usenetserver.com>
Source record: 104629

OK gang , I was sorta surprised at the different opinions and replies to my question 'bout the correct balun for a
4 element 11 meter "quad" antenna.
I'm still gathering the materials needed, but I thought I'd toss this in, for your opinions.
Now ..... how 'bout a few opinions on the correct length :-)

Now ..... be kind :-)

Johnny

4414. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 18:24:27 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bottn1$9vk$1@news.service.uci.edu>
Source record: 104630

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:vr31fonr28gvf7@corp.supernews.com...
> > Do we agree that the amount of differential will depend on the number of
> > 'degrees missing' from the length of the antenna?

> No. In a few minutes, I'll post a description of a more recent
> measurement I made that refutes this. Of course, elementary circuit
> theory refutes it also, which is the basis for my disagreement.

Perhaps the statement was poorly worded. The presumption is that the
"missing degrees" of length are supplied by the coil. Do you believe this
is untrue? Realize of course, that a sufficiently simple model can fail to
describe any phenomenon which has been oversimplified in the model.

> > Do we agree that the position of the loading coil plays a significant.
> > role in determining how much of a current differential will appear
across
> > it?

> If you're talking about a physically long coil, yes. If you're talking
> about a physically small coil, no.

Yes, Roy. The discussion is limited to those coils which cause a current
differential from one end to the other. The other kind don't meet the
requirement. :-)

> But if you believe that the amount of antenna the coil "replaces"
> determines the differential, wouldn't this be true regardless of the
> placement of the coil in the antenna?

No. Note the shape of the current vs position curve along the antenna. It
doesn't change linearly with position. There are relatively flat regions
near the ends, and there's region nearer the middle where the current
changes rapidly with position. Presumably it's related to the way the
impedance changes with position along the antenna.

> > Are you going to insist that it be one of these ferrite core jobs, or is
it
> > more like ones on a HF6V?

> Is there something about a "ferrite job" that makes it follow different
> rules?

The 'ferrite jobs' provide considerably more inductance for a given coil
size. Fewer turns, shorter length of wire, physically smaller, no
radiation. Do you agree there's a difference between air and ferrite?

> Only after people understand
> how a physically small inductor works will they have any chance of
> understanding how a physically long one does.

Which people are those, Roy?

73, Jim AC6XG

4415. Re: Quad length ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 18:44:17 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <6YqdnR8HQ-DBHS-i4p2dnA@comcast.com>
Source record: 104631

> Now ..... how 'bout a few opinions on the correct length :-)

Driven element, 1 wavelength.
Reflector, about 5% longer,
Directors, about 5% shorter.

Plenty of design stuff available on the web, just scale from the 20/40/10 meter frequency to 11 meters.

4416. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 18:47:59 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <6YqdnR4HQ-DBHS-i4p2dnA@comcast.com>
Source record: 104632

> With regard to Reg's nuts-n-bolts suggestion, I've seen these antennas
> far too often and in far too exact a 45 degree state for them to be
> simply loose hardware.

The ones I've seen didn't look accidental either.

> So - other suggestions? Any support for the 'storecasting' idea? One
> place I saw one of these was on a MacDonalds, another was a bank, so
> Muzak would make sense. Still, why would so many be off-polarized?

Muzak or similar services may do their own transmitters in some places, they frequently operate on subcarriers on the local FM stations.

I've seen them on fast food places as well.

Plot by space aliens to kill us all with junk food? :)

> Clueless installers covering both bases when they don't know the
> 'real' polarization? Some special service that transmits at that odd
> angle?

Poissible, but it takes some effort to get to 45 degrees, most antenna booms are pre-drilled for 0 or 90.

4417. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 19:06:25 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bou09o$bd2$1@news.service.uci.edu>
Source record: 104633

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0311121003.417beae9@posting.google.com...
> So far, your tests,
> while not being a bugcatcher type coil seem to match my expectations
> fairly closely.

I'd like to hear an explanation for ANY current difference across a coil that is supposedly behaving as a lumped inductor. But the test really should be for the same type of antenna used in Yuri's discussion; A physically short antenna, with an electrically long coil, positioned away from the feedpoint. One misconception here has been about the physical length of the coil with respect to wavelength. That's not the most relevant issue, in my opinion. The wire comprising the coil also has a physical length. The relationship between physical length and electrical length is velocity factor. The same thing is true for a coil. The velocity factor for a wire does not go to infinity simply by virtue of the fact that it has been wound into a coil. This is basically what is being implied when someone argues that loading coils do not effectively supliment the electrical length of an antenna.

73, Jim AC6XG

4418. Re: Quad length ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 19:19:12 UTC
From: "Johnny V. Mullins" <jvm333@alltel.net>
Message-ID: <1068664790.643082@ph9cache>
Source record: 104634

OOOOPS !! I should'a said "BOOM LENGTH ", I've got a calculator for the elements, but seems there's
"give" and "take" in considering what boom length to use. i.e. .....
"gain", vs. "rejection"
A shorter boom would be more desirably for my installation.

It's also my understanding that a 4 element matches the 52 ohm coax better than a shorter 3 element ??

Thanks

Johnny

"Johnny V. Mullins" <jvm333@alltel.net> wrote in message news:1068660546.824477@cache6.usenetserver.com...
> OK gang , I was sorta surprised at the different opinions and replies to my
> question 'bout the correct balun for a
> 4 element 11 meter "quad" antenna.
> I'm still gathering the materials needed, but I thought I'd toss this in,
> for your opinions.
> Now ..... how 'bout a few opinions on the correct length :-)
>
> Now ..... be kind :-)
>
> Johnny
>
>
>

4419. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 19:25:25 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311121125.53c1d95b@posting.google.com>
Source record: 104635

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb1a979$1_7@corp.newsgroups.com>...
> Yuri Blanarovich wrote:
> > What's this guessing game anyway?
>
> If you can talk an astronomer into predicting the day in 2004 when
> the first level 3 solar storm will hit earth, you can discredit him
> when his prediction falls through.

More thoughts from the rubber room...Lets say you, Yuri and crew are
correct and the current taper is large across the coil.
Lets say the coil is still a 1 ft long bugcatcher coil.
Lets say the current is fairly constant below the coil.
What will the real world effect be of this phenomenon?
About the same as using a shorter coil, the way I see it.
The current below the coil should still be appx the same. The coil
location has not moved. All you might see is a beginning of current
taper of appx 2-4-6 inches lower than you might normally expect. What
will be the effect of this? Hardly nada I suspect. But lets take this
to a further gross level. Lets drop the coil from 47.5% above base, to
37.5% above base. Will all surely agree this would be a worse case to
performance than any severe taper of current in the coil? What do I
see when modeling? -1.75 dbi vs -1.96 dbi. I think this discrepancy
would be as bad as you would ever see from a taper of current across a
coil. Even if the coil was a foot long or longer, as long as you don't
approach a helical antenna. I can't normally hear .21 db difference.
But lets take this even farther and use vertload. I tried an appx 10
ft antenna with a coil 1.44 m above base, with a 1.5 m stinger. The
radiating efficiency was 17.58 db using 4 ohms for ground loss, with a
1.3 db hit compared to a 1/4 wave. I then dropped the coil to 1.14 m
above base, and lengthened the stinger to 1.8 m. 15.95 db efficiency
with the same 1.3 db hit compared to a 1/4 wave. I assume this
difference to be as bad and most likely worse than any error shown
from a current taper across the coil when modeling or in the real
world.
To *me*, I find it all pretty much a non issue, and basically a turd
hunt as we call it down here in redneck country. But this is not to
say I don't admire the determination and grit of the participants
involved in this episode of "A Current Affair". But what do I
know...They don't keep me in a rubber room for nothing... MK

4420. re: test

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 19:28:15 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112142815.29052.00000084@mb-m10.aol.com>
Source record: 104636

>
>testing
>
>
>--
>Posted via Mailgate.ORG Server - http://www.Mailgate.ORG
>
>

It works!

Go to step 2

4421. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 19:59:33 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <VaqdnTi29om4DC-iRVn-tg@comcast.com>
Source record: 104637

On 11-Nov-2003, Roy Lewallen <w7el@eznec.com> wrote:

> My apologies to everyone for taking up so much bandwidth.
>
> 73,
> Roy Lewallen, W7EL

Roy,

Your postings are never a waste of bandwidth. I hope that you plan to publish more of the type of
experiments which you have just described. I believe your methods are brilliant examples of both
the scientific method and good engineering practice. Bravo Zulu!

KO6NO

4422. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:09:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb2939c_2@corp.newsgroups.com>
Source record: 104638

Mark Keith wrote:
> So far, your tests,
> while not being a bugcatcher type coil seem to match my expectations
> fairly closely.

They seem to have matched Yuri's predictions almost exactly. He predicted
a 5% reduction in current. That was very close. He predicted an 18 degree
effect. Turns out a 5% reduction in current in that area of the cosine
curve is almost exactly 18 degrees. Cos-1(.95) = 18 degrees
--
73, Cecil http://www.qsl.net/w5dxp

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4423. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:14:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb294be$1_2@corp.newsgroups.com>
Source record: 104639

Jim Kelley wrote:
> Perhaps the statement was poorly worded. The presumption is that the
> "missing degrees" of length are supplied by the coil. Do you believe this
> is untrue? Realize of course, that a sufficiently simple model can fail to
> describe any phenomenon which has been oversimplified in the model.

Roy's measurements verify Yuri's predictions. Assuming 1.0 amps at zero
degrees on one side of the coil, 0.95 amps out is almost exactly 18 degrees
since arc-cos(0.95)=18.2 degrees. Am I missing something?
--
73, Cecil http://www.qsl.net/w5dxp

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4424. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:16:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb29550_2@corp.newsgroups.com>
Source record: 104640

Jim Kelley wrote:

> I'd like to hear an explanation for ANY current difference across a coil
> that is supposedly behaving as a lumped inductor. But the test really
> should be for the same type of antenna used in Yuri's discussion;

Jim, did you fail to notice that arc-cos(0.95) = 18.2 degrees?
--
73, Cecil http://www.qsl.net/w5dxp

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4425. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:19:11 UTC
From: Emma <emma_hentenna@hotmail.com>
Message-ID: <bou4k0$3e1$1@nic.grnet.gr>
Source record: 104641

Yes,"a" in the diagram below is the wire radius.

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
/Hentenna%20Geometry.htm

My design results, for two different radius values,
of R, X, Z, Rho, SWR and Directivity, as they vary with the driving element
position,
are shown at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaA/Henten
naA.htm

and

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaB/Henten
naB.htm

I would be most grateful if you could have a look at these results and make
any comments.

I would also appreciate any reference you may point at, in addition to those
I collected at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/References/refer
ences.htm

Thank you in advance for your time,

Emma

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0311111603.36412349@posting.google.com...
> (I assume "a" in the diagram you linked to is the wire radius or
> diameter, though it probably is not critical.)
>
> Yes, it appears that it would be best if the feed is balanced. A
> balun to transform from an unbalanced feed to a balanced one is a good
> idea for this antenna. You can put the balun at the antenna, or some
> distance away and feed from the balun to the antenna with balanced
> line, if the line is arranged symmetrically with respect to the
> antenna. It would also be good to know the approximate feedpoint
> impedance of the antenna. An eznec (or similar) model of the antenna
> should give you an idea about the feedpoint impedance. If you use
> coaxial feedline to the balun, which connects in turn directly to the
> antenna, and if you dress the feedline so it runs away from the
> antenna perpendicular to the wire where the feed point is, a single
> balun is likely enough, but if the feedline runs away from the antenna

> at an angle, it may be advisable to also use a choke-type balun
> perhaps 1/4 wavelength from the feedpoint. On the other hand, I would
> not expect enough gain from this antenna that it would matter a lot,
> and you may do fine not using a balun at all and just letting the
> feedline radiate a little.
>
> Cheers,
> Tom
>
> "emma" <emma_hentenna@hotmail.com> wrote in message
news:<booqk5$4ef$1@nic.grnet.gr>...
> > In the picture below appears the geometry of the Hentenna.
> > No constructional details are given.
> >
> >
http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> > /Hentenna%20Geometry.htm
> >
> > However I can use a balun to connect the coaxial line with the
connector.
> > Because of the skin effect there is current in the interior and the
exterior
> > of the conductor.
> > Firstly this current is only superficial.A part of it ends into one of
two
> > wires.
> > As result we connect an unbalanced system(coaxial line) with a balanced
> > one(conductor).
> > In order to avoid this we use a balun which is a geometry transformer.
> >
> > I ask for more comments.
> >
> > Emma

4426. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:20:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb29641_2@corp.newsgroups.com>
Source record: 104642

Mark Keith wrote:
> More thoughts from the rubber room...Lets say you, Yuri and crew are
> correct and the current taper is large across the coil.
> Lets say the coil is still a 1 ft long bugcatcher coil.
> Lets say the current is fairly constant below the coil.
> What will the real world effect be of this phenomenon?

Roy's measurements vindicated Yuri's prediction. Current in equals 1.0 amp
at zero degrees. Measured current out equals 0.95 amps. arc-cos(0.95) =
18 degrees. Yuri's prediction was right on. What else is there to argue
about? Even the small toroidal coil functioned exactly as predicted by
Yuri.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4427. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:26:09 UTC
From: Emma <emma_hentenna@hotmail.com>
Message-ID: <bou512$3rd$1@nic.grnet.gr>
Source record: 104643

Yes,"a" in the diagram below is the wire radius.

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
/Hentenna%20Geometry.htm

My design results, for two different radius values,
of R, X, Z, Rho, SWR and Directivity, as they vary with the driving element
position,
are shown at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaA/Henten
naA.htm

and

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaB/Henten
naB.htm

I would be most grateful if you could have a look at these results and make
any comments.

I would also appreciate any reference you may point at, in addition to those
I collected at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/References/refer
ences.htm

Thank you in advance for your time,

Emma

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0311111603.36412349@posting.google.com...
> (I assume "a" in the diagram you linked to is the wire radius or
> diameter, though it probably is not critical.)
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> Yes, it appears that it would be best if the feed is balanced. A
> balun to transform from an unbalanced feed to a balanced one is a good
> idea for this antenna. You can put the balun at the antenna, or some
> distance away and feed from the balun to the antenna with balanced
> line, if the line is arranged symmetrically with respect to the
> antenna. It would also be good to know the approximate feedpoint
> impedance of the antenna. An eznec (or similar) model of the antenna
> should give you an idea about the feedpoint impedance. If you use
> coaxial feedline to the balun, which connects in turn directly to the
> antenna, and if you dress the feedline so it runs away from the
> antenna perpendicular to the wire where the feed point is, a single
> balun is likely enough, but if the feedline runs away from the antenna

> at an angle, it may be advisable to also use a choke-type balun
> perhaps 1/4 wavelength from the feedpoint. On the other hand, I would
> not expect enough gain from this antenna that it would matter a lot,
> and you may do fine not using a balun at all and just letting the
> feedline radiate a little.
>
> Cheers,
> Tom
>
> "emma" <emma_hentenna@hotmail.com> wrote in message
news:<booqk5$4ef$1@nic.grnet.gr>...
> > In the picture below appears the geometry of the Hentenna.
> > No constructional details are given.
> >
> >
http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> > /Hentenna%20Geometry.htm
> >
> > However I can use a balun to connect the coaxial line with the
connector.
> > Because of the skin effect there is current in the interior and the
exterior
> > of the conductor.
> > Firstly this current is only superficial.A part of it ends into one of
two
> > wires.
> > As result we connect an unbalanced system(coaxial line) with a balanced
> > one(conductor).
> > In order to avoid this we use a balun which is a geometry transformer.
> >
> > I ask for more comments.
> >
> > Emma

4428. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:44:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j365rv4jgceclflh85ln20gh4feura5m0h@4ax.com>
Source record: 104644

On 12 Nov 2003 10:03:40 -0800, nm5k@wt.net (Mark Keith) wrote:

>OK. Lets say the coil in the real world is one foot long. That is appx
>1/10 of the total antenna length. Will there be any argument that max
>current will occur at the coil? I hope not...

Hi Mark,

I offered an EZNEC analysis that supported (circumspectly) Yuri's
position, but he blew it off chasing rainbows. Using the protocol
(already published by Yuri) for emulating a solenoid (and not just the
contentious one point load), that solenoid is found residing on
segments 50 to 59 (spanning 10 inches):
>1 W2E1 1 0.00
>2 .95623 0.00
>3 .9205 0.00
>4 .88976 0.00
>5 .86122 0.00
>6 .83415 0.00
>7 .80815 0.00
>8 .78296 0.00
>9 .75843 0.00
>10 .73443 0.00
>11 .71088 0.00
>12 .68771 0.00
>13 .66486 -0.01
>14 .64229 -0.01
>15 .61997 -0.01
>16 .59787 -0.01
>17 .57596 -0.01
>18 .55421 -0.01
>19 .53261 -0.02
>20 .51115 -0.02
>21 .48979 -0.02
>22 .46853 -0.02
>23 .44736 -0.02
>24 .42627 -0.02
>25 .40523 -0.02
>26 .38424 -0.02
>27 .36329 -0.02
>28 .34238 -0.03
>29 .32148 -0.03
>30 .30059 -0.03
>31 .27969 -0.03
>32 .25878 -0.03

```
>33 .23785 -0.03
>34 .21688 -0.04
>35 .19585 -0.04
>36 .17477 -0.04
>37 .1536 -0.05
>38 .13234 -0.05
>39 .11095 -0.06
>40 .08941 -0.07
>41 .06769 -0.08
>42 .04576 -0.12
>43 .02355 -0.21
>44 .001 -4.38
>45 .02202 -179.8
>46 .04579 180.00
>47 .0707 180.00
>48 .09404 180.00
>49 .11529 180.00
>50 .13404 180.00
>51 .14984 180.00
>52 .16235 180.00
>53 .17155 180.00
>54 .17718 180.00
>55 .17057 180.00
>56 .15943 180.00
>57 .15069 180.00
>58 .1433 180.00
>59 .13668 180.00
>60 .1306 180.00
>61 .12495 180.00
>62 .11962 180.00
>63 .11457 180.00
>64 .10975 180.00
>65 .10512 180.00
>66 .10066 180.00
>67 .09634 180.00
>68 .09216 180.00
>69 .08809 180.00
>70 .08413 180.00
>71 .08025 180.00
>72 .07646 180.00
>73 .07274 180.00
>74 .06908 180.00
>75 .06549 180.00
>76 .06194 180.00
>77 .05845 180.00
>78 .05499 180.00
>79 .05158 180.00
>80 .04819 180.00
>81 .04484 180.00
>82 .0415 180.00
```

>83 .03819 180.00
>84 .03488 180.00
>85 .03159 180.00
>86 .02829 180.00
>87 .02499 180.00
>88 .02167 180.00
>89 .01831 180.00
>90 .01491 180.00
>91 .01141 180.00
>92 .00777 180.00
>93 Open .00363 180.00

I will note a caveat that it does not prove anything by Yuri's source of information, and as Yuri is admittedly ignorant of the details of the physical model, I was forced to guess the model specification by the inference of the commentary at his page, and the attending photographs. Further, contrary to what was said, neither is it resonant (a fact that Yuri offers no amplification too, amending data, or confirmation nor denial), About the only thing that can be said: "the solenoid offers a current differential."

73's
Richard Clark, KB7QHC

4429. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 20:56:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q175rvgj6kr3uarlma4pknc33cs1l97hsl@4ax.com>
Source record: 104645

On 12 Nov 2003 11:25:25 -0800, nm5k@wt.net (Mark Keith) wrote:

> But lets take this
>to a further gross level. Lets drop the coil from 47.5% above base, to
>37.5% above base. Will all surely agree this would be a worse case to
>performance than any severe taper of current in the coil?

Hi Mark,

My model took no more than a minute to offer (in comparison to the
like data already offered in response to your other post):
>1 W2E1 1 0.00
>2 .94658 0.00
>3 .90287 0.00
>4 .86518 0.00
>5 .83014 0.00
>6 .79686 0.00
>7 .76486 0.00
>8 .73383 0.00
>9 .70357 0.00
>10 .67393 0.00
>11 .64482 0.00
>12 .61614 -0.01
>13 .58783 -0.01
>14 .55984 -0.01
>15 .53212 -0.01
>16 .50463 -0.01
>17 .47734 -0.02
>18 .45021 -0.02
>19 .42323 -0.02
>20 .39637 -0.02
>21 .36959 -0.02
>22 .34288 -0.02
>23 .31623 -0.02
>24 .2896 -0.03
>25 .26298 -0.03
>26 .23634 -0.03
>27 .20966 -0.03
>28 .18292 -0.04
>29 .15608 -0.04
>30 .12912 -0.05
>31 .102 -0.07
>32 .07466 -0.09
>33 .04706 -0.14
>34 .01911 -0.32

```
>35 .00929 -179.4
>36 .03832 -179.9
>37 .06839 180.00
>38 .10011 180.00
>39 .12989 180.00
>40 .15719 180.00
>41 .17431 180.00
>42 .18799 180.00
>43 .19776 180.00
>44 .20299 180.00
>45 .20331 180.00
>46 .19816 180.00
>47 .18701 180.00
>48 .17804 180.00
>49 .17045 180.00
>50 .16365 180.00
>51 .15741 180.00
>52 .1516 180.00
>53 .14614 180.00
>54 .14097 180.00
>55 .13604 180.00
>56 .13133 180.00
>57 .12679 180.00
>58 .12241 180.00
>59 .11817 180.00
>60 .11405 180.00
>61 .11005 180.00
>62 .10614 180.00
>63 .10233 180.00
>64 .0986 180.00
>65 .09494 180.00
>66 .09134 180.00
>67 .08781 180.00
>68 .08434 180.00
>69 .08091 180.00
>70 .07754 180.00
>71 .0742 180.00
>72 .0709 180.00
>73 .06764 180.00
>74 .06441 180.00
>75 .06121 180.00
>76 .05804 180.00
>77 .05488 180.00
>78 .05175 180.00
>79 .04863 180.00
>80 .04553 180.00
>81 .04243 180.00
>82 .03935 180.00
>83 .03626 180.00
>84 .03318 180.00
```

>85 .03009 180.00
>86 .02699 180.00
>87 .02387 180.00
>88 .02073 180.00
>89 .01754 180.00
>90 .0143 180.00
>91 .01096 180.00
>92 .00748 180.00
>93 Open .0035 180.00
>
The solenoid was dropped 10 inches between the two models.
Best gain = -15.33dBi @ 29 deg for this
Best gain = -9.52dBi @ 29 deg for the former
and in both cases, a hellacious mismatch.

I would like to have an answer to why the disparity in the state of tune between this model and the physical model it pretends to represent, but Yuri has steadfastly sloughed off those questions demanding that it is my responsibility to prove his thesis right.

73's
Richard Clark, KB7QHC

4430. Re: Quad length ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 21:09:18 UTC
From: W6DKN <w6dkn-nospam-@qsl.net>
Message-ID: <vr58c1gjhj6a4c@corp.supernews.com>
Source record: 104646

Johnny V. Mullins wrote:
> OOOOPS !! I should'a said "BOOM LENGTH ", I've got a calculator for
> the elements, but seems there's
> "give" and "take" in considering what boom length to use. i.e. .....
> "gain", vs. "rejection"
> A shorter boom would be more desirably for my installation.
>
> It's also my understanding that a 4 element matches the 52 ohm coax
> better than a shorter 3 element ??
>
> Thanks
>
> Johnny

See http://www.softcom.net/users/kd6dks/quad.html

4431. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 21:17:37 UTC
From: Sparks <sparksw4eas@mindspring.com>
Message-ID: <3FB2CDA1.221D@mindspring.com>
Source record: 104647

It IS STORECASTING in ALL instances in Florida. It is 45 degrees.
You-All are missing the true fact in the USA, "Most" stations use dual
polorized antenni and a very large number use circular. Broadcast
Consultant

4432. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 21:23:21 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112162321.05279.00000074@mb-m21.aol.com>
Source record: 104648

Richard KB7QHC wrote:

>I offered an EZNEC analysis that supported (circumspectly) Yuri's
>position, but he blew it off chasing rainbows.

I am terribly sorry, with all the mumbo-jumbo going on I didn't see the right rainbow over the devils :-)

I have to go back and reread the thread (take a vacation :-), I guess some of the points obvious to me that were nit picked blinded me over the diamonds hidden. The confusion was that all I had on the W9UCW set up was what I had published, and you assumed that was my setup/data and kept asking me about it.

I will be making snap-on current probe, which will make it easier to slide along the element and observe the current without the disturbance to the antenna and will be a bit different over the thermocouple meters. Just need a bit more time.

Thanks to all those civil pros and cons, looks like we are getting ahead. If we can implements the phenomena properly in modeling software, it should be giant step in properly analyzing and designing loaded antennas and elements. There are many dBs hidden there.

Yuri, K3BU/m

4433. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 21:40:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hl95rv0bgpm7s7t4i5l4i2jh3o8s4lnlgp@4ax.com>
Source record: 104649

On 12 Nov 2003 21:23:21 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

>Richard KB7QHC wrote:
>
>>I offered an EZNEC analysis that supported (circumspectly) Yuri's
>>position, but he blew it off chasing rainbows.
>
>I am terribly sorry, with all the mumbo-jumbo going on I didn't see the right
>rainbow over the devils :-)

Hi Yuri,

It's fine by me to be compared to devils (munchkins in comparison to
their satanic majesty).
>
>I have to go back and reread the thread (take a vacation :-), I guess some of
>the points obvious to me that were nit picked blinded me over the diamonds
>hidden. The confusion was that all I had on the W9UCW set up was what I had
>published, and you assumed that was my setup/data and kept asking me about it.

If you quote a source, you are responsible for the outcome of its
challenge. It is not up to the challenger to chase down the
problematic details, and it is not your defense to say the other guy
got it wrong.

The question that leaps to mind is how are you going to replicate the
data if you were so ignorant of the original details? Even more, it
would further all discussion for you to offer a COMPLETE specification
of what you are doing (or going to do), rather than an informal ramble
around the garden with a camera.

>
>I will be making snap-on current probe, which will make it easier to slide
>along the element and observe the current without the disturbance to the
>antenna and will be a bit different over the thermocouple meters. Just need a
>bit more time.

This is responsive to my issue with heat - through substitution. It
doesn't completely answer it, but the data is the focus and the
reduction of error is a goal.

>
>Thanks to all those civil pros and cons, looks like we are getting ahead. If we
>can implements the phenomena properly in modeling software, it should be giant
>step in properly analyzing and designing loaded antennas and elements. There
>are many dBs hidden there.

>
>Yuri, K3BU/m

73's
Richard Clark, KB7QHC

4434. WANTED-DONATIONS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 21:48:49 UTC
From: n2ion@aol.com
Message-ID: <20031112164849.25862.00000102@mb-m05.aol.com>
Source record: 104650

LIMARC (the Long Island Mobile Amateur Radio Club) has had two Field Day meetings in preparation for the big event next June. We want to improve our emergency preparedness and we feel that it's to the club's and public's advantage to get an early start. We want to be ready far in advance of this event.

LIMARC feels strongly about being ready to assist in any type of emergency situation. We would like to be ready to do our part for public service.
At this time LIMARC is looking for donations of towers, telescoping masts, beams or vertical antennas, radios, etc. to be used for the Field Day event, or any other emergency where we may need to provide emergency communications.

If you have any of the above items, and are not using them, and would be intersted in donating to our cause, please contact Jeff, N2ION@AOL.COM or by phone at 516-356-0800.

The club will provide you with a donation confirmation document letter for tax purposes.

We really need your help at this time so please try to assist us as best you can.

Thanks & 73,
Jeff, N2ION
Co-Chairman-LIMARC Field Day Committee

4435. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 22:00:04 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <heSdndd6MoT-MC-iRVn-tg@comcast.com>
Source record: 104651

"Sparks" <sparksw4eas@mindspring.com> wrote in message
news:3FB2CDA1.221D@mindspring.com...
> It IS STORECASTING in ALL instances in Florida. It is 45 degrees.
> You-All are missing the true fact in the USA, "Most" stations use dual
> polorized antenni and a very large number use circular. Broadcast
> Consultant

Ok, that makes some sense then, but what's the advantage of sitting the
antenna at 45 then?
It should work as well at any angle, as long as it's pointed the right way.

4436. Re: Quad length ???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 22:01:19 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <nuWdnTZUfO42MC-iRVn-jg@comcast.com>
Source record: 104652

> > It's also my understanding that a 4 element matches the 52 ohm coax
> > better than a shorter 3 element ??

I wouln't expect that to be true, though for specific antennas it might be.
If both antennas are properly designed and built, no.

4437. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 22:30:15 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112173015.14053.00000083@mb-m15.aol.com>
Source record: 104653

Richard,
If your current is different at the ends of the coil, you're an angel.

>
>The question that leaps to mind is how are you going to replicate the
>data if you were so ignorant of the original details? Even more, it
>would further all discussion for you to offer a COMPLETE specification
>of what you are doing (or going to do), rather than an informal ramble
>around the garden with a camera.

The point of the original argument was: is the current the same or different at the ends of the typical coil in loaded antenna. I will reiterate the exercise: I knew it was different from my "heat tests with Hustler", W8JI countered "you dummy, it can't be" (in a nutshell :-), ON4UN showed graphically how, W9UCW chimed in "it is, I measured it, here is some data", Cecil theorized it, W8JI chorus "calculated" it can't be.

My point is that I argued that current is different, not how precisely I can calculate or offer calculated "proof", the first order was to convince unbelievers that there is a difference and let them loose to figure out why (Cecil shined light on it) and then to properly apply formulas and figures so we can model it.

So when I say that I want to do MY measurements, I am not after exactly duplicating W9UCW measurements and test, I just want to pick, first my mobile antenna (practical situation) and then similar setup what Barry used - nice 60 radial ground plane and various loaded radiators and see what (formulas, software) comes close to reality. We are already seeing some path, and with sliding current probe I believe I can get more data along the radiators and we can see how does it jive with Barry's and with calculations and modeling. So again, I am not after replicating Barry's laboratory. If what we are saying is true, than it doesn't matter how fat the coil is, where it is within the limits, more data from various situations will help us to correlate the procedures. My goal was to convince unbelievers (and as we can see, there are plenty), well, to show that current in a typical loading coil's ends IS DIFFERENT (it is up them to believe it or not).

This wasn't on the level of scientific conference paper, but more like a street fight - who is right and why are you ridiculing me (us) if I am (we are) right. Now roll your slide rule blades out and lets do the stage two, fine tune the "theory" and put some good numbers on IT.

So she's round after all? Should we change thread name now?

Yuri, K3BU.us

4438. Re: To trust which SWR meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-12 23:20:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB2C029.48C07FBA@cwis.net>
Source record: 104654

"G. Doughty",
Just for curiosity's sake, what is the difference in
readings?
'Doc

4439. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 00:03:23 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86wua5qgms.fsf@duchess.twilley.org>
Source record: 104655

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Dave" == Dave VanHorn <dvanhorn@cedar.net> writes:

[... Sparks talks about storecasting ...]

Dave> Ok, that makes some sense then, but what's the advantage of
Dave> sitting the antenna at 45 then? It should work as well at any
Dave> angle, as long as it's pointed the right way.

Sitting the antenna at 45 degrees drops the level of vertically- and
horizontally-polarized noise 3db, I believe.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
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Omgn8k6sAY+3tf6fruNtGoc=
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4440. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 00:10:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb2cbfd$1_4@corp.newsgroups.com>
Source record: 104656

Yuri Blanarovich wrote:
> So when I say that I want to do MY measurements, I am not after exactly
> duplicating W9UCW measurements and test, I just want to pick, first my mobile
> antenna (practical situation) and then similar setup what Barry used - nice 60
> radial ground plane and various loaded radiators and see what (formulas,
> software) comes close to reality.

Why bother, Yuri? Roy proved your predictions to be right on. His physically
small inductance had almost exactly an 18 degree effect just as you predicted.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4441. Re: We Have Loopage!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 00:50:02 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <FtednYuse_fOSC-iRVn-sw@comcast.com>
Source record: 104657

Steve,

Yes, it is mounted vertically. Not a true square, since the two tree branches at 75 feet are only 65 feet apart. So, it is a trapezoid, with the bottom wire about 80 feet long. Feeding a corner with a 1/4 wave section (at 3800) of RG11 75 Ohm coax. This goes into about 100 feet of LMR240. SWR at the shack end of the 240 is about 1.1:1 at resonance. SWR on 40 and 17 meters is about 5:1. but my Ameritron amp with a Pi network output will load up OK on both bands. I just keep the power down to 600W or so. I am looking at replacing the RG11 with a 2.25:1 transformer.

Tam/WB2TT
"Desmoface" <desmoface@aol.com> wrote in message
news:20031112102844.14015.00000072@mb-m15.aol.com...
> >>Steve,
> >>
> >>I had about the same results with my loop. I ended up whacking off about
5
> >>feet after I put it up, and a year later whacked off another 5.
>
> Tam, sounds like your loop is situated vertically?? What did you use for a
> feedline? Did you use a balun? What was the lowest swr you obtained??
Thanks
> again..
>
> Steve
> kb8viv

4442. Re: Force 12 and Hex-Beam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 02:06:59 UTC
From: Old Ed <eseniorsR-E-M-O-V-E@earthlink.net>
Message-ID: <7HBsb.10998$6c3.7066@newsread1.news.pas.earthlink.net>
Source record: 104658

Thanks to all who responded to my question(s)!

73, Ed

4443. Re: Screw-Driver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 03:01:01 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB2F3ED.32353EBF@cwis.net>
Source record: 104659

Kevin & Natalia,
Tried to email you direct but it was returned.
'Doc

4444. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 04:21:58 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031112232158.28583.00000149@mb-m11.aol.com>
Source record: 104660

>
>Why bother, Yuri? Roy proved your predictions to be right on. His physically
>small inductance had almost exactly an 18 degree effect just as you
>predicted.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

I want to see how well can we track modeling, and what is the proper way to model the inductors and "force" the Eznec et al to tell the truth?

Back to the behavior of coils and RF current distribution, isn't the same thing happening in a PI tank of amplifiers? At one end we have hi impedance (tube side) low current, at the antenna end we have low impedance high current? Another case when current across the coil CAN be different?

Yuri, K3BU.us

4445. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 05:23:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s536rvcndj774kson6o4fa73uegou1agne@4ax.com>
Source record: 104661

On 13 Nov 2003 04:21:58 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:
>I want to see how well can we track modeling, and what is the proper way to
>model the inductors and "force" the Eznec et al to tell the truth?

Hi Yuri,

This is the problem of framing the question. The choice of a lumped component in EZNEC (as I understand it) is entirely your choice, just as is the choice in the number of radials to put under an antenna. If the lumped component is inappropriate (just as would be a non representative ground system or incorrect choice of ground models) that is the consequence of your bad choice. Your page already offers the solution for a solenoid, a simple protocol that fits the situation you presented and to which you identified and presented Tom as performing inappropriately. In other words, he did not practice the protocol, and so it seems, neither have you.

This returns us to the adequacy of actually framing the specification (instead of the question). Can you present a format for testing BOTH the physical model and the software model that allows the software model to be accurate? To this point, no. Not knowing the particulars that lead to the data offered, and then comparing to a poor model was in fact no proof at all. That data, and even my model barely reconcile to any of but one possible fact: a current differential across a long solenoid (something that Roy has not dismissed even if that answer has been projected upon him by theory spinners). It conforms to your thesis, but it hardly proves it (simply because it inverts your expectations shown in this so-called data).

Take the simple question I offered you some time ago: "What is the value of this inductor?" You have never responded to this, nor offered an anticipated value for your own, future work. You condemned Tom for his poor work, and yet he is the only one to offer a working value; and if the lack of resonance in my model is any indication, it is an entirely wrong value, but to this point it is the ONLY specific value offered by ANYONE. What value is this data, your proof, if you cannot provide such a fundamental characteristic?

OK, so you are going to abandon it as anecdotal and replace it with your own effort. Do you have an estimated value for such fundamental issues as the size of the radiator, the solenoid, its value, its placement, the ground system? It took me less effort to spin up a model than write this missive. What overwhelming problems do you dwell on such that this discussion goes mute?

I am puzzled how you can demand that others perform the benchwork when you cannot present the problem for them to examine. Roy opened a new thread doing just that, and the sneer review pointed out it was not the same (as what?). Of course it wasn't, no one has any but the barest of details. His inductor was too small and in the wrong place to accept as a valid representation of the issue goes the rebuttal; but it proved you right by conforming to all the particulars. Now if that doesn't hold the record for self-contradiction, I am sure it will be eclipsed tomorrow. That was an exercise in framing the answer, a practice of the cut-and-paste theorists that speed read through their bibles looking for a passage in greek that corresponds to their view of the world.

When these threads turn to examining "the truth," it is more than obvious that such a pursuit is bogged down from the beginning and not necessarily due to an artifact of any tool as it is of the mind.

73's
Richard Clark, KB7QHC

4446. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 06:02:50 UTC
From: tdonaly@aol.com
Message-ID: <20031113010250.16652.00000143@mb-m07.aol.com>
Source record: 104662

Richard wrote,
>
>
>On 13 Nov 2003 04:21:58 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
>wrote:
>>I want to see how well can we track modeling, and what is the proper way to
>>model the inductors and "force" the Eznec et al to tell the truth?
>
>Hi Yuri,
>
>This is the problem of framing the question. The choice of a lumped
>component in EZNEC (as I understand it) is entirely your choice, just
>as is the choice in the number of radials to put under an antenna. If
>the lumped component is inappropriate (just as would be a non
>representative ground system or incorrect choice of ground models)
>that is the consequence of your bad choice. Your page already offers
>the solution for a solenoid, a simple protocol that fits the situation
>you presented and to which you identified and presented Tom as
>performing inappropriately. In other words, he did not practice the
>protocol, and so it seems, neither have you.
>
>This returns us to the adequacy of actually framing the specification
>(instead of the question). Can you present a format for testing BOTH
>the physical model and the software model that allows the software
>model to be accurate? To this point, no. Not knowing the particulars
>that lead to the data offered, and then comparing to a poor model was
>in fact no proof at all. That data, and even my model barely
>reconcile to any of but one possible fact: a current differential
>across a long solenoid (something that Roy has not dismissed even if
>that answer has been projected upon him by theory spinners). It
>conforms to your thesis, but it hardly proves it (simply because it
>inverts your expectations shown in this so-called data).
>
>Take the simple question I offered you some time ago: "What is the
>value of this inductor?" You have never responded to this, nor
>offered an anticipated value for your own, future work. You condemned
>Tom for his poor work, and yet he is the only one to offer a working
>value; and if the lack of resonance in my model is any indication, it
>is an entirely wrong value, but to this point it is the ONLY specific
>value offered by ANYONE. What value is this data, your proof, if you
>cannot provide such a fundamental characteristic?
>
>OK, so you are going to abandon it as anecdotal and replace it with
>your own effort. Do you have an estimated value for such fundamental

>issues as the size of the radiator, the solenoid, its value, its
>placement, the ground system? It took me less effort to spin up a
>model than write this missive. What overwhelming problems do you
>dwell on such that this discussion goes mute?
>
>I am puzzled how you can demand that others perform the benchwork when
>you cannot present the problem for them to examine. Roy opened a new
>thread doing just that, and the sneer review pointed out it was not
>the same (as what?). Of course it wasn't, no one has any but the
>barest of details. His inductor was too small and in the wrong place
>to accept as a valid representation of the issue goes the rebuttal;
>but it proved you right by conforming to all the particulars. Now if
>that doesn't hold the record for self-contradiction, I am sure it will
>be eclipsed tomorrow. That was an exercise in framing the answer, a
>practice of the cut-and-paste theorists that speed read through their
>bibles looking for a passage in greek that corresponds to their view
>of the world.
>
>When these threads turn to examining "the truth," it is more than
>obvious that such a pursuit is bogged down from the beginning and not
>necessarily due to an artifact of any tool as it is of the mind.
>
>73's
>Richard Clark, KB7QHC
>
>

Hi Richard,
it's obvious that the purpose of these discussions among
the pathologically competitive is not to reveal truth, but to enhance the
reputation for
infallibility of the professional egos involved. (I'm not writing of you, Roy,
or Keith.)
For those of us who like to lurk, such discussions can be entertaining, but are
essentially worthless, since they usually only consist of pronouncements
from on high unaccompanied by anything resembling logic or proof. Some
baseless technical rhetoric can be thought-provoking, however, just as some
religious beliefs are. Too bad most of it isn't.
73,
Tom Donaly, KA6RUH

4447. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 06:32:46 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311122232.15c8410e@posting.google.com>
Source record: 104663

Hi Emma,

I don't have many comments, only that the increased bandwidth you see
in your model with the larger wire is consistent with what I'd expect,
and that it surprises me a little that the resistive part of the
feedpoint impedance is monotonic with "d" in the thin-wire case but
not in the thicker-wire case.

Also, I see antenna design as a series of tradeoffs which can be
divided into a few areas: arrange conductors so that you can get
current distributions give you the directional pattern you want and
also in an arrangement that you can build with sufficient mechanical
ruggedness and in a suitable mechanical configuration for your
application. Arrange a feed and matching system so you can get the
desired current distribution on the conductors. Decouple your
feedline and any other conductors in the area from the antenna
structure. The tradeoffs come when you find there is no practical way
to feed your ideal antenna, or when you find it's too big to mount on
your car, or whatever. The antenna you've modeled doesn't seem very
difficult to build, so I would suggest actually building one and
testing it to see if it works like you expect, and if it's
mechanically practical for you. These are pretty generic comments,
but I'm honestly not very clear on just what you wish to
accomplish--what problem you are trying to solve.

Cheers,
Tom

"Emma" <emma_hentenna@hotmail.com> wrote in message news:<bou4k0$3e1$1@nic.grnet.gr>...
> Yes,"a" in the diagram below is the wire radius.
>
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> /Hentenna%20Geometry.htm
>
> My design results, for two different radius values,
> of R, X, Z, Rho, SWR and Directivity, as they vary with the driving element
> position,
> are shown at
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaA/Henten
> naA.htm
>
> and
>

> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaB/Henten
> naB.htm
>
> I would be most grateful if you could have a look at these results and make
> any comments.
>
> I would also appreciate any reference you may point at, in addition to those
> I collected at
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/References/refer
> ences.htm
>
> Thank you in advance for your time,
>
> Emma

4448. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 06:57:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3c96rv4d98t0hkuf1q69jgr7bce21v3i7u@4ax.com>
Source record: 104664

On 13 Nov 2003 06:02:50 GMT, tdonaly@aol.com (Tdonaly) wrote:

>For those of us who like to lurk, such discussions can be entertaining, but are
>essentially worthless, since they usually only consist of pronouncements
>from on high unaccompanied by anything resembling logic or proof. Some
>baseless technical rhetoric can be thought-provoking, however, just as some
>religious beliefs are. Too bad most of it isn't.

Hi Tom,

Quite true. On the other hand, there is always an element of substance to be investigated, or to reinvigorate long unexercised issues. You said as much, but I don't mind putting some work into these things to test the perspective of their impact.

The issue of lumped versus distributed loads has enough of that perspective to merit discussion. It is too bad it is attended with such a circus mentality. Further, it also illustrates how poor planning, testing, and specification can seriously prejudice an outcome. Even if the topics are specious, it can be shown that their conclusive proofs are often spun from sheer imagination or frauds (aka fractal claims). These tests of logic are often more important than the lack of substance (look at all the folderol of photons, tachyons and such metaphysical guff).

For instance, it motivated Mark to enquire into how much effect moving the solenoid could have (which my model confirmed in its own tortured way). It has also motivated Yuri to perform measurements with more care to details and greater coverage (not just two data points). Roy emerged to do some bench work (he may yet change his mind, but I suppose that is stretching my luck ;-)

All fairly typical behaviors for our supposed avocation; but growing rarer with the haughty attitude that mental gymnastics can answer it all. To this point I've finished viewing one of Robert Pease's Online seminars (Use and Mis-use of Amplifiers) and his single thumped home admonition was to "Eschew SPICE."

For those who want the straight skinny from a battle hardened bench designer, I recommend his online work at:
http://www.national.com/rap/
on the other hand, for those looking for cut-and-paste greek citations, they will be put against the wall. :-)

Where's my bazooka?

73's
Richard Clark, KB7QHC

4449. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 07:15:31 UTC
From: Troy - VK2HXY <NOSPAMvk2hxy@hotmail.com>
Message-ID: <LiGsb.83$co2.3704@nnrp1.ozemail.com.au>
Source record: 104665

Thanks heaps to all who have replied so far. It really is nice to see so many people willing to share the knowledge with those less in the know.

Warmest regards to all, and if anyone want's to make more recommendations, feel free.

73 de VK2HXY
Troy
Sydney
Australia

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fb25fc1$1_2@corp.newsgroups.com...
> JDer8745 wrote:
> > Best all around antenna is a center fed doublet fed with balanced TL such as
> > transmitting twin lead, ladder line, or open wire line.
>
> He asked for the best all *round* antenna.
> Your antenna is not round at all. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4450. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 07:40:05 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <mtydndTBU-h4qy6i4p2dnA@comcast.com>
Source record: 104666

>Sitting the antenna at 45 degrees drops the level of vertically- and
>horizontally-polarized noise 3db, I believe.

Sounds like a conservation of energy violation.
Assuming noise is randomly polarized. ..

I think something's still not clear here.

4451. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 08:57:49 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031113035749.20279.00000117@mb-m04.aol.com>
Source record: 104667

>KB7QHC:
>Take the simple question I offered you some time ago: "What is the
>value of this inductor?" You have never responded to this, nor
>offered an anticipated value for your own, future work.

Value as inductance?
Take typical mobile antenna, or from info by W9UCW, resonate it on particular ham band with inserted inductance, calculate the value and you got it. Then check the resonant frequency, if it is not what you are aiming for, readjust the inductance or stinger length.

Again, our first to step was to answer the question: is it the same or more like around 50% difference. If we agree that it isn't, then we go and investigate and try to fit the calculations and correlate specific setups. W9UCW took his appart (doen some time ago), I have right now my 72 Buick LeSabre with Hustler masts, coils and some home brewed coils. I can provide dimensions, coil inductances for those who want to calculate Hustlers. Other stuff I have to make, time permitting.

Are we merging?

Yuri

4452. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 09:02:17 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031113040217.20279.00000118@mb-m04.aol.com>
Source record: 104668

>
>Sounds like a conservation of energy violation.
>Assuming noise is randomly polarized. ..
>
>I think something's still not clear here.
>
>

You have to be more specific, what kind of noise, source, how far.
Then what it is attached to or radiated by. The "antennas" can add polarization
as well as propagation.
Noise can be point source, omnidirectional, omnipolarized, but also "massaged"
by the surroundings and "antennas" attached to it or in vicinity. Ever chased
power line noise along the power lines?

Yuri, K3BU

4453. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 09:46:46 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86r80cr46x.fsf@duchess.twilley.org>
Source record: 104669

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>>>>> "Dave" == Dave VanHorn <dvanhorn@cedar.net> writes:

Jack> Sitting the antenna at 45 degrees drops the level of vertically-
Jack> and horizontally-polarized noise 3db, I believe.

Dave> Sounds like a conservation of energy violation. Assuming noise
Dave> is randomly polarized. ..

I do not share your assumption that noise is randomly polarized.

The majority of noise I encounter is man-made and vertically
polarized. There is a great deal of horizontally polarized noise as
well. Natural noise may be randomly polarized, but that's the
minority in my experience.

Dave> I think something's still not clear here.

It makes sense to me.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

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=b4o8
-----END PGP SIGNATURE-----

4454. Circulators, reflectometers, scatterometers, isolators, waves, etc, etc...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 11:00:56 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <IvJsb.24311$Oo4.8110@newsread1.news.atl.earthlink.net>
Source record: 104670

A different look at transmission waves, circulators, isolators, gyrators, reflecotmeters, scatterometers, and stuff, etc, etc...

See recent PowerPoint presentation entitled "Waves: The Scatterometer and Other Interesting Circuits" posted in both MS ppt and Adobe pdf formats on USENET a.b.s.e a couple of days ago.

--
Peter K1PO
Indialantic By-the-Sea, FL

4455. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 11:44:49 UTC
From: DXer <DXer@DXcentral.com>
Message-ID: <bovqpp$hek@library2.airnews.net>
Source record: 104671

I have a 40 meter loop inside my 80 meter loop and have been running it for
3 years without any problems.

Both antennas are flat (no SWR) and there appears to be little to no
interaction between the antennas.

73,

Lee - K1NT

<w4udx@bellsouth.net> wrote in message
news:g8Dob.3961$ns.3957@bignews4.bellsouth.net...
> Hi group,
> just wondering.... can I take a 40M delta loop and add an 80M dipole to
it?
> Will there be interaction?
> SWR problems?
>
> Mark W4UDX
>
>

4456. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 12:17:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3766a_8@corp.newsgroups.com>
Source record: 104672

Yuri Blanarovich wrote:
> Back to the behavior of coils and RF current distribution, isn't the same thing
> happening in a PI tank of amplifiers? At one end we have hi impedance (tube
> side) low current, at the antenna end we have low impedance high current?
> Another case when current across the coil CAN be different?

A PI tank is a three or four terminal network so the difference is
understandable. The basic problem seems to be in considering the coil
in an antenna to be a two terminal lumped component when it really
is a 2+ terminal network including attenuated reflections, displacement
currents, and multiple paths to ground.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4457. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 12:59:57 UTC
From: richardharrison@webtv.net
Message-ID: <15685-3FB3804D-8@storefull-2311.public.lawson.webtv.net>
Source record: 104673

Yuri, K3BU wrote:
"My point is that I argued that current is different, not how precisely
I can calculate or offer calculted proof."

The 19th edition of the ARRL Antenna Book included a CD-ROM containing a program to optimize whip loading. The book also has a section on loading coil design.

Network analysis may be inapplicable, but the simple argument that the current is likely different at the two ends of an antenna loading coil is elegantly made by Fig 6 on page 16-4 of the 19th edition of the ARRL Antenna Book. It shows a simple whip over a ground plane as an equivalent circuit of distributed inductance and capacitance. It`s obvious that capacitance near the feedpoint bleeds current to ground which is thus unavailable at inductance further from the feedpoint. The antenna is, unlike a transmission line, unbalanced. Some energy escapes the confines of the antenna, and isn`t all available from temporary storage to travel on its path along the antenna away from the feedpoint. Decline of current in the loading coil is plotted in the figure.

Yuri`s point is proved. Look at Fig 6. The picture is worth a thousand words.

Best regards, Richard Harrison, KB5WZI

4458. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 13:31:38 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031113083138.01325.00000105@mb-m20.aol.com>
Source record: 104674

>
>Yuri`s point is proved. Look at Fig 6. The picture is worth a thousand
>words.
>
>Best regards, Richard Harrison, KB5WZI
>
>

Yes, but then on page 16-7 Fig 10 they show that current across the coil is constant, which situation I analyze in my article at www.K3BU.us as an error being perpetuated since 1955 by Belrose.

W8JI used this picture to "see, it is constant" :-)

I wonder if 20th edition has the same stuff. I haven't got new book yet.

Yuri

4459. Re: Where to find microwave (10-25 GHz) phased array help?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 13:36:48 UTC
From: Nisse <nisse@nospam.com>
Message-ID: <3FB388F0.2DB72C21@nospam.com>
Source record: 104675

Raytheon & c:o are still VERY active, however if You want professonal help
they might not be very co-operative. If You want amateur radio application help,

and happends to find an amateur working there, it is of course another
buissness...

Recommended reading IMHO are IEEE APS publications. The MTTS
publications are mora about the elecronics wihin the arrays...

N.

> Scott:
>
> Many of the microwave design shops have been disbanded or consolidated, and
> I have not had direct contact with them in a few years, but Ball in Denver,
> Raytheon in Falls Church (the old Melpar bunch), Hughes and TRW in the LA
> area and AEL in Pa. all have built successful arrays in this frequency
> range. I can't guarantee that any of them are still operational at this
> point in time. Dimensional tolerances are the big problem, especially with
> printed techniques as the substrate dielectric characteristics are not
> uniform. CNC techniques have made all metal designs practical, finally.
> Get recent copies of IEEE MTTS and look for authors of articles in the area
> of interest.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
> "Scott Kelley" <scottk@iccom.com> wrote in message
> news:3_OdnZhB5_bkgSyiRVn-tA@centurytel.net...
> >
> > Looking for someone *experienced* in the design of phased array antennas
> at
> > or above 10-24 GHz. Need to consult on the potential for using a phased
> > array antenna in place of a horn antenna at 10.5 and/or 24 GHz.
> >
> > Does anyone here have that experience, or can anybody refer me to someone?
> >
> > Thanks,
> > Scott Kelley
> >
> > PS I will try to check the newsgroup for replies, but if you could also
> > respond directly to my email, I would appreciate it.
> >
> >

4460. A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 14:14:09 UTC
From: Glenn Ashmore <gashmore@mindspring.com>
Message-ID: <XqMsb.556$0K4.126@lakeread04>
Source record: 104677

Over the years I have built several Quadrafiliar antennas for 137.5 Mhz polar orbiting weather satellite photos. I have the dimensions pretty well refined to get horizon to horizon reception but they have all been copper tube on a PVC pipe. I have some 3/8" stainless tube left from a watermaker project and thought I might use it and a piece of Max-Gain fiberglass tube to make one that would look nicer and hold up at sea. I have a couple of questions about changing over to stainless but don't know where to ask them.

The resistance of the stainless tube is the thing that worries me. The balun design I came up with balances 1/2" copper tube to 50 ohms almost perfectly but changing the diameter to 3/8" stainless is going to change the impedance. I just don't know how much and in which direction.

There is plenty of info on the web about QHF but I can't seem to find a newsgroup or forum to ask questions. Anyone else here dabble in quadrafiliars?

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

4461. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 14:19:06 UTC
From: Sparks <sparksw4eas@mindspring.com>
Message-ID: <3FB3BD09.38A9@mindspring.com>
Source record: 104676

Well..... The origional question was "What is the 45 degree antenni
seen on mostly commercial eating places ect. That has been answered.
I'm slowley recovering from a heart attack last week and will let the
antenna experts stomp through the grass with the why's, where fores, and
other "stuff" that can make interesting reading for a few weeks.
Regards, Sparks

4462. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 14:57:46 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <v6ednRGiKYFoBi6iRVn-vg@comcast.com>
Source record: 104678

"Jack Twilley" <jmt+usenet@twilley.org> wrote in message
news:86wua5qgms.fsf@duchess.twilley.org...

Sitting the antenna at 45 degrees drops the level of vertically- and
horizontally-polarized noise 3db, I believe.

Jack.
- --
Jack Twilley
jmt at twilley dot org

Jack,

My original point was that if you drop the vertical and horizontal gains
each by 3 db, the sum gain is still 0 db.

BTW, people talk about Muzack in fast food restaurants. Never saw a fast
food restaurant with Muzack. It is something else.

Tam/WB2TT

4463. Design & Performance of Loaded Vertical Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 15:02:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp06e7$gu1$1@sparta.btinternet.com>
Source record: 104679

Given the length and diameter of the top and bottom antenna sections, and the LENGTH and DIAMETER of the loading coil, program LOADCOIL will calculate coil inductance and the number of turns needed to resonate the antenna to any required 1/4-wave frequency.

The program allows the coil to slide up and down the antenna to optimise radiating efficiency versus physical implementation. The inductance value, number of turns and wire gauge are automatically varied to maintain 1/4-wave resonance versus height.

As a self-check on resonance and other results, the base feedpoint Zin is calculated. Zin can be used in another program to calculate tuner L and C settings. A base loading coil can be conveniently included in a tuner.

The distribution of current along the antenna, including along the coil especially if it is a long helix, and phase relationships, are necessarily taken into account to estimate loss and radiation resistances. But such data is not outputted because it's of no practical use to anybody and not worth the screen space.

The simple radiation pattern of short vertical antennas is already very well known.

Download program LOADCOIL in a few seconds from website below and run immediately.

=======================
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
=======================

4464. Re: 45 degree polarization??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 15:20:45 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <BM-dnRGKj9jVPC6iRVn-vw@comcast.com>
Source record: 104680

> BTW, people talk about Muzack in fast food restaurants. Never saw a fast
> food restaurant with Muzack. It is something else.

As a former Muzak installer, I can assure you, they do.

I'm still skeptical on the idea that most noise is either vertical or horizontal, and that rotating an antenna 45 deg will cut both by 3dB

Also, this would be an FM service, where such noise would normally be insignificant.

4465. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 15:33:22 UTC
From: richardharrison@webtv.net
Message-ID: <514-3FB3A442-221@storefull-2312.public.lawson.webtv.net>
Source record: 104681

Yuri, K3BU wrote:
"W8JI used this picture (Fig 10) to "see, it is constant".

But that was only by specification. It`s the same as saying, "Let`s say the line is lossless".

The text reads:
"The loading coil acts as the lumped constant that it is, and disregarding losses and coil radiation, maintains the same current flow throughout."

This says that in the impossible case of zero radiation and zero loss, the coil current is the same at both ends of the coil. This is close enough for a coil at 50 Hz, but unlikely at 5 MHz.

A real loading coil such as a bug catcher, has a real length. The combination of incident and reflected waves at each point along the length of the antenna produces a different voltage, just as seen in a transmission line. This effect prevails in an antenna, too.

Just as on a transmission line, the voltage variation represents an impedance variation. Impedance is high at the open-circuit end of the antenna , and it it is low 90-degrees back from that open circuit. Since some length is filled with the coil, there is a difference in volts at the ends of the coil due to the standing wave on the antenna.

The feed paths to the coil are unbalanced as shown in Fig 6. That is not shown in Fig 10 which is meant to show the difference in antenna current above and below the coil, not what happens in the coil itself. The authors specify an idealized coil which has the same current in and out. This is only a declaration, not a real world situation.

Best regards, Richard Harrison, KB5WZI

4466. antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 16:02:33 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311130802.441cf86b@posting.google.com>
Source record: 104682

Could someone tell me how to make a single-wire antenna that can pick up TV channel 5? I just need to know what length is best and what material to use.

Thank you.

4467. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 16:04:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3ab9b_2@corp.newsgroups.com>
Source record: 104683

Richard Harrison wrote:
> This says that in the impossible case of zero radiation and zero loss,
> the coil current is the same at both ends of the coil.

This would be true for traveling-wave antennas. But in a standing-wave antenna, the net current is the sum of the forward current and the reflected current. Even if the coil had zero radiation and zero loss, a real-world coil would have a delay through the coil. That delay changes the relative phase between the forward and reflected currents making the net current different at each end of the coil even for a coil with zero radiation and zero loss. The forward currents would be equal into and out of the coil. The reflected currents would be equal into and out of the coil. But their phasor sum would differ due to phasing.

Assume the forward current and reflected current are in phase at zero degrees at the feedpoint. The net current is simply the algebraic sum of those two values. But 45 degrees out from the feedpoint, the forward current is at 45 degrees and less than at the feedpoint. The reflected current is at -45 degrees and greater than at the feedpoint and the sum of the two currents is the sum of two phasor currents 90 degrees apart. At 90 degrees, at the end of the antenna, the forward current and reflected current are equal and phasor sum to zero.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4468. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 16:10:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3ad2d_2@corp.newsgroups.com>
Source record: 104684

mfc wrote:
> Could someone tell me how to make a single-wire antenna that can pick
> up TV channel 5? I just need to know what length is best and what
> material to use.

VHF Channel 5 is centered around 79 MHz. So two 3 foot pieces of
aluminum tubing connected in the center to a piece of 75 ohm coax
should do the job.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4469. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 16:19:14 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <pkb7rvc06q632ddi4dcbdnht7l938716g8@4ax.com>
Source record: 104685

On Thu, 13 Nov 2003 06:57:17 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

[interesting comments snipped]
|
|All fairly typical behaviors for our supposed avocation; but growing
|rarer with the haughty attitude that mental gymnastics can answer it
|all. To this point I've finished viewing one of Robert Pease's Online
|seminars (Use and Mis-use of Amplifiers) and his single thumped home
|admonition was to "Eschew SPICE."
|
|For those who want the straight skinny from a battle hardened bench
|designer, I recommend his online work at:
|http://www.national.com/rap/
|on the other hand, for those looking for cut-and-paste greek
|citations, they will be put against the wall. :-)

No, they'll just swithch to the Taguchi method.

4470. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 16:56:04 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311130856.573476a6@posting.google.com>
Source record: 104686

Richard,
You have written quite extensively on this thread, a lot of it being
comments that I just dont understand. If you don't like the way it is
going or the people involved are not coming to you' as is their job,
to present absolute proof then why bother with these people or the
thread.
Since you and Tom are like minded establish a thread that you can
banter back and forth without interuption from the roudies. Tom
mentioned somebody else
so you may have a quarum to go your own way, which would be a pity
Can't you bend just a bit and go with the flow when unsurmountable
proof is not presented to you first, which you say is everybodies job.
Looking at the posters that are already involved with this thread
including
those who have now decided to abstain it would appear that there is
some interest in the subject. Didn't you yourself invite me to
participate ? If so you must certainly had some interest in what the
lesser people were saying.
Why not look at the possitives presented and put aside attempts to
deflate
or deride honest attempts to explain. You are apparently a computor
expert so why not derive a system where a inductance is transfered to
a system that can easily be modeled since there seems to be some
interest in the matter and you would good chance of becoming a hero
to all.
Still your friend and hanging on
Art

edonaly@aol.com (Tdonaly) wrote in message
news:<20031113010250.16652.00000143@mb-m07.aol.com>...
> Richard wrote,
> >
> >
> >On 13 Nov 2003 04:21:58 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> >wrote:
> >>I want to see how well can we track modeling, and what is the proper way to
> >>model the inductors and "force" the Eznec et al to tell the truth?
> >
> >Hi Yuri,
> >
> >This is the problem of framing the question. The choice of a lumped
> >component in EZNEC (as I understand it) is entirely your choice, just
> >as is the choice in the number of radials to put under an antenna. If
> >the lumped component is inappropriate (just as would be a non

> >representative ground system or incorrect choice of ground models)
> >that is the consequence of your bad choice. Your page already offers
> >the solution for a solenoid, a simple protocol that fits the situation
> >you presented and to which you identified and presented Tom as
> >performing inappropriately. In other words, he did not practice the
> >protocol, and so it seems, neither have you.
> >
> >This returns us to the adequacy of actually framing the specification
> >(instead of the question). Can you present a format for testing BOTH
> >the physical model and the software model that allows the software
> >model to be accurate? To this point, no. Not knowing the particulars
> >that lead to the data offered, and then comparing to a poor model was
> >in fact no proof at all. That data, and even my model barely
> >reconcile to any of but one possible fact: a current differential
> >across a long solenoid (something that Roy has not dismissed even if
> >that answer has been projected upon him by theory spinners). It
> >conforms to your thesis, but it hardly proves it (simply because it
> >inverts your expectations shown in this so-called data).
> >
> >Take the simple question I offered you some time ago: "What is the
> >value of this inductor?" You have never responded to this, nor
> >offered an anticipated value for your own, future work. You condemned
> >Tom for his poor work, and yet he is the only one to offer a working
> >value; and if the lack of resonance in my model is any indication, it
> >is an entirely wrong value, but to this point it is the ONLY specific
> >value offered by ANYONE. What value is this data, your proof, if you
> >cannot provide such a fundamental characteristic?
> >
> >OK, so you are going to abandon it as anecdotal and replace it with
> >your own effort. Do you have an estimated value for such fundamental
> >issues as the size of the radiator, the solenoid, its value, its
> >placement, the ground system? It took me less effort to spin up a
> >model than write this missive. What overwhelming problems do you
> >dwell on such that this discussion goes mute?
> >
> >I am puzzled how you can demand that others perform the benchwork when
> >you cannot present the problem for them to examine. Roy opened a new
> >thread doing just that, and the sneer review pointed out it was not
> >the same (as what?). Of course it wasn't, no one has any but the
> >barest of details. His inductor was too small and in the wrong place
> >to accept as a valid representation of the issue goes the rebuttal;
> >but it proved you right by conforming to all the particulars. Now if
> >that doesn't hold the record for self-contradiction, I am sure it will
> >be eclipsed tomorrow. That was an exercise in framing the answer, a
> >practice of the cut-and-paste theorists that speed read through their
> >bibles looking for a passage in greek that corresponds to their view
> >of the world.
> >
> >When these threads turn to examining "the truth," it is more than
> >obvious that such a pursuit is bogged down from the beginning and not

> >necessarily due to an artifact of any tool as it is of the mind.
> >
> >73's
> >Richard Clark, KB7QHC
> >
> >
>
> Hi Richard,
> it's obvious that the purpose of these discussions among
> the pathologically competitive is not to reveal truth, but to enhance the
> reputation for
> infallibility of the professional egos involved. (I'm not writing of you, Roy,
> or Keith.)
> For those of us who like to lurk, such discussions can be entertaining, but are
> essentially worthless, since they usually only consist of pronouncements
> from on high unaccompanied by anything resembling logic or proof. Some
> baseless technical rhetoric can be thought-provoking, however, just as some
> religious beliefs are. Too bad most of it isn't.
> 73,
> Tom Donaly, KA6RUH

4471. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 17:09:48 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB3BADC.3BD8B1CE@uci.edu>
Source record: 104688

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > I'd like to hear an explanation for ANY current difference across a coil
> > that is supposedly behaving as a lumped inductor. But the test really
> > should be for the same type of antenna used in Yuri's discussion;
>
> Jim, did you fail to notice that arc-cos(0.95) = 18.2 degrees?

No. But I have failed to notice any explanation for it other than you
and Yuri have provided.

73, Jim AC6XG

4472. WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 17:12:01 UTC
From: Just_me <martian10Nospam@rogers.com>
Message-ID: <BXOsb.56711$Rah1.9872@twister01.bloor.is.net.cable.rogers.com>
Source record: 104687

Does anyone know whom makes an ANTENNA called WonderShaft ?

4473. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 18:56:24 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311131056.28692bae@posting.google.com>
Source record: 104691

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb29641_2@corp.newsgroups.com>...
> Mark Keith wrote:
> > More thoughts from the rubber room...Lets say you, Yuri and crew are
> > correct and the current taper is large across the coil.
> > Lets say the coil is still a 1 ft long bugcatcher coil.
> > Lets say the current is fairly constant below the coil.
> > What will the real world effect be of this phenomenon?
>
> Roy's measurements vindicated Yuri's prediction. Current in equals 1.0 amp
> at zero degrees. Measured current out equals 0.95 amps. arc-cos(0.95) =
> 18 degrees. Yuri's prediction was right on. What else is there to argue
> about? Even the small toroidal coil functioned exactly as predicted by
> Yuri.

My argument boils down to: What does this mean to the antenna builder
or modeler? If any discrepancy is so small to be barely measurable,
all this speculation about gross error when modeling is *to me* a load
of hooey. Even if the current varies, which BTW, I never claimed would
be exactly perfect front to back, it should have so little effect on
accuracy to be a non issue. Where is the beef that this claimed
variation of current across a coil causes drastic modeling or coil
placement calculation errors? Sorry, I just don't see it. What am I
missing here? MK

4474. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 19:08:52 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB3D6C4.315F20C0@uci.edu>
Source record: 104693

Mark Keith wrote:
> My argument boils down to: What does this mean to the antenna builder
> or modeler?

To the antenna user, or the antenna builder/modeler who doesn't care about current distribution, it would probably mean nothing.

> If any discrepancy is so small to be barely measurable,
> all this speculation about gross error when modeling is *to me* a load
> of hooey.

The discrepancy varies anywhere from barely measureable to very measureable.

> Where is the beef that this claimed
> variation of current across a coil causes drastic modeling or coil
> placement calculation errors? Sorry, I just don't see it. What am I
> missing here? MK

I think it should only matter to people who want to give advice on the subject.

73, Jim AC6XG

4475. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 19:19:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp0lgp$ie4$1@titan.btinternet.com>
Source record: 104692

Mark, I have often wondered about the meaning of the American word "hooey".

Following a few speed-reads of this disgraceful, un-ending thread, in
conjunction with your description, I now have a better understanding.

Thank you.

Who says the Internet is not educational?

Reg.

4476. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 19:31:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3dc4d_2@127.0.0.1>
Source record: 104694

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>Jim, did you fail to notice that arc-cos(0.95) = 18.2 degrees?
>
> No. But I have failed to notice any explanation for it other than you
> and Yuri have provided.

Assuming the forward current and reflected current are in phase
at the feedpoint, the 5% reduction in net current at the other
end of the coil appears to be because the forward current and
reflected current are not in zero phase at that point. The phase
of the forward and reflected currents are changing in a predictable
manner but the phase of their sum, the net current, doesn't change
much if they are in the ballpark of the same magnitudes. I think Roy
measured that net current phase.
--
73, Cecil, W5DXP

4477. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 19:35:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3dcf0_2@127.0.0.1>
Source record: 104695

Just_me wrote:
> Does anyone know whom makes an ANTENNA called WonderShaft ?

That was an antenna that my ex-wife gave me?
--
73, Cecil, W5DXP

4478. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 19:41:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3de9a_2@127.0.0.1>
Source record: 104696

Mark Keith wrote:
> My argument boils down to: What does this mean to the antenna builder
> or modeler?

Probably a little more than the theory of relativity which seems
to be quite important in the scheme of things.

> If any discrepancy is so small to be barely measurable,
> all this speculation about gross error when modeling is *to me* a load
> of hooey. Even if the current varies, which BTW, I never claimed would
> be exactly perfect front to back, it should have so little effect on
> accuracy to be a non issue. Where is the beef that this claimed
> variation of current across a coil causes drastic modeling or coil
> placement calculation errors? Sorry, I just don't see it. What am I
> missing here? MK

Well, for instance, EZNEC cannot directly model the phased array
in Kraus' book which requires the coils to perform a 180 degree
phase shift in the current. Don't you think that is useful information?
--
73, Cecil, W5DXP

4479. Re: Question on HS Screwdriver land installation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 20:06:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb3e45c_2@127.0.0.1>
Source record: 104697

Paul Braun wrote:

> I'm about to mount a High Sierra screwdriver in my yard to use as my
> base antenna (condo living, dontcha know....)
>
> I'm going to polish up the brass stud on the mounting bracket. Should
> I put some sort of anti-oxidation stuff on it before I mount the
> antenna? I'll be removing the quick-release for the whip as well,
> since this will be a permanent install and I want one less point of
> failure.
>
> Any suggestions?

Trade your present brass connector for one that is simply
threaded with a 3/8" fine thread hole. That's what I did.
--
73, Cecil, W5DXP

4480. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 20:39:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <92l7rv0oe07uba85orad28jdqgnauq8bkb@4ax.com>
Source record: 104698

On 13 Nov 2003 08:56:04 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard,
>You have written quite extensively on this thread, a lot of it being
>comments that I just dont understand.

It would help you, me, and the rest if you simply asked each time that
occurs.

I posted 11 times to Yuri's thread of 183
I posted ONCE to Roy's thread of 103
I posted 5 (now 6) times to this

You've posted 8 times total among them - you know, that still leaves
something like 300 postings, 90%, by others (and among not too many
different individuals). I can certainly offer that my writing has
more impact, but hardly as much tonnage. YMMV

>If you don't like the way it is
>going or the people involved are not coming to you' as is their job,
>to present absolute proof then why bother with these people or the
>thread.

You might as well ask those who live in pollution why they don't
simply stop breathing.

>Can't you bend just a bit and go with the flow when unsurmountable
>proof is not presented to you first, which you say is everybodies job.

With 80% of the weather vanes already turned into the wind, why would
I want to do that? Art you pine for a more soothed and tranquil
passage across what is in fact a stormy sea.

>Didn't you yourself invite me to
>participate ? If so you must certainly had some interest in what the
>lesser people were saying.

You focus too much on these herculean threads and it would behoove you
to participate outside of them (and I will offer that you already
have). The majority of my correspondence is in fact with those asking
questions that these titans have disdained from answering:
Parasitic Question...
Hints for a quasi professional cage...
Penn state fractal...
dielectric antennas...
OCF Dipole...

ant coupler and silver mica...
Magloop woes
1.2 GHz antennas...
Device by an antenna...
to trust which SWR meter...
in the last week alone. Do you see any insistence by me for absolute accuracy, or demands for proofs in those? No, Art, I reserve that for those who are too lame to defend outrageous claims. None of the topics above qualify in that regard. Well maybe one inflated soul, perhaps. A guy with 9 actual out of 12 patents claimed - should I put on a happy face and simply offered "Bravo! 9 out of 12 is good enough"? People like that inflated the stock bubble of 2000.

To put it simply, if you lay it out as a fact, I will test it as a fact. If you lay it out as an idea, then there is something to listen to. I can let ideas pass on their own merit, but facts have a status that require validation. If you want an idea validated, that requires the assistance of psychiatry or religion because you are mixing faith and science inappropriately. If you want to argue faith and/or science, it belongs in the Racist and Democracy threads that I eschew.

I will admit I love kicking out the crutches of cripples who are obvious charlatans. In my youth I walked past too many street urchins begging for spare change (called flower children then) who are now robbing companies of earnings as CEO's (they were flower children because what change they couldn't scrabble up for dope, they could call home for from Daddy-kins, or Mummy-kins to help bail them out).

This simply means I can tell (as many can, it is no great talent) the difference between an honest call for help, and a fool's mission. Long threads such as this and others contain no more than 20% real content. When I have responded to that, the remainder begs for entertainment critiques (generally very poor material and easily mocked). As a benefit, my critiques are far more entertaining too.

Roy's separate thread started out shame-based, I recognized it from the start because I can do it so much better, and have. It deserved only one comment from me because it was lost from the beginning. That it ran to some 100+ postings proves its lack of material and its girth of ego. My own shame-based topics have run to less postings than the total of Roy's tap dancing. The only difference is my ego requires less from me, and is satisfied with the silence of others humbled by their poverty of refute. ;-)

>Why not look at the possitives presented and put aside attempts to
>deflate
>or deride honest attempts to explain. You are apparently a computor
>expert so why not derive a system where a inductance is transfered to
>a system that can easily be modeled since there seems to be some
>interest in the matter and you would good chance of becoming a hero
>to all.

Both Roy and I offered a protocol to do just that - BEFORE these 300+ postings! You simply have to read Yuri's page to observe it, and how it is accomplished. Then ask yourself, what quality of discussion from 300+ posts in its complete indifference could be called meritorious?

>Still your friend and hanging on
>Art

Hi Art,

Probably more that what you wanted to know. All part of my service in providing entertainment analysis and criticism when no data is offered and no principles of science are being tested. As to your comment of my becoming a hero to all - not the model I aspire to at all.

Heros, in literature and legend, either die in the last act, or are insipid and overwhelmingly dull individuals. I am content to allow for 100 Heroes to rise here in my place. :-)

What I am is a triple threat. I know the material, I can write, and I don't give a damn (which is to say, I don't care if I'm wrong, because I can change that by anyone proving it).

73's
Richard Clark, KB7QHC

4481. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 20:55:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o0r7rv4l2au1dpoqlisv0u7vh90kcigfva@4ax.com>
Source record: 104699

On 13 Nov 2003 08:57:49 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote:

>>KB7QHC:
>>Take the simple question I offered you some time ago: "What is the
>>value of this inductor?" You have never responded to this, nor
>>offered an anticipated value for your own, future work.
>
>Value as inductance?

Yes, and its physical size. The remainder of you post is not data and does not respond to the question.
>
>Are we merging?
>
>Yuri

Hi Yuri,

I hope that wasn't a question of conjugation.

Humor aside (dry as it might be). Give details specific to a physical model that can go directly into a software model:
Size of radiator (all physical dimensions);
Size and value of inductor (all physical dimensions);
Size and composition of ground field (radial count, gauge, and physical dimensions);
Elevation of feed/GP - if any (physical dimension);
Position of Solenoid (physical dimension);
Frequency of excitation (Hz, radians/sec, or CPS - your choice).

I know you haven't done it yet. What do you intend for each above? None of this is going to nail you down to prove with absolute precision. None of this is so alien that it requires a semester of study before committing to a prototype.

Scientific method proceeds from the question through experimentation and data to the validation, not the other way around. That means you should have all these details at least roughed out to an approximation by now. I did as much from photos in less than half an hour. If you were to do as much, you could already answer the majority of those specifications asked for above.

73's
Richard Clark, KB7QHC

4482. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 20:57:37 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <7PWdnZQuMLCmbS6i4p2dnA@comcast.com>
Source record: 104700

> To me, sounds like one of those viagra emails I keep getting :-)

That's just one of those marketing things.

Penetrator, Intruder, Force 5, Titan, WonderShaft... Antennas or.... ?

4483. Re: A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 22:06:11 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fb4163e$0$13498$ba620e4c@reader1.news.skynet.be>
Source record: 104705

Hi Glenn,

I have always heard that stailess steel is a bad conductor of heat and electricity. So ...

73 de Jacques - ON5MJ

4484. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 22:44:03 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311131444.6f980c2a@posting.google.com>
Source record: 104701

Hmmm... Could you explain why I need two pieces? Why can't I just
have one 3 foot piece of wire?

Thanks for your help. I really appreciate it.

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb3ad2d_2@corp.newsgroups.com>...
> mfc wrote:
> > Could someone tell me how to make a single-wire antenna that can pick
> > up TV channel 5? I just need to know what length is best and what
> > material to use.
>
> VHF Channel 5 is centered around 79 MHz. So two 3 foot pieces of
> aluminum tubing connected in the center to a piece of 75 ohm coax
> should do the job.

4485. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 23:03:06 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bp12jg$1j3i7q$1@ID-175933.news.uni-berlin.de>
Source record: 104702

Be gentle...

"mfc" <mfc9327@aol.com> wrote in message
news:3599641a.0311131444.6f980c2a@posting.google.com...
> Hmmm... Could you explain why I need two pieces? Why can't I just
> have one 3 foot piece of wire?
>
> Thanks for your help. I really appreciate it.
>
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb3ad2d_2@corp.newsgroups.com>...
> > mfc wrote:
> > > Could someone tell me how to make a single-wire antenna that can pick
> > > up TV channel 5? I just need to know what length is best and what
> > > material to use.
> >
> > VHF Channel 5 is centered around 79 MHz. So two 3 foot pieces of
> > aluminum tubing connected in the center to a piece of 75 ohm coax
> > should do the job.

4486. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 23:10:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp1319jrf1@sparta.btinternet.com>
Source record: 104703

..
> Could someone tell me how to make a single-wire antenna that can pick
> up TV channel 5? I just need to know what length is best and what
> material to use.

.....

Just get a length of any sort of wire and poke one end in the antenna socket
you will find at the rear of the receiver. Get rid of the wire insulation
at the receiver end.

If the signal is weak you will need something a little more elaborate. But
if you are not too far from the transmitter it may work first time.

4487. 6 Meter Glass Mount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 23:12:47 UTC
From: N1RZB <n1rzb@highstream.net>
Message-ID: <vr842e1av5bg08@corp.supernews.com>
Source record: 104704

Dose any antenna manufacture make a 6 Meter Glass Mount Antenna? If so,please let me know, I'm looking for one.

Thanks, N1RZB

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.535 / Virus Database: 330 - Release Date: 11/1/03

4488. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-13 23:42:24 UTC
From: jgboyles@aol.com
Message-ID: <20031113184224.20183.00000205@mb-m04.aol.com>
Source record: 104706

> Could you explain why I need two pieces? Why can't I just
>have one 3 foot piece of wire?

Two pieces will work better than one piece. One piece will work, just not as well. The explanation of why one doesn't work as well as two is complex. As others have stated, one piece of wire will work, and the length or orentiation may not be critical.
73 Gary N4AST

4489. Re: A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 00:09:04 UTC
From: Glenn Ashmore <gashmore@mindspring.com>
Message-ID: <G8Vsb.1221$0K4.376@lakeread04>
Source record: 104707

That is what I am worried about. Stainless has about 15% the
conductivity of copper but I have seen outrageously expensive stainless
QFH antennas on some big outrageously expensive yachts that work great.

ON5MJ wrote:

> Hi Glenn,
>
> I have always heard that stailess steel is a bad conductor of heat and
> electricity. So ...
>
> 73 de Jacques - ON5MJ
>
>

--
Glenn Ashmore

I'm building a 45' cutter in strip/composite. Watch my progress (or lack
there of) at: http://www.rutuonline.com
Shameless Commercial Division: http://www.spade-anchor-us.com

4490. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 00:16:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb41ede$1_3@corp.newsgroups.com>
Source record: 104708

mfc wrote:
> Hmmm... Could you explain why I need two pieces? Why can't I just
> have one 3 foot piece of wire?

Basically, the center of the six foot section has an impedance that
closely matches the impedance of the 75 ohm coax. It's called a
center-fed dipole (two poles broken in the center). Or you could
use rabbit ears which are also broken in the center.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4491. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 00:21:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb42008_3@corp.newsgroups.com>
Source record: 104709

Richard Fry wrote:
> Be gentle...

:-) I am accepting of ignorance, Richard. In a lot of fields and ways, I am extremely ignorant. What I find hard to accept is someone's alleged wisdom when they are obviously ignorant. That includes most holier-than-thou religious people who are somehow magically privy to the ultimate in wisdom.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4492. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 00:23:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb420b4_3@corp.newsgroups.com>
Source record: 104710

Bob Miller wrote:
> Bob k5qwg

Hey Bob, check your computer's date/time.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4493. Re: A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 02:17:58 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <T9qdnTAA5-TTpimi4p2dnA@comcast.com>
Source record: 104711

"Glenn Ashmore" <gashmore@mindspring.com> wrote in message
news:G8Vsb.1221$0K4.376@lakeread04...
> That is what I am worried about. Stainless has about 15% the
> conductivity of copper but I have seen outrageously expensive stainless
> QFH antennas on some big outrageously expensive yachts that work great.

Long term, they might do better than copper, which wouldn't last as long.

4494. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 02:21:52 UTC
From: mrrusso@optonline.net
Message-ID: <3fb43c99.525995@news.optonline.net>
Source record: 104712

:-) :-) :-)

>> Does anyone know whom makes an ANTENNA called WonderShaft ?
>
>That was an antenna that my ex-wife gave me?
>--
>73, Cecil, W5DXP
>

4495. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:00:50 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311131900.a6afe31@posting.google.com>
Source record: 104713

Jim Kelley <jwkelley@uci.edu> wrote in message news:<3FB3D6C4.315F20C0@uci.edu>...
> Mark Keith wrote:
> > My argument boils down to: What does this mean to the antenna builder
> > or modeler?
>
> To the antenna user, or the antenna builder/modeler who doesn't care
> about current distribution, it would probably mean nothing.

Well, I care a great deal myself, I can't see how this would help me
at all. What would you do about it?
>
> > If any discrepancy is so small to be barely measurable,
> > all this speculation about gross error when modeling is *to me* a load
> > of hooey.
>
> The discrepancy varies anywhere from barely measureable to very
> measureable.

That says a lot...
>
> > Where is the beef that this claimed
> > variation of current across a coil causes drastic modeling or coil
> > placement calculation errors? Sorry, I just don't see it. What am I
> > missing here?
>
> I think it should only matter to people who want to give advice on the
> subject.

That doesn't answer the question. MK

4496. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:05:27 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <sih8rv0uabv5prlaavktoiqcpsuqkj22cv@4ax.com>
Source record: 104714

On Thu, 13 Nov 2003 18:23:53 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Bob Miller wrote:
>> Bob k5qwg
>
>Hey Bob, check your computer's date/time.

Thanks, got ahead of myself, there.

Bob
k5qwg

4497. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:07:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311131907.2fbe7f64@posting.google.com>
Source record: 104715

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message Where is the beef that this claimed
> > variation of current across a coil causes drastic modeling or coil
> > placement calculation errors? Sorry, I just don't see it. What am I
> > missing here? MK
>
> Well, for instance, EZNEC cannot directly model the phased array
> in Kraus' book which requires the coils to perform a 180 degree
> phase shift in the current. Don't you think that is useful information?

I can model it just fine using two sources. I've done it many times.
You can set the phase shift to anything you want. My question pertains
to the claimed or implied drastic modeling error we are supposed to be
seeing due to current taper in a mobile bugcatcher coil. Thats what
all this revolves around. Myself, I don't think any error would be
enough to worry about. Do you disagree? MK

4498. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:17:35 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB4494F.F51305F@cwis.net>
Source record: 104716

Tarmo,
Or, you could look at it in the opposite way. The tuner would replace the beam, tower, and rotor at a net savings of ~probably~ the price of the tuner. I wonder why people are so 'afraid' of tuners?
'Doc

4499. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:29:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb44c36$1_6@corp.newsgroups.com>
Source record: 104717

Mark Keith wrote:

> I can model it just fine using two sources. I've done it many times.
> You can set the phase shift to anything you want.

Yes, but how did you first discover that was the way to go instead
of trying to model a coil to cause the phase shift?

> My question pertains
> to the claimed or implied drastic modeling error we are supposed to be
> seeing due to current taper in a mobile bugcatcher coil. Thats what
> all this revolves around. Myself, I don't think any error would be
> enough to worry about. Do you disagree? MK

The original statement that triggered this entire miniseries was:

"You like to call names, insult people, and argue rather than take the
time to learn basic electronics. This is in any book, including the ARRL
Handbook. If you look at HOW an inductor works, the current flowing in
one terminal ALWAYS equals the current flowing out the other terminal."

If you were posting technical facts and someone accused you of calling
names, insulting people, and arguing rather than taking time to learn
basic electronics, do you think that error would be enough to worry about?
--
73, Cecil http://www.qsl.net/w5dxp

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4500. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 03:57:18 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fb4548f_4@news1.prserv.net>
Source record: 104718

Why, yes, I do. Recognize the trade name immediately. What do I win?

--
Crazy George
Remove N O and S P A M imbedded in return address
"Just_me" <martian10Nospam@rogers.com> wrote in message
news:BXOsb.56711$Rah1.9872@twister01.bloor.is.net.cable.rogers.com...
> Does anyone know whom makes an ANTENNA called WonderShaft ?
>
>

4501. Re: A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 04:09:01 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fb4584a_3@news1.prserv.net>
Source record: 104569

Someone (you, perhaps?) posted a very similar question on here a year or so ago about material for marine antennas. Do a Google search for maritime or marine antennas. Having lived around the Texas Gulf Coast for all my life, I fail to understand the problem with copper, but maybe that's just me. Sounds like a perfect application for brazed joints and silver plating, or at least a few good coats of marine varnish. Corroded copper is probably a better RF conductor than stainless anyway, and the smaller diameter is going to work against you as well.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Glenn Ashmore" <gashmore@mindspring.com> wrote in message
news:XqMsb.556$0K4.126@lakeread04...
> Over the years I have built several Quadrafiliar antennas for 137.5 Mhz
> polar orbiting weather satellite photos. I have the dimensions pretty
> well refined to get horizon to horizon reception but they have all been
> copper tube on a PVC pipe. I have some 3/8" stainless tube left from a
> watermaker project and thought I might use it and a piece of Max-Gain
> fiberglass tube to make one that would look nicer and hold up at sea. I
> have a couple of questions about changing over to stainless but don't
> know where to ask them.
>
> The resistance of the stainless tube is the thing that worries me. The
> balun design I came up with balances 1/2" copper tube to 50 ohms almost
> perfectly but changing the diameter to 3/8" stainless is going to change
> the impedance. I just don't know how much and in which direction.
>
> There is plenty of info on the web about QHF but I can't seem to find a
> newsgroup or forum to ask questions. Anyone else here dabble in
> quadrafiliars?
>
>
> --
> Glenn Ashmore
>
> I'm building a 45' cutter in strip/composite. Watch my progress (or lack
> there of) at: http://www.rutuonline.com
> Shameless Commercial Division: http://www.spade-anchor-us.com
>

4502. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 04:43:48 UTC
From: Al - VA3KAI <niittyma@sympatico.ca>
Message-ID: <64Zsb.14875$IK2.1129597@news20.bellglobal.com>
Source record: 104572

Years ago I bought a CB coaxial base antenna that I still have up and use on 10/12 M with a tuner. I seem to remember it was made by Shakespeare Antennas.

If it's the same, mine is white fibreglass consisting of a 102" whip on top and a 1" coaxial sleeve that is centre fed via a base mounted SO239 connector.

Might be what you are asking about..... Al, VA3KAI

"Just_me" <martian10Nospam@rogers.com> wrote in message news:BXOsb.56711$Rah1.9872@twister01.bloor.is.net.cable.rogers.com...
> Does anyone know whom makes an ANTENNA called WonderShaft ?
>
>

4503. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 04:43:51 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031113234351.01350.00000195@mb-m20.aol.com>
Source record: 104570

>
>Well, I care a great deal myself, I can't see how this would help me
>at all. What would you do about it?

Mike,
to put in perspective, and I tried to point out in the course of threading this thread, the significance is this:

1. Impact on effciency - efficiency is roughly proportional to the area under the current curve over the radiator. When the current drop across the coil is significant, that "eats" the portion of the curve and the curve above the coil is much smaller (cosine or triangle shape), less efficiency (than shown in some pictures).

2. Understanding the effect allows to better optimize the antenna performance, be it through modeling or experimenting and measuring. That's why top hats look so good. We are not talking just fraction of dB, on low bands that shows as 10s of dBs on signal.

3. Proper modeling in software will allow better design and optimization. See case of linear loaded 80m KLM beam vs. modified with loading coils, big difference in pattern and gain and performance.

4. If the modeling software can not capture the effect, than your designs of multielement loaded antennas are off.

This exercise already opened my eyes wider and after I test the designs, I will hopefully come up with some better mobile antennas.

Yuri

4504. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 04:45:40 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031113234540.01350.00000196@mb-m20.aol.com>
Source record: 104571

>
>If you were posting technical facts and someone accused you of calling
>names, insulting people, and arguing rather than taking time to learn
>basic electronics, do you think that error would be enough to worry about?
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

Thank you!

Yuri

4505. Re: 40M+80M dual band delta loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 04:51:14 UTC
From: Al - VA3KAI <niittyma@sympatico.ca>
Message-ID: <VaZsb.14880$IK2.1132464@news20.bellglobal.com>
Source record: 104573

Lee,

Just curious, what do you feed it with and where (corner or side)? Also,
what are the shapes? I'm amazed at the flat SWR!

73, Al

"DXer" <DXer@DXcentral.com> wrote in message
news:bovqpp$hek@library2.airnews.net...
> I have a 40 meter loop inside my 80 meter loop and have been running it
for
> 3 years without any problems.
>
> Both antennas are flat (no SWR) and there appears to be little to no
> interaction between the antennas.
>
> 73,
>
> Lee - K1NT
>
> <w4udx@bellsouth.net> wrote in message
> news:g8Dob.3961$ns.3957@bignews4.bellsouth.net...
> > Hi group,
> > just wondering.... can I take a 40M delta loop and add an 80M dipole to
> it?
> > Will there be interaction?
> > SWR problems?
> >
> > Mark W4UDX
> >
> >
>
>

4506. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 05:04:11 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <3fo8rvoe1et0gsbf4jitpc936ijkjn2pqj@4ax.com>
Source record: 104689

On Thu, 13 Nov 2003 17:12:01 GMT, "Just_me"
<martian10Nospam@rogers.com> wrote:

>Does anyone know whom makes an ANTENNA called WonderShaft ?
>

There's golf clubs called that. Google brings up a: "wanderschaft
antenna"

To me, sounds like one of those viagra emails I keep getting :-)

Bob
k5qwg

4507. Re: Screw-Driver Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 05:09:55 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <aro8rv4jj32825atdmfd3oeto3fpapeuc5@4ax.com>
Source record: 104690

On Sun, 9 Nov 2003 20:46:25 +1300, "Kevin & Natalia Mitchell"
<sparcman@hotmail.com> wrote:

>Hi All,
>
>Can anyone point me in the direction, or forward any information on building
>my own Screw-Driver type antenna.
>
>I would like a good across the board Mobile HF antenna.
>
>Regards
>
>Kevin. ZL1UDD
>

Go to Google search and enter

screwdriver antenna plans

or

screwdriver antenna construction

or whatever and you'll find whatever is available.

Bob
k5qwg

4508. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 05:34:10 UTC
From: Irv Finkleman <finkirv@NOSPAMshaw.ca>
Message-ID: <3FB46949.A775CB97@NOSPAMshaw.ca>
Source record: 104574

JGBOYLES wrote:
>
> > Could you explain why I need two pieces? Why can't I just
> >have one 3 foot piece of wire?
>
> Two pieces will work better than one piece. One piece will work, just not as
> well. The explanation of why one doesn't work as well as two is complex. As
> others have stated, one piece of wire will work, and the length or orentiation
> may not be critical.
> 73 Gary N4AST

The 'two piece' job can be a set of rabbit ears. One advantage is that
it will be directional and may help if you have a ghosting problem. If
the signal is sufficient, sometimes just a hunk of wire hanging off the
back of the set will be enough.
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

4509. Re: A question about Quadrafiliar Helix antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 08:07:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp22gj$r8q$1@hercules.btinternet.com>
Source record: 104575

> > That is what I am worried about. Stainless has about 15% the
> > conductivity of copper but I have seen outrageously expensive stainless
> > QFH antennas on some big outrageously expensive yachts that work great.
>
> Long term, they might do better than copper, which wouldn't last as long.

.....

An antenna has both radiation and loss resistance.

Suppose a VHF copper dipole is 99% efficient.

If it is replaced with stainless steel which has 10 times the resistance
loss then the efficiency will fall to 90%.

Nobody will be able to detect any difference except that in 5 years time in
a marine environment the stainless steel dipole will still be working.

An understanding of ohms law is useful.

4510. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 08:50:19 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311140050.24cc6bd@posting.google.com>
Source record: 104576

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb44c36$1_6@corp.newsgroups.com>...
> Mark Keith wrote:
>
> > I can model it just fine using two sources. I've done it many times.
> > You can set the phase shift to anything you want.
>
> Yes, but how did you first discover that was the way to go instead
> of trying to model a coil to cause the phase shift?

Dunno. That's the way I've always done it. Never occurred to me to use
a phasing coil in a model, although I have used stubs for that
purpose. But stubs seem to radiate to a degree.
>
> > My question pertains
> > to the claimed or implied drastic modeling error we are supposed to be
> > seeing due to current taper in a mobile bugcatcher coil. Thats what
> > all this revolves around. Myself, I don't think any error would be
> > enough to worry about. Do you disagree? MK
>
> The original statement that triggered this entire miniseries was:
>
> "You like to call names, insult people, and argue rather than take the
> time to learn basic electronics. This is in any book, including the ARRL
> Handbook. If you look at HOW an inductor works, the current flowing in
> one terminal ALWAYS equals the current flowing out the other terminal."
>
> If you were posting technical facts and someone accused you of calling
> names, insulting people, and arguing rather than taking time to learn
> basic electronics, do you think that error would be enough to worry about?

No one is answering my simple questions. I could care less about what
Tom said,
or Yuri's motivation for doing this. I've read it 14 times already...
Thats not the issue at hand in this thread. Yuri seems to be giving
the impression that we are seeing possible large modeling errors due
to the use of strictly lumped inductance in the models of short
verticals. Myself, I don't see how, being any concentration or
tapering of current in the coil is still in the same appx height on
the mast. Or the same segment area if modeling. The current
distribution below the mast should be pretty much the same. It's just
not going to make enough difference to worry about, taper or no taper.
I have no fault with what Yuri is doing. But it seems to me he's
trying to find an explanation "current taper across coils" for a
problem "modeling or design error" that really doesn't exist.

But thats just my opinion. If he wants to pursue this, more power to him. Doesn't bother me. But I doubt I'll be changing my position on the importance of any current taper in coils when it comes to accuracy in modeling or coil placement calculations in the real world. Even if I decide to agree that there can be a drastic current taper across a loading coil, I don't see how knowing this would do me a bit of good. It's not going to change a thing I am doing in the real world. Like I said at first, I don't model mobile antennas anyway. I calculate them in terms of efficiency. I already know what the appx current distribution and pattern will look like. No need to model them. But again, I don't think any error this "current taper" could cause, even in a lumped inductor modeling program, would be enough to worry about. Do you disagree? Yes or no. If yes, how do you base your conclusion? I guess what I really want to know is even if I decided to agree the current can drastically vary across the coil, what the heck good would it do me? I can think of not a single thing, except for simply knowing about it...No one yet has shown how it would grossly effect model accuracy. It's just hinted at as a problem. One which I don't think exists to any degree worth losing any sleep over. Oh well, back to my rubber room....:/ MK

4511. WTB: APU-100 Wellbrooks phase

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 11:22:38 UTC
From: Dimitris Mylonopoulos <mylond@otenet.gr>
Message-ID: <bp2duc$p9q$1@usenet.otenet.gr>
Source record: 104577
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I want to buy a used a Wellbrooks apu-100 phaser or the schematic plan of
it.
Dimitris

4512. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 13:34:30 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031114083430.12215.00000186@mb-m25.aol.com>
Source record: 104578

> Oh well, back to my rubber room....:/ MK
>

and stay there :-)

Some people can see further than others. Stand by for more. More thorough work and decent article will take a bit more time. I intend to do that, have promised cooperation of others in our camp. We should have more precise figures, arguments and 'splanations. I mentioned some things in my previous post, but if you can't see the benefits for improvement then be happy with what you have.

Yuri

4513. Re: 6 Meter Glass Mount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 13:35:05 UTC
From: derswede@aol.comspam.com
Message-ID: <20031114083505.29246.00000217@mb-m10.aol.com>
Source record: 104579

<< Does any antenna manufacture make a 6 Meter Glass Mount Antenna? If so,please let me know, I'm looking for one.

Thanks, N1RZB >>

Just installed a dual band glassmount to allow mounting a UHV-6 for the HF/6M rig....set up the G/M with the Alinco dual bander, checked it with the antenna analyzer to tweak it to the fav repeaters. Not very happy with it, even w/low SWR (as many have noted...a dummy load has low SWR!). Previous antenna was a Comet SB-15 which worked wonderfully....the glassmount is quite poor compared to that antenna. I'll probably add a diplexer to use the UHV-6 instead of the G/M and/or reinstall the SB15. A 6M antenna would be even worse, I would imagine, as coupling it would take a larger mount. My personal opinion? Try for another mounting method. However, if you find a G/M 6M antenna, hope your experience is better than mine.

Cheers!
A

4514. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 14:00:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb4dffe_2@corp.newsgroups.com>
Source record: 104580

Mark Keith wrote:
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>> ... do you think that error would be enough to worry about?
>
> No one is answering my simple questions.

Mine either. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4515. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 14:08:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb4e205$1_2@corp.newsgroups.com>
Source record: 104581

Yuri Blanarovich wrote:
> Some people can see further than others. Stand by for more. More thorough work
> and decent article will take a bit more time. I intend to do that, have
> promised cooperation of others in our camp. We should have more precise
> figures, arguments and 'splanations. I mentioned some things in my previous
> post, but if you can't see the benefits for improvement then be happy with what
> you have.

One thing I was originally confused about until I sat down and drew some
phasor diagrams. The phase of the *net* current doesn't change much over
the length of the mobile antenna. It's the phase of the forward current
and reflected current that is changing. But those phases are changing in
opposite directions so the sum of those two phasors results in very little
phase change in the net current.

For a 1/4WL vertical, the net current is approximately equal to 90 degrees
of a cosine wave, 1.0 at zero degrees and zero at 90 degrees. The magnitude
of the net current is an indication of where between zero and 90 degrees
the current is being measured. Where = arc-cos(|net current|)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4516. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 14:32:20 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311140632.6b0903ae@posting.google.com>
Source record: 104582

How critical is it that I remove the insulation? I noticed that my
alarm clock has an antenna that is just an insulated wire.

Thanks for the help.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bp1319jrf1@sparta.btinternet.com>...
> ..
> > Could someone tell me how to make a single-wire antenna that can pick
> > up TV channel 5? I just need to know what length is best and what
> > material to use.
>
> ....
>
> Just get a length of any sort of wire and poke one end in the antenna socket
> you will find at the rear of the receiver. Get rid of the wire insulation
> at the receiver end.
>
> If the signal is weak you will need something a little more elaborate. But
> if you are not too far from the transmitter it may work first time.

4517. Re: WANTED-DONATIONS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 14:53:05 UTC
From: KeyBoard In The Wilderness <KTW@zilch.com>
Message-ID: <j%5tb.2518$Ue4.2011@fed1read01>
Source record: 104583

Hold a swap meet -- take a 10% fee -- worked for a club I belonged to.

--
73 From The Keyboard

"N2ION" <n2ion@aol.com> wrote in message
news:20031112164849.25862.00000102@mb-m05.aol.com...
> LIMARC (the Long Island Mobile Amateur Radio Club) has had two Field Day
> meetings in preparation for the big event next June. We want to improve
our
> emergency preparedness and we feel that it's to the club's and public's
> advantage to get an early start. We want to be ready far in advance of
this
> event.
>
> LIMARC feels strongly about being ready to assist in any type of
> emergency situation. We would like to be ready to do our part for public
> service.
> At this time LIMARC is looking for donations of towers, telescoping
> masts, beams or vertical antennas, radios, etc. to be used for the Field
Day
> event, or any other emergency where we may need to provide emergency
> communications.
>
> If you have any of the above items, and are not using them, and
would be
> intersted in donating to our cause, please contact Jeff, N2ION@AOL.COM or
by
> phone at 516-356-0800.
>
> The club will provide you with a donation confirmation document
letter
> for tax purposes.
>
> We really need your help at this time so please try to assist us as
> best you can.
>
> Thanks & 73,
> Jeff, N2ION
> Co-Chairman-LIMARC Field Day Committee

4518. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 15:09:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp2r6fpkv1@sparta.btinternet.com>
Source record: 104585

> How critical is it that I remove the insulation? I noticed that my
> alarm clock has an antenna that is just an insulated wire.
>
....

Radio waves get through wire insulation, even if it is very thick, just as
if it isn't there.

It is necessary only to remove the insulation at the end of the wire where
it has to make electrical contact with the radio circuits.

4519. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 15:09:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb4f038_2@127.0.0.1>
Source record: 104584

Richard Harrison wrote:
> Yuri, K3BU wrote:
> "W8JI used this picture (Fig 10) to "see, it is constant".
>
> But that was only by specification. It`s the same as saying, "Let`s say
> the line is lossless".

I looked at the ARRL Antenna Book CD and it contains the same
stuff. It also says: "This product is licensed under the terms
of the License Agreement contained in the LICENSE.TXT file on
the disk. Read it carefully before using the CD." :-)
--
73, Cecil, W5DXP

4520. Stoddart, Singer antenna mount wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 15:29:59 UTC
From: maxshiloh@yahoo.com
Message-ID: <8c7550c8.0311140729.39c539d6@posting.google.com>
Source record: 104586

Hi,

I'm looking for an old antenna mount made by Stoddart, Singer,
ailtech, or Eaton. Part number is 92341-1, and it mounted two large
horn antennas (1-2 and 2-4Ghz) on a tripod. If anyone has one that
you would be willing to sell, or any other antennas in the model
number group(1-18Ghz sold with the NM-65T and NM-67) please e-mail me.
maxshiloh@yahoo.com

Thanks

4521. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 16:21:47 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp2vfa$fpcp$1@news3.infoave.net>
Source record: 104587
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Please excuse me, once again I have erred in the eyes of a 6 Lander by placing truth in front of political correctness.

It might interest you to know that after the surrender of Lee, Lincoln requested the White house band to play Dixie.

I am always amazed how enlightened liberals can reduce a complex war to a single issue. If you choose to do so, make sure it is the correct single answer. The war of Northern aggression was about money, slavery did not have a damn thing to do with it.

Lincoln's emancipation proclamation had no standing in a seceded South and was made in the hopes that it would foment an uprising of the slaves, thus requiring the use of Southern troops for quelling the uprising rather than fighting the Northern troops.

But Ed, let me not confuse you with the facts.

"Ed Price" <edprice@cox.net> wrote in message
news:LQnsb.23361$mb5.12394@fed1read02...
> Have been staying out of this, but your Leninist historical revisionism is
> too much. Having lost ancestors on BOTH sides, I calls that conflict the
War
> of Stupid Secession. And while Dixie is a bright & lively tune, it's sound
> should forever evoke memories of the dark heart of the Confederacy.
>
> Ed
> wb6wsn
>

4522. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 16:37:15 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031114113715.28917.00000250@mb-m17.aol.com>
Source record: 104588

>Read it carefully before using the CD." :-)

I didn't use CD, just book 19th Ed.

BUmmer

4523. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 16:38:56 UTC
From: Budman <scarroll@asticorp.com>
Message-ID: <t51arvk3b53pnihtsq9t6sc6h6da3oc7h0@4ax.com>
Source record: 104589

"Ed" <ed@nospam.com> wrote:

>Aaaahhhhhhh, another speculator who can't resist fouling a good thread and
>wasting bandwidth in these groups. You and the other guy know nothing and
>feel the need to prove it here for some reason. Now that you've done that
>please run along. There are people checking this thread for information and
>all they find is your uninformative crap. You have nothing to add so please
>go back to posting in your porn NG's or whatever it is you like to do. And
>while your posting in alt.whack.whack.whack consider this - not everyone of
>these units goes out the "front door" - people get them as evaluation units
>and they may get them before the readers of alt.whack.whack.whack such as
>yourself get them. If no one has any information on it - thats OK too - I'm
>not worried.
>
>Now seriously ... GO AWAY.
>
>
>"Bob Miller" <bxmiller@texas.netNOSPAM> speculated that : <blah, blah, blah>
>

I'm thinking of buying a 2005 Camry for my daughter when she graduates next
year. Any one out there have any actual hands on experience on that vehicle.

Sheez

4524. Re: MFJ-974H Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:11:11 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <P08tb.150088$9E1.754695@attbi_s52>
Source record: 104590

Budman wrote:

SNIP
> I'm thinking of buying a 2005 Camry for my daughter when she graduates next
> year. Any one out there have any actual hands on experience on that vehicle.
>
> Sheez
>

YES!! The test engineers for Camry drove it about 1 year ago! It was
part of the design and development cycle.

Does that mean that someone from MFJ may have tested the new tuner??

I would guess so. But, [s]he may not be at liberty to make a public comment.

Anyway this thread begs the issue.

Deacon Dave

4525. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:28:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311140928.3d844d72@posting.google.com>
Source record: 104591

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
>
> Mike,
> to put in perspective, and I tried to point out in the course of threading this
> thread, the significance is this:
>
> 1. Impact on effciency - efficiency is roughly proportional to the area under
> the current curve over the radiator. When the current drop across the coil is
> significant, that "eats" the portion of the curve and the curve above the coil
> is much smaller (cosine or triangle shape), less efficiency

Sure, it's called varying stinger heights, or varying capacitance. The
less stinger you have, the less current will be pulled through the
coil. Thats the way I see it anyway. If you noticed a taper across a
coil, what would you do about it? How are you going to improve the
antenna, if #1 , the coil is already as high as you can place it, and
#2, the stinger is as long as you can make it.
>
> 2. Understanding the effect allows to better optimize the antenna performance,
> be it through modeling or experimenting and measuring.

How? I don't see how we can improve over what we are using. We are
already using the optimum coil placement if we want that. Vertload can
tell you that very quickly.

> That's why top hats look
> so good. We are not talking just fraction of dB, on low bands that shows as 10s of dBs on
signal.

Huh? Top hats work well, because of a current taper across the coil?
Top hats don't model properly because of a current taper across a
coil? I'm confused...

>
> 3. Proper modeling in software will allow better design and optimization. See
> case of linear loaded 80m KLM beam vs. modified with loading coils, big
> difference in pattern and gain and performance.

Where would I see this? Normally, I would expect the lumped coil
version to be the most efficient if quality coils are used...
>
> 4. If the modeling software can not capture the effect, than your designs of
> multielement loaded antennas are off.

Thats a big if though...I've already shown that the likely error from
this "taper" would most likely be so small to be unnoticed. So far, no

one has shown it to be otherwise.

>
> This exercise already opened my eyes wider and after I test the designs, I will
> hopefully come up with some better mobile antennas.
>
> Yuri

Thats the bottom line. But I still feel I'm already building mine as
well as they can be. MK

4526. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:29:39 UTC
From: richardharrison@webtv.net
Message-ID: <17563-3FB51103-46@storefull-2317.public.lawson.webtv.net>
Source record: 104592

Cecil, W5DXP wrote:
"I looked at the ARRL Antenna Cook CD and it contains the same stuff."

Declaring a coil to have zero size and loss does not make it so.

Loss resistance alone does not delay anything. It kills electricity by converting it to heat instantly. It takes no prisoners. It has no electrical storage.

Pure inductance delays current by exactly 90-degrees behind the applied a-c voltage. Resistance adds vectorially with inductive reactance to produce an impedance on some angle with the resistance between 0 and 90-degrees, depending upon the magnitudes of resistance and reactance.

So, in any coil the current is delayed. Coax with a coiled center conductor is manufactured as delay line and is specified in microhenries per foot.

Coils are made of conductors which suffer skin effect resistance. None escape loss, despite declarations. None occupy zero space.

Assuming perfection is valuable for analysis, but should not be used as proof of performance.

Best regards, Richard Harrison, KB5WZI

4527. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:38:08 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <k7CdneELSZeXjiiiRVn-iw@comcast.com>
Source record: 104593

"'Doc" <w5lz@cwis.net> wrote in message news:3FB4494F.F51305F@cwis.net...
>
>
> Tarmo,
> Or, you could look at it in the opposite way. The
> tuner would replace the beam, tower, and rotor at a
> net savings of ~probably~ the price of the tuner. I
> wonder why people are so 'afraid' of tuners?
> 'Doc

OK, how about this:

I was just listening to an EA8 on 20 meters. He was S9 on the tribander, and S4 on the 75 meter antenna.

Also, why have a no tune transmitter when you have to retune the antenna tuner when you change frequency.

Tam/WB2TT

4528. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:39:21 UTC
From: richardharrison@webtv.net
Message-ID: <17563-3FB51349-47@storefull-2317.public.lawson.webtv.net>
Source record: 104595

Mark Keith wrote:
"But I still feel I`m already building mine as well as they can be."

Close the patent office!

Best regards, Richard Harrison, KB5WZI

4529. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 17:40:27 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Sq6dndcZsYcZjiiiRVn-jg@comcast.com>
Source record: 104594

> Radio waves get through wire insulation, even if it is very thick, just as
> if it isn't there.
>
> It is necessary only to remove the insulation at the end of the wire where
> it has to make electrical contact with the radio circuits.

Reminds me of my first crystal radio!

I stripped the insulation from about 100' of phone wire, and western-unioned all the splices (kids don't often have 100' of wire in less than 20 pieces).. Later, I learned that didn't actually help..
However, it did make the wire lighter, which wasn't a bad thing.. Soft copper does have it's limits..

I remember the thrill of picking up CHICAGO! :) :)

The project came to an untimely end, due to the antenna being up as high as I could reach, which coincidentally was neck-high for the mailman.. Copper wire isn't that easy to see..

4530. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 18:15:03 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <zY8tb.2647$cX1.2169@fed1read02>
Source record: 104596
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bp2vfa$fpcp$1@news3.infoave.net...
> Please excuse me, once again I have erred in the eyes of a 6 Lander by
> placing truth in front of political correctness.
>
> It might interest you to know that after the surrender of Lee, Lincoln
> requested the White house band to play Dixie.
>
> I am always amazed how enlightened liberals can reduce a complex war to a
> single issue. If you choose to do so, make sure it is the correct single
> answer. The war of Northern aggression was about money, slavery did not
> have a damn thing to do with it.
>
> Lincoln's emancipation proclamation had no standing in a seceded South and
> was made in the hopes that it would foment an uprising of the slaves, thus
> requiring the use of Southern troops for quelling the uprising rather than
> fighting the Northern troops.
>
> But Ed, let me not confuse you with the facts.

Oh my, tarred as a "6-Lander"! How cutting! And quaint, since the "6"
designation is a result of a Federal bureau licensing organizational plan,
and you Southern boys are always so distrustful of Federal schemes. Looks
like them Washington boys are already inside your head.

Playing "Dixie" might have been a diplomatic gesture of kindness; it also
might be viewed as the ultimate "screw you".

Slavery was the basis of the South's wealth, the ultimate cheap labor.
Claiming that money was the true basis for the US Civil War is like trying
to link the Holocaust to the cost of soap in Bavaria. And the South didn't
want to simply continue slavery, they wanted to allow it to be expanded to
new states as they joined the Union. Slavery wasn't the single issue, but it
was the ultimate trigger to a train of events that had been being avoided
for 30 years. If slavery wasn't the prime issue, then why wasn't the Civil
War fought between the Union and say, Indiana, Illinois, Wisconsin,
Minnesota and Michigan?

The Emancipation Proclamation was obviously unenforceable, as it applied
only to those states currently in rebellion to the Union. How about that,
Lincoln takes the moral high-ground, foments trouble within his adversaries
territory, and causes the adversary to waste precious manpower on internal
suppression. Impressive even after 150 years.

You divine that I'm a "liberal." You're obviously invoking the same powers of political acumen that typified the train wreck that was the Confederate Government. The Great Speeches of Jefferson Davis could be inscribed on the head of a pin with a magic marker!

Dixie is dead; get over it, or accept irrelevance.

Ed
WB6WSN

4531. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 18:16:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB51C0A.BF571D68@uci.edu>
Source record: 104598

Mark Keith wrote:
> If you noticed a taper across a
> coil, what would you do about it? How are you going to improve the
> antenna, if #1 , the coil is already as high as you can place it, and
> #2, the stinger is as long as you can make it.

Come on, Mark. How can ones ability to model and build better antennas be totally unaffected by an element that is missing from their understanding of the fundamental phenomena.

> I don't see how we can improve over what we are using.

Do you think that people who have made improvements were unable to see how they could make improvements?

> But I still feel I'm already building mine as
> well as they can be.

That may very well be the case, Mark. But unless you understand how they work, you can't very well convince someone of why it is the case.

73, Jim AC6XG

4532. Re: Racist Amateur Radio Operators (trimmed)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 18:18:35 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <T%8tb.2648$cX1.2638@fed1read02>
Source record: 104597

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:bgusb.22989$Oo4.16018@newsread1.news.atl.earthlink.net...
>
> "Ed Price" <edprice@cox.net> wrote in message
> news:%aosb.23364$mb5.5675@fed1read02...

SNIP

> > Roger:
> >
> > If you were replying to anything I posted, your intent was unclear. I
have
> > been attempting to show that the USA is NOT, by careful plan, a
democracy.
> > We have a constitutional republic, despite the blatherings of the
> civically
> > challenged. Those who bleat the merits of a pure democracy would be the
> > first to bitch about an infringement of their "rights." Democracy knows
no
> > rights, only majorities.
> >
> > Ed
> > wb6wsn
> >
>
> Very true....but you can't blame folks for not grasping the facts. Our
own
> representatives call the USA a Democracy. Oh well.
>
> Dan/W4NTI
>
>

It's chilling, and correct, observing that we get the government that we
deserve.

Ed
WB6WSN

4533. Re: WonderShaft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 18:22:30 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <x39tb.2649$cX1.1545@fed1read02>
Source record: 104599

"Bob Miller" <bxmiller@texas.netNOSPAM> wrote in message
news:3fo8rvoe1et0gsbf4jitpc936ijkjn2pqj@4ax.com...
> On Thu, 13 Nov 2003 17:12:01 GMT, "Just_me"
> <martian10Nospam@rogers.com> wrote:
>
> >Does anyone know whom makes an ANTENNA called WonderShaft ?
> >
>
> There's golf clubs called that. Google brings up a: "wanderschaft
> antenna"
>
> To me, sounds like one of those viagra emails I keep getting :-)
>
> Bob
> k5qwg
>
>

Uhhh, that would be a wunderschwanz.

Ed
WB6WSN

4534. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 18:40:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb52190_2@127.0.0.1>
Source record: 104600
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Ed Price wrote:
> Dixie is dead; get over it, or accept irrelevance.

Dixie isn't dead. I whistled it just this morning.
--
73, Cecil, W5DXP

4535. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 19:19:21 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB52AB9.48AFCEE0@uci.edu>
Source record: 104601

Cecil Moore wrote:
> One thing I was originally confused about until I sat down and drew some
> phasor diagrams. The phase of the *net* current doesn't change much over
> the length of the mobile antenna. It's the phase of the forward current
> and reflected current that is changing. But those phases are changing in
> opposite directions so the sum of those two phasors results in very little
> phase change in the net current.

It might be helpful to indicate your point of reference when talking
about phase, i.e. phase is changing with respect to voltage, or phase is
changing with respect to the source, phase is changing with respect to
position, etc.

Take the sentence "it's the phase of the forward and reflected current
that is changing" for example. For a traveling wave it is certainly
true that at any given point along a waveguide, the phase of the wave is
constantly changing with time. But it isn't necessarily true that at
that point, the phase of the current relative the voltage is changing
with time.

In the problem we've been discussing both points of reference are
relevant. In some case we're addressing the phase shift between voltage
and current, and in other cases we're discussing the change in phase
along the length of a conductor. I think it's helpful to be specific
about this.

> For a 1/4WL vertical, the net current is approximately equal to 90 degrees
> of a cosine wave, 1.0 at zero degrees and zero at 90 degrees. The magnitude
> of the net current is an indication of where between zero and 90 degrees
> the current is being measured. Where = arc-cos(|net current|)

That angle is the 'phase' of the current standing wave as a function of
position, not to be confused with the phase of the current with respect
to voltage. Roger?

73, Jim AC6XG

4536. Re: Larson glass mount question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 19:54:29 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <GOSdnV6xGdtiryiiRVn-hQ@comcast.com>
Source record: 104602

Check out the EZPASS transponder site at
http://www.ezpass.com/static/info/exteriortags.shtml
Turns out that I have a no-no vechicle, but I put the transponder below the
heavy tint. Works OK.

Tam/WB2TT
"Dan" <dan9125@aol.com> wrote in message
news:90dcbbbd.0310311116.3faf797c@posting.google.com...
> Im going to be installing a Larson KG450UDPL 450-470mhz glass mount
> antenna on my 2004 Dodge Ram pick up and i was wondering if anyone
> knew the best spot to place this antenna. I have read about glass with
> tint causing problems.The rear window (where i want to put it) has a
> light tint,how will know if this will make my antenna performance
> suffer? Are some tints worse than others? I hate to stick it there and
> have not work then have to scrape it off. The windshield is clear but
> who wants an antenna on the windshield?
>
> Thanks alot Dan9125@aol.com

4537. Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:05:21 UTC
From: Dunc <Dunc.F@CenturyTel.Net>
Message-ID: <SLOdnRt-TtX7pyii4p2dnA@centurytel.net>
Source record: 104603
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

I just bought a new RV that has an all fiberglass shell. It also has
thermopaine windows. (2 layers of glass with an air space between them.)

In my older RV I used through the glass antennas with great success, but
with the thickness and air space of the thermopaine windows they will not
work.

I am looking for suggestions for antennas that would preferable not require
drilling into the shell, but if necessary the smaller hole the better.
I my Cell company is Verizon and is a triband phone.

My VHF needs are for 144-148
and UHF 420-450

Thanks
73
Dunc, KL7RH

4538. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:36:32 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031114153632.28987.00000226@mb-m17.aol.com>
Source record: 104604

>
>Mark Keith wrote:
>"But I still feel I`m already building mine as well as they can be."
>
>Close the patent office!
>
>Best regards, Richard Harrison, KB5WZI
>
>
>

Bingo!

In order not to rush Phreak into the patent office I will sit on some solutions for a while. :-)

3BUmmer

4539. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:38:29 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031114153829.28987.00000228@mb-m17.aol.com>
Source record: 104605

>
>Dixie isn't dead. I whistled it just this morning.
>--
>73, Cecil, W5DXP
>
>
>

I heard it, sounded good!

BUmmer

4540. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:38:52 UTC
From: Not Me <me@privacy.net>
Message-ID: <bp3ep8$1ircfg$1@ID-204939.news.uni-berlin.de>
Source record: 104606
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

Might try to locate a feed though barrel connector. Can be made water tight
with silicone or you can try for a hermetically sealed unit.

If it were not for the triband requirement you could use balume coupling as
is done when on some AM stations with series fed antennas that have FM
antennas attached.

| I just bought a new RV that has an all fiberglass shell. It also has
| thermopaine windows. (2 layers of glass with an air space between them.)
|
| In my older RV I used through the glass antennas with great success, but
| with the thickness and air space of the thermopaine windows they will not
| work.
|
| I am looking for suggestions for antennas that would preferable not
require
| drilling into the shell, but if necessary the smaller hole the better.
| I my Cell company is Verizon and is a triband phone.
|
| My VHF needs are for 144-148
| and UHF 420-450
|
| Thanks
| 73
| Dunc, KL7RH
|
|
|

4541. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:47:20 UTC
From: Chris Bryant <bryantrv-06@cfl.rr.com>
Message-ID: <pan.2003.11.14.20.47.16.347804@bryantrv.com>
Source record: 104607
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

On Fri, 14 Nov 2003 12:05:21 -0800, Dunc wrote:

> I just bought a new RV that has an all fiberglass shell. It also has
> thermopaine windows. (2 layers of glass with an air space between them.)
>
> In my older RV I used through the glass antennas with great success, but
> with the thickness and air space of the thermopaine windows they will not
> work.
>
> I am looking for suggestions for antennas that would preferable not
> require drilling into the shell, but if necessary the smaller hole the
> better. I my Cell company is Verizon and is a triband phone.

The "standard" way is to run the cable through the top refrigerator vent-
so you don't need to drill through the shell.

--
Chris Bryant
http://bryantrv.com

4542. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:49:03 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <3dbtb.546$Rk5.3@newsread1.news.atl.earthlink.net>
Source record: 104608
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:zY8tb.2647$cX1.2169@fed1read02...
>
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bp2vfa$fpcp$1@news3.infoave.net...
> > Please excuse me, once again I have erred in the eyes of a 6 Lander by
> > placing truth in front of political correctness.
> >
> > It might interest you to know that after the surrender of Lee, Lincoln
> > requested the White house band to play Dixie.
> >
> > I am always amazed how enlightened liberals can reduce a complex war to
a
> > single issue. If you choose to do so, make sure it is the correct single
> > answer. The war of Northern aggression was about money, slavery did not
> > have a damn thing to do with it.
> >
> > Lincoln's emancipation proclamation had no standing in a seceded South
and
> > was made in the hopes that it would foment an uprising of the slaves,
thus
> > requiring the use of Southern troops for quelling the uprising rather
than
> > fighting the Northern troops.
> >
> > But Ed, let me not confuse you with the facts.
>
>
> Oh my, tarred as a "6-Lander"! How cutting! And quaint, since the "6"
> designation is a result of a Federal bureau licensing organizational plan,
> and you Southern boys are always so distrustful of Federal schemes. Looks
> like them Washington boys are already inside your head.
>
> Playing "Dixie" might have been a diplomatic gesture of kindness; it also
> might be viewed as the ultimate "screw you".
>
> Slavery was the basis of the South's wealth, the ultimate cheap labor.
> Claiming that money was the true basis for the US Civil War is like trying
> to link the Holocaust to the cost of soap in Bavaria. And the South didn't
> want to simply continue slavery, they wanted to allow it to be expanded to
> new states as they joined the Union. Slavery wasn't the single issue, but
it

> was the ultimate trigger to a train of events that had been being avoided
> for 30 years. If slavery wasn't the prime issue, then why wasn't the Civil
> War fought between the Union and say, Indiana, Illinois, Wisconsin,
> Minnesota and Michigan?
>
> The Emancipation Proclamation was obviously unenforceable, as it applied
> only to those states currently in rebellion to the Union. How about that,
> Lincoln takes the moral high-ground, foments trouble within his
adversaries
> territory, and causes the adversary to waste precious manpower on internal
> suppression. Impressive even after 150 years.
>
> You divine that I'm a "liberal." You're obviously invoking the same powers
> of political acumen that typified the train wreck that was the Confederate
> Government. The Great Speeches of Jefferson Davis could be inscribed on
the
> head of a pin with a magic marker!
>
> Dixie is dead; get over it, or accept irrelevance.
>
>
> Ed
> WB6WSN
>

Edward of El Cajon California.....isn't that right on top of the fault?
Beware of things that go bump in the night.

Dan/W4NTI
The Heart of Dixie

4543. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:54:00 UTC
From: David Eduardo <radiodavid@yahoo.com>
Message-ID: <lhbtb.10327$v16.2542@newssvr29.news.prodigy.com>
Source record: 104609
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:3dbtb.546$Rk5.3@newsread1.news.atl.earthlink.net...
>
>
> Edward of El Cajon California.....isn't that right on top of the fault?

It's nowhere near the San Andreas fault, which is far to the East in the
Imperial Valley.

4544. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 20:59:54 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net>
Source record: 104610
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

OH, so its West of the fault.....that means when it cracks the stuff to
the west will fall off into the Pacific ocean, right?

Beware of things that go bump in the night.

Dan/W4NTI

"David Eduardo" <radiodavid@yahoo.com> wrote in message
news:Ihbtb.10327$v16.2542@newssvr29.news.prodigy.com...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:3dbtb.546$Rk5.3@newsread1.news.atl.earthlink.net...
> >
> >
> > Edward of El Cajon California.....isn't that right on top of the fault?
>
> It's nowhere near the San Andreas fault, which is far to the East in the
> Imperial Valley.
>
>

4545. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 21:18:27 UTC
From: Dunc <Dunc.F@CenturyTel.Net>
Message-ID: <1oWdnVbFodc02yiiRVn-vA@centurytel.net>
Source record: 104611
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

Thanks Chris.(again!)

Any suggestions for a good no ground plane antenna for both applications?
"Chris Bryant" <bryantrv-06@cfl.rr.com> wrote in message
news:pan.2003.11.14.20.47.16.347804@bryantrv.com...
> On Fri, 14 Nov 2003 12:05:21 -0800, Dunc wrote:
>
> > I just bought a new RV that has an all fiberglass shell. It also has
> > thermopaine windows. (2 layers of glass with an air space between
them.)
> >
> > In my older RV I used through the glass antennas with great success, but
> > with the thickness and air space of the thermopaine windows they will
not
> > work.
> >
> > I am looking for suggestions for antennas that would preferable not
> > require drilling into the shell, but if necessary the smaller hole the
> > better. I my Cell company is Verizon and is a triband phone.
>
> The "standard" way is to run the cable through the top refrigerator vent-
> so you don't need to drill through the shell.
>
> --
> Chris Bryant
> http://bryantrv.com
>
>

4546. no counterpoise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 21:22:13 UTC
From: joe bob <joe@bob.net>
Message-ID: <COSdnVk_Otjj2iiiRVn-jA@shawneelink.net>
Source record: 104612

i have a 5/8 vhf antenna (with coil at bottom) with nmo mount. if i cut the wip down to 1/2 wave will it work without a ground plane? i want to put it on my fiberglass boat.

i see marine antennas that are 1/2 wave with a coil at the bottom. i would like to adapt a antenna i allready have.

4547. Re: no counterpoise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 21:25:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB54862.E652B4CD@cwis.net>
Source record: 104613

joe bob,
You'd still have a problem because then the coil
at the bottom would be the wrong size/value for a
1/2 wave antenna.
'Doc

4548. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 21:29:47 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB5494B.F16A09C3@cwis.net>
Source record: 104614
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

Dunc,
Why not make a groundplane for the antenna, glue it to
the roof of the RV and mount any old antenna in the center
of it?
'Doc

4549. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 21:53:35 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb54efd_8@corp.newsgroups.com>
Source record: 104615

Jim Kelley wrote:
> That angle is the 'phase' of the current standing wave as a function of
> position, not to be confused with the phase of the current with respect
> to voltage. Roger?

Since any reference to voltage on an antenna seems to be verboten, I
have avoided any such reference. Otherwise, here is a quote from Kraus:

"It is generally assumed that the current distribution of an infinitesimally
thin antenna is sinusoidal, and that the phase is *constant* over a 1/2WL
interval, changing abruptly by 180 degrees between intervals."

Don't you just love the phrase, "It is generally assumed ..."? He doesn't
say the current is sinusoidal. He doesn't say the phase is constant over
a 1/2WL interval.

For that general assumption to be true, the reflected current would have
to equal the forward current on a standing-wave antenna. But we know it
doesn't. However, this implies that the reflected current arriving back
at the feedpoint is not extremely/severely attenuated. Here's a cute
ballpark analysis sure to drive the gurus crazy.

Assume the Z0 of a traveling-wave dipole is 600 ohms. The ratio of forward
voltage to forward current is 600 ohms. The ratio of reflected voltage to
reflected current is 600 ohms. Assume the feedpoint current is one amp and
the feedpoint voltage is 50 volts. Assume the forward current and the reflected
current are in phase at the feedpoint. Assume the forward voltage and reflected
voltage are 180 degrees out of phase at the feedpoint. This is enough information
to solve for the ratio of forward current to reflected current at the feedpoint.
Assuming the net current is one amp at the feedpoint, I get 0.542 amps for
the forward current and 0.458 amps for the reflected current, i.e. the reflected
current is 85% of the value of the forward current. Remember, that is a ballpark
estimate.

That means the current only decreases by 15% in its round trip to the
end of the antenna and back. Same for the voltage. Oops, I mentioned
voltage - sorry. But please note that the power loss is a lot higher
than 15% since both the current and voltage are reduced by the same 15%.

The argument seems to occur due to the ignoring of the component waves
on a standing wave antenna. Such is the steady-state model seduction attended
by its sacred cows. Who wants to join me in a beer bust and barbecue?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!

------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4550. Current in antenna loading coils controversy - new specification

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 22:31:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p4garvorl4omej3suse3988o3um4lcfi2i@4ax.com>
Source record: 104616

Hi All,

After having asked more than once for simple characteristics, taken
Tom's speculative offering of 300ï¿½H (to which Yuri neither accepted
nor rejected, nor offered amendment to, nor any value of his own, nor
attempted to confirm or reject through his correspondence); I settled
down to hammering through the values to make it ring using the other
speculations of simple characteristics that remain wholly undisclosed
(see enumeration above).

The valuation offered by Tom was easily 1000% high. That I suggested
that my model did not resonate came to no response by Yuri, who was
quick to accept testimony of there being a current differential (which
was also in reverse characteristic to those so-called measurements).

Instead, I used what metrics were offered in the casual report and by
evidence of photography to mock up the following:
0.375" Diameter copper (with losses) radiator length at 92";
a ground field of 60 #12 copper (with losses) radials;
a 36.8267ï¿½H lumped coil (no losses attributed through R, no C);
the lumped coil placed at the 46th inch (49.45%);
the antenna placed over real ground;
ground is of medium characteristic;
the entire antenna/ground plane is 6" above actual ground;
that comes to the following current distribution:
>1 W2E1 1 0.00
>2 1.0005 0.00
>3 1.0012 -0.01
>4 1.0019 -0.02
>5 1.0027 -0.03
>6 1.0035 -0.03
>7 1.0043 -0.04
>8 1.0051 -0.05
>9 1.006 -0.05
>10 1.0069 -0.06
>11 1.0079 -0.06
>12 1.0089 -0.07
>13 1.0099 -0.07
>14 1.011 -0.08
>15 1.0121 -0.08
>16 1.0132 -0.09
>17 1.0144 -0.09
>18 1.0156 -0.10
>19 1.0169 -0.10
>20 1.0182 -0.10

```
>21 1.0195 -0.11
>22 1.021 -0.11
>23 1.0224 -0.12
>24 1.024 -0.12
>25 1.0256 -0.12
>26 1.0273 -0.13
>27 1.029 -0.13
>28 1.0309 -0.13
>29 1.0328 -0.14
>30 1.0349 -0.14
>31 1.0371 -0.14
>32 1.0394 -0.14
>33 1.0418 -0.15
>34 1.0445 -0.15
>35 1.0473 -0.15
>36 1.0503 -0.16
>37 1.0535 -0.16
>38 1.0571 -0.16
>39 1.061 -0.16
>40 1.0653 -0.16
>41 1.0702 -0.17
>42 1.0759 -0.17
>43 1.0826 -0.17
>44 1.091 -0.17
>45 1.1039 -0.17
>46 1.1224 -0.18
>47 1.0841 -0.18
>48 1.0513 -0.18
>49 1.0231 -0.18
>50 .99652 -0.18
>51 .97101 -0.18
>52 .94623 -0.18
>53 .92201 -0.19
>54 .8982 -0.19
>55 .87475 -0.19
>56 .85159 -0.19
>57 .82863 -0.19
>58 .80587 -0.19
>59 .78328 -0.20
>60 .76083 -0.20
>61 .73849 -0.20
>62 .71627 -0.20
>63 .69412 -0.20
>64 .67205 -0.20
>65 .65004 -0.20
>66 .62807 -0.21
>67 .60614 -0.21
>68 .58425 -0.21
>69 .56237 -0.21
>70 .5405 -0.21
```

>71 .51863 -0.21
>72 .49675 -0.21
>73 .47485 -0.22
>74 .45294 -0.22
>75 .43099 -0.22
>76 .40898 -0.22
>77 .38692 -0.22
>78 .3648 -0.22
>79 .34259 -0.23
>80 .32028 -0.23
>81 .29787 -0.23
>82 .27531 -0.23
>83 .25259 -0.23
>84 .22969 -0.23
>85 .20656 -0.23
>86 .18316 -0.23
>87 .15942 -0.24
>88 .13523 -0.24
>89 .11047 -0.24
>90 .08486 -0.24
>91 .05798 -0.24
>92 Open .02713 -0.24
>
for each INCH of the radiator (and lumped coil)
A visual description would be a constant current to the coil, and then
a linear taper to the tip.

The corresponding launch characteristic:
1.80dBi @ 29ï¿½

By Decimating the lumped value across 10" (corresponding to the large
solenoid's apparent size ascertained from the photographs); to 10
lumped values of 4.28078ï¿½H (adjusted to re-obtain resonance); placed
at successive 1 inch segments (50..59); we find the following changes:
>1 W2E1 1 0.00
>2 1.0005 0.00
>3 1.0011 -0.02
>4 1.0017 -0.02
>5 1.0024 -0.03
>6 1.0031 -0.04
>7 1.0039 -0.04
>8 1.0047 -0.05
>9 1.0054 -0.05
>10 1.0063 -0.06
>11 1.0071 -0.07
>12 1.008 -0.07
>13 1.0089 -0.08
>14 1.0099 -0.08
>15 1.0108 -0.09
>16 1.0118 -0.09
>17 1.0129 -0.10

```
>18 1.014 -0.10
>19 1.0151 -0.11
>20 1.0162 -0.11
>21 1.0174 -0.11
>22 1.0187 -0.12
>23 1.02 -0.12
>24 1.0213 -0.13
>25 1.0227 -0.13
>26 1.0241 -0.13
>27 1.0256 -0.14
>28 1.0272 -0.14
>29 1.0289 -0.14
>30 1.0306 -0.15
>31 1.0324 -0.15
>32 1.0344 -0.15
>33 1.0364 -0.16
>34 1.0385 -0.16
>35 1.0408 -0.16
>36 1.0432 -0.17
>37 1.0458 -0.17
>38 1.0485 -0.17
>39 1.0515 -0.17
>40 1.0547 -0.18
>41 1.0582 -0.18
>42 1.0621 -0.18
>43 1.0665 -0.18
>44 1.0714 -0.18
>45 1.0776 -0.19
>46 1.0854 -0.19
>47 1.0886 -0.19
>48 1.0876 -0.19
>49 1.083 -0.19
>50 1.0748 -0.19
>51 1.0633 -0.20
>52 1.0484 -0.20
>53 1.0301 -0.20
>54 1.0084 -0.20
>55 .98291 -0.20
>56 .9533 -0.20
>57 .92528 -0.20
>58 .8983 -0.21
>59 .87192 -0.21
>60 .84597 -0.21
>61 .82036 -0.21
>62 .79502 -0.21
>63 .7699 -0.21
>64 .74494 -0.21
>65 .72014 -0.22
>66 .69545 -0.22
>67 .67086 -0.22
```

>68 .64635 -0.22
>69 .62191 -0.22
>70 .59751 -0.22
>71 .57314 -0.22
>72 .5488 -0.23
>73 .52446 -0.23
>74 .50012 -0.23
>75 .47576 -0.23
>76 .45136 -0.23
>77 .42692 -0.23
>78 .40243 -0.23
>79 .37785 -0.24
>80 .35318 -0.24
>81 .32841 -0.24
>82 .30348 -0.24
>83 .2784 -0.24
>84 .25312 -0.24
>85 .22759 -0.24
>86 .20178 -0.24
>87 .1756 -0.25
>88 .14894 -0.25
>89 .12165 -0.25
>90 .09344 -0.25
>91 .06384 -0.25
>92 Open .02987 -0.25
>
for each INCH of the radiator (and lumped coil)
A visual description would be a constant current to the coil, and then
a linear taper to the tip. It should be noted that for the protocol
of solenoid assembly by lumped parts, the current into the solenoid
does not equal the current out of the solenoid.

The corresponding launch characteristic:
1.56dBi @ 29i¿½

Or roughly a quarter dB difference between the two (being generous, a
6% variation in absolute signal strength)

Any surprises? Perhaps to the easily surprised, but a quarter dB
variation hardly counts in the real world. Moment to moment
propagation variation will eclipse or boost this easily (although
employing 0.3dB to boost or eclipse is a strain on language). The
real world is going to suffer the bitch of matching R (being resonant
does not confer a 50 Ohm match to this small radiator). Does the
current drop through the solenoid? Again, no surprise. Does it drop
enough? Well that is arguable given the lack of attention to details
of specifying the original test.

Has any new precept been obtained that has not already been supplied?
Insofar as the complaint of not seeing the current variation goes,
that was answered long before the 350 itinerant postings that ignored

it. Does the decimation offer enough accuracy? Angel population counts will undoubtedly be re-entered into with relish to make that illusionary exploration despite the obvious variation of so little as a quarter dB did for the first huge leap being the greatest difference that will be found.

73's
Richard Clark, KB7QHC

4551. Re: no counterpoise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 22:33:46 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <eLctb.200230$Tr4.571687@attbi_s03>
Source record: 104617

Add a small ground plane. Aluminum foil on a suitable support, piece of plywood etc., would work fine.

Deacon Dave

joe bob wrote:

> i have a 5/8 vhf antenna (with coil at bottom) with nmo mount. if i cut the
> wip down to 1/2 wave will it work without a ground plane? i want to put it
> on my fiberglass boat.
>
> i see marine antennas that are 1/2 wave with a coil at the bottom. i would
> like to adapt a antenna i allready have.
>
>
>

4552. Re: WANTED-DONATIONS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 23:09:24 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <aunarv8bhjg1glkatib8ldm44h1vcrqcol@4ax.com>
Source record: 104519

On Fri, 14 Nov 2003 06:53:05 -0800, "KeyBoard In The Wilderness"
<KTW@zilch.com> wrote:

>Hold a swap meet -- take a 10% fee -- worked for a club I belonged to.

The Midland Amateur Radio Club has worked hand in hand with Emergency
services for many years. When it came time for the county to upgrade
their communications system, they purchased an amateur base station
that is installed along with their 911 services.

They decided to set up a communications van and included an amateur
station in that as well.

I'd say we have some pretty good cooperation.
We are currently working on limited range, portable repeaters as well
as microwave TV links.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)

4553. Re: Current in antenna loading coils controversy - new specification

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 23:11:49 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp3nfknis1@hercules.btinternet.com>
Source record: 104618

"Richard Clark" wrote -

> The valuation offered by Tom was easily 1000% high.

.....

Sounds a lot. Do you mean it was 10 or was it 11 times bigger?

4554. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 23:37:08 UTC
From: Neon John <johngdDONTYOUDARE@bellsouth.net>
Message-ID: <mkparvgbapkep3nbca1ir0l8fsdlaeif3n@4ax.com>
Source record: 104520
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

On Fri, 14 Nov 2003 13:18:27 -0800, "Dunc" <Dunc.F(NoSpam)@CenturyTel.Net>
wrote:

>Thanks Chris.(again!)
>
>Any suggestions for a good no ground plane antenna for both applications?

Just tape off a suitable area of the roof with aluminum duct tape and attach
your favorite conventional antenna. If you use high quality tape it'll stay
attached for years. On the roof it'll be invisible. Just overlap each strip
with the previous to provide coupling between the strips.

John

John De Armond
johngdDONTYOUDARE@bellsouth.net
http://bellsouthpwp.net/j/o/johngd/
Cleveland, Occupied TN

4555. Re: Current in antenna loading coils controversy - new specification

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-14 23:47:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m9qarvghq5rv6j324sl6htgl871t15hpor@4ax.com>
Source record: 104521

On Fri, 14 Nov 2003 23:11:49 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>"Richard Clark" wrote -
>
>> The valuation offered by Tom was easily 1000% high.
>
>...
>
>Sounds a lot. Do you mean it was 10 or was it 11 times bigger?
>
To be strictly accurate - a whole lot ï¿½3dB.

73's
Richard Clark, KB7QHC

4556. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 00:00:45 UTC
From: Dunc <Dunc.F@CenturyTel.Net>
Message-ID: <ceOdndvrBqQw8SiiRVn-sw@centurytel.net>
Source record: 104522
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

Really???

Gee John that sounds too simple to be true!

But, I'll try it if it works!

Have you used that idea?

73
Dunc, KL7RH

"Neon John" <johngdDONTYOUDARE@bellsouth.net> wrote in message
news:mkparvgbapkep3nbca1ir0l8fsdlaeif3n@4ax.com...
> On Fri, 14 Nov 2003 13:18:27 -0800, "Dunc" <Dunc.F(NoSpam)@CenturyTel.Net>
> wrote:
>
> >Thanks Chris.(again!)
> >
> >Any suggestions for a good no ground plane antenna for both applications?
>
> Just tape off a suitable area of the roof with aluminum duct tape and
attach
> your favorite conventional antenna. If you use high quality tape it'll
stay
> attached for years. On the roof it'll be invisible. Just overlap each
strip
> with the previous to provide coupling between the strips.
>
> John
> ---
> John De Armond
> johngdDONTYOUDARE@bellsouth.net
> http://bellsouthpwp.net/j/o/johngd/
> Cleveland, Occupied TN

4557. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 00:15:57 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB5703D.5F1296C6@uci.edu>
Source record: 104523

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > That angle is the 'phase' of the current standing wave as a function of
> > position, not to be confused with the phase of the current with respect
> > to voltage. Roger?
>
> Since any reference to voltage on an antenna seems to be verboten, I
> have avoided any such reference.

I can understand how at DC, references to current in a dipole might be
verboten. :-)

I wonder if voltage on a dipole could be roughly likened to transverse
velocity at various points along a whip.

> Don't you just love the phrase, "It is generally assumed ..."?

I guess it allows: 'I'm not responsible should it turn out not to be a
good assumption'. :-)

> For that general assumption to be true, the reflected current would have
> to equal the forward current on a standing-wave antenna. But we know it
> doesn't. However, this implies that the reflected current arriving back
> at the feedpoint is not extremely/severely attenuated.

Seems to me it just implies that current at the end of a dipole isn't
really zero.

> Assume the Z0 of a traveling-wave dipole is 600 ohms. The ratio of forward
> voltage to forward current is 600 ohms. The ratio of reflected voltage to
> reflected current is 600 ohms. Assume the feedpoint current is one amp and
> the feedpoint voltage is 50 volts. Assume the forward current and the reflected
> current are in phase at the feedpoint. Assume the forward voltage and reflected
> voltage are 180 degrees out of phase at the feedpoint. This is enough information
> to solve for the ratio of forward current to reflected current at the feedpoint.
> Assuming the net current is one amp at the feedpoint, I get 0.542 amps for
> the forward current and 0.458 amps for the reflected current, i.e. the reflected
> current is 85% of the value of the forward current. Remember, that is a ballpark
> estimate.

50 volts difference across a 600 ohm impedance, over 2, plus and minus
half an amp.

> That means the current only decreases by 15% in its round trip to the
> end of the antenna and back.

I think it may actually make many round trips. There may be multiple
reflections.

> The argument seems to occur due to the ignoring of the component waves
> on a standing wave antenna. Such is the steady-state model seduction attended
> by its sacred cows.

Well, you'll either have to write out everything as a series, which is a
lot of busy work, or use the steady state equivalent.

So what does all this say about reflectivity at the end of the dipole?
;-)

73, Jim AC6XG

4558. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 02:18:03 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311141818.58c0266d@posting.google.com>
Source record: 104524

Richard, that was a darned good response, clear and to the point,
Makes me feel a bit silly.
Actually Richard this same question has been bothering me for some
time in my modeling,
As you know I am dealing with coupling of radiated circuits. I know
you are not in agreement in what I am doing but that is not important
at this time.
When I realised that one cannot get the Q that one desires it was
really brought home to me what many had said to me about top band and
low efficiencies.
Not only have I had it brought home to me that there is more to an
inductance than I realised but also the difficulties of modeling its
many facets.
The last month or so I have modeled and remodeled my coupling inductor
not only by splitting it up into more than one but also spacing them
out so they represent the actual inductance length plus making the
diameter of those element segments the same as the coil diameter, all
these present different efficiencies tho not by very much . But then
the bandwidth on the model
is much narrower that the actual antenna!. My first reaction is that
the coil is more lossier than the model shows but what it really shows
is that the program can't handle inductances to my satisfaction thus
for me this thread is enlarging my education. So your comments are
very welcome.
Regards
Art

yRichard Clark <kb7qhc@comcast.net> wrote in message
news:<92l7rv0oe07uba85orad28jdqgnauq8bkb@4ax.com>...
> On 13 Nov 2003 08:56:04 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >Richard,
> >You have written quite extensively on this thread, a lot of it being
> >comments that I just dont understand.
>
> It would help you, me, and the rest if you simply asked each time that
> occurs.
>
> I posted 11 times to Yuri's thread of 183
> I posted ONCE to Roy's thread of 103
> I posted 5 (now 6) times to this
>
> You've posted 8 times total among them - you know, that still leaves

> something like 300 postings, 90%, by others (and among not too many
> different individuals). I can certainly offer that my writing has
> more impact, but hardly as much tonnage. YMMV
>
> >If you don't like the way it is
> >going or the people involved are not coming to you' as is their job,
> >to present absolute proof then why bother with these people or the
> >thread.
>
> You might as well ask those who live in pollution why they don't
> simply stop breathing.
>
> >Can't you bend just a bit and go with the flow when unsurmountable
> >proof is not presented to you first, which you say is everybodies job.
>
> With 80% of the weather vanes already turned into the wind, why would
> I want to do that? Art you pine for a more soothed and tranquil
> passage across what is in fact a stormy sea.
>
> >Didn't you yourself invite me to
> >participate ? If so you must certainly had some interest in what the
> >lesser people were saying.
>
> You focus too much on these herculean threads and it would behoove you
> to participate outside of them (and I will offer that you already
> have). The majority of my correspondence is in fact with those asking
> questions that these titans have disdained from answering:
> Parasitic Question...
> Hints for a quasi professional cage...
> Penn state fractal...
> dielectric antennas...
> OCF Dipole...
> ant coupler and silver mica...
> Magloop woes
> 1.2 GHz antennas...
> Device by an antenna...
> to trust which SWR meter...
> in the last week alone. Do you see any insistence by me for absolute
> accuracy, or demands for proofs in those? No, Art, I reserve that for
> those who are too lame to defend outrageous claims. None of the
> topics above qualify in that regard. Well maybe one inflated soul,
> perhaps. A guy with 9 actual out of 12 patents claimed - should I put
> on a happy face and simply offered "Bravo! 9 out of 12 is good
> enough"? People like that inflated the stock bubble of 2000.
>
> To put it simply, if you lay it out as a fact, I will test it as a
> fact. If you lay it out as an idea, then there is something to listen
> to. I can let ideas pass on their own merit, but facts have a status
> that require validation. If you want an idea validated, that requires
> the assistance of psychiatry or religion because you are mixing faith

> and science inappropriately. If you want to argue faith and/or
> science, it belongs in the Racist and Democracy threads that I eschew.
>
> I will admit I love kicking out the crutches of cripples who are
> obvious charlatans. In my youth I walked past too many street urchins
> begging for spare change (called flower children then) who are now
> robbing companies of earnings as CEO's (they were flower children
> because what change they couldn't scrabble up for dope, they could
> call home for from Daddy-kins, or Mummy-kins to help bail them out).
>
> This simply means I can tell (as many can, it is no great talent) the
> difference between an honest call for help, and a fool's mission.
> Long threads such as this and others contain no more than 20% real
> content. When I have responded to that, the remainder begs for
> entertainment critiques (generally very poor material and easily
> mocked). As a benefit, my critiques are far more entertaining too.
>
> Roy's separate thread started out shame-based, I recognized it from
> the start because I can do it so much better, and have. It deserved
> only one comment from me because it was lost from the beginning. That
> it ran to some 100+ postings proves its lack of material and its girth
> of ego. My own shame-based topics have run to less postings than the
> total of Roy's tap dancing. The only difference is my ego requires
> less from me, and is satisfied with the silence of others humbled by
> their poverty of refute. ;-)
>
> >Why not look at the possitives presented and put aside attempts to
> >deflate
> >or deride honest attempts to explain. You are apparently a computor
> >expert so why not derive a system where a inductance is transfered to
> >a system that can easily be modeled since there seems to be some
> >interest in the matter and you would good chance of becoming a hero
> >to all.
>
> Both Roy and I offered a protocol to do just that - BEFORE these 300+
> postings! You simply have to read Yuri's page to observe it, and how
> it is accomplished. Then ask yourself, what quality of discussion
> from 300+ posts in its complete indifference could be called
> meritorious?
>
> >Still your friend and hanging on
> >Art
>
> Hi Art,
>
> Probably more that what you wanted to know. All part of my service in
> providing entertainment analysis and criticism when no data is offered
> and no principles of science are being tested. As to your comment of
> my becoming a hero to all - not the model I aspire to at all.
>

> Heros, in literature and legend, either die in the last act, or are
> insipid and overwhelmingly dull individuals. I am content to allow
> for 100 Heroes to rise here in my place. :-)
>
> What I am is a triple threat. I know the material, I can write, and I
> don't give a damn (which is to say, I don't care if I'm wrong, because
> I can change that by anyone proving it).
>
> 73's
> Richard Clark, KB7QHC

4559. WOW TEKTRONIK MANUALS' VINTAGE JIT 4 XMAS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 02:30:18 UTC
From: "Marc H.Popek" <LVMarc@worldnet.att.net>
Message-ID: <_cgtb.259237$0v4.17395445@bgtnsc04-news.ops.worldnet.att.net>
Source record: 104525
Cross-posted to: sci.electronics.design,SCI.ELECTRONICS.COMPONENTS,rec.radio.amateur.antenna,alt.engineering.electrical

WOW, ORIGINAL TEKTRONIX MANUALS,

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=2572732665&category=40123
&rd=1

ONE IS LISTED BUT THERE WAY MORE!

"""Original manual for a dual power supply TM 503a. Excellent condition.
Includes schematics and theory of operations. Also have TM 504 power module
TM 506A power module PG 502 250 MHZ PULSE GEN DM5110 DVM DM511 DMM DC 504A
COUNTER/TIMER each OF THESE MANUALS ARE A TREASRUE CHEST FULL OF ACTAUL
SCHEMATICS AND ASSEMBLY DRAWINGS OF THE FINFISHED UNITS, WOW! select THE
TITLE YOU WANT AT CHECK OUT, COMBINE TO SAVE EVEN MORE AT CHECKOUT1 USE buy
now AND GET what you want when you when and SHIPPING IS ABSOLUTLEY FREE. WOW
FREE SHIPPING. "

BUY NOW AND GET A COMPLETE SET 5 MANUALS 42.42 POST PIAD IN conusa WOW FREE
SHIPPING JIT FOR X-MAS

4560. Re: 6 Meter Glass Mount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 02:35:21 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <b14brv0a0r192pqkmgic69ejd50qdsdd2s@4ax.com>
Source record: 104526

On Thu, 13 Nov 2003 18:12:47 -0500, "N1RZB" <n1rzb@highstream.net>
wrote:

>Dose any antenna manufacture make a 6 Meter Glass Mount Antenna? If
>so,please let me know, I'm looking for one.
>
>Thanks, N1RZB

Roughly, a 1/4 antenna on 6 meters would be about 58 inches long. A
little big, it would seem, for adhering to glass.

Bob
k5qwg

>
>
>---
>Outgoing mail is certified Virus Free.
>Checked by AVG anti-virus system (http://www.grisoft.com).
>Version: 6.0.535 / Virus Database: 330 - Release Date: 11/1/03
>

4561. Re: WOW TEKTRONIK MANUALS' VINTAGE JIT 4 XMAS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 02:44:18 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <pn4brv09g6uukuo4ck5330r75lqppfh51a@4ax.com>
Source record: 104527
Cross-posted to: sci.electronics.design,SCI.ELECTRONICS.COMPONENTS,rec.radio.amateur.antenna,alt.engineering.electrical

On Sat, 15 Nov 2003 02:30:18 GMT, "Marc H.Popek"
<LVMarc@worldnet.att.net> wrote:

>WOW, ORIGINAL TEKTRONIX MANUALS,
>
>
>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=2572732665&category=40123
>&rd=1
>
>
>ONE IS LISTED BUT THERE WAY MORE!
>
>"""Original manual for a dual power supply TM 503a. Excellent condition.
>Includes schematics and theory of operations. Also have TM 504 power module
>TM 506A power module PG 502 250 MHZ PULSE GEN DM5110 DVM DM511 DMM DC 504A
>COUNTER/TIMER each OF THESE MANUALS ARE A TREASRUE CHEST FULL OF ACTAUL
>SCHEMATICS AND ASSEMBLY DRAWINGS OF THE FINFISHED UNITS, WOW! select THE
>TITLE YOU WANT AT CHECK OUT, COMBINE TO SAVE EVEN MORE AT CHECKOUT1 USE buy
>now AND GET what you want when you when and SHIPPING IS ABSOLUTLEY FREE. WOW
>FREE SHIPPING. "
>
>BUY NOW AND GET A COMPLETE SET 5 MANUALS 42.42 POST PIAD IN conusa WOW FREE
>SHIPPING JIT FOR X-MAS
>

WOW!

John

4562. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 02:57:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb59649$1_7@corp.newsgroups.com>
Source record: 104528

Jim Kelley wrote:
> Seems to me it just implies that current at the end of a dipole isn't
> really zero.

The net current is very close to zero because the forward and reflected
currents are very nearly equal and 180 degrees out of phase.

> I think it may actually make many round trips. There may be multiple
> reflections.

Of course, but like a transmission line, there is only one forward wave
and one reflected wave. All the multiple reflections are contained in
those two waves.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4563. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 03:08:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <em5brv8cugr894iomd9jpluksip8a0pc5e@4ax.com>
Source record: 104529

On 14 Nov 2003 18:18:03 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard, that was a darned good response, clear and to the point,
>Makes me feel a bit silly.
>Actually Richard this same question has been bothering me for some
>time in my modeling,
>As you know I am dealing with coupling of radiated circuits. I know
>you are not in agreement in what I am doing but that is not important
>at this time.
>When I realised that one cannot get the Q that one desires it was
>really brought home to me what many had said to me about top band and
>low efficiencies.
>Not only have I had it brought home to me that there is more to an
>inductance than I realised but also the difficulties of modeling its
>many facets.
>The last month or so I have modeled and remodeled my coupling inductor
>not only by splitting it up into more than one but also spacing them
>out so they represent the actual inductance length plus making the
>diameter of those element segments the same as the coil diameter, all
>these present different efficiencies tho not by very much . But then
>the bandwidth on the model
>is much narrower that the actual antenna!. My first reaction is that
>the coil is more lossier than the model shows but what it really shows
>is that the program can't handle inductances to my satisfaction thus
>for me this thread is enlarging my education. So your comments are
>very welcome.
>Regards
>Art
>

Hi Art,

Modeling is simply a way to take notes that matter. EZNEC has no
settings for words like "miracle gain," and has no multiplier for
"Quantum Electro-Dynamic Tachyons." You pass around models and no one
is confused by what is meant by Source Z. Or if they are, it is an
efficient means for thinning out the herd.

Does your brain fill to overflowing when asked to add all the
reflections in a system? Tell them to show a model and watch their
thumbs burn out flipping pages to their favorite passage in greek.
Lord knows that asking them to step up to the bench has them
struggling to find their crutches.

If I give you grief, you at least know which end of the soldering iron to pick up. That puts you out 6 sigma from the xerox-philosophers.

73's
Richard Clark, KB7QHC

4564. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 03:32:13 UTC
From: Neon John <johngdDONTYOUDARE@bellsouth.net>
Message-ID: <kc7brv0eje05c6ghubj5op0cqjdb5mcdek@4ax.com>
Source record: 104531
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

On Fri, 14 Nov 2003 16:00:45 -0800, "Dunc" <Dunc.F(NoSpam)@CenturyTel.Net>
wrote:

>Really???
>
>Gee John that sounds too simple to be true!
>
>But, I'll try it if it works!
>
>Have you used that idea?

Sure have. Works great. I started out using copper tape with conductive
adhesive but then I decided to try the aluminum duct tape since it's so cheap.
As long as you overlap the strips a little so there's some capacitive
coupling, it works great.

Something else that works is conductive paint. I once sprayed the underside
of a fiberglass boat upper deck with anti-EMI conductive paint and then
installed a regular Larson 5/8ths wave antenna. Worked just fine. The paint
is expensive new but it can be found on occasion from surplus outfits.

John

John De Armond
johngdDONTYOUDARE@bellsouth.net
http://bellsouthpwp.net/j/o/johngd/
Cleveland, Occupied TN

4565. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 03:33:14 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311141933.69e9b9f@posting.google.com>
Source record: 104530

richardharrison@webtv.net (Richard Harrison) wrote in message news:<17563-3FB51349-47@storefull-2317.public.lawson.webtv.net>...
> Mark Keith wrote:
> "But I still feel I`m already building mine as well as they can be."
>
> Close the patent office!
>
> Best regards, Richard Harrison, KB5WZI

Nothing to patent. I didn't invent them. I think I see now why Roy bailed out.
It's starting to get silly.
We are talking about something that is already very well known. Or at least when applied to mobile antennas. There is nothing new about optimizing the coil location to improve current distribution. The various heights above the base have been hashed out and tested ad-nausium till the cows come home. There is nothing new about using a top hat to improve current distribution. Ditto on the testing...There is nothing new about ground losses usually overshadowing coil losses with most mobile setups. Yuri tells me to go back to my rubber room, but read his previous post first,and I did. But I see nothing there that is new as far as pertaining to mobile antenna design. Not a single thing. Now if it's proven that errors could been seen when modeling arrays, or whatever, I can see that as useful. Not that I'm convinced it's a major problem yet mind you...But I could see finding usable modeling improvement with complex arrays much more likely than the lowly whip and coil.
When it comes to mobile antennas, I think they have pretty much reached the state of the art as far as the design of a coil loaded short antenna goes. All variations of loading positions have already been tested virtually non stop since at the very least the 50's, when bugcatchers became very common. I've got a 1935 QST with a mobile on the front, but he's not using a bugcatcher. Crap, what more can you do with a simple whip and coil....:/ They have been beat to death looking for the very last drop for 50 solid years. I've personally beat them to death myself looking for the last drop since at least 1988-89 or so when I got my first mobile radio. Trust me, I can't really improve over what I have now without getting ridiculous or undrivable or too heavy. I'm already over the legal 13.6 ft height limit as it is. My coil is already elevated from the base 50% when driving, "10 ft antenna, with the base 4.5 ft off the ground" 62% up when parked with the lower mast. "13 ft antenna" With the 13 ft version, my coil is higher than some peoples whole antenna. Appx 12.5 ft off the ground.

I can't physically install the coil any higher than that due to the fiberglass mast I use for the lower main section. I installed the coil at the very top, and use a 5ft thin stinger whip above the coil. It wouldn't help a whole lot more anyway. It's better to keep the same longer stinger length and add mast below the coil. Heck, I agree with almost everthing he promotes as far as mobile antenna design as far as coil placement, hats, etc. But it's sure nothing new or earthshaking. I've seen nothing so far to indicate we are designing in gross error or even noticable error. I've seen nothing to indicate that any new data gleaned from his tests will improve mobile antenna design enough to notice in FS measurements. He suggests nothing new that already isn't being utilized. Where's the all important beef?
I'm not trying to be difficult, I'm just asking the fairly obvious. I ask very simple questions and what do I get? Bafflegab deflection tactics, rehashes of past social dilemmas, or just vague, totally useless comments from one. I think I'm gonna bail on this thread also. I have better things to do than chase my tail and bark at the moon. My position on the current state of mobile antenna design is fairly well known at this point. I'll just leave it at that. MK

4566. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 03:51:24 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <4vudnfvgB6YsPyiiRVn-hA@comcast.com>
Source record: 104532
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

"Dunc" <Dunc.F(NoSpam)@CenturyTel.Net> wrote in message
news:ceOdndvrBqQw8SiiRVn-sw@centurytel.net...
> Really???
>
> Gee John that sounds too simple to be true!
>
> But, I'll try it if it works!
>
> Have you used that idea?

For best results, lay the tape our like "X"s with the antenna point in the
middle.
Also, you can glue a steel plate, or even a magmount magnet there, and then
use a mag-mount antenna!

Amaze your friends :) Magnetic antenna sticks REALLY well to fiberglass :)
:) :)

4567. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 10:19:43 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <W4ntb.4898$cX1.822@fed1read02>
Source record: 104533
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
> OH, so its West of the fault.....that means when it cracks the stuff to
> the west will fall off into the Pacific ocean, right?
>
> Beware of things that go bump in the night.
>
> Dan/W4NTI

OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main irrational protagonist, has resorted to looking me up on QRZ and is one step from posting my address.

The half of my family that hails from the North has handed down a legacy of the appreciation of fine killing equipment, while my Alabama heritage yields me the willingness to use them. I'm pretty sure that the carcass that goes bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs are always hungry!

Oh yeah, re the faults. Some day, we are gonna have some mighty fine Atlantic ocean-front property out here.

Ed
wb6wsn

4568. Re: WOW TEKTRONIK MANUALS' VINTAGE JIT 4 XMAS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 10:24:10 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <59ntb.4914$cX1.2114@fed1read02>
Source record: 104534
Cross-posted to: sci.electronics.design,SCI.ELECTRONICS.COMPONENTS,rec.radio.amateur.antenna,alt.engineering.electrical

"John Larkin" <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote in
message news:pn4brv09g6uukuo4ck5330r75lqppfh51a@4ax.com...
> On Sat, 15 Nov 2003 02:30:18 GMT, "Marc H.Popek"
> <LVMarc@worldnet.att.net> wrote:
>
> >WOW, ORIGINAL TEKTRONIX MANUALS,
> >
> >
> >http://cgi.ebay.com/

Yeah, well, everybody likes to make a buck or twenty. However, I think more
highly of those who share their manuals via electronic copies.

Ed
wb6wsn

4569. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 11:22:54 UTC
From: Arf! Arf! <DoggieDaze@Liberalz.com>
Message-ID: <bp52ac$q1f$0@pita.alt.net>
Source record: 104535
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:W4ntb.4898$cX1.822@fed1read02...

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
> OH, so its West of the fault.....that means when it cracks the stuff to
> the west will fall off into the Pacific ocean, right?
>
> Beware of things that go bump in the night.
>
> Dan/W4NTI

OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main irrational protagonist, has resorted to looking me up on QRZ and is one step from posting my address.

The half of my family that hails from the North has handed down a legacy of the appreciation of fine killing equipment, while my Alabama heritage yields me the willingness to use them. I'm pretty sure that the carcass that goes bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs are always hungry!

Oh yeah, re the faults. Some day, we are gonna have some mighty fine Atlantic ocean-front property out here.

Ed
wb6wsn

Ed...stop flattering yourself. Dan is not likely to look at your callsign as anything less than a passing fancy. Same here...except I will not bother to look up your call sign. Who cares?

4570. Re: Taste this important pack from Microsoft

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 12:14:05 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <aJydnaWSA6YIhSui4p2dnA@crocker.com>
Source record: 104536
Cross-posted to: rec.photo.film+labs,rec.photo.marketplace,rec.photo.misc,rec.photo.technique.art,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

yummy!

4571. FS: Cushcraft MA5V Ham Radio Vertical antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 12:49:50 UTC
From: David Hawkins <dthawk@verizon.net.NOSPAM>
Message-ID: <Ohptb.56976$E9.38182@nwrddc01.gnilink.net>
Source record: 104537

http://www.cushcraft.com/amateur/details.asp?catid=92

FS: Cushcraft MA5V Ham Radio Vertical antenna

Price: $75 to the first one to show up. Antenna was put up last year, and works great. Excellent condition. Getting ready to move and need to take down antenna. MSRP $199. Will not ship, must assist in taking down antenna. Call 972-881-2997

Plano Texas

email: dthawk @ verizon . net

KB5WK

4572. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 13:27:48 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <vk9crvkfkq815eirq33bt3i3a98imtprul@4ax.com>
Source record: 104538
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

On Fri, 14 Nov 2003 22:51:24 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>
>"Dunc" <Dunc.F(NoSpam)@CenturyTel.Net> wrote in message
>news:ceOdndvrBqQw8SiiRVn-sw@centurytel.net...
>> Really???
>>
>> Gee John that sounds too simple to be true!
>>
>> But, I'll try it if it works!
>>
>> Have you used that idea?
>
>For best results, lay the tape our like "X"s with the antenna point in the
>middle.
>Also, you can glue a steel plate, or even a magmount magnet there, and then
>use a mag-mount antenna!
>
>Amaze your friends :) Magnetic antenna sticks REALLY well to fiberglass :)
>:) :)
>
Ideally, a ground plane should have a radius of at least 1/4 the
wavelength being used. For 2M, this would be roughly 19.25 inches.

It need not be solid, and as above, two strips crossing at right
angles, with the antenna mounted in the center, will do reasonably
well.

For some public service events, where hams are assigned to a support
van, some I know have duct taped a metal sheet to the fiberglass roof,
and stuck on a magmount antenna with good results.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

4573. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 13:49:51 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <W9qtb.5491$cX1.1343@fed1read02>
Source record: 104539
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
news:bp52ac$q1f$0@pita.alt.net...
>
> "Ed Price" <edprice@cox.net> wrote in message
> news:W4ntb.4898$cX1.822@fed1read02...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
> > OH, so its West of the fault.....that means when it cracks the stuff
to
> > the west will fall off into the Pacific ocean, right?
> >
> > Beware of things that go bump in the night.
> >
> > Dan/W4NTI
>
>
> OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main
> irrational protagonist, has resorted to looking me up on QRZ and is one
step
> from posting my address.
>
> The half of my family that hails from the North has handed down a legacy
of
> the appreciation of fine killing equipment, while my Alabama heritage
yields
> me the willingness to use them. I'm pretty sure that the carcass that goes
> bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs
are
> always hungry!
>
> Oh yeah, re the faults. Some day, we are gonna have some mighty fine
> Atlantic ocean-front property out here.
>
>
> Ed
> wb6wsn
>
> Ed...stop flattering yourself. Dan is not likely to look at your callsign
as
> anything less than a passing fancy. Same here...except I will not bother
to

> look up your call sign. Who cares?

Well, I certainly don't care, especially about a chickenshit "Arf" who can't stick his name on his opinions. You're worth whatever you think of yourself, and often less.

Ed
wb6wsn

4574. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 14:20:08 UTC
From: bob <bob@bob.com>
Message-ID: <Zzqtb.9421$rV.363@bignews5.bellsouth.net>
Source record: 104540
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

He is the proverbial "fart in a whirlwind". When he looks in the mirror,
he sees the failure that we are all familiar with. Luckily, he cannot
keep a woman around so we can rule out another generation!

Ed Price wrote:

> "Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
> news:bp52ac$q1f$0@pita.alt.net...
>
>>"Ed Price" <edprice@cox.net> wrote in message
>>news:W4ntb.4898$cX1.822@fed1read02...
>>
>>"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
>>news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
>>
>>>OH, so its West of the fault.....that means when it cracks the stuff
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> to
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>>>the west will fall off into the Pacific ocean, right?
>>>
>>>Beware of things that go bump in the night.
>>>
>>>Dan/W4NTI
>>
>>
>>OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main
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>>from posting my address.
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>>The half of my family that hails from the North has handed down a legacy
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>>the appreciation of fine killing equipment, while my Alabama heritage
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>>me the willingness to use them. I'm pretty sure that the carcass that goes
>>bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs

>
> are
>
>>always hungry!
>>
>>Oh yeah, re the faults. Some day, we are gonna have some mighty fine
>>Atlantic ocean-front property out here.
>>
>>
>>Ed
>>wb6wsn
>>
>>Ed...stop flattering yourself. Dan is not likely to look at your callsign
>
> as
>
>>anything less than a passing fancy. Same here...except I will not bother
>
> to
>
>>look up your call sign. Who cares?
>
>
>
> Well, I certainly don't care, especially about a chickenshit "Arf" who can't
> stick his name on his opinions. You're worth whatever you think of yourself,
> and often less.
>
> Ed
> wb6wsn
>

4575. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 15:58:45 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <V2stb.2021$Wy4.1871@newsread2.news.atl.earthlink.net>
Source record: 104541
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
news:bp52ac$q1f$0@pita.alt.net...
>
> "Ed Price" <edprice@cox.net> wrote in message
> news:W4ntb.4898$cX1.822@fed1read02...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
> > OH, so its West of the fault.....that means when it cracks the stuff
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> > the west will fall off into the Pacific ocean, right?
> >
> > Beware of things that go bump in the night.
> >
> > Dan/W4NTI
>
>
> OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main
> irrational protagonist, has resorted to looking me up on QRZ and is one
step
> from posting my address.
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> The half of my family that hails from the North has handed down a legacy
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> the appreciation of fine killing equipment, while my Alabama heritage
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> bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs
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> always hungry!
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> Oh yeah, re the faults. Some day, we are gonna have some mighty fine
> Atlantic ocean-front property out here.
>
>
> Ed
> wb6wsn
>
> Ed...stop flattering yourself. Dan is not likely to look at your callsign
as
> anything less than a passing fancy. Same here...except I will not bother
to

> look up your call sign. Who cares?
>
>

Thas right....I was just wondering if he was really in the land of the fruits, you know how it is with these ham calls these days.

Dan/W4NTI

4576. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 15:58:46 UTC
From: richardharrison@webtv.net
Message-ID: <24987-3FB64D36-8@storefull-2316.public.lawson.webtv.net>
Source record: 104543

Mark Keith wrote:
"I`ve seen nothing so far to indicate we are designing in gross error or even noticible error."

Neither have I. But, I`ve read several stimulating perceptions which were new to me and motivated me to investigate and improve my understanding.

I am sorry My statement, "Close the patent office!" offended Mark. I have no doubt that Mark has optimized his mobil antennas.

Forty years after Faraday suggested the existence of electric fields in about 1842,
Heinrich Hertz built a spark transmitter and receiver. The receiver was just a loop with a gap which sparked when Hertz keyed his transmitter. It was resonant at 53 MHz or near the frequencies now assigned as TV Channel 2 in the USA. Hertz optimized his antennas for maximum transmission distance and achieved about 30 feet.

In the last 160 years there have been many interesting antenna developments and more are yet to come. Most are not likely predictable.

Best regards, Richard Harrison, KB5WZI

4577. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 16:05:07 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp5is1$u6t$1@news3.infoave.net>
Source record: 104542
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

The answer is pretty simple Ed, weather conditions.

First all the slaves were brought in by Yankee traders. It was against the law in the South to import Africans.

The problem with using slaves in the North was the short growing season and a population that must be housed and fed during the unproductive months. This made slavery a net loss situation in the North. The folks up North had no problem with slavery when the cotton was shipped to mills in the North. The problem started when the South shipped the cotton to England and other countries direct. This put the Northern mill workers out of jobs and caused the North to impose unfair tariffs on Southern products.

Slavery as an issue did indeed exist as an issue, but MONEY was the real issue. Had the South continued to supply cheap materials to the North, slavery would still be in vogue.

Excuse me gotta to go, my cell phone is playing Dixie, have to answer it...
"Ed Price" <edprice@cox.net> wrote in message . If slavery wasn't the prime issue, then why wasn't the Civil
> War fought between the Union and say, Indiana, Illinois, Wisconsin,
> Minnesota and Michigan?
>

4578. Re: WOW TEKTRONIK MANUALS' VINTAGE JIT 4 XMAS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 16:21:57 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp5jrj$u9e$1@news3.infoave.net>
Source record: 104544
Cross-posted to: sci.electronics.design,SCI.ELECTRONICS.COMPONENTS,rec.radio.amateur.antenna,alt.engineering.electrical

I am over wowed...

"Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
news:_cgtb.259237$0v4.17395445@bgtnsc04-news.ops.worldnet.att.net...
> WOW, ORIGINAL TEKTRONIX MANUALS,
>
>
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=2572732665&category=40123
> &rd=1
>
>
> ONE IS LISTED BUT THERE WAY MORE!
>
> """Original manual for a dual power supply TM 503a. Excellent condition.
> Includes schematics and theory of operations. Also have TM 504 power
module
> TM 506A power module PG 502 250 MHZ PULSE GEN DM5110 DVM DM511 DMM DC 504A
> COUNTER/TIMER each OF THESE MANUALS ARE A TREASRUE CHEST FULL OF ACTAUL
> SCHEMATICS AND ASSEMBLY DRAWINGS OF THE FINFISHED UNITS, WOW! select THE
> TITLE YOU WANT AT CHECK OUT, COMBINE TO SAVE EVEN MORE AT CHECKOUT1 USE
buy
> now AND GET what you want when you when and SHIPPING IS ABSOLUTLEY FREE.
WOW
> FREE SHIPPING. "
>
> BUY NOW AND GET A COMPLETE SET 5 MANUALS 42.42 POST PIAD IN conusa WOW
FREE
> SHIPPING JIT FOR X-MAS
>
>

4579. Alliance tenna-rotor controller!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 17:10:13 UTC
From: G&#65533;ry Duyck <gery@duyck-co.be>
Message-ID: <3fb65deb$0$10312$ba620e4c@reader0.news.skynet.be>
Source record: 104545

Hellow,

Today I got a Alliance tenna-rotor (that's what on the back).

From descriptions I got from the internet I can conclude that
it will probably be a Alliance U-100 type rotor.
(the rotating mast can go completely through the rotor,
I want to use it for elevation control)

Carefully I opened the box to see what's inside.

You have four conductors comming out of the control wire,
only three are connected:

black red
input cable O O TOP VIEW
----------------- none blue
O O

I think it needs 24V DC.
Which one should be the mass, and which are the 2 for left-right control?

What I'm planning to do:
- Make a computer interface to controll the rotor for elevation.

Do I need to insert a variable resistor to see what's the rotor position?
If yes, how do I do this ?

Another thing is the interface, which designs should I use ?

Any hint's / tips / info is very welcome, to set up this rotor correctly!!!

73's
ON4GDK, Gery D.

4580. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 17:26:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb661e1$1_5@corp.newsgroups.com>
Source record: 104546
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

w4jle wrote:
> First all the slaves were brought in by Yankee traders. It was against the
> law in the South to import Africans.

Their passage from Yankee ports to the Southern States was guaranteed
by federal law, i.e. it was illegal to interfere with the transfer of
slaves through the Northern States.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4581. Passive Antenna Repeater Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 18:48:21 UTC
From: wp20032@aol.com
Message-ID: <20031115134821.16385.00000257@mb-m23.aol.com>
Source record: 104547

In recent threads, the subject of auto mounted passive repeaters (an inside antenna connected to an outside antenna) was discussed, and they were shown to be pretty much ineffective because of losses. Continuing this discussion in a slightly different tack, I am wondering how effective such a repeater would be for a RF tight enclosure such as an RV that has very little leakage because of screened windows and a metal body.

How would one estimate the amount of loss before the transmitted signal arrived at the external antenna? Would multipath inside the vehicle affect the transmitted signal?

This is just a mental exercise, as I have already run coax directly to the rig from the outside antenna on my trailer.

TIA
--Wayne

4582. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 18:56:12 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <6Futb.6197$cX1.4711@fed1read02>
Source record: 104548
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bp5is1$u6t$1@news3.infoave.net...
> The answer is pretty simple Ed, weather conditions.
>
> First all the slaves were brought in by Yankee traders. It was against the
> law in the South to import Africans.

Cite that source!

> The problem with using slaves in the North was the short growing season
and
> a population that must be housed and fed during the unproductive months.

If you have slaves, you can get them to do more than raise plants. Ever hear
of construction, mining or manufacture? All labor intensive, but obviously
beyond the imagination of a Southern slaver.

SNIP

> Slavery as an issue did indeed exist as an issue, but MONEY was the real
> issue. Had the South continued to supply cheap materials to the North,
> slavery would still be in vogue.

Based strictly on economics, how could you possibly claim that the North
found it cheaper to prosecute the Civil War than to accept higher-priced
cotton? And following your logic, the South would have been economically
devastated with the development of synthetic fabrics, so they could have
tried secession maybe around 1925?

Ed
wb6wsn

4583. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 19:00:19 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311151100.2b2a7084@posting.google.com>
Source record: 104549

nm5k@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0311141933.69e9b9f@posting.google.com>...
> richardharrison@webtv.net (Richard Harrison) wrote in message
news:<17563-3FB51349-47@storefull-2317.public.lawson.webtv.net>...
> > Mark Keith wrote:
> > "But I still feel I`m already building mine as well as they can be."
> >
> > Close the patent office!
> >
> > Best regards, Richard Harrison, KB5WZI
>
> Nothing to patent. I didn't invent them. I think I see now why Roy
> bailed out.
> It's starting to get silly.
> We are talking about something that is already very well known. Or at
> least when applied to mobile antennas. There is nothing new about
> optimizing the coil location to improve current distribution. The
> various heights above the base have been hashed out and tested
> ad-nausium till the cows come home. There is nothing new about using
> a top hat to improve current distribution. Ditto on the
> testing...There is nothing new about ground losses usually
> overshadowing coil losses with most mobile setups. Yuri tells me to go
> back to my rubber room, but read his previous post first,and I did.
> But I see nothing there that is new as far as pertaining to mobile
> antenna design. Not a single thing. Now if it's proven that errors
> could been seen when modeling arrays, or whatever, I can see that as
> useful. Not that I'm convinced it's a major problem yet mind you...But
> I could see finding usable modeling improvement with complex arrays
> much more likely than the lowly whip and coil.
> When it comes to mobile antennas, I think they have pretty much
> reached the state of the art as far as the design of a coil loaded
> short antenna goes.

Can you tell me where I can find what the orientation of coil cross
section does for efficiency ?
There are circular cross sections, edge wound cross sections and also
the ribbon type that Collins uses where the ribbon is coiled on a
adjacent coil former, why did they choose this method?
I am pursuing efficiency, reduction of losses and Collins have a great
reputation so which form is the state of the art especially with
corner flux density.
Another question is that if we split up an inductance into two parts
does the form factor include the summation of inductances or does the
distance inbetween

where coil linkage is not fully formed affect efficiency for the
worse.
Discussion like this thread hopefully will enlarge our education to
see if such things matter . Another question I struggle with is to put
another element inside the coil where there is max flux density but
again it can't be resolved by modeling. With the multi antenna experts
onboard it is always a possibility that a modicom of information will
be provided that will benefit all.
As far as inductances, all is not known to my mind and I always would
like to be privy to more information, and not because I want to build
a whip

All variations of loading positions have already
> been tested virtually non stop since at the very least the 50's, when
> bugcatchers became very common. I've got a 1935 QST with a mobile on
snipThey have been beat to death
> looking for the very last drop for 50 solid years. I've personally
> beat them to death myself looking for the last drop since at least
snip> Where's the all important beef?
> I'm not trying to be difficult, I'm just asking the fairly obvious. I
> ask very simple questions and what do I get? Bafflegab deflection
> tactics, rehashes of past social dilemmas, or just vague, totally
> useless comments from one. I think I'm gonna bail on this thread also.
> I have better things to do than chase my tail and bark at the moon. My
> position on the current state of mobile antenna design is fairly well
> known at this point. I'll just leave it at that. MK

Regards
Art

4584. Re: Passive Antenna Repeater Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 19:37:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kovcrvgfsb7hhhd0haqnalujmt1q53udfc@4ax.com>
Source record: 104551

On 15 Nov 2003 18:48:21 GMT, wp20032@aol.com (WP20032) wrote:

>This is just a mental exercise, as I have already run coax directly to the rig
>from the outside antenna on my trailer.

Hi Wayne,

Speaking of the loss of passive repeating, compare that to the loss of the shielded inclosure you are trying to transceive through. No doubt the latter will overwhelm the former giving you a new appreciation to the chestnut "can you hear me now?"

The losses of passive repeating are typically compared to the coupling from your set to the inside antenna (this is the loss to be computed as it is by far the greatest). Losses within the coupling between antennas (if matched) are trivial in comparison. Further, when the topic arises, the simple observation that you are sitting next to a window that is extremely large (in terms of wavelength) dilute the argument that the passive re-radiator is needed at all (and serves only as placebo).

73's
Richard Clark, KB7QHC

4585. Re: Alliance tenna-rotor controller!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 20:10:17 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <sJGdndvHttOxHSuiU-KYhg@ctc.net>
Source record: 104550

```
,
>
> Today I got a Alliance tenna-rotor (that's what on the back).
>
> From descriptions I got from the internet I can conclude that
> it will probably be a Alliance U-100 type rotor.
> (the rotating mast can go completely through the rotor,
> I want to use it for elevation control)
>
> Carefully I opened the box to see what's inside.
>
> You have four conductors comming out of the control wire,
> only three are connected:
>
> black red
> input cable O O TOP VIEW
> ----------------- none blue
> O O
>
> I think it needs 24V DC.
> Which one should be the mass, and which are the 2 for left-right control?
>
> What I'm planning to do:
> - Make a computer interface to controll the rotor for elevation.
>
> Do I need to insert a variable resistor to see what's the rotor position?
> If yes, how do I do this ?
>
> Another thing is the interface, which designs should I use ?
>
```

Most of the rotators use an AC voltage and a a capacitor.
The winding is center tapped. one side of the low voltage AC goes to the center tap. The capacitor is across the whole winding. To go left or right, the other AC lead goes to one of the capacitor/winding leads and the other end is left floating with just the capacitor attached.

For a vertical mount you can attach a variatable resistor to the rotating part and hang a weight on the shaft of the resistor.

Look in the www.amsat.org programs and look for a program called fodtrack. In it is a simple computer interface that works off the parallel port of a computer. YOu should be able to get some ideas from there.

4586. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 20:18:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp61nh$8b9$1@hercules.btinternet.com>
Source record: 104552

> As far as inductances, all is not known to my mind and I always would
> like to be privy to more information, and not because I want to build
> a whip

.....

Art, perhaps you have not heard of program SOLNOID3. It will tell you lots of things about coils. From a single turn to close spaced helical, and a helix which has been stretched out straight to just a length of wire.

Would you like to know the self-capacitance and self-resonant frequency of a loading coil? What is the self-resonant frequency of a coil which has been stretched out into a straight length of wire?

The program will even estimate the rise in temperature above ambient for a given RF voltage developed across a tank-circuit coil. Download program SOLNOID3 from website below in a few seconds and run immediately. No unzipping inconvenience.

==========
Regards from Reg, G4FGQ
For Free Radio Design Software
go to http://www.g4fgq.com
==========

4587. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 21:30:16 UTC
From: bob <bob@bob.com>
Message-ID: <bp65t5$4j3$0@pita.alt.net>
Source record: 104553
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:V2stb.2021$Wy4.1871@newsread2.news.atl.earthlink.net...

"Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
news:bp52ac$q1f$0@pita.alt.net...
>
> "Ed Price" <edprice@cox.net> wrote in message
> news:W4ntb.4898$cX1.822@fed1read02...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:enbtb.561$Rk5.450@newsread1.news.atl.earthlink.net...
> > OH, so its West of the fault.....that means when it cracks the stuff
to
> > the west will fall off into the Pacific ocean, right?
> >
> > Beware of things that go bump in the night.
> >
> > Dan/W4NTI
>
>
> OK, this thread must be dead, as Mr. Jeswald, of Anniston, the main
> irrational protagonist, has resorted to looking me up on QRZ and is one
step
> from posting my address.
>
> The half of my family that hails from the North has handed down a legacy
of
> the appreciation of fine killing equipment, while my Alabama heritage
yields
> me the willingness to use them. I'm pretty sure that the carcass that goes
> bump isn't gonna be mine. Y'all come out now, bring Bubba too; the dogs
are
> always hungry!
>
> Oh yeah, re the faults. Some day, we are gonna have some mighty fine
> Atlantic ocean-front property out here.
>
>
> Ed
> wb6wsn
>
> Ed...stop flattering yourself. Dan is not likely to look at your callsign
as

> anything less than a passing fancy. Same here...except I will not bother
to
> look up your call sign. Who cares?
>
>

Thas right....I was just wondering if he was really in the land of the
fruits, you know how it is with these ham calls these days.

Dan/W4NTI

Ed is waaaayyyyy out there in the land of fairies and home of the liberal.

4588. Re: 6 Meter Glass Mount ??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 21:54:19 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <fgxtb.60513$E9.37015@nwrddc01.gnilink.net>
Source record: 104554

"AA" <derswede@aol.comspam.com> wrote in message
news:20031114083505.29246.00000217@mb-m10.aol.com...
> << Does any antenna manufacture make a 6 Meter Glass Mount Antenna? If
> so,please let me know, I'm looking for one.
>
> Thanks, N1RZB >>
>
> Just installed a dual band glassmount to allow mounting a UHV-6 for the
HF/6M
> rig....set up the G/M with the Alinco dual bander, checked it with the
antenna
> analyzer to tweak it to the fav repeaters. Not very happy with it, even
w/low
> SWR (as many have noted...a dummy load has low SWR!). Previous antenna
was a
> Comet SB-15 which worked wonderfully....the glassmount is quite poor
compared
> to that antenna. I'll probably add a diplexer to use the UHV-6 instead of
the
> G/M and/or reinstall the SB15. A 6M antenna would be even worse, I would
> imagine, as coupling it would take a larger mount. My personal opinion?
Try
> for another mounting method. However, if you find a G/M 6M antenna, hope
your
> experience is better than mine.
>
> Cheers!
> A
>
> The original glass mount patent (now held by AES) described an end fed
1/2 wave radiator. As the bottom Z of a 1/2 wave is very high (in the
kilOhm rnage) coupling through the glass even at HF is a no brainer. Other
advantages are that the max radiation occurs 1/2 way up the antenna, not at
the base as in a 1/4 wave and the antenna worked well on Corvettes and
fiberglass boats.
The patent was quite good- and so followers like Larsen, Valor et al were
forced into an inferior 1/4 wave design.

I have used a center loaded 1/2 wave glass mount on both 10M and 6M with
excellent results.

Dale W4OP

4589. Re: Complex Z0 Consistency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 22:23:55 UTC
From: pez <studentant@hotmail.com>
Message-ID: <bp692d$ru3$1@nic.grnet.gr>
Source record: 104555

Dear Mr. Reg Edwards,

Please do not think I forgot your kind request.
I am terribly sorry for the long delay to reply
but I am sure I can expect your understanding.

Well, there are exactly 11 different cases
between the quadruples (a, b, Ro, Xo) and (R', L', G', C')
which are consistent with the Uniform Transmission Line theory
as they appear at
http://antennas.ee.duth.gr/recradioamateurantenna/ComplexZ0Consistency.txt

This means that every other combination of values,
other than those referenced above,
does not lead to a describable
by the well-known relations for a transmission line,
such as I believe you have use
when you built your transmission line programs.

I counted ~100 words up to here!

d;^)

Sincerely yours,

pez
SV7BAX

P.S.
The two programs by you
have been already studied and discussed
by the members of our group
and I will transfer our comments about them,
on another occasion, I hope.

| ==========
| "pez" wrote ...
|
| Much obliged for your hard work.
|
| But could you please describe in one very short paragraph, say 100 words,
| your conclusions?
|
| - - - - and oblige,
|
| Yours, Reg, G4FGQ.

4590. Re: Passive Antenna Repeater Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 22:39:04 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <68adrv8b30rndpkit3rktajp8r5pf0bmcn@4ax.com>
Source record: 104556

On 15 Nov 2003 18:48:21 GMT, wp20032@aol.com (WP20032) wrote:

>In recent threads, the subject of auto mounted passive repeaters (an inside
>antenna connected to an outside antenna) was discussed, and they were shown to
>be pretty much ineffective because of losses. Continuing this discussion in a
>slightly different tack, I am wondering how effective such a repeater would be
>for a RF tight enclosure such as an RV that has very little leakage because of
>screened windows and a metal body.

I tried it using a 5/8 mag mount in the center of the ceiling on my
shop. The interior is all barn metal with the doors also being metal.

I ran a shot lead to a collinear antenna on the roof. Results? I did
just as good next to the small window on the south side (repeater is
to the east). IOW, neither was worth the effort.

I set up the duobander in the ham shack TM-V7A to cross band (one
way) and then used the HT to transmit on the 440 band while listening
on the repeater output of 147.00. Now that worked just find.

Currently I have a station set up in the shop so using the HT from
there is no longer necessary.

Portions of the shop can be seen at the bottom of
http://www.rogerhalstead.com/boatanch.htm Although a much better over
all view is 4th from the top in
http://www.rogerhalstead.com/glasair2.htm

Ceiling and walls are the same material often used for the outside of
hangers, shops, and other out buildings. Doors are insulated metal.

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>How would one estimate the amount of loss before the transmitted signal arrived
>at the external antenna? Would multipath inside the vehicle affect the
>transmitted signal?
>
>This is just a mental exercise, as I have already run coax directly to the rig
>from the outside antenna on my trailer.
>
>TIA
>--Wayne

4591. Re: WOW TEKTRONIK MANUALS' VINTAGE JIT 4 XMAS

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-15 23:11:17 UTC
From: mike <spamme0@juno.com>
Message-ID: <3FB6B295.6080500@juno.com>
Source record: 104557
Cross-posted to: sci.electronics.design,SCI.ELECTRONICS.COMPONENTS,rec.radio.amateur.antenna,alt.engineering.electrical

w4jle wrote:
> I am over wowed...
>
>
> "Marc H.Popek" <LVMarc@worldnet.att.net> wrote in message
> news:_cgtb.259237$0v4.17395445@bgtnsc04-news.ops.worldnet.att.net...
>
>>WOW, ORIGINAL TEKTRONIX MANUALS,
>>
>>
>>
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=2572732665&category=40123
>
>>&rd=1
>>
>>
>>ONE IS LISTED BUT THERE WAY MORE!
>>
>>"""Original manual for a dual power supply TM 503a. Excellent condition.
>>Includes schematics and theory of operations. Also have TM 504 power
>
> module
>
>>TM 506A power module PG 502 250 MHZ PULSE GEN DM5110 DVM DM511 DMM DC 504A
>>COUNTER/TIMER each OF THESE MANUALS ARE A TREASRUE CHEST FULL OF ACTAUL
>>SCHEMATICS AND ASSEMBLY DRAWINGS OF THE FINFISHED UNITS, WOW! select THE
>>TITLE YOU WANT AT CHECK OUT, COMBINE TO SAVE EVEN MORE AT CHECKOUT1 USE
>
> buy
>
>>now AND GET what you want when you when and SHIPPING IS ABSOLUTLEY FREE.
>
> WOW
>
>>FREE SHIPPING. "
>>
>>BUY NOW AND GET A COMPLETE SET 5 MANUALS 42.42 POST PIAD IN conusa WOW
>
> FREE
>
>>SHIPPING JIT FOR X-MAS
>>

>>
>
>
>
Didn't I see this ad on channel 46 at about 3AM this morning? WOW!
I designed some of that stuff. "Treasure Chest" is not the term I would
have used. ;-)
mike

--
Bunch of stuff For Sale and Wanted at the link below.
laptops and parts Test Equipment
Honda CB-125S
Color LCD overhead projector
TEK Sampling Sweep Plugin
Tek 2465 $800, ham radio, 30pS pulser
Tektronix Concept Books, spot welding head...
http://www.geocities.com/SiliconValley/Monitor/4710/

4592. WTB-TOWER ON TRAILER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 00:45:20 UTC
From: n2ion@aol.com
Message-ID: <20031115194520.29282.00000400@mb-m10.aol.com>
Source record: 104558

I'M LOOKING FOR A COUPLE OF TOWERS ON TRAILERS.
PLEASE EMAIL ME WITH ANY DETAILS.

THANKS IN ADVANCE

4593. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 05:35:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB70CBA.57CA17F9@cwis.net>
Source record: 104559

Tarmo,
Wrote in part;
> Also, why have a no tune transmitter when you have to retune the antenna
> tuner when you change frequency.
>

Well, lets see.
1. No tower, or room for a beam antenna.
2. Hand, wrist, and arm not broken, sprained, strained, or lazy.
3. The 'no tune' transmitter wasn't ~my~ idea. I don't mind
tuning.
4. Simplifies antenna system.
5. Even if I think antennas are beautiful, neighbors don't.
6. Don't really care if 'they' hear me S-9 or S-4, as long
as they hear me. Same for hearing 'them'.
7. Had a tribander. The loop did as well and in some instances
better. (Do have to admit the tribander wasn't up very high.)
8. Don't have to worry about a rotor and everything associated
with
one.
9. And... we're talking about a "best" 'all around antenna'
which
implies not having several.

No ~one~ antenna does everything well, there are always
compromises
in performance vs. simplicity. Some would rather use a tuner
than
have a number of antennas, some won't. I really don't think
it'll
make much difference either way...
'Doc

4594. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 05:49:07 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <jp2erv4uedl7gvcvjgrpmblgnaev4ng62n@4ax.com>
Source record: 104560

On 15 Nov 2003 11:00:19 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

|Can you tell me where I can find what the orientation of coil cross
|section does for efficiency ?

Michaels ("Loading Coils for 160-Meter Antennas", QST, April 1990, pp
28-31) might help.

|There are circular cross sections, edge wound cross sections and also
|the ribbon type that Collins uses where the ribbon is coiled on a
|adjacent coil former, why did they choose this method?

I believe the Collins ribbon inductors were designed for variability,
i.e., tunable without any sliding contacts as in roller inductors.

|I am pursuing efficiency, reduction of losses and Collins have a great
|reputation so which form is the state of the art especially with
|corner flux density.
|Another question is that if we split up an inductance into two parts
|does the form factor include the summation of inductances or does the
|distance inbetween
|where coil linkage is not fully formed affect efficiency for the
|worse.
|Discussion like this thread hopefully will enlarge our education to
|see if such things matter . Another question I struggle with is to put
|another element inside the coil where there is max flux density but
|again it can't be resolved by modeling. With the multi antenna experts
|onboard it is always a possibility that a modicom of information will
|be provided that will benefit all.
|As far as inductances, all is not known to my mind and I always would
|like to be privy to more information, and not because I want to build
|a whip

Another interesting reference is Rhea ("Filters and an Oscillator
Using a New Solenoid Model", Applied Microwave & Wireless, November
2000, pp 30-42) In a nutshell, his premise is that the classic
inductor model is in error, particularly with respect interwinding
capacitance.

Some other articles that should be read by all participating in this
thread are by Cebik.

http://www.cebik.com/amod/amod13.html

http://www.cebik.com/amod/amod14.html

4595. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 05:55:20 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <1jEtb.7048$cX1.5061@fed1read02>
Source record: 104561
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"bob" <bob@bob.com> wrote in message news:bp65t5$4j3$0@pita.alt.net...
>
> "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> news:V2stb.2021$Wy4.1871@newsread2.news.atl.earthlink.net...
>
> "Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
> news:bp52ac$q1f$0@pita.alt.net...

SNIP

> Thas right....I was just wondering if he was really in the land of the
> fruits, you know how it is with these ham calls these days.
>
> Dan/W4NTI
>
> Ed is waaaayyyyy out there in the land of fairies and home of the liberal.
>

I'm terminating this thread now, as I find myself attempting rational
discourse with those whose cranial output is limited to dog barks and
hallucinations about how my physical location affects my judgement &
political views.

Ed
WB6WSN

4596. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 10:54:53 UTC
From: charlesb <n5pvl@sbcglobal.net>
Message-ID: <1IItb.1187$aR1.838@newssvr13.news.prodigy.com>
Source record: 104562
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:1jEtb.7048$cX1.5061@fed1read02...
>
>
> I'm terminating this thread now

Good idea, Ed.

It's an ignorant waste of hot air that would be better spouted off at
rec.radio.amateur.policy , where off-topic, non-ham garbage like this
belongs.

Oh, and I wanted to ask: Is it true that they call California the "cereal
bowl state" because once you get past the fruits and nuts, the only thing
left are the flakes?

Just wondering!

Charles Brabham, N5PVL

4597. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 14:13:46 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vrf1h6d4cvs6a7@corp.supernews.com>
Source record: 104563
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bp2vfa$fpcp$1@news3.infoave.net...

> I am always amazed how enlightened liberals can reduce a complex war to a
> single issue.

Imagine if today's liberal press had covered WWII, when we were losing
an average of 309 people A DAY....

after several MONTHS of conflict in iraq, we JUST hit #400, and while it's
a tragedy and all war is dreadful, we already have thrown out the tyrant
that
was in *that* nation.

We would never have made it past the beaches of normandy had CNN,
MSNBC and the rest of those yellow bellied leftist news organizations had
been around then as they are now.

Clint
KB5ZHT
--

MORE bad news for liberals....

Tax refunds next year are estimated to be up 27% from this
year due to tax cuts. Yet ANOTHER reason it must suck to
be a liberal in modern America.

45 Communist Goals for America

http://www.uhuh.com/nwo/communism/comgoals.htm

--

4598. Best antenna for portable HF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 14:45:33 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fb78d8c$1_2@news.vo.lu>
Source record: 104564
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Hi,

I have discussed on this page
http://www.astrosurf.com/lombry/qsl-portable.htm
the different models of portable antennas (and amplifiers) suited to work outdoor (e.g. Field days). This list includes some verticals, longwires, and short beams.

Could you take a look and suggest me other models that you know be used by isolated hams working in the field, during your holidays abroad or by DXpeditions.

Your new antenna should be able to work DX stations and support 0.5-1 kW PEP max, be relatively light, easy to set, not too cumbersome and, if possible cheap. This is not a wild dream...

If you know some, please list the model, brand and, for beams, the band coverage and nbr of elements. I will find add. info on the web.

You can answer me directly by posting your answer on this forum or via my website http://www.astrosurf.com/lombry/post.htm

NB. In the meantime, if you find some typing/grammar errors, please tell me (as you understood, I usually speak French...)

Thanks in advance

Thierry
ON4SKY
QSL Mgr for LX3SKY

4599. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 15:30:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <qKMtb.4957$Wy4.1971@newsread2.news.atl.earthlink.net>
Source record: 104565
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

"Ed Price" <edprice@cox.net> wrote in message
news:1jEtb.7048$cX1.5061@fed1read02...
>
> "bob" <bob@bob.com> wrote in message news:bp65t5$4j3$0@pita.alt.net...
> >
> > "Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
> > news:V2stb.2021$Wy4.1871@newsread2.news.atl.earthlink.net...
> >
> > "Arf! Arf!" <DoggieDaze@Liberalz.com> wrote in message
> > news:bp52ac$q1f$0@pita.alt.net...
>
> SNIP
>
> > Thas right....I was just wondering if he was really in the land of the
> > fruits, you know how it is with these ham calls these days.
> >
> > Dan/W4NTI
> >
> > Ed is waaaayyyyy out there in the land of fairies and home of the
liberal.
> >
>
> I'm terminating this thread now, as I find myself attempting rational
> discourse with those whose cranial output is limited to dog barks and
> hallucinations about how my physical location affects my judgement &
> political views.
>
> Ed
> WB6WSN
>

Good , don't let the door hit you in your arse.

Say hello to the fairy princess.

Dan/W4NTI

4600. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 18:12:08 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311161012.3516df82@posting.google.com>
Source record: 104566

Wes Stewart <n7ws@_arrl.net> wrote in message
news:<jp2erv4uedl7gvcvjgrpmblgnaev4ng62n@4ax.com>...
> On 15 Nov 2003 11:00:19 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
>
> |Can you tell me where I can find what the orientation of coil cross
> |section does for efficiency ?
>
> Michaels ("Loading Coils for 160-Meter Antennas", QST, April 1990, pp
> 28-31) might help.
>
> |There are circular cross sections, edge wound cross sections and also
> |the ribbon type that Collins uses where the ribbon is coiled on a
> |adjacent coil former, why did they choose this method?
>
> I believe the Collins ribbon inductors were designed for variability,
> i.e., tunable without any sliding contacts as in roller inductors.
>
> |I am pursuing efficiency, reduction of losses and Collins have a great
> |reputation so which form is the state of the art especially with
> |corner flux density.
> |Another question is that if we split up an inductance into two parts
> |does the form factor include the summation of inductances or does the
> |distance inbetween
> |where coil linkage is not fully formed affect efficiency for the
> |worse.
> |Discussion like this thread hopefully will enlarge our education to
> |see if such things matter . Another question I struggle with is to put
> |another element inside the coil where there is max flux density but
> |again it can't be resolved by modeling. With the multi antenna experts
> |onboard it is always a possibility that a modicom of information will
> |be provided that will benefit all.
> |As far as inductances, all is not known to my mind and I always would
> |like to be privy to more information, and not because I want to build
> |a whip
>
> Another interesting reference is Rhea ("Filters and an Oscillator
> Using a New Solenoid Model", Applied Microwave & Wireless, November
> 2000, pp 30-42) In a nutshell, his premise is that the classic
> inductor model is in error, particularly with respect interwinding
> capacitance.
>
> Some other articles that should be read by all participating in this

> thread are by Cebik.
>
> http://www.cebik.com/amod/amod13.html
>
> http://www.cebik.com/amod/amod14.html

Thank you for those references Wes. I really didn't expect to hear
from you again. I now have the computor program to simulate my actual
antenna so efficiency is now of major importance ,I can up my
efficiency to 50 per cent
by hanging a wire down from the dipole ends which I am not comfortable
about
and would rather aproach the coil for loss reduction and go for a beam
setup
by using the radiation efficiently by making it fully directional
stead of figure 8 form
and hopefully I can get those extracts

Reg I tried to enter your page once but I am so computor incompetant.
Looked at a tank circuit today and it was wound flat ribbon form!

Looking forward to looking at this fresh info
Many thanks to both of you
Art

4601. Re: Best antenna for portable HF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 19:21:49 UTC
From: Rene PE1RA <deleterene.altenaremovedelete@gmx.net>
Message-ID: <bp8ip8$1knfn4$1@ID-153362.news.uni-berlin.de>
Source record: 104567
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> schreef in bericht
news:3fb78d8c$1_2@news.vo.lu...
> Hi,
>
> I have discussed on this page
> http://www.astrosurf.com/lombry/qsl-portable.htm
> the different models of portable antennas (and amplifiers) suited to work
> outdoor (e.g. Field days). This list includes some verticals, longwires,
and
> short beams.
>
> Could you take a look and suggest me other models that you know be used by
> isolated hams working in the field, during your holidays abroad or by
> DXpeditions.

You should check out the Buddipole antenna system: www.buddipole.com .

73 de Rene PE1RA

4602. Position control.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 20:12:35 UTC
From: G&#65533;ry Duyck <gery@duyck-co.be>
Message-ID: <3fb7da27$0$10320$ba620e4c@reader0.news.skynet.be>
Source record: 104568

What's the easiest way to attach a variable resistor
to your rotor, or outside tube, for an elevation motor?

Does anyone have experience with this ?

All tips / info / foto's are welcome !

73's
ON4GDK, Gery D.

4603. OT: My first Hockey Game

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 20:29:51 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp8moc$2bp3$1@news3.infoave.net>
Source record: 104469

One of the neat parts of running a news site is that you get invited to a lot
of things that you probably would never had attended on your own. My first hockey
game was the result of a really nice lady named Wendy, with The Columbia Inferno,
inviting me to a game
I explained to her that my impression of hockey was a bunch of Canadians, with
unpronounceable French names, hitting some little black thing on a frozen fishin'
pond. She promised if I came, she could turn me into a fan. While she spoke, I was
thinking if Cocky ain't there, I ain't a fan.

Anyway, Friday evening I arrived at the game and this is what I saw. Before the
game starts they have a pregame warm up. It is kinda like when the NBA does their
figure eight drills shooting baskets. The main difference is they are smacking a
thing called a "puck" at the basket (which is nailed to the floor) with these bent
sticks called "sticks". They skate around at about sixty miles an hour and it all
looks like organized chaos.

Then they turned out the lights and I started to get concerned, I mean how can you
watch a game in the dark? Turns out that like the WWF they flash colored lights on
the fishin' pond and then a guy like Vince McMahon, only his name was Roger Hyde,
comes out and whoops up the crowd.

While he was talking, a guy come out in this funny looking stock car painted like a
Piggly Wiggly shopping cart. It was driven by some guy named Zamboni and it didn't
even have a number on it.. He kept making victory laps like he had won something.
I guess I got there too late for the race because all I saw so far was the
skating guys.

I missed the kick off, I was reaching down for some Redman and when I looked up
they were already skating around and smacking the puck. This went on for a while
and I still wasn't sure which team was the Infernos until the puck went in the net
thing. The crowd was making a lot of noise, so it appeared the guys dressed in white
was the home team. He apparently got it in just in time, a moment later a red light
came on and he would have been too late.

The rules seem pretty simple, you score points by putting the puck in the net. The
hard part is understanding when you are allowed to do that. They have some blue lines
painted on the pond, and only some people are allowed past them except when this guy
on the blue line says its ok, otherwise it is an offside penalty.

The penalties are different and are graded by the level of severity. The levels are
kinda bad, bad, and really bad...

"Kinda Bad" is like when somebody smacks another guy with his stick. Kinda bad
gets you sent to this little box for two minutes. The other team seems to know your in the box
and they start a thing called "The Power Play". Don't worry, if you don't notice it,
the announcer and the crowd lets you know. They chant "power play" if it is one
of the other teams guys, and something else when it is one of yours.

A "Bad" penalty is only called if blood is all over the place, and now your sent
to the box for five minutes.

A "Really Bad" penalty seems to be premeditated murder, or use of a firearm, this
results in a ten minute personal penalty (no powerplay) and possible ejection from
the game.

Oh! And they have special guys to argue with the officials. You can tell which ones
are allowed because they have a "C" or an "A" on their jerseys. Near as I can figure
it stands for "Complaining" and "Arguing" because both of them never came out at the
same time.

The game has three periods, and between periods they do neat stuff, except they have
to watch out for Zamboni, seems he is so proud of winning he has to do victory laps
every chance he gets. This is the only driver I am beginning to hate worse than
Jeff Gordon! Blaze, the mascot (I bet Cocky could whip his butt) skated
around and some guys I guess were Shriners came out in a little fire truck and shot
t-shirts to the crowd.

Excuse me whilst I remove my tongue from my cheek and tell you it was really entertaining
The Inferno won the game 4-2 and I learned this is one game you have to see in person.
I had glimpsed it a few times on TV and it is just too fast to capture. The thing I found
really fascinating is that two players fighting were allowed to continue flailing at each
other as long as the blows continued and neither went down on the ice. It's enough
to satisfy any diehard WWF fan.

Wendy was right, I will be returning to future games if only to see that Zamboni
guy get his :>) I've got to give it two thumbs up for entertainment value

--
<--
Editor - Gilbert News On-Line
Http://gilbertnews.net

4604. Re: Position control.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 20:54:58 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <jcednfAlOse3eSqiRVn-gQ@crocker.com>
Source record: 104470

"G&#65533;ry Duyck" <gery@duyck-co.be> wrote in message
news:3fb7da27$0$10320$ba620e4c@reader0.news.skynet.be...
> What's the easiest way to attach a variable resistor
> to your rotor, or outside tube, for an elevation motor?
>
> Does anyone have experience with this ?
>
> All tips / info / foto's are welcome !
>
> 73's
> ON4GDK, Gery D.
>
>

1. a couple of plastic pulleys and some waxed string
2. bicycle gears and chain
3. just wrap a string around the mast and use one pulley on the resistor
4. glue magnets on the mast and use reed switches
5. paint barcodes on the mast and use an optical reader
6. one of those compasses like they use in cars
7. gyroscope (maybe one of those new tiny solid state things)
8. put a remote tv camera looking at markings on the mast (add led's for night use)
9. put a remote tv camera looking down the boom of the antenna (maybe hard to use at night)
10. just put the antenna where you can see it from the shack and add spot light for night use.

4605. Re: Alliance tenna-rotor controller!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 21:10:20 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <V_6dnWu-07NUeiqi4p2dnA@comcast.com>
Source record: 104471

G�ry,

I am not sure I understand what you have, but I think you have to rotor, but not the control box. If you look at the metal housing of the rotor, you will see that the terminals are numbered:

1 2
3 4

3 appears to be the common lead. (I don't have the data sheet), and 1 and 2 go to the motor. In addition, inside the control box there is a 150 uf 50 Volt NONPOLARIZED capacitor between 1 and 2. Terminal 4 comes from the interrupter in the rotor, and activates a solenoid in the control box for direction indication. As somebody else mentioned, you might not want to use that; especially if you do not have the control box.

If you are going to operate this from 50 Hz, I would make the capacitor at least 220 uF. The voltage is about 24 VAC. I did not trace out the wiring, but I think if you apply voltage between terminals 3 & 1 it will turn in one direction. If between terminals 2 & 3, the other direction.

If you do not have a nonpolarized capacitor, here is how you can make one up: Connect two regular electrolytic capacitors in series, with the negative terminals tied together. Now connect a 1N4001, or whatever, diode across each capacitor with the polarity so that the arrow on the diode (the band end) points to the positive terminal of each capacitor

Tam/WB2TT
"G�ry Duyck" <gery@duyck-co.be> wrote in message
news:3fb65deb$0$10312$ba620e4c@reader0.news.skynet.be...
> Hellow,
>
> Today I got a Alliance tenna-rotor (that's what on the back).
>
> From descriptions I got from the internet I can conclude that
> it will probably be a Alliance U-100 type rotor.
> (the rotating mast can go completely through the rotor,
> I want to use it for elevation control)
>
> Carefully I opened the box to see what's inside.
>
> You have four conductors comming out of the control wire,
> only three are connected:
>
> black red
> input cable O O TOP VIEW

> ---------- none blue
> O O
>
> I think it needs 24V DC.
> Which one should be the mass, and which are the 2 for left-right control?
>
> What I'm planning to do:
> - Make a computer interface to controll the rotor for elevation.
>
> Do I need to insert a variable resistor to see what's the rotor position?
> If yes, how do I do this ?
>
> Another thing is the interface, which designs should I use ?
>
> Any hint's / tips / info is very welcome, to set up this rotor
correctly!!!
>
> 73's
> ON4GDK, Gery D.
>
>

4606. FS: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 21:24:35 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <nWRtb.70630$Ec1.3903083@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104472
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

This is the MFJ 1/4 wave ground plane antenna. It is currently cut for 220,
but can be cut down for 144mhz.
It is assembled at the moment. I had it up for about 6 months, but decided
to take it down.
It is in like new condition. Comes with U bolt for mounting.

$20.00 plus $5.00 shipping.

email direct if interested

4607. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 21:51:45 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp8rik$2dpp$1@news3.infoave.net>
Source record: 104473
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

While I am somewhat adept at cutting a 144 to 220, for the life of me I do not know how to do the converse...

"CommCtr1" <nospam@tome.com> wrote in message news:nWRtb.70630$Ec1.3903083@bgtnsc05-news.ops.worldnet.att.net...
> This is the MFJ 1/4 wave ground plane antenna. It is currently cut for 220,
> but can be cut down for 144mhz.
> It is assembled at the moment. I had it up for about 6 months, but decided
> to take it down.
> It is in like new condition. Comes with U bolt for mounting.
>
> $20.00 plus $5.00 shipping.
>
> email direct if interested
>
>
>
>
>
>

4608. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 22:41:16 UTC
From: jgboyles@aol.com
Message-ID: <20031116174116.00881.00000396@mb-m28.aol.com>
Source record: 104474

>While I am somewhat adept at cutting a 144 to 220, for the life of me I do
>not know how to do the converse..

May be worth the $20 just to find out how that is done.
73 Gary N4AST

4609. Re: Position control.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 23:05:26 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <oc0grvco2dtmfvi5p7tm9onclc5eevuvi1@4ax.com>
Source record: 104475

On Sun, 16 Nov 2003 21:12:35 +0100, "Gï¿½ry Duyck" <gery@duyck-co.be>
wrote:

|What's the easiest way to attach a variable resistor
|to your rotor, or outside tube, for an elevation motor?
|
|Does anyone have experience with this ?

Yes.

The way I did it was to mount the body of the pot to the horizontal
tube and install a weight on the shaft. Gravity will keep the weight
pointed at the center of the Earth thus holding the shaft in a fixed
position while the body of the pot rotates around it.

Weatherproof as necessary.

Wes N7WS
|
|All tips / info / foto's are welcome !
|
|73's
|ON4GDK, Gery D.
|

4610. Re: OT: My first Hockey Game

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 23:08:00 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <jrTtb.165865$mZ5.1137259@attbi_s54>
Source record: 104476

This is the best description of hockey that I have read in my 50 years
of being a hockey fan!! [Boston Bruins and perpetual hope].

W4JLE gets right to the heart of the game. He did miss one point though;
the Zamboni guy must have a weak bladder because wherever he goes he
leaves a puddle behind.

:-)

w4jle wrote:

4611. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 23:29:11 UTC
From: dbn <dnicholson@mcmsys.com>
Message-ID: <bp914b$7qi$1@news.mcmsys.com>
Source record: 104477
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

Just how does one go abt STRECHING the radiator since 220mhz requires a shorter radiator than 144mhz. If you would impart this information to the ham community, I do beleive that you will be a hero!!!! Or at very least well liked!!!

Dan

--
If I am tired now, why do I have to RETIRE later?

4612. Re: Passive Antenna Repeater Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 23:42:38 UTC
From: wp20032@aol.com
Message-ID: <20031116184238.29282.00000467@mb-m10.aol.com>
Source record: 104478

>>This is just a mental exercise, as I have already run coax directly to the
>rig
>>from the outside antenna on my trailer.
>
>Hi Wayne,
>
>Speaking of the loss of passive repeating, compare that to the loss of
>the shielded inclosure you are trying to transceive through. No doubt
>the latter will overwhelm the former giving you a new appreciation to
>the chestnut "can you hear me now?"
>
>The losses of passive repeating are typically compared to the coupling
>from your set to the inside antenna (this is the loss to be computed
>as it is by far the greatest). Losses within the coupling between
>antennas (if matched) are trivial in comparison. Further, when the
>topic arises, the simple observation that you are sitting next to a
>window that is extremely large (in terms of wavelength) dilute the
>argument that the passive re-radiator is needed at all (and serves
>only as placebo).
>
>73's
>Richard Clark, KB7QHC
>
Richard--
The question came up in my mind because I was not able to hit a relatively close repeater from inside the trailer. The windows are screened, but there are some minor leak areas around the refridgerator vent, etc.

My question was directed at a theoretically RF tight container. In such a case, how effective would the reradiator be....20 dB down....40 dB, etc. I am not sure how this would be calculated in the relatively near field, with reflections.

TIA
Wayne

4613. Re: OT: My first Hockey Game

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-16 23:59:49 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bp932b$2gta$1@news3.infoave.net>
Source record: 104479

Thank you Dave, some of the direct e-mail has been less flattering. One in particular from a Canadian that questioned the legality of my lineage. :>)

"Dave Shrader" <david.shrader@comcast.net> wrote in message news:jrTtb.165865$mZ5.1137259@attbi_s54...
> This is the best description of hockey that I have read in my 50 years
> of being a hockey fan!! [Boston Bruins and perpetual hope].
>
> W4JLE gets right to the heart of the game. He did miss one point though;
> the Zamboni guy must have a weak bladder because wherever he goes he
> leaves a puddle behind.
>
> :-)
>
> w4jle wrote:
>

4614. Re: OT: My first Hockey Game

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 01:09:12 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <YcVtb.170158$9E1.861685@attbi_s52>
Source record: 104480

I am passionate about my hockey! But I can still enjoy a parody about my sport. I'm sorry some of our VE friends didn't see the humor.

I hope they never have someone explain baseball to them! I remember Bud Abbott and Lou Costello: "Who's on first? ..."

:-)

Deacon Dave, W1MCE
+ + +

w4jle wrote:

> Thank you Dave, some of the direct e-mail has been less flattering. One in
> particular from a Canadian that questioned the legality of my lineage. :>)

4615. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 01:17:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <qkVtb.171418$ao4.556477@attbi_s51>
Source record: 104481
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

Hmmm ?? A construction project!! Or, is it a recipe?

Start with a 48 inch length of stainless steel 1/16 inch diameter rod.

Add a new coil at one end to be tapped for a 50 ohm match at 146 MHz.

Add a new capacitor connected in parallel with the coil.

Adjust capacitor and inductance to achieve 146 MHz resonance.

Using an antenna analyzer locate and solder a tap coil for 50 ohm match.

Seal all with a strong weather proof sealant.

Install in mount provided at point of sale.

Install on vehicle.

After failure, replace with commercial 146 MHz antenna

Deacon Dave, W1MCE

4616. MFJ-1432 RuffRider

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 01:45:18 UTC
From: Bill East <beast@pcs.mb.ca>
Message-ID: <tMVtb.13194$f7.675850@localhost>
Source record: 104482

Looking at this antenna for my mobile. Will use a PO style of mount, unless the NMO is more solid. Anyone have problems with this antenna at highway speeds. With all the sections this antenna has can anyone report loose or vibration problems.over time?
How well is it constructed for mobile use .
thanks,
Bill/VE4AAZ

4617. Re: Position control.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 01:52:51 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Pd6dnS7vWcKctyWiRVn-hg@comcast.com>
Source record: 104483

Wes,

I have been saving an old U100 rotor for possible elevation control, and never thought to use anything other than the stock controller. Your idea really makes a lot of sense. Glad I read this thread before going the clackety clack route.

Tam/WB2TT
"Wes Stewart" <n7ws@_arrl.net> wrote in message
news:oc0grvco2dtmfvi5p7tm9onclc5eevuvi1@4ax.com...
> On Sun, 16 Nov 2003 21:12:35 +0100, "G?ry Duyck" <gery@duyck-co.be>
> wrote:
>
> |What's the easiest way to attach a variable resistor
> |to your rotor, or outside tube, for an elevation motor?
> |
> |Does anyone have experience with this ?
>
> Yes.
>
> The way I did it was to mount the body of the pot to the horizontal
> tube and install a weight on the shaft. Gravity will keep the weight
> pointed at the center of the Earth thus holding the shaft in a fixed
> position while the body of the pot rotates around it.
>
> Weatherproof as necessary.
>
> Wes N7WS
> |
> |All tips / info / foto's are welcome !
> |
> |73's
> |ON4GDK, Gery D.
> |
>

4618. Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 02:13:51 UTC
From: Je Forget <je.forget@frenchconnection.fr>
Message-ID: <BBDD990F.3A04%je.forget@frenchconnection.fr>
Source record: 104485

Okay here's the deal,

I would absolutely love to put up a Log P, but lamentably my tower is only 42' to the thrust bearing, and if I put up even the smallest Tennadyne T-6, the 38' (2x19') rear element would severely overhang not only the neighbors yard, but their house as well. (they are 24" from the lot line.)

My other concern is ice. That is to say, when it ices up (as it will inevitably do several times each winter) the longer elements could droop to the point where they could strike his roof, mine, a nearby tree. (heck, the balance between peace among neighbors and a decent antenna system sure is frustrating...

So, I have to keep it small, but I would like it to cover more than the usual 20-15-10 devices, and still have some level of performance. (gee, while I'm at it, let's have it defy gravity, be completely invisible, and guarantee a 59 copy to even the remotest corners of the globe... but seriously folks, I need some real life testimonials here!)

I have a brand new TH3JR (purchased 5 years ago) still in the unopened box, but I'm thinking 'more bands' would be nice.

I found a local place that has some interesting antennas, but I find few references to them and their performance on the web. (that's not to suggest they are not good devices, heck, they could be a well kept secret little gem.) Here's a link to the one I'm looking at:

http://www3.sympatico.ca/tgmc/mq-2.html

It's quite compact, and a very different configuration from anything I've seen elsewhere.

So, what's out there that's small and yet delivers decent performance with 20-17-15-12-10 in mind?

Any helpful firsthand experience passed along would be very much appreciated!

Pat, VE3PMK

(I'm slowly getting spam under control, so please post replies here. Thanks!)

4619. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 02:17:26 UTC
From: richardharrison@webtv.net
Message-ID: <20366-3FB82FB6-271@storefull-2312.public.lawson.webtv.net>
Source record: 104484

Art, KB9MZ wrote:
"I can up my efficiency to 50 per cent by hanging a wire down from the dipole ends which I am not comfortable about---."

Why would Art be uncomfortable about improving efficiency by hanging a wire down?
Maybe he does not believe his model is correct. Maybe he doesn`t want some directivity change that comes with hanging a wire down. Maybe there is some physical problem with hanging a wire down.

The problem with a loading coil is increased loss. Capacitance is usually low loss.

As Yuri, K3BU has noted, there is much to be learned from reading ON4UN`s Chapter 9 about antenna loading even though everything regarding vertical antennas doesn`t translate readily to horizontal antennas.

ON4UN includes horizontally polarized antennas in "Low-Band DXing". It`s easy to read, well illustrated, and full of good references. It helps if you want to design your own antenna because it tells why as well as how.

Best regards, Richard Harrison, KB5WZI

4620. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 02:34:39 UTC
From: k9sqg@aol.com
Message-ID: <20031116213439.02030.00000331@mb-m16.aol.com>
Source record: 104486

A log periodic is similar to a discone in that the shining attribute is wideband coverage, not gain. If you look at the gain curves, and F/B, you will see why the manufacturers often quote maximum gain, not average gain, and I've never seen a gain or F/B ratio plot as a function of frequency in their ads. As long as you know what you're getting, you won't be disappointed.

73s,

Evan

4621. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 03:04:24 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <hRWtb.5712$0K4.1584@lakeread04>
Source record: 104487

"Je Forget" <je.forget@frenchconnection.fr> wrote in message
news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> Okay here's the deal,
>
> I would absolutely love to put up a Log P, but lamentably my tower is only
> 42' to the thrust bearing, and if I put up even the smallest Tennadyne
T-6,
> the 38' (2x19') rear element would severely overhang not only the
neighbors
> yard, but their house as well. (they are 24" from the lot line.)

How about the StepIR rotatable dipole, or their two element beam?? A
little pricey,
but it works.

Pete

4622. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 03:07:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bp9e11$jq6$1@hercules.btinternet.com>
Source record: 104488

> Reg I tried to enter your page once but I am so computor incompetant.

Art, I'm afraid there's not much hope for you then.

Why not try keeping tropical fish ? It's very relaxing although it can be
livened up by introducing just one pirana to the tank. ;o)

Yours, Reg

4623. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 03:24:44 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB83F7C.4FE73B7A@cwis.net>
Source record: 104489

Pat,
If I were you, I think I'd forget about a log-P antenna.
Personally, I'd forget about the locally made one too. If
the 'TH3JR' is still in the unopened box, it sounds like you
don't really care much about having a beam up in the air and
in use. And to be painfully honest, it also sounds like you
just don't have the room for one. Keep shopping for that
gravity defying, invisible, super-duper special only 3 feet
wide with the built in de-icer...
'Doc

4624. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 03:38:19 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB842B6.60207@get.lost>
Source record: 104490
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.misc,rec.radio.shortwave

Clint wrote:

> MORE bad news for liberals....
>
> Tax refunds next year are estimated to be up 27% from this
> year due to tax cuts. Yet ANOTHER reason it must suck to
> be a liberal in modern America.

And the way those liberals rape the babies before eating them... disgusting!

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4625. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 04:31:01 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <9aYtb.217049$HS4.1900993@attbi_s01>
Source record: 104491

If small with gain on 20->10 including the WARC bands is the goal, I'd suggest looking at the Hexbeam. Quite pricy compared to the TGM you mentioned, though. I'm quite happy with my 5-band Hex, for what it's worth, and it's turning radius is <10 feet (even smaller in metric)

Paul AB0SI

"Je Forget" <je.forget@frenchconnection.fr> wrote in message news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> Okay here's the deal,
>
> I would absolutely love to put up a Log P, but lamentably my tower is only
> 42' to the thrust bearing, and if I put up even the smallest Tennadyne T-6,
> the 38' (2x19') rear element would severely overhang not only the neighbors
> yard, but their house as well. (they are 24" from the lot line.)
>
> My other concern is ice. That is to say, when it ices up (as it will
> inevitably do several times each winter) the longer elements could droop to
> the point where they could strike his roof, mine, a nearby tree. (heck, the
> balance between peace among neighbors and a decent antenna system sure is
> frustrating...
>
> So, I have to keep it small, but I would like it to cover more than the
> usual 20-15-10 devices, and still have some level of performance. (gee,
> while I'm at it, let's have it defy gravity, be completely invisible, and
> guarantee a 59 copy to even the remotest corners of the globe... but
> seriously folks, I need some real life testimonials here!)
>
> I have a brand new TH3JR (purchased 5 years ago) still in the unopened box,
> but I'm thinking 'more bands' would be nice.
>
> I found a local place that has some interesting antennas, but I find few
> references to them and their performance on the web. (that's not to suggest
> they are not good devices, heck, they could be a well kept secret little
> gem.) Here's a link to the one I'm looking at:
>
> http://www3.sympatico.ca/tgmc/mq-2.html
>
> It's quite compact, and a very different configuration from anything I've

> seen elsewhere.
>
> So, what's out there that's small and yet delivers decent performance with
> 20-17-15-12-10 in mind?
>
> Any helpful firsthand experience passed along would be very much
> appreciated!
>
> Pat, VE3PMK
>
> (I'm slowly getting spam under control, so please post replies here.
> Thanks!)
>

4626. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 06:47:29 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <rirgrvct113nah63ttodjrvka5a4rggkkh@4ax.com>
Source record: 104492

On Sun, 16 Nov 2003 21:13:51 -0500, Je Forget
<je.forget@frenchconnection.fr> wrote:

|Okay here's the deal,

Why not move? With the current sunspot situation you will have five
or more years before anything above 20 meters is useful so you will
have plenty of time to find a new QTH.

|
|I would absolutely love to put up a Log P, but lamentably my tower is only
|42' to the thrust bearing, and if I put up even the smallest Tennadyne T-6,
|the 38' (2x19') rear element would severely overhang not only the neighbors
|yard, but their house as well. (they are 24" from the lot line.)
|
|My other concern is ice. That is to say, when it ices up (as it will
|inevitably do several times each winter) the longer elements could droop to
|the point where they could strike his roof, mine, a nearby tree. (heck, the
|balance between peace among neighbors and a decent antenna system sure is
|frustrating...
|
|So, I have to keep it small, but I would like it to cover more than the
|usual 20-15-10 devices, and still have some level of performance. (gee,
|while I'm at it, let's have it defy gravity, be completely invisible, and
|guarantee a 59 copy to even the remotest corners of the globe... but
|seriously folks, I need some real life testimonials here!)
|
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|but I'm thinking 'more bands' would be nice.
|
|I found a local place that has some interesting antennas, but I find few
|references to them and their performance on the web. (that's not to suggest
|they are not good devices, heck, they could be a well kept secret little
|gem.) Here's a link to the one I'm looking at:
|
|http://www3.sympatico.ca/tgmc/mq-2.html
|
|It's quite compact, and a very different configuration from anything I've
|seen elsewhere.
|
|So, what's out there that's small and yet delivers decent performance with
|20-17-15-12-10 in mind?
|
|Any helpful firsthand experience passed along would be very much
|appreciated!

|
|Pat, VE3PMK
|
|(I'm slowly getting spam under control, so please post replies here.
|Thanks!)

4627. Re: Passive Antenna Repeater Revisited

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 07:49:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hmugrv88hntvclfqa5i7dpniuail7h4p8n@4ax.com>
Source record: 104493

On 16 Nov 2003 23:42:38 GMT, wp20032@aol.com (WP20032) wrote:

>My question was directed at a theoretically RF tight container. In such a
>case, how effective would the reradiator be....20 dB down....40 dB, etc. I am
>not sure how this would be calculated in the relatively near field, with
>reflections.
>
>TIA
>Wayne

Hi Wayne,

Resonant cavities are RF tight containers, and they exhibit less than
1dB to several many. The lower values are a function of low loss
(very large resonators), the higher values are a function of either
high loss or poor coupling. No doubt when you have folks residing
within the "cavity" loss becomes an issue - and then add coupling loss
to boot. This says nothing as to the state if the cavity is resonant
or not.

If the radiating antenna is within less than a wavelength of the
pickup, you don't stand much chance of coming out with less than 3dB
loss. You may as well count on at least 20dB loss.

A low power, half duplex, cross band repeater would probably remove
all the presumptions and actually work. One half residing within a
shield would also cut down on annoying hits on a shared frequency.

73's
Richard Clark, KB7QHC

4628. Re: Best antenna for portable HF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 08:09:27 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <vrh0getltil02e@corp.supernews.com>
Source record: 104494
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I just finished a buddipole myself.. Can't wait to get it all tuned and see what it'll do with my new Vectronics 20 meter rig I just built.. Now, where's my hot sauce so I can make that battery...

Paul Jordan
kl0an
Anchorage, AK

"Rene PE1RA" <deleterene.altenaremovedelete@gmx.net> wrote in message news:bp8ip8$1knfn4$1@ID-153362.news.uni-berlin.de...
>
> "Thierry" <Thierry, see http://www.astrosurf.com/lombry/> schreef in bericht
> news:3fb78d8c$1_2@news.vo.lu...
> > Hi,
> >
> > I have discussed on this page
> > http://www.astrosurf.com/lombry/qsl-portable.htm
> > the different models of portable antennas (and amplifiers) suited to work
> > outdoor (e.g. Field days). This list includes some verticals, longwires,
> and
> > short beams.
> >
> > Could you take a look and suggest me other models that you know be used by
> > isolated hams working in the field, during your holidays abroad or by
> > DXpeditions.
>
> You should check out the Buddipole antenna system: www.buddipole.com .
>
> 73 de Rene PE1RA
>
>
>

4629. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 08:59:24 UTC
From: Michael <mixstat-donotspam@bigpond.net.au>
Message-ID: <M50ub.14315$aT.7087@news-server.bigpond.net.au>
Source record: 104495

"JDer8745" <jder8745@aol.com> wrote in message
news:20031112112305.27776.00000082@mb-m06.aol.com...
> Howdy, Toy
>
> Best all around antenna is a center fed doublet fed with balanced TL such
as
> transmitting twin lead, ladder line, or open wire line.
>

Dont forget a balanced feedline radiates along the line. You may have to
deal with this somehow with the Australian Communications Authority's new
radiation guidelines.

4630. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 10:17:27 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fb8a02e$1_1@news.vo.lu>
Source record: 104496
Body handling: HTML body converted to readable text

"paulfriedman@comcast.net" wrote in message
news:9aYtb.217049$HS4.1900993@attbi_s01...
> If small with gain on 20->10 including the WARC bands is the goal, I'd
> suggest looking at the Hexbeam. Quite pricy compared to the TGM you
> mentioned, though. I'm quite happy with my 5-band Hex, for what it's
worth,
> and it's turning radius is <10 feet (even smaller in metric)

Hi,

Hexbeam is light, great for portable or small space but it has to be modify
manually to work on other bands...
Not the best way.

You can get a Titanex beam, better, lighter, cheaper...
See http://www.astrosurf.com/lombry/qsl-portable3.htm

Thierry
ON4SKY
QSL mgr for LX3SKY

>
> Paul AB0SI
>
>
> "Je Forget" wrote in message
> news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> > Okay here's the deal,
> >
> > I would absolutely love to put up a Log P, but lamentably my tower is
only
> > 42' to the thrust bearing, and if I put up even the smallest Tennadyne
> T-6,
> > the 38' (2x19') rear element would severely overhang not only the
> neighbors
> > yard, but their house as well. (they are 24" from the lot line.)
> >
> > My other concern is ice. That is to say, when it ices up (as it will
> > inevitably do several times each winter) the longer elements could droop
> to
> > the point where they could strike his roof, mine, a nearby tree. (heck,
> the
> > balance between peace among neighbors and a decent antenna system sure
is
> > frustrating...

> >
> > So, I have to keep it small, but I would like it to cover more than the
> > usual 20-15-10 devices, and still have some level of performance. (gee,
> > while I'm at it, let's have it defy gravity, be completely invisible,
and
> > guarantee a 59 copy to even the remotest corners of the globe... but
> > seriously folks, I need some real life testimonials here!)
> >
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> box,
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> >
> > I found a local place that has some interesting antennas, but I find few
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> suggest
> > they are not good devices, heck, they could be a well kept secret little
> > gem.) Here's a link to the one I'm looking at:
> >
> > http://www3.sympatico.ca/tgmc/mq-2.html
> >
> > It's quite compact, and a very different configuration from anything
I've
> > seen elsewhere.
> >
> > So, what's out there that's small and yet delivers decent performance
with
> > 20-17-15-12-10 in mind?
> >
> > Any helpful firsthand experience passed along would be very much
> > appreciated!
> >
> > Pat, VE3PMK
> >
> > (I'm slowly getting spam under control, so please post replies here.
> > Thanks!)
> >
>
>

4631. Re: *Pirhanas* in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 10:56:29 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3fb757c9_2@newsfeed.slurp.net>
Source record: 104502

Speaking of pirhanas in the tank, this humble lurker and scribe takes this opportunity to thank and congratulate you pirhanas posting here for driving the likes of Gary Coffman, Tom Rauch, Tom Bruhns, Bart Rowlett, Steve Best, Bob Haviland, Roy Lewallen, Wes Stewart, Ian White, Walt Maxwell, Joe Reisert .... et al., right off this reflector with your feeding frenzies over triviae, minutiae, and inconsequential stuff.

To celebrate further your victory, have at it some more, check the archives, and add to the list here:

1.

2.

.....

Shame on the lot of you.

N3HE

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bp9e11$jq6$1@hercules.btinternet.com...
> > Reg I tried to enter your page once but I am so computor incompetant.
>
> ----------
>
> Art, I'm afraid there's not much hope for you then.
>
> Why not try keeping tropical fish ? It's very relaxing although it can be
> livened up by introducing just one pirana to the tank. ;o)
> ----
> Yours, Reg
>
>
>
>

4632. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 14:30:30 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <aY4ub.6248$Wy4.4699@newsread2.news.atl.earthlink.net>
Source record: 104497
Body handling: HTML body converted to readable text

Sorry, but you are misinformed. The HX-5B hexbeam meets all the
requirements that were stated. There are no "modifications" required to
operate on the 5 bands. You obviously do not own one - I do.

K8AC

"Thierry" wrote in message
news:3fb8a02e$1_1@news.vo.lu...
>
> "paulfriedman@comcast.net" wrote in message
> news:9aYtb.217049$HS4.1900993@attbi_s01...
> > If small with gain on 20->10 including the WARC bands is the goal, I'd
> > suggest looking at the Hexbeam. Quite pricy compared to the TGM you
> > mentioned, though. I'm quite happy with my 5-band Hex, for what it's
> worth,
> > and it's turning radius is <10 feet (even smaller in metric)
>
> Hi,
>
> Hexbeam is light, great for portable or small space but it has to be
modify
> manually to work on other bands...
> Not the best way.
>
> You can get a Titanex beam, better, lighter, cheaper...
> See http://www.astrosurf.com/lombry/qsl-portable3.htm
>
> Thierry
> ON4SKY
> QSL mgr for LX3SKY
>
>
> >
> > Paul AB0SI
> >
> >
> > "Je Forget" wrote in message
> > news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> > > Okay here's the deal,
> > >
> > > I would absolutely love to put up a Log P, but lamentably my tower is
> only
> > > 42' to the thrust bearing, and if I put up even the smallest Tennadyne
> > T-6,

> > > the 38' (2x19') rear element would severely overhang not only the
> > neighbors
> > > yard, but their house as well. (they are 24" from the lot line.)
> > >
> > > My other concern is ice. That is to say, when it ices up (as it will
> > > inevitably do several times each winter) the longer elements could
droop
> > to
> > > the point where they could strike his roof, mine, a nearby tree.
(heck,
> > the
> > > balance between peace among neighbors and a decent antenna system sure
> is
> > > frustrating...
> > >
> > > So, I have to keep it small, but I would like it to cover more than th
e
> > > usual 20-15-10 devices, and still have some level of performance.
(gee,
> > > while I'm at it, let's have it defy gravity, be completely invisible,
> and
> > > guarantee a 59 copy to even the remotest corners of the globe... but
> > > seriously folks, I need some real life testimonials here!)
> > >
> > > I have a brand new TH3JR (purchased 5 years ago) still in the unopened
> > box,
> > > but I'm thinking 'more bands' would be nice.
> > >
> > > I found a local place that has some interesting antennas, but I find
few
> > > references to them and their performance on the web. (that's not to
> > suggest
> > > they are not good devices, heck, they could be a well kept secret
little
> > > gem.) Here's a link to the one I'm looking at:
> > >
> > > http://www3.sympatico.ca/tgmc/mq-2.html
> > >
> > > It's quite compact, and a very different configuration from anything
> I've
> > > seen elsewhere.
> > >
> > > So, what's out there that's small and yet delivers decent performance
> with
> > > 20-17-15-12-10 in mind?
> > >
> > > Any helpful firsthand experience passed along would be very much
> > > appreciated!
> > >
> > > Pat, VE3PMK

> > >
> > > (I'm slowly getting spam under control, so please post replies here.
> > > Thanks!)
> > >
> >
> >
>
>

4633. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 15:41:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb8ec39$1_7@corp.newsgroups.com>
Source record: 104498

Michael wrote:
> Dont forget a balanced feedline radiates along the line.

If the currents are balanced, most of the photons are
re-absorbed by the free electrons. OTOH, if the currents
inside a coax feedline are not balanced, an unbalanced
feedline radiates along the line.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4634. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 15:49:35 UTC
From: Pat's Sympatico <nobady@nowhere.nil>
Message-ID: <X66ub.3908$iT4.499536@news20.bellglobal.com>
Source record: 104500

Doc,

I hear you loud and clear, I know it's tight up there, and with Rocky & Bullwinkle guarding the upsiedasium, there won't be any invisible Al-Ti-Up alloys anytime soon...

But seriously, I know it's limited, and I knew that when I put the tower up a month ago. It was the only place in the yard available. (big pool, two decks, hot-tub, pool-shed, and oodles of beautiful trees... again, everything is a trade off with suburban living.)

I have read Log-Ps are not the be-all end-all antenna, but are good solutions when you want 'one' multipurpose antenna with some steerable directivity and an assortment of bands. And yes, any specialised monobander will outperform most multipurpose devices. (what was that we were saying about trade-offs??? Darn near everywhere aren't they?)

So, with all that said, I'm looking for the best compromise. The house next door is 12 feet from the centre of the tower, so if I can keep the turning radius around 15', at the 42' height, it won't look to bad at all, AND I can park the beam pointed either directly toward, or directly away from the building. That way, with a total boom length under 18 feet, it will be entirely in 'my' airspace when not in use.

So the search continues for a something with a 18' or shorter boom, with a longest element no greater than 30', and won't droop too much with moderate ice loading. I know the 'droop' of an element is a non-linear function based on its length and the total ice load, but from a practical standpoint, on the longest element, how far down will it bow? I'm guessing if I paint the topside of the elements flat-black it will help with shedding the ice when the sun hits them.

Thanks again for sharing the wisdom of the group...

Pat, VE3PMK
(please respond here as I am slowly getting the spambots under control. Thanks.)

4635. Alpha Delta DXEE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 16:02:56 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <74shrvopqo5s3s9e96jvi8cnthdj6ovlv1@4ax.com>
Source record: 104499

Has anyone attempted to convert the Alpha Delta DXEE to operate on 30 meters? I find it's performance on 40 not near as good as my trusty old G5RV and am considering shortening the 40 meter section to be resonant on 30 as long as it doesn't screw up the 20 meter section. If anyone has tried this, I'd sure like to know the results and the length to make to 'new' 30 meter section. Thanks.

4636. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 16:15:44 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <Tu6ub.21685$3j.15803@lakeread01>
Source record: 104501

I used the TGM for three years and really liked it. It is a great little antenna. There are 27 reviews on eHam - all give this little beauty a perfect "5" rating. Look for "TGM Communications Hybrid Quad." I would highly recommend it.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

4637. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:09:21 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <5h7ub.27121$Dw6.135087@attbi_s02>
Source record: 104503
Body handling: HTML body converted to readable text

The Hexbeam 5Bi has gain and is resonant on 20,17,15,12,10. It has a turning radius of less than 10 feet and weighs less than 20 lbs. The one you are thinking about does, indeed, require the user to change the wire elements for band changing, not the 5Bi, however.

The Titenex Log Periodic you refer to has a turning radius of 18 feet (weight is just about the same for both antennas).

The original poster was looking for a small beam, hence my suggestion of the Hexbeam (again, the permanent one, not the transportable one you cover on your excellent website). My QTH, for example, does not have room for a 18 foot/ 6 meter turning radius.

Paul AB0SI

"Thierry" wrote in message
news:3fb8a02e$1_1@news.vo.lu...
>
> "paulfriedman@comcast.net" wrote in message
> news:9aYtb.217049$HS4.1900993@attbi_s01...
> > If small with gain on 20->10 including the WARC bands is the goal, I'd
> > suggest looking at the Hexbeam. Quite pricy compared to the TGM you
> > mentioned, though. I'm quite happy with my 5-band Hex, for what it's
> worth,
> > and it's turning radius is <10 feet (even smaller in metric)
>
> Hi,
>
> Hexbeam is light, great for portable or small space but it has to be
modify
> manually to work on other bands...
> Not the best way.
>
> You can get a Titanex beam, better, lighter, cheaper...
> See http://www.astrosurf.com/lombry/qsl-portable3.htm
>
> Thierry
> ON4SKY
> QSL mgr for LX3SKY
>
>
> >
> > Paul AB0SI
> >

4638. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:11:15 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <Ti7ub.224633$Tr4.664282@attbi_s03>
Source record: 104504
Body handling: HTML body converted to readable text

Floyd:

This was my fault, not Thierry's. I should have specified the model number.
He was thinking about the transportable Hex which does require futzing
whenever you change bands.

Paul AB0SI

"Floyd Sense" wrote in message
news:aY4ub.6248$Wy4.4699@newsread2.news.atl.earthlink.net...
> Sorry, but you are misinformed. The HX-5B hexbeam meets all the
> requirements that were stated. There are no "modifications" required to
> operate on the 5 bands. You obviously do not own one - I do.
>
> K8AC
>
>
> "Thierry" wrote in message
> news:3fb8a02e$1_1@news.vo.lu...
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> > "paulfriedman@comcast.net" wrote in message
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> > See http://www.astrosurf.com/lombry/qsl-portable3.htm
> >
> > Thierry
> > ON4SKY
> > QSL mgr for LX3SKY
> >
> >
> > >

> > > Paul AB0SI
> > >
> > >
> > > "Je Forget" wrote in message
> > > news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> > > > Okay here's the deal,
> > > >
> > > > I would absolutely love to put up a Log P, but lamentably my tower
is
> > only
> > > > 42' to the thrust bearing, and if I put up even the smallest
Tennadyne
> > > T-6,
> > > > the 38' (2x19') rear element would severely overhang not only the
> > > neighbors
> > > > yard, but their house as well. (they are 24" from the lot line.)
> > > >
> > > > My other concern is ice. That is to say, when it ices up (as it will
> > > > inevitably do several times each winter) the longer elements could
> droop
> > > to
> > > > the point where they could strike his roof, mine, a nearby tree.
> (heck,
> > > the
> > > > balance between peace among neighbors and a decent antenna system
sure
> > is
> > > > frustrating...
> > > >
> > > > So, I have to keep it small, but I would like it to cover more than
th
> e
> > > > usual 20-15-10 devices, and still have some level of performance.
> (gee,
> > > > while I'm at it, let's have it defy gravity, be completely
invisible,
> > and
> > > > guarantee a 59 copy to even the remotest corners of the globe...
but
> > > > seriously folks, I need some real life testimonials here!)
> > > >
> > > > I have a brand new TH3JR (purchased 5 years ago) still in the
unopened
> > > box,
> > > > but I'm thinking 'more bands' would be nice.
> > > >
> > > > I found a local place that has some interesting antennas, but I find
> few
> > > > references to them and their performance on the web. (that's not to
> > > suggest

> > > > they are not good devices, heck, they could be a well kept secret
> little
> > > > gem.) Here's a link to the one I'm looking at:
> > > >
> > > > http://www3.sympatico.ca/tgmc/mq-2.html
> > > >
> > > > It's quite compact, and a very different configuration from anything
> > I've
> > > > seen elsewhere.
> > > >
> > > > So, what's out there that's small and yet delivers decent
performance
> > with
> > > > 20-17-15-12-10 in mind?
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> > > > Any helpful firsthand experience passed along would be very much
> > > > appreciated!
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> > > > Pat, VE3PMK
> > > >
> > > > (I'm slowly getting spam under control, so please post replies here.
> > > > Thanks!)
> > > >
> > >
> > >
> >
> >
>
>

4639. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:15:26 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpavo1$3d7s$1@news3.infoave.net>
Source record: 104505

Not if the currents are balanced.

"Michael" <mixstat-donotspam@bigpond.net.au> wrote in message
news:M50ub.14315$aT.7087@news-server.bigpond.net.au...
> "JDer8745" <jder8745@aol.com> wrote in message
> news:20031112112305.27776.00000082@mb-m06.aol.com...
> > Howdy, Toy
> >
> > Best all around antenna is a center fed doublet fed with balanced TL
such
> as
> > transmitting twin lead, ladder line, or open wire line.
> >
>
> Dont forget a balanced feedline radiates along the line. You may have to
> deal with this somehow with the Australian Communications Authority's new
> radiation guidelines.
>
>
>
>

4640. Re: *Pirhanas* in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:20:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb9036c_3@corp.newsgroups.com>
Source record: 104506

David J. Windisch wrote:
> Speaking of pirhanas in the tank, this humble lurker and scribe takes this
> opportunity to thank and congratulate you pirhanas posting here for driving
> the likes of ... et al., right off this reflector with your feeding frenzies
> over triviae, minutiae, and inconsequential stuff.

A larger question might be: Why do some (not all) of those guys stake their
reputations and egos on that very "triviae, minutiae, and inconsequential stuff"?

Some of those guys on your list disagree loud and long with each other, both
sides determined never to admit a mistake of any kind. Many list their degrees
and accomplishments as if those things are a vaccination against mistakes.

Driving a person off a public unmoderated newsgroup is impossible. What causes
people to leave this newsgroup under pressure is pride plus the heat in the kitchen.

Do you think we really need a newsgroup guru upper class whose assertions are
immune from other questioning minds?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4641. Re: *Pirhanas* in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:25:52 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <540irvc8f38pgvgt1ufnjn8rn03mh6c2oc@4ax.com>
Source record: 104507

On Mon, 17 Nov 2003 05:56:29 -0500, "David J. Windisch"
<davidw@copper.net> wrote:

|Speaking of pirhanas in the tank, this humble lurker and scribe takes this
|opportunity to thank and congratulate you pirhanas posting here for driving
|the likes of Gary Coffman, Tom Rauch, Tom Bruhns, Bart Rowlett, Steve Best,
|Bob Haviland, Roy Lewallen, Wes Stewart, Ian White, Walt Maxwell, Joe
|Reisert .... et al., right off this reflector with your feeding frenzies
|over triviae, minutiae, and inconsequential stuff.

While I'm honored to be counted among the others you speak of Dave, I
think you're not lurking often enough <g>.

I must say that some of us on the list are still here. I don't know
the reasons why some of the others are not regulars anymore; it could
be what you cite or it could just be the press of other things in
life. I too miss their contributions.

Nevertheless, it's just usenet and not something to be taken very
seriously or to get upset about. The thin skinned should not apply
<g>.

Actually, I think some of the participants in the latest thread might
be off dreaming up some experiments or new models to bring back to the
discussion. Notwithstanding the bullheadedness and wacky thinking of
some of the usual suspects, there has been some thought provoking
discussion.

Regards,

Wes N7WS

4642. R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 17:41:09 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <ff2dnfxihNR6miSiRVn-gw@comcast.com>
Source record: 104508

Hello:

Went to R/S today to pick up some BNC connectors to make a short coax patch wire.

Was somewhat surprised to see that they only carry, now, the "screw-on" variety.
No more soldered ones.

Apparently you insert the stripped end of the coax into the connector, and twist a portion of the rear
of the connector barrel which clamps the braid.
My guess is that this probably is OK for the braid, but I can't imagine how it connects, relaiably, to the center pin.

Looking at it in the package, it seems the coax wire just pokes into the center pin, and that's that.
Maybe they expect gravity to make a contact.

Seems like this would make a really poor connector, but perhaps I'm too old fashioned in thinking that
the only good contact is a soldered one.

Am I missing anything here ?

Do they actually work ?
Work good enough for a receiver's coax run ?

Thanks,
Bob

4643. TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 18:30:34 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311171030.3eec8a49@posting.google.com>
Source record: 104509

I recently made a TV antenna to receive Channel 5 using a paper clip and 3 feet of rolled up aluminum foil. It works pretty well, but there are these diagonal lines that keep "swimming" across the screen from left to right. Also, there's a little room for improvement in the picture. Does anyone know how I can improve my antenna to get a much clearer picture? Maybe I should use tin foil instead of aluminum foil or something like that? Any ideas?

Thanks for all your help.

4644. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 18:50:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb918a1_8@corp.newsgroups.com>
Source record: 104510

mfc wrote:
> I recently made a TV antenna to receive Channel 5 using a paper clip
> and 3 feet of rolled up aluminum foil. It works pretty well, but
> there are these diagonal lines that keep "swimming" across the screen
> from left to right. Also, there's a little room for improvement in
> the picture. Does anyone know how I can improve my antenna to get a
> much clearer picture? Maybe I should use tin foil instead of aluminum
> foil or something like that? Any ideas?

I'm sorry, but what about getting a real antenna, maybe in the attic?
Bent pins have been known to catch fish, but fishhooks are superior.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4645. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 19:08:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB91C95.7F78D189@uci.edu>
Source record: 104511

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Seems to me it just implies that current at the end of a dipole isn't
> > really zero.
>
> The net current is very close to zero because the forward and reflected
> currents are very nearly equal and 180 degrees out of phase.

Is that what you meant by:

"For that general assumption to be true, the reflected current would
have
to equal the forward current on a standing-wave antenna. But we know it
doesn't"?

It's not clear whether you're making this point in recognition of the
fact that wires are not lossless, or whether you're claiming it's
somehow fundamental to the performance of a radiator.

> > I think it may actually make many round trips. There may be multiple
> > reflections.

> Of course, but like a transmission line, there is only one forward wave
> and one reflected wave. All the multiple reflections are contained in
> those two waves.

Then apparently you've decided not to completely eschew making at least
some steady state assumptions. Seductive indeed. ;-)

73, Jim AC6XG

4646. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 19:16:53 UTC
From: CB_Oktopus_ <LA3xma@broadpark.no>
Message-ID: <3fb91fa1@news.broadpark.no>
Source record: 104512

Cecil Moore wrote:
> mfc wrote:
>
>> I recently made a TV antenna to receive Channel 5 using a paper clip
>> and 3 feet of rolled up aluminum foil. It works pretty well, but
>> there are these diagonal lines that keep "swimming" across the screen
>> from left to right. Also, there's a little room for improvement in
>> the picture. Does anyone know how I can improve my antenna to get a
>> much clearer picture? Maybe I should use tin foil instead of aluminum
>> foil or something like that? Any ideas?
>
>
> I'm sorry, but what about getting a real antenna, maybe in the attic?
> Bent pins have been known to catch fish, but fishhooks are superior.

yes. walk and bay an antenna, and distroy the fun of building anyting
your self. Keep up the good work mfc!!!

LA3XMA Odd

4647. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 19:29:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2l7irvohooiniqq8m6b3bhdn31p66o0me4@4ax.com>
Source record: 104513

On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:

>I recently made a TV antenna to receive Channel 5 using a paper clip
>and 3 feet of rolled up aluminum foil. It works pretty well, but
>there are these diagonal lines that keep "swimming" across the screen
>from left to right. Also, there's a little room for improvement in
>the picture. Does anyone know how I can improve my antenna to get a
>much clearer picture? Maybe I should use tin foil instead of aluminum
>foil or something like that? Any ideas?
>
>Thanks for all your help.

Hi OM,

The diagonal lines are modulation bars or perhaps the sync signal of the picture. Both is probably over your head, but suffice it to say, they only appear because the signal is weak. You probably already know that.

Part of the "passage of rites" growing up before cable was learning how to position the rabbit ears for the best signal (which suggests an alternative before putting up a real antenna - the rabbit ears that is).

Often the angles and position made no sense to either the initiated or the un-intiated as just plain luck dominated. Acquiring that luck meant you had achieved that passage to - whatever. There is no substitute for this process, and if you are in a fringe area, you may progress to the higher rites of erecting and positioning the outdoor antenna (achieved solo by the intrepid).

From indoors, you may have already achieved the best there is to achieve. Adding a TV inline amplifier may help bring out the contrast in those swimming lines so that they would qualify for the Olympics synchronized event. ;-)

An antenna with more elements, higher up, is in order (barring more fruitful experimentation). Welcome to the 50's - a time when Men were Men, and children watched them on TV wearing masks and capes without the fear of sexual confusion (and Liberace was just a piano player).

73's
Richard Clark, KB7QHC

4648. Re: Best antenna for portable HF ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 20:08:29 UTC
From: G&R <spam@limbo.hell>
Message-ID: <ZU9ub.4904$iT4.575802@news20.bellglobal.com>
Source record: 104517
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Hi Thierry,

An antenna that you may consider is the Baby Boomer Quad. (ie 10-15-20m with 12 and 17m capability).

As to portability, it is a great Portable DXpedition, Field Day , Emergency and Permanent Antenna.

Would I recommend this as a Back pack antenna? No.

Cheap? No.

Heavy Duty and Quality? YES!

Al I can suggest is to check us out at www.degendesigns.com

73,
Guenther VE3CVS
info@degendesigns.com

"Thierry" <Thierry, see http://www.astrosurf.com/lombry/> wrote in message news:3fb78d8c$1_2@news.vo.lu...
> Hi,
>
> I have discussed on this page
> http://www.astrosurf.com/lombry/qsl-portable.htm
> the different models of portable antennas (and amplifiers) suited to work
> outdoor (e.g. Field days). This list includes some verticals, longwires, and
> short beams.
>
> Could you take a look and suggest me other models that you know be used by
> isolated hams working in the field, during your holidays abroad or by
> DXpeditions.
>
> Your new antenna should be able to work DX stations and support 0.5-1 kW PEP
> max, be relatively light, easy to set, not too cumbersome and, if possible
> cheap. This is not a wild dream...
>
> If you know some, please list the model, brand and, for beams, the band
> coverage and nbr of elements. I will find add. info on the web.
>
> You can answer me directly by posting your answer on this forum or via my
> website http://www.astrosurf.com/lombry/post.htm
>

> NB. In the meantime, if you find some typing/grammar errors, please tell
me
> (as you understood, I usually speak French...)
>
> Thanks in advance
>
> Thierry
> ON4SKY
> QSL Mgr for LX3SKY
>
>
>

4649. Re: *Pirhanas* in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 20:08:40 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FB92AC8.DE8C52B0@uci.edu>
Source record: 104514

It seems to me to be a two-way street, David. Although their
contributions to the ham radio community are indeed enormous, those
contributions haven't necessarily bought a monopoly on intellect in the
community. They have purchased in most cases, indebtedness, gratitude
and a large degree of deference from the community. However I don't
believe it's true that out of deference, the community must withhold its
opinions and relegate itself to secondary citizen status. It is an
unfortunate fact that heated internet discussions almost inevitably lead
to personal remarks or inuendo. What we should recognize is that if
some people have decided not to post to the newsgroup, it is possible
they are simply more interested in giving opinions than in exchanging
them. But I think that's understandable, given the range of opinions to
be had on the internet. :-)

73, Jim AC6XG

"David J. Windisch" wrote:
>
> Speaking of pirhanas in the tank, this humble lurker and scribe takes this
> opportunity to thank and congratulate you pirhanas posting here for driving
> the likes of Gary Coffman, Tom Rauch, Tom Bruhns, Bart Rowlett, Steve Best,
> Bob Haviland, Roy Lewallen, Wes Stewart, Ian White, Walt Maxwell, Joe
> Reisert .... et al., right off this reflector with your feeding frenzies
> over triviae, minutiae, and inconsequential stuff.
>
> To celebrate further your victory, have at it some more, check the archives,
> and add to the list here:
>
> 1.
>
> 2.
>
> ....
>
> Shame on the lot of you.
>
> N3HE
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bp9e11$jq6$1@hercules.btinternet.com...
> > > Reg I tried to enter your page once but I am so computor incompetant.
> > >
> > > --
> > >
> > > Art, I'm afraid there's not much hope for you then.

> >
> > Why not try keeping tropical fish ? It's very relaxing although it can be
> > livened up by introducing just one pirana to the tank. ;o)
> > ----
> > Yours, Reg
> >
> >
> >
> >

4650. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 20:10:27 UTC
From: G&R <spam@limbo.hell>
Message-ID: <NW9ub.4932$iT4.576138@news20.bellglobal.com>
Source record: 104518

Please consider a BBQ by Degen Designs.

www.degendesigns.com

73

Guenther VE3CVS
info@degendesigns.com

"Je Forget" <je.forget@frenchconnection.fr> wrote in message
news:BBDD990F.3A04%je.forget@frenchconnection.fr...
> Okay here's the deal,
>
> I would absolutely love to put up a Log P, but lamentably my tower is only
> 42' to the thrust bearing, and if I put up even the smallest Tennadyne
T-6,
> the 38' (2x19') rear element would severely overhang not only the
neighbors
> yard, but their house as well. (they are 24" from the lot line.)
>
> My other concern is ice. That is to say, when it ices up (as it will
> inevitably do several times each winter) the longer elements could droop
to
> the point where they could strike his roof, mine, a nearby tree. (heck,
the
> balance between peace among neighbors and a decent antenna system sure is
> frustrating...
>
> So, I have to keep it small, but I would like it to cover more than the
> usual 20-15-10 devices, and still have some level of performance. (gee,
> while I'm at it, let's have it defy gravity, be completely invisible, and
> guarantee a 59 copy to even the remotest corners of the globe... but
> seriously folks, I need some real life testimonials here!)
>
> I have a brand new TH3JR (purchased 5 years ago) still in the unopened
box,
> but I'm thinking 'more bands' would be nice.
>
> I found a local place that has some interesting antennas, but I find few
> references to them and their performance on the web. (that's not to
suggest
> they are not good devices, heck, they could be a well kept secret little
> gem.) Here's a link to the one I'm looking at:
>
> http://www3.sympatico.ca/tgmc/mq-2.html

>
> It's quite compact, and a very different configuration from anything I've
> seen elsewhere.
>
> So, what's out there that's small and yet delivers decent performance with
> 20-17-15-12-10 in mind?
>
> Any helpful firsthand experience passed along would be very much
> appreciated!
>
> Pat, VE3PMK
>
> (I'm slowly getting spam under control, so please post replies here.
> Thanks!)
>

4651. Re: Position control.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 20:13:57 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <9_9ub.6558$Wy4.36@newsread2.news.atl.earthlink.net>
Source record: 104515

Nothing wrong with using the U100 controller as-is. I used a pair of them
for a year or so working the earlier Oscars and had no problems tracking the
moving satellites with the U100.

K8AC

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:Pd6dnS7vWcKctyWiRVn-hg@comcast.com...
> Wes,
>
> I have been saving an old U100 rotor for possible elevation control, and
> never thought to use anything other than the stock controller. Your idea
> really makes a lot of sense. Glad I read this thread before going the
> clackety clack route.
>

4652. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 20:16:07 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bpbaad$1jm2$1@f04n12.cac.psu.edu>
Source record: 104516

Hi:
I like the crimp on BNC's myself but the solder kind are OK. The twist on RS ones are probably OK in low frequency low power but I wouldn't trust them myself. In fact, I wouldn't buy one except in desperation.
Your concerns are the same ones I have. As I can buy Amphonal crimp BNC's for $1.85 each anywhere, I would invest $50 in a crimp tool and go that route.

--
John Passaneau W3JXP
State College Pa
jxp16@psu.edu
This mail is a natural product. The slight variations in spelling and grammar enhance its individual character and beauty and in no way are to be considered flaws or defects.

"Robert11" <rgsxrose@comcast.net> wrote in message news:ff2dnfxihNR6miSiRVn-gw@comcast.com...
> Hello:
>
> Went to R/S today to pick up some BNC connectors to make a short coax patch
> wire.
>
> Was somewhat surprised to see that they only carry, now, the "screw-on"
> variety.
> No more soldered ones.
>
> Apparently you insert the stripped end of the coax into the connector, and
> twist a portion of the rear
> of the connector barrel which clamps the braid.
> My guess is that this probably is OK for the braid, but I can't imagine how
> it connects, relaiably, to the center pin.
>
> Looking at it in the package, it seems the coax wire just pokes into the
> center pin, and that's that.
> Maybe they expect gravity to make a contact.
>
> Seems like this would make a really poor connector, but perhaps I'm too old
> fashioned in thinking that
> the only good contact is a soldered one.
>
> Am I missing anything here ?

>
> Do they actually work ?
> Work good enough for a receiver's coax run ?
>
> Thanks,
> Bob
>

4653. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 21:20:00 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <bpbe20$p82$1@216.39.144.81>
Source record: 104369

On Mon, 17 Nov 2003 12:41:09 -0500, Robert11 wrote:
> Hello:
>
> Went to R/S today to pick up some BNC connectors to make a short coax patch
> wire.
>
> Was somewhat surprised to see that they only carry, now, the "screw-on"
> variety.
> No more soldered ones.
>
> Apparently you insert the stripped end of the coax into the connector, and
> twist a portion of the rear
> of the connector barrel which clamps the braid.
> My guess is that this probably is OK for the braid, but I can't imagine how
> it connects, relaiably, to the center pin.
>
> Looking at it in the package, it seems the coax wire just pokes into the
> center pin, and that's that.
> Maybe they expect gravity to make a contact.
>
> Seems like this would make a really poor connector, but perhaps I'm too old
> fashioned in thinking that
> the only good contact is a soldered one.
>
> Am I missing anything here ?
>
> Do they actually work ?
> Work good enough for a receiver's coax run ?

I tried one about 15 years ago when I couldn't find anything else on a
weekend. It worked, but I kept wondering when it would fall off. They
DON'T work with a stranded center conductor.

4654. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 21:42:33 UTC
From: Roger Halstead <newsgroup@rogerhalstead.com>
Message-ID: <k7firv0jj61d06qsomekhfa537ttrg6133@4ax.com>
Source record: 104370

On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:

>I recently made a TV antenna to receive Channel 5 using a paper clip
>and 3 feet of rolled up aluminum foil. It works pretty well, but
>there are these diagonal lines that keep "swimming" across the screen
>from left to right. Also, there's a little room for improvement in
>the picture. Does anyone know how I can improve my antenna to get a
>much clearer picture? Maybe I should use tin foil instead of aluminum
>foil or something like that? Any ideas?

Part of the problem is the antenna is too short for channel 5.

I'd start by using *two* 3 foot long pieces of foil, or wire, copper tube, pipe, or whatever you find that might conduct. In the case of aluminum foil you are going to need another paper clip. In the case of copper you can solder the twin lead to the strips. However if you don't have a solder gun or iron, ... Use paper clips.

Fasten the wires in a piece of twin lead to the two pieces of foil. One wire to each foil strip. IE wire on one side of twin lead goes to one strip of foil and wire on other side of twin lead goes to other piece of foil. Staple, tape, or glue the foil (stretched out to form a straight line) to a board, or strip of plastic. (something non conductive and easy to move)

OTOH, if you do have some twin lead, try a piece 6 feet long. lay the twin lead out flap. Take the two wires on each end and twist them together. Solder is better. Now, in the center, cut the wires only ON ONE SIDE. Fasten another piece of twin lead (for a lead in wire) here and hook the other end of that twin lead to the TV set.

You can tape or glue, or staple (don't put metal staples in so a single metal staple crosses both wires) the twin lead antenna to a board, put it on a stick, pole, pipe, or whatever to get it up higher and now you can rotate it for best reception. You might even be able to tape it to a wall, or up in the attic and get good reception.

I don't have any twin lead, or I'd make one, shoot a photo, and put it on a page to view.

Welcome to the world of "Let's see if this' ll work".

Roger Halstead (K8RI EN73 & ARRL Life Member)
www.rogerhalstead.com
N833R World's oldest Debonair? (S# CD-2)
>
>Thanks for all your help.

4655. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 22:23:37 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <JTbub.76794$Ec1.4022875@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104371
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

Well you see gentlemen, after spending a day up on the roof, it appears I typed without proof reading.
You would all be correct, how would you cut a 220mhz antenna to work on 144mhz????? Good question!
So let me stand corrected and say, it can be cut for 440mhz..... NOT 144mhz.
Thanks for noticing my mistake.....

73

Lou

4656. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 23:41:46 UTC
From: jgboyles@aol.com
Message-ID: <20031117184146.20316.00000406@mb-m04.aol.com>
Source record: 104372

>Thanks for noticing my mistake.....
>

We all make em'. Good luck selling the antenna.
73 Gary N4AST

4657. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 23:54:25 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB95FC2.5010201@get.lost>
Source record: 104373

CB_Oktopus_ wrote:

>>> I recently made a TV antenna to receive Channel 5 using a paper clip
>>> and 3 feet of rolled up aluminum foil. [snip]
>>
>> I'm sorry, but what about getting a real antenna, maybe in the attic?
>> Bent pins have been known to catch fish, but fishhooks are superior.
>
> yes. walk and bay an antenna, and distroy the fun of building anyting
> your self. Keep up the good work mfc!!!

Sure, and while he's at it, why not have fun making an automobile out of
a pumpkin, three used tampons and a rusty nail.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4658. WTB-TRAILER & TOWER

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-17 23:57:31 UTC
From: n2ion@aol.com
Message-ID: <20031117185731.11586.00000391@mb-m22.aol.com>
Source record: 104374

I'M LOOKING FOR A COUPLE OF TOWERS ON TRAILERS. THE OLD EASY WAY OR SOMETHING COMPARABLE
PLEASE EMAIL ME WITH ANY DETAILS.

THANKS IN ADVANCE

4659. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:00:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb96144_7@corp.newsgroups.com>
Source record: 104375

Jim Kelley wrote:
> Cecil Moore wrote:
>>The net current is very close to zero because the forward and reflected
>>currents are very nearly equal and 180 degrees out of phase.

This is at the tip end of a dipole.

> Is that what you meant by:
>
> "For that general assumption to be true, the reflected current would
> have
> to equal the forward current on a standing-wave antenna. But we know it
> doesn't"?

This is apparently not at the tip end of a dipole.

> It's not clear whether you're making this point in recognition of the
> fact that wires are not lossless, or whether you're claiming it's
> somehow fundamental to the performance of a radiator.

Both, radiation is a "loss".

>>Of course, but like a transmission line, there is only one forward wave
>>and one reflected wave. All the multiple reflections are contained in
>>those two waves.
>
> Then apparently you've decided not to completely eschew making at least
> some steady state assumptions. Seductive indeed. ;-)

There are only two possible directions, forward and reverse, in which
energy can flow. Multiple reflections do not create any more directions.
I am not opposed to the steady-state solution and use it all the time. I am
opposed to people being seduced by the steady-state solution into believing
there is not such thing as forward and reflected waves even though standing
waves require forward and reflected waves.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4660. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:02:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fb961bf_7@corp.newsgroups.com>
Source record: 104376

CB_Oktopus_ wrote:

> Cecil Moore wrote:
>> I'm sorry, but what about getting a real antenna, maybe in the attic?
>> Bent pins have been known to catch fish, but fishhooks are superior.
>
> yes. walk and bay an antenna, and distroy the fun of building anyting
> your self. Keep up the good work mfc!!!

One can certainly build a real antenna. My statement had nothing to
do with build Vs buy.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4661. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:05:41 UTC
From: "David J. Windisch" <davidw@copper.net>
Message-ID: <3fb810a4_2@newsfeed.slurp.net>
Source record: 104394

Zoran:

Isn't the raping and eating of babies by liberals called partial-birth abortion ... and will you help stop these disgusting events?

David Windisch

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message news:3FB842B6.60207@get.lost...
> Clint wrote:
>
> > MORE bad news for liberals....
> >
> > Tax refunds next year are estimated to be up 27% from this
> > year due to tax cuts. Yet ANOTHER reason it must suck to
> > be a liberal in modern America.
>
>
> And the way those liberals rape the babies before eating them... disgusting!
>
>
>
>
> --
>
> Anti-spam measure: look me up on qrz.com if you need to reply directly
>

4662. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:16:12 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <gxdub.5504$Rk5.4737@newsread1.news.atl.earthlink.net>
Source record: 104377
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

20 bux hu?

You can built one out of a SO-239 coax connector, a aluminum L bracket. A U-bolt, and some welding wire/and or solid copper and some solder....maybe 5 bux at most.

Dan/W4NTI

"CommCtr1" <nospam@tome.com> wrote in message news:JTbub.76794$Ec1.4022875@bgtnsc05-news.ops.worldnet.att.net...
> Well you see gentlemen, after spending a day up on the roof, it appears I
> typed without proof reading.
> You would all be correct, how would you cut a 220mhz antenna to work on
> 144mhz????? Good question!
> So let me stand corrected and say, it can be cut for
> 440mhz..... NOT 144mhz.
> Thanks for noticing my mistake.....
>
> 73
>
> Lou
>
>

4663. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:20:51 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <DBdub.170950$mZ5.1204814@attbi_s54>
Source record: 104378
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

AWW ... you took all the fun out of the project :-)

DD

CommCtr1 wrote:

> Well you see gentlemen, after spending a day up on the roof, it appears I
> typed without proof reading.
> You would all be correct, how would you cut a 220mhz antenna to work on
> 144mhz????? Good question!
> So let me stand corrected and say, it can be cut for
> 440mhz..... NOT 144mhz.
> Thanks for noticing my mistake.....
>
> 73
>
> Lou
>
>

4664. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:35:31 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <85qirvcjnb8tknvtjnkartn2td7o6a63db@4ax.com>
Source record: 104379

On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:

>I recently made a TV antenna to receive Channel 5 using a paper clip
>and 3 feet of rolled up aluminum foil. It works pretty well, but
>there are these diagonal lines that keep "swimming" across the screen
>from left to right. Also, there's a little room for improvement in
>the picture. Does anyone know how I can improve my antenna to get a
>much clearer picture? Maybe I should use tin foil instead of aluminum
>foil or something like that? Any ideas?
>
>Thanks for all your help.

Do you have rabbit ears? They're about $5.99 at Radio Shack. Adjust
the length to about 3 feet per side, and then wiggle 'em around.

Bob
k5qwg

4665. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:45:37 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311171645.57a987b8@posting.google.com>
Source record: 104380

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<20366-3FB82FB6-271@storefull-2312.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "I can up my efficiency to 50 per cent by hanging a wire down from the
> dipole ends which I am not comfortable about---."
>
> Why would Art be uncomfortable about improving efficiency by hanging a
> wire down?
> Maybe he does not believe his model is correct. Maybe he doesn`t want
> some directivity change that comes with hanging a wire down. Maybe there
> is some physical problem with hanging a wire down.
>
> The problem with a loading coil is increased loss. Capacitance is
> usually low loss.

Richard
seem like a sentence got dropped,
What is it that you want to know ?
Are you suggesting using a capacitive coupling instead of
the use of an inductor.....
I think you need to rewrite the post so I can see what your needs are
Regards
Art

>
> As Yuri, K3BU has noted, there is much to be learned from reading
> ON4UN`s Chapter 9 about antenna loading even though everything regarding
> vertical antennas doesn`t translate readily to horizontal antennas.
>
> ON4UN includes horizontally polarized antennas in "Low-Band DXing". It`s
> easy to read, well illustrated, and full of good references. It helps if
> you want to design your own antenna because it tells why as well as how.
>
> Best regards, Richard Harrison, KB5WZI

4666. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 00:59:43 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311171659.22b59763@posting.google.com>
Source record: 104381

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<bp9e11$jq6$1@hercules.btinternet.com>...
> > Reg I tried to enter your page once but I am so computor incompetant.
>
> ---------------------------------------
>
> Art, I'm afraid there's not much hope for you then.
>
> Why not try keeping tropical fish ? It's very relaxing although it can be
> livened up by introducing just one pirana to the tank. ;o)
> ----
> Yours, Reg

-
Well Reg-
there is not really much to the inductance formular and I have made up
a couple of inductance pairs so that I can measure the gain difference
using the Freeth computor program which plots the radiation footprint.
As you stated earlier keep increasing the coil diameter...
Interesting post by Wes with the inductor articles. Now have to track
down the QST article. Reg, do you go into coil cross section phenomina
in your program
i.e. sharp corners?
Regarding fish, we have several species of pirana on this newsgroup
usually recognisable by the foot in the mouth.
Cheers
Art

4667. WANTED: Hygain Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:01:21 UTC
From: "Dr. William J. Schmidt, II" <bill@wjschmidt.com>
Message-ID: <vrirr3mkgsiaeb@corp.supernews.com>
Source record: 104382

Always looking for new / used/ crashed / abused / for parts.... Hygain antennas and parts.... specifically 205BA/CA, 155BA/CA, 105BA/CA and associated parts... I can remove the antennas for you. Reply via email.

--

Sincerely,

Dr. William J. Schmidt, II K9HZ & K9ZC

"Collector of Edison Wind-up Phonographs... Do you have one for me?"
Email: bill@wjschmidt.com
Alternate Email: wmschmidt@charter.net
WebPage: www.wjschmidt.com

4668. Re: *Pirhanas* in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:24:48 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311171724.73a82a65@posting.google.com>
Source record: 104384

David, leaving you out as one of the possibilities responsible
for throwing out this august group Give me one instance with
names of that which you are complaining about.

Actually some of those very same names have shamed other
people to leave this newsgroup and you will notice that
some of the language on this thread has already become
harsh and vindictive. So give me a name David, since
you are the first to come forward with the proverbial stone.
I.e. one without personal sin
Art
By the way what makes you think that these people are so
brittle that they will not return ?

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb9036c_3@corp.newsgroups.com>...
> David J. Windisch wrote:
> > Speaking of pirhanas in the tank, this humble lurker and scribe takes this
> > opportunity to thank and congratulate you pirhanas posting here for driving
> > the likes of ... et al., right off this reflector with your feeding frenzies
> > over triviae, minutiae, and inconsequential stuff.
>
> A larger question might be: Why do some (not all) of those guys stake their
> reputations and egos on that very "triviae, minutiae, and inconsequential stuff"?
>
> Some of those guys on your list disagree loud and long with each other, both
> sides determined never to admit a mistake of any kind. Many list their degrees
> and accomplishments as if those things are a vaccination against mistakes.
>
> Driving a person off a public unmoderated newsgroup is impossible. What causes
> people to leave this newsgroup under pressure is pride plus the heat in the kitchen.
>
> Do you think we really need a newsgroup guru upper class whose assertions are
> immune from other questioning minds?

4669. Re: no counterpoise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:38:11 UTC
From: drbob92031@aol.com
Message-ID: <20031117203811.28583.00000433@mb-m11.aol.com>
Source record: 104385

Why use a ground plane. If you ге on the boat in salt water use the ocean

4670. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:40:46 UTC
From: Noon-Air <noon-air@comcast.net>
Message-ID: <pv2dnQJDJpcC5SSiRVn-gw@comcast.com>
Source record: 104386
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

"Dan/W4NTI" <w4nti@get rid of this mindspring.com> wrote in message
news:gxdub.5504$Rk5.4737@newsread1.news.atl.earthlink.net...
> 20 bux hu?
>
> You can built one out of a SO-239 coax connector, a aluminum L bracket.
A
> U-bolt, and some welding wire/and or solid copper and some
solder....maybe
> 5 bux at most.

Too expensive....all you need is an SO-239 and a coffee can with a piece of
copper wire and some solder

> Dan/W4NTI
>
> "CommCtr1" <nospam@tome.com> wrote in message
> news:JTbub.76794$Ec1.4022875@bgtnsc05-news.ops.worldnet.att.net...
> > Well you see gentlemen, after spending a day up on the roof, it appears
I
> > typed without proof reading.
> > You would all be correct, how would you cut a 220mhz antenna to work on
> > 144mhz????? Good question!
> > So let me stand corrected and say, it can be cut for
> > 440mhz..... NOT 144mhz.
> > Thanks for noticing my mistake.....
> >
> > 73
> >
> > Lou
> >
> >
>
>

4671. Vet. with a reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:42:19 UTC
From: drbob92031@aol.com
Message-ID: <20031117204219.28583.00000434@mb-m11.aol.com>
Source record: 104387

Please e-mail directly to me as I very seldom read this news group. The question. Has any one had any experience with a reflector or director used with ground mounted verical? I do not want to go into phasing verts.
tnx es 73 de bob WA2EAW

4672. Re: Methods for ladder line feed on rotatable antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 01:45:28 UTC
From: drbob92031@aol.com
Message-ID: <20031117204528.28583.00000436@mb-m11.aol.com>
Source record: 104388

Think in terms of slip rings as a contacts between the ladder line and the feed
of the Yagi driven element.
Bob WA2EAW

4673. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:04:48 UTC
From: Michael <mixstat-donotspam@bigpond.net.au>
Message-ID: <47fub.15110$aT.15011@news-server.bigpond.net.au>
Source record: 104389

I actually meant to say induced currents not radiated since this is near field.

Given that the ACA's radiation guidlines talks about near fields and not far fields its probably appropriate to consider induced currents from open wire feeders to nearby people.

As most transceivers have an unbalanced output its just as easy to make it unbalanced at the antenna end of the transmission line anyway unless you want to use the transmission line as part of the antenna / impedance match. Then you can be reasonably sure there will be no radiation induced into humans near your transmission line and be in compliance with the ACA regulations (and safer for others I guess).

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fb8ec39$1_7@corp.newsgroups.com...
> Michael wrote:
> > Dont forget a balanced feedline radiates along the line.
>
> If the currents are balanced, most of the photons are
> re-absorbed by the free electrons. OTOH, if the currents
> inside a coax feedline are not balanced, an unbalanced
> feedline radiates along the line.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4674. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:14:26 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <qOWdnbFd5cYD7ySiU-KYhA@ctc.net>
Source record: 104383
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

> Well you see gentlemen, after spending a day up on the roof, it appears I
> typed without proof reading.
> You would all be correct, how would you cut a 220mhz antenna to work on
> 144mhz????? Good question!
> So let me stand corrected and say, it can be cut for
> 440mhz..... NOT 144mhz.
> Thanks for noticing my mistake.....

Typos do slip in. You could split the element about halfway and fold it out
the other way to make the elements longer.

4675. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:15:10 UTC
From: Michael <mixstat-donotspam@bigpond.net.au>
Message-ID: <Ogfub.15115$aT.14886@news-server.bigpond.net.au>
Source record: 104390

"Michael" <mixstat-donotspam@bigpond.net.au> wrote in message
news:47fub.15110$aT.15011@news-server.bigpond.net.au...
> I actually meant to say induced currents not radiated since this is near
> field.
>
> Given that the ACA's radiation guidlines talks about near fields and not
far
> fields its probably appropriate to consider induced currents from open
wire
> feeders to nearby people.

From memory it specifies maximum volts/area to the distance where person can gain access to the antenna.

It also mentions a maximum flux/area or it could be a certain induced current in some standard measurement device I think. I haven't looked at it for over a year now. It all doesn't matter too much when youre using coax anyway so then you can use the standard tables they give you.

4676. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:27:52 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FB983A8.AB912A9F@cwis.net>
Source record: 104391

Please post picture of you with your rabbit ears.
They are always good for a laugh or two...
'Doc

PS - If your ears aren't pierced, use the papper clip
method of attachment.

4677. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:32:00 UTC
From: Je Forget <je.forget@frenchconnection.fr>
Message-ID: <BBDEEECD.3C69%je.forget@frenchconnection.fr>
Source record: 104392

With winter fast approaching, and very few mild days remaining, I'm putting up the MQ-26 from TGM Communications. It certainly fits the area constraints and I've received several emails from owners offering nothing but praise and accolades for it, plus they are manufactured in a town an hour from here, so I can get it 'now.' If it's a dud, I'll change it out in the spring.

I'll post some performance reports here later after I've had a few months of playing with it.

Thanks again to all for the helpful advice.

Happy DX,
Pat, VE3PMK
London, Ontario, Canada

4678. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 02:53:47 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <%Qfub.230818$Fm2.231415@attbi_s04>
Source record: 104393

"Je Forget" <je.forget@frenchconnection.fr> wrote in message
news:BBDEEECD.3C69%je.forget@frenchconnection.fr...
> With winter fast approaching, and very few mild days remaining, I'm
putting
> up the MQ-26 from TGM Communications. It certainly fits the area
constraints
> and I've received several emails from owners offering nothing but praise
and
> accolades for it, plus they are manufactured in a town an hour from here,
so
> I can get it 'now.' If it's a dud, I'll change it out in the spring.
>
> I'll post some performance reports here later after I've had a few months
of
> playing with it.
>
> Thanks again to all for the helpful advice.
>
> Happy DX,
> Pat, VE3PMK
> London, Ontario, Canada
>

Pat:

I hope it works for you. I'd be VERY interested in hearing how it survives
the first ice storm.

Hope to catch you on the air.

Paul AB0SI

4679. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 06:45:50 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FB9C02F.8080609@get.lost>
Source record: 104395

David J. Windisch wrote:

> Isn't the raping and eating of babies by liberals called partial-birth
> abortion

Not really. There's no medical procedure called "partial-birth abortion"
- it's a political invention of the abortion opponents. It does not
apply only to the third trimester which is non-elective, anyway.

> ... and will you help stop these disgusting events?

Sure, as soon as I can find *one* abortion opponent who can honestly
answer "yes" to the following hypothetical scenario:

Your teenage daughter is pregnant as a result of rape, the fetus is
deformed and her life is in danger if the pregnancy is carried through
all the way. Do you still oppose abortion, either elective or
non-elective (i.e. this disgusting event)?

Typically, the answer is no, with a truckload of excuses why abortion
ceases to be murder when it comes to their own hypocritical asses. Even
the Pope himself authorized "baby murder" when it was the Catholic nuns
who wanted no children. Of course, you won't read about this in your
church bulletin.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4680. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 13:02:05 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <3FBA184D.E3422FB0@silverstar.com>
Source record: 104396
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

CommCtr1 wrote:
>
> Well you see gentlemen, after spending a day up on the roof, it appears I
> typed without proof reading.
> You would all be correct, how would you cut a 220mhz antenna to work on
> 144mhz????? Good question!
> So let me stand corrected and say, it can be cut for
> 440mhz..... NOT 144mhz.
> Thanks for noticing my mistake.....
>
> 73
>
> Lou

Ahhh, but using loading coils enables one to access multi bands with
one vertical element.

4681. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 13:04:35 UTC
From: Dean Arthur <dearthur@silverstar.com>
Message-ID: <3FBA18E3.4515FD6@silverstar.com>
Source record: 104397
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

Dan/W4NTI wrote:
>
> 20 bux hu?
>
> You can built one out of a SO-239 coax connector, a aluminum L bracket. A
> U-bolt, and some welding wire/and or solid copper and some solder....maybe
> 5 bux at most.
>
> Dan/W4NTI
>

Remember, most of these were bottle fed and have no concept of self-help.

You're a good samaritan. Now you'll be bombarded with requests to build
same for them for 5 bux shipping included!

4682. Re: Etching an antenna onto a circuit board?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 14:31:34 UTC
From: Alex Flinsch <alex@localhost.localdomain>
Message-ID: <slrnbrkbk4.7ta.alex@homer.linux1.lan>
Source record: 104398

In article <u2fjrvo8dp4rr80sehvma08007ae7mefqj@4ax.com>, Craig wrote:
> intends etching the antenna onto a printed circuit board and in a
> subsequent E-mail he asked whether the width of the foils should be
> the same as for regular rod elements.
>

Warning -- the following is reasoned guesswork before my second cup of coffee...

Since it is not really the width of the rod elements that is important, but rather the surface area (derived from the circumference 2*pi*r), I would think that the width of the foils on the pc board should correspond to the circumference of the rod elements, and should be calculated as Diameter*pi

4683. Re: Etching an antenna onto a circuit board?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 16:48:43 UTC
From: Pat's Sympatico <nobady@nowhere.nil>
Message-ID: <o4sub.9084$iT4.950234@news20.bellglobal.com>
Source record: 104399

I read about PCB strip antennas years back. From what I recall (subject to correction of course) the bandwidth of the device is a function of strip width (to a limit of course.) Also, if the strip is too narrow, the antenna impedance will be skewed. I suppose that's due to the velocity factor of the etched conductor. It's been quite a while since I've read up on any of this so my menory of it might be severly distorted and if so, please accept my apologies. An hour of surfing and searching should yield more than enough info.

Cheers,
Pat

4684. Re: Not enough clearance for a Log Periodic - Suggestions? :(

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 17:36:45 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fb90d56_2@newsfeed.slurp.net>
Source record: 104333

With the space limitations you describe, your best bet might be a 2-el
5-band quad...Take a look at GemQuad (fine Canadian product), and ask them
about ice loading. They're pretty tolerant.

- Mike KI6PR
El Rancho R.F., CA

"Pat's Sympatico" wrote
> But seriously, I know it's limited, and I knew that when I put the tower
up
> a month ago. It was the only place in the yard available. (big pool, two
> decks, hot-tub, pool-shed, and oodles of beautiful trees... again,
> everything is a trade off with suburban living.)
>
> I have read Log-Ps are not the be-all end-all antenna, but are good
> solutions when you want 'one' multipurpose antenna with some steerable
> directivity and an assortment of bands. And yes, any specialised
monobander
> will outperform most multipurpose devices. (what was that we were saying
> about trade-offs??? Darn near everywhere aren't they?)
>
> So, with all that said, I'm looking for the best compromise. The house
next
> door is 12 feet from the centre of the tower, so if I can keep the turning
> radius around 15', at the 42' height, it won't look to bad at all, AND I
can
> park the beam pointed either directly toward, or directly away from the
> building. That way, with a total boom length under 18 feet, it will be
> entirely in 'my' airspace when not in use.
>
> So the search continues for a something with a 18' or shorter boom, with a
> longest element no greater than 30', and won't droop too much with
moderate
> ice loading. I know the 'droop' of an element is a non-linear function
based
> on its length and the total ice load, but from a practical standpoint, on
> the longest element, how far down will it bow? I'm guessing if I paint the
> topside of the elements flat-black it will help with shedding the ice when
> the sun hits them.
>
> Thanks again for sharing the wisdom of the group...
>
> Pat, VE3PMK
> (please respond here as I am slowly getting the spambots under control.
> Thanks.)

>
>

4685. Re: MFJ 220mhz ground plane $20.00

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 18:04:14 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <yatub.6479$Rk5.3037@newsread1.news.atl.earthlink.net>
Source record: 104400
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio.swap,rec.radio.amateur.antenna,rec.radio.swap

"Dean Arthur" <dearthur@silverstar.com> wrote in message
news:3FBA18E3.4515FD6@silverstar.com...
> Dan/W4NTI wrote:
> >
> > 20 bux hu?
> >
> > You can built one out of a SO-239 coax connector, a aluminum L bracket.
A
> > U-bolt, and some welding wire/and or solid copper and some
solder....maybe
> > 5 bux at most.
> >
> > Dan/W4NTI
> >
>
> Remember, most of these were bottle fed and have no concept of self-help.
>
> You're a good samaritan. Now you'll be bombarded with requests to build
> same for them for 5 bux shipping included!

Sorry, I'm not in the antenna suppy business. Its up the the vast unwashed
to figure out how.

Dan/W4NTI

4686. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 18:16:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fba620f$1_6@corp.newsgroups.com>
Source record: 104401

Cecil Moore wrote:
> I am
> opposed to people being seduced by the steady-state solution into believing
> there is not such thing as forward and reflected waves even though standing
> waves require forward and reflected waves.

I also apologize if this particular dose of reality brought this thread to
a screeching halt.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4687. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 18:22:33 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vrkosveqpl8kb8@corp.supernews.com>
Source record: 104402

"Zoran Brlecic" <...WA7AA...@get.lost> wrote in message
news:3FB9C02F.8080609@get.lost...
> David J. Windisch wrote:

> Not really. There's no medical procedure called "partial-birth abortion"

One of the greatest bits of proof i've ever seen of denial.

Clint

--

45 Communist Goals for America

http://www.uhuh.com/nwo/communism/comgoals.htm

--

4688. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 18:25:21 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vrkp275h4p6e6f@corp.supernews.com>
Source record: 104403

"David J. Windisch" <davidw@copper.net> wrote in message
news:3fb810a4_2@newsfeed.slurp.net...
> Zoran:
>
> Isn't the raping and eating of babies by liberals called partial-birth
> abortion ... and will you help stop these disgusting events?
>
> David Windisch

Heh, it's quite ironic.... they want full legal rights to kill a child while
in the womb under the banners of "tissue mass", "personal liberty"
and "control of one's own body"...

... but take one that has commited vile disgusting offenses against
society such as mass murder and put them in the electric chair
and the left will gather en masse and protest putting them to death.

Absolutely backwards.

Clint
------

45 Communist Goals for America

http://www.uhuh.com/nwo/communism/comgoals.htm

--

4689. 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 19:10:45 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311181110.3c3f7b28@posting.google.com>
Source record: 104404

Hi.

I am working on building a TV antenna to receive channel 5, and I was wondering if plugging two 3 foot wires into a 2-way splitter would essentially be the same thing as rabbit ears in terms of functionality.

The splitter I am considering is on the right at:

http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F007%5F002%5F001%5F006&Page=1

Also, just out of curiosity, would it be any better if I used a 4 way splitter? I could have four 3 foot wires coming out of it to possibly improve the reception?

Thanks for all the help.

4690. Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 19:21:40 UTC
From: Northern Lights <philnospamharder@rhbank.com>
Message-ID: <1069183285.115652@rh9cache2>
Source record: 104405

I have a mundane question.

Does anyone have suggestions for installing ground rods in rocky soil? The topsoil on my property tends to be very shallow, at times only 12 in. deep. I would rather use earth ground and not go the route of an artificial ground.

I think I know the answer to my question but wanted to see if anyone out there had a silver bullet solution.

Phil, K4NE

4691. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 19:28:17 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBA72D1.C0EBDC88@uci.edu>
Source record: 104406

mfc wrote:
http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F007%5F002%5F001%5F006&Page=1

Anybody ever count how many cookies the Radio Shack site sets? I quit
at 50.

73, Jim AC6XG

4692. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 19:32:58 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpds88$6hp$1@newshost.mot.com>
Source record: 104407

No. The two "split" terminals are in phase. You need a balun. Get one of
the 75 to 300 ohm transformers & build a folded dipole.
Steve
k
9
d
c
i

"mfc" <mfc9327@aol.com> wrote in message
news:3599641a.0311181110.3c3f7b28@posting.google.com...
> Hi.
>
> I am working on building a TV antenna to receive channel 5, and I was
> wondering if plugging two 3 foot wires into a 2-way splitter would
> essentially be the same thing as rabbit ears in terms of
> functionality.
>
> The splitter I am considering is on the right at:
>
>
http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F007%5F00
2%5F001%5F006&Page=1
>
> Also, just out of curiosity, would it be any better if I used a 4 way
> splitter? I could have four 3 foot wires coming out of it to possibly
> improve the reception?
>
> Thanks for all the help.

4693. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 19:41:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBA75D6.D3717475@uci.edu>
Source record: 104408

Cecil Moore wrote:
> I am
> opposed to people being seduced by the steady-state solution into believing
> there is not such thing as forward and reflected waves even though standing
> waves require forward and reflected waves.

Say that in Sacramento, and some knucklehead legislator will pass a law
against it.

73, Jim AC6XG

4694. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 20:10:24 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <ormdnQMBYs084SeiRVn-uA@comcast.com>
Source record: 104409

"mfc" <mfc9327@aol.com> wrote in message
news:3599641a.0311181110.3c3f7b28@posting.google.com...
> Hi.
>
> I am working on building a TV antenna to receive channel 5, and I was
> wondering if plugging two 3 foot wires into a 2-way splitter would
> essentially be the same thing as rabbit ears in terms of
> functionality.
>
> The splitter I am considering is on the right at:
>
>
http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=C
TLG%5F007%5F002%5F001%5F006&Page=1

Google on "wilkinson combiner"

These splitters are lossy. Loss is not what you want in an antenna.
The device that closest matches what you're thinking of, is called a balun.
(balanced to unbalanced transformer)
With a balun in hand, you can use two 1/4 wave wires with the balun in the
middle to form a dipole
ntenna.. --------------------B----------------------
You'll have a hard time finding a 1-1 ratio balun for TV though. Most are
4-1 so you want to do a folded dipole, which matches the resulting 300 ohm
impedance fairly well.. (75 * 4 = 300)

/--\
\-------------------b--------------------/

Like that.

Again, google is your friend.
Antenna designs can be scaled by frequency.
A 300 MHz version of a 100 MHz antenna design, is 1/3 the size.

4695. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 20:43:08 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <bpe091$1j8o$1@f04n12.cac.psu.edu>
Source record: 104410

Hi Phil:

Two thoughts on your question. First it sound like your putting in the ground rod for RF grounding reasons. Ground rods are very poor RF grounds. Grounds rods are for lighting and electrical safety not RF. If you want a good RF ground plus electrical protection ground putting in a ground rod plus as many buried radials of what ever length you can manage will do the job much better.
Second, I have 6 ground rods in my tower installation. The ground here is rocky also, which made putting them in not something I looked forward to. In the end I used an electric jack hammer to put them in. It had a cup adapter in place of the normal bit. I started the rod by hand with a big hammer and then muscled the electric jack hammer up and finished the job. The hardest part was lifting the jack hammer up to reach the top of the ground rod. This is a lot easier if you have some help. The jack hammer belonged to a friend but I'm sure that a large rental store should have them.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Northern Lights" <philnospamharder@rhbank.com> wrote in message
news:1069183285.115652@rh9cache2...
> I have a mundane question.
>
> Does anyone have suggestions for installing ground rods in rocky soil?
The
> topsoil on my property tends to be very shallow, at times only 12 in.
deep.
> I would rather use earth ground and not go the route of an artificial
> ground.
>
> I think I know the answer to my question but wanted to see if anyone out
> there had a silver bullet solution.
>
> Phil, K4NE
>
>
>

4696. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 20:58:34 UTC
From: richardharrison@webtv.net
Message-ID: <20293-3FBA87FA-548@storefull-2317.public.lawson.webtv.net>
Source record: 104412

Cecil, W5DXP wrote:
"There are only two possible directions, forward and reverse in which energy can flow. Multiple reflections do not create any more directions."

True. Further, all the same-frequency, same-direction signals merge. So, as Cecil said, there are only two same-frequency signals on a transmission line, forward and reverse. The interference pattern these signals produce does not represent another signal.

Trying to use ordinary circuit analysis on standing-wave antennas is problematic, but it`s been tried in this thread. Here is what R.W.P. King wrote in "Transmission Lines, Antennas, and Wave Guides", King, Mimno, and Wing, 1945, on page 86:
"Inductance and capacitance as used in near-zone circuits with uniform current cannot be defined, and ordinary circuit analysis does not apply." This has not stopped efforts in this thread to analyze LC circuits as if we were dealing with low frequencies.

Best regards, Richard Harrison, KB5WZI

4697. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:05:12 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FBA899A.7090003@get.lost>
Source record: 104411

Clint wrote:

>>Not really. There's no medical procedure called "partial-birth abortion"
>
> One of the greatest bits of proof i've ever seen of denial.

You mean your not addressing the actual question and beating up on the
straw man instead?

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4698. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:11:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBA8B0E.8F1432D4@uci.edu>
Source record: 104413

Richard Harrison wrote:
>
> Cecil, W5DXP wrote:
> "There are only two possible directions, forward and reverse in which
> energy can flow. Multiple reflections do not create any more
> directions."
>
> True. Further, all the same-frequency, same-direction signals merge. So,
> as Cecil said, there are only two same-frequency signals on a
> transmission line, forward and reverse. The interference pattern these
> signals produce does not represent another signal.

So the claim is that the amplitude of the reflection being bandied about
is the sum of multiple reflections? I haven't seen any indication of
that. It appears to be simply the amplitude of the first reflection.
At least, that's the way it appears to me, the uninitiated.

73, Jim AC6XG

4699. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:20:14 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FBA8D21.2070906@get.lost>
Source record: 104414

Clint wrote:

> Heh, it's quite ironic.... they want full legal rights to kill a child while
> in the womb under the banners of "tissue mass", "personal liberty"
> and "control of one's own body"...
>
> ... but take one that has commited vile disgusting offenses against
> society such as mass murder and put them in the electric chair
> and the left will gather en masse and protest putting them to death.

If you bothered to investigate the issues in depth, instead of relying
on the simplistic pre-packaged sound bites from that hypocrite clown
Limbaugh radio show, perhaps you'd realize that none of this insane
raving about abortion, death penalty and especially taxes is a
black-and-white conservatives vs. liberals stand-off.
Of course, in this highly consumer-oriented culture, it is much easier
to let politicians and celebrities do your thinking for you. Hence the
demonization of the "liberals" straw man. High taxes: it's the liberals.
Abortion: it's the liberals. 9/11: it's the liberals. Cow died: it's the
liberals. Wife ran off with a milkman: it's the liberals.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4700. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:30:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fba8fa1_1@corp.newsgroups.com>
Source record: 104415

Richard Harrison wrote:
> Trying to use ordinary circuit analysis on standing-wave antennas is
> problematic, but it`s been tried in this thread. Here is what R.W.P.
> King wrote in "Transmission Lines, Antennas, and Wave Guides", King,
> Mimno, and Wing, 1945, on page 86:
> "Inductance and capacitance as used in near-zone circuits with uniform
> current cannot be defined, and ordinary circuit analysis does not
> apply." This has not stopped efforts in this thread to analyze LC
> circuits as if we were dealing with low frequencies.

Very true. The basic problem, as I see it, is in assuming that the standing-wave current only has one component. For standing-wave antennas, the standing-wave current must necessarily have two components, If and Ir, as explained by Balanis in _Antenna_Theory_, (page 489, 2nd edition).

In general, when forward waves and reflected waves exist in the circuit, lumped circuit analysis fails and distributed network analysis is the only method that yields the correct result. So even if one allows that the forward current magnitude is constant through a coil and the reflected current magnitude is constant through a coil, the net current magnitude will not be constant because of the phase differences in the two superposed currents at each end of the coil.

I've been told by the gurus that I can ignore the forward and reflected waves and still obtain the correct steady-state solution. A mobile bugcatcher coil on 75m seems to disprove that assertion. But I have been called a "Grasshopper" and thus apparently have a lot yet to learn.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4701. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:34:42 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBA9072.3A515BCE@cwis.net>
Source record: 104416

Phil,
In line with the previous suggestion, if you can't
go 'down', go side ways. 'Depth' isn't what does the
job.
'Doc

4702. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:36:26 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBA90DA.D3FFCD6F@cwis.net>
Source record: 104417

mfc,
You're just making an easy job much more complicated
than it needs to be. Build the antenna as suggested.
'Doc

4703. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:41:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fba9231_1@corp.newsgroups.com>
Source record: 104418

Jim Kelley wrote:
> So the claim is that the amplitude of the reflection being bandied about
> is the sum of multiple reflections? I haven't seen any indication of
> that. It appears to be simply the amplitude of the first reflection.
> At least, that's the way it appears to me, the uninitiated.

Shirley, you jest. Reference pages 17-20 in _T-Lines & Networks_ by Johnson.
Consider a T-line with an SWR of 5.8284:1 and a constant 100W Z0-matched
source. The forward power will be 100W, 150W, 175W, 187.5W, 193.75W,
196.875W, 198.4375W, ..., 200W. After steady-state is reached, the
reflected power is a constant 100W (sans modulation and noise).
--
73, Cecil http://www.qsl.net/w5dxp

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4704. Re: Are we a Democracy, or a Republic ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:46:45 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fba9369$1_1@corp.newsgroups.com>
Source record: 104319

Zoran Brlecic wrote:
> If you bothered to investigate the issues in depth, instead of relying
> on the simplistic pre-packaged sound bites from that hypocrite clown
> Limbaugh radio show, ...

If Rush Limbaugh was kidnapped, drugged, and an embryo was surgically implanted in his gut against his will, who thinks he would not have an abortion?
--
73, Cecil http://www.qsl.net/w5dxp

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4705. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 21:52:04 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBA9484.A691489A@uci.edu>
Source record: 104321

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > So the claim is that the amplitude of the reflection being bandied about
> > is the sum of multiple reflections? I haven't seen any indication of
> > that. It appears to be simply the amplitude of the first reflection.
> > At least, that's the way it appears to me, the uninitiated.
>
> Shirley, you jest. Reference pages 17-20 in _T-Lines & Networks_ by Johnson.
> Consider a T-line with an SWR of 5.8284:1 and a constant 100W Z0-matched
> source. The forward power will be 100W, 150W, 175W, 187.5W, 193.75W,
> 196.875W, 198.4375W, ..., 200W. After steady-state is reached, the
> reflected power is a constant 100W (sans modulation and noise).

Interesting reference. Wish I had it. He's showing re-reflections from
a Z0-matched source? I don't think I understand all I know about that.
:-)

73, AC6XG

4706. Conix 160 Meter Vertical --CQ

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 22:02:35 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <hCwub.7418$0K4.4885@lakeread04>
Source record: 104320

Can anyone explain to me how the vertical for 160 works as an "electrically quiet loop" (Dec. CQ). I must be missing something, it looks like a thick radiator, and the BW seems very optimistic?

Pete

4707. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 22:07:20 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpe57r$4uko$1@news3.infoave.net>
Source record: 104323

Bill, your not supposed to taunt the kids on the short bus...

"Bill Turner" <noway@nohow.com> wrote in message
news:61okrvg9n3m75tug4n5ercatunkfrmbgi3@4ax.com...
> On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:
>
> >Maybe I should use tin foil instead of aluminum
> >foil or something like that? Any ideas?
>
> --
>
> Troll-O-Meter rating: 8.5 out of a possible 10.
>
> Good job!
>
> --
> Bill, W6WRT
>

4708. Re: Etching an antenna onto a circuit board?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 22:07:34 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3FBA9801.7010700@comcast.net>
Source record: 104322

I wonder if the velocity factor, i.e. length, in the dipole would be
affected by the dielectric constant of the PCB?

I know that in microstrip transmission lines the Vf is inversely
proportional to the square root of the dielectric. This would be an
antenna with two different dielectrics; one, air: second PCB.

An alternative to etching the antenna, leaving copper for the antenna,
would be to etch the antenna away leaving the remainder of the copper
and tuning it as a 'Slot' antenna. This might have promise!

Deacon Dave, W1MCE
+ + +

Craig wrote:

> A passing acquaintance of my wife's has E-mailed me for assistance
> with calculating the element lengths for a UHF dipole he wishes to
> build. I gave him the required information, however, he apparently
> intends etching the antenna onto a printed circuit board and in a
> subsequent E-mail he asked whether the width of the foils should be
> the same as for regular rod elements.
>
> In any event, in my very limited experience, I've never heard of
> etching antennas onto a circuit board. Is this really possible, and if
> so, can I direct him to a suitable web site with more info.
>
> Craig

4709. Re: antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 22:56:18 UTC
From: jder8745@aol.com
Message-ID: <20031118175618.05710.00000474@mb-m13.aol.com>
Source record: 104324

I had an old Hoffman TV in Calif back in 1959. The antenna I had was a 20-inch length of hookup wire.

Pulled in lots of channels. When there was a ghost, I just moved the wire until it went away.

Jack K9CUN

4710. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 23:17:37 UTC
From: jder8745@aol.com
Message-ID: <20031118181737.05710.00000477@mb-m13.aol.com>
Source record: 104325

Howdy,

I never buy so-called "ground rods". Instead I use 3/4-inch Cu tubing and connect it to the end of my garden hose.

I turn on the water and push the end of the tubing into the ground. The water pressure makes it easy to push the rod into the ground.

HOWEVER: Depending on how "rocky" the soil is, it may be a little harder than if the soil is un-rocky. (It's a much better hint for softer soil.)

BTW Cu tubing is much cheaper than a ground rod.

73 de Jack, K9CUN

4711. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 23:41:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bpeanv$h7s$1@sparta.btinternet.com>
Source record: 104326

> BTW Cu tubing is much cheaper than a ground rod.
>
....

But it is still a waste of effort and money for a ground connection resistance of 50, 100, 200 ohms or more.

Go horizontal with radial wires. Shallow-buried. Or lay on the surface if that's all you can manage.

4712. Re: Etching an antenna onto a circuit board?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-18 23:58:07 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <c-OdneIeAr-JLyeiRVn-gw@comcast.com>
Source record: 104327

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:3FBA9801.7010700@comcast.net...
> I wonder if the velocity factor, i.e. length, in the dipole would be
> affected by the dielectric constant of the PCB?

Absolutely. Also the loss factor.

> I know that in microstrip transmission lines the Vf is inversely
> proportional to the square root of the dielectric. This would be an
> antenna with two different dielectrics; one, air: second PCB.

Yes :)

> An alternative to etching the antenna, leaving copper for the antenna,
> would be to etch the antenna away leaving the remainder of the copper
> and tuning it as a 'Slot' antenna. This might have promise!

Monopole, Yagi, LPDA and Patch are all commonly done on pcb material.

4713. Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 00:33:19 UTC
From: Joey <noone@nowhere.com>
Message-ID: <79elrvcnk3cub8bvivtquo956afhdi2h4q@4ax.com>
Source record: 104328

Hi,

I have a scanner (or whatever else I plug in to the coax at the time) fed by a discone that's about 8 feet from my 2m/440 large vertical antenna. I run at most 50W into the vertical, usually just 5W, and have yet to run into any major overload problems into the scanner. At most, it just stops recieving but I haven't blown anything yet, probably because it's a 120ft RG-8 run. lossy :) Anyway I'd like to put a pre-amp at the antenna on the recieve only feed and am worried that I could overload the pre-amp while transmitting on the other antenna. What to do here? Relocating it further away would be a last resort. Shutting the recieve side off during TX is fine. Is there some remote rf sensing auto coax disconnect device out there?

73
J

4714. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 00:41:48 UTC
From: Joey <noone@nowhere.com>
Message-ID: <10flrv4o50o22i116gt60vgj0d312bu5n1@4ax.com>
Source record: 104329

clearly, you need this
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F003%5F001%5F001%5F000&product%5Fid=15%2D1880

picks up signals from space, too

On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:

>I recently made a TV antenna to receive Channel 5 using a paper clip
>and 3 feet of rolled up aluminum foil. It works pretty well, but
>there are these diagonal lines that keep "swimming" across the screen
>from left to right. Also, there's a little room for improvement in
>the picture. Does anyone know how I can improve my antenna to get a
>much clearer picture? Maybe I should use tin foil instead of aluminum
>foil or something like that? Any ideas?
>
>Thanks for all your help.

4715. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 00:48:11 UTC
From: richardharrison@webtv.net
Message-ID: <27516-3FBABDCB-681@storefull-2313.public.lawson.webtv.net>
Source record: 104331

Art, KB9MZ wrote:
"Are you suggesting using a capacitive coupling instead of an inductor?"

The dipole is about the simplest standing wave antenna. Its system must be resonant to allow full current in the antenna.

The best arrangement for a dipole is a centerfed balanced pair of wires in a straight line that is self-resonant but this is only possible at discrete frequencies.

If an antenna is too short to be resonant, it may be resonated by adding to its inductance or its capacitance, or both, if the antenna can`t be lengthened.

My remark was only a reiteration of common knowledge. Coils are lossy and capacitors tend to be nearly lossless.

Cecil has shown how an all-wave system with small losses can be made that doesn`t even require a tuner. He uses a variety of selected ladder line lengths to maximize antenna current.

Another option is to use a balanced dipole with a balanced line connected with the transmitter through a tuner.

Bill Orr, W6SAI has a suggestion for reducing the range of impedances the tuner must handle. It is to make the sum of the dipole length and the feedline length into preferred sums. These are 110, 133, 177, or 212 feet. He shows how to make the dipole, balanced line, and tuner in his book "Wire Antennas". He calls the dipole, line, and tuner: "A Universal H-F Antenna System", to cover 3.5 to 29.7 MHz with one antenna.

Best regards, Richard Harrison, KB5WZI

4716. Hi-Par LJ-6 6meter beam info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 00:52:49 UTC
From: Rob W8CRZ <crandall@ee.net>
Message-ID: <SuLub.23$dI5.1@news.ee.net>
Source record: 104330

Hi all I have this beam and was trying to find out some info on it can
anyone tell me anything?
Thanks in advance
Rob W8CRZ

--
You can't make me act like an adult!

4717. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 01:04:44 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <moflrvk5bpts5sfuqm1gt7j6b4lt65urkn@4ax.com>
Source record: 104332

On Tue, 18 Nov 2003 13:52:04 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

|
|
|Cecil Moore wrote:
|>
|> Jim Kelley wrote:
|> > So the claim is that the amplitude of the reflection being bandied about
|> > is the sum of multiple reflections? I haven't seen any indication of
|> > that. It appears to be simply the amplitude of the first reflection.
|> > At least, that's the way it appears to me, the uninitiated.
|>
|> Shirley, you jest. Reference pages 17-20 in _T-Lines & Networks_ by Johnson.
|> Consider a T-line with an SWR of 5.8284:1 and a constant 100W Z0-matched
|> source. The forward power will be 100W, 150W, 175W, 187.5W, 193.75W,
|> 196.875W, 198.4375W, ..., 200W. After steady-state is reached, the
|> reflected power is a constant 100W (sans modulation and noise).
|
|Interesting reference. Wish I had it.

I have it and it doesn't say anything of the sort.

|He's showing re-reflections from
|a Z0-matched source? I don't think I understand all I know about that.
|:-)
|
|73, AC6XG

4718. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 05:12:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbafbf5$1_3@corp.newsgroups.com>
Source record: 104334

Jim Kelley wrote:
> Interesting reference. Wish I had it. He's showing re-reflections from
> a Z0-matched source? I don't think I understand all I know about that.

Nope, the reference is a DC transient buildup to steady-state but the
same principles apply to RMS values.
--
73, Cecil http://www.qsl.net/w5dxp

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4719. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 05:32:11 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbb007f_3@corp.newsgroups.com>
Source record: 104335

Wes Stewart wrote:

> Jim Kelley <jwkelley@uci.edu> wrote:
>
> |Cecil Moore wrote:
> |> Shirley, you jest. Reference pages 17-20 in _T-Lines & Networks_ by Johnson.

Now change the context from a DC example to an RF example:

> |> Consider a T-line with an SWR of 5.8284:1 and a constant 100W Z0-matched
> |> source. The forward power will be 100W, 150W, 175W, 187.5W, 193.75W,
> |> 196.875W, 198.4375W, ..., 200W. After steady-state is reached, the
> |> reflected power is a constant 100W (sans modulation and noise).
> |
> |Interesting reference. Wish I had it.
>
> I have it and it doesn't say anything of the sort.

I didn't quote anything it says, Wes, I just gave it as a reference. Then I
suggested a different example to be considered. When the SWR is 5.8284:1,
the reflected power is 1/2 of the forward power making mental calculations
easy. The RF example was out of my head, not out of the reference.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4720. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 05:32:45 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3FBB007C.ADEAC197@rickfrazier.com>
Source record: 104336

Phil:

Have any building projects coming up???

When I built my workshop, I tied the rebar perimeter together and ran a #6 copper wire in the trench. Also put a number of #12 wires under the vapor barrier (on top of the compacted fill, and below the plastic vapor barrier. Brought each wire down to a common point at the corner of the room that is now my Ham Shack. I'd guess there's somewhere over 700 feet of bare copper wire laying under there... The slab is 32 x 52 feet, and the individual copper wires range from 50 to 66 feet long, and they are cross connected at a couple of random places across the narrow dimension of the slab. It's clearly the best "ground" I've ever had.

There wasn't a ghost of a chance of driving conventional ground rods, as I live on solid Lava, which has what the locals call "Blue Rock" underlying (which is just more lava, but with higher density). The rock is so hard, it will stop a D-9 Caterpillar using a single claw ripper in it's tracks, even if they are only ripping less than a foot deep. Ripping and leveling a lot here takes more than a bit of time, particularly compared to dirt or mixed dirt and rock!

Even if I wasn't putting up a building, I'd be thinking about how I could get a decent grid of copper out there, even if I had to lay it out on the ground and put an inch of dirt on top and grow new grass.... If I ever move, I know I'll be doing something similar.

-_Rick AH7H

Northern Lights wrote:

> I have a mundane question.
>
> Does anyone have suggestions for installing ground rods in rocky soil? The
> topsoil on my property tends to be very shallow, at times only 12 in. deep.
> I would rather use earth ground and not go the route of an artificial
> ground.
>
> I think I know the answer to my question but wanted to see if anyone out
> there had a silver bullet solution.
>
> Phil, K4NE

4721. Home Made Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 08:33:31 UTC
From: Alen Desanic <alen.desanic@si.htnet.hr>
Message-ID: <bpfa0t$811$1@ls219.htnet.hr>
Source record: 104337

I tried to find some description about constructing and building 50-100 ft telescoping tower but without results. Maybe somebody can help me with useful links, PDF's, DOC's.....?

Thanks in advance!

Alen Desanic, 9A3MA

4722. Re: BPL a reality in my area now!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 11:59:22 UTC
From: w1rfi@aol.com
Message-ID: <20031119065922.29149.00000622@mb-m10.aol.com>
Source record: 104338

>Hmmm - I wonder ... presumably the BPL couplers are capacitors coupling
>appropriate RF from one leg of the power system to the next. Would they
>also couple spuriously-generated RF at similar frequencies?

Absolutely. The couplers I have seen inductively couple the BPL signal from the low-voltage wiring onto a single phase of the medium-voltage wiring. One manufacturer has provided an estimate that they have about 6 dB of loss. Right now, you and perhaps 3-4 neighbors share a common electrical-wiring noise pool. Their noise goes out their AC wiring and into yours. These couplers will create community-wide noise pools, taking all electrical noise -- BPL or other -- from house wiring, where it is radiated inefficiently, to overhead wiring. You guys know about transmission lines and antennas -- do the math.

>Will the entire BPL scheme spread all these other
>spurious emissions far and wide?

Yes, it will.

>And, by the way, since aircraft use AM, do they receive hash when they
>fly over BPL lines? Are our brethren in aviation potentially useful
>allies in this war?

http://www.arrl.org/news/stories/2003/11/14/101/?nc=1

73,
Ed Hare, W1RFI

4723. Re: TV antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 12:17:16 UTC
From: Phil <philip.bradway@verizon.net>
Message-ID: <gbJub.36262$hB5.35893@nwrdny02.gnilink.net>
Source record: 104339

Notice that they never give a noise factor!

Phil, KB2HQ

"Joey" <noone@nowhere.com> wrote in message
news:10flrv4o50o22i116gt60vgj0d312bu5n1@4ax.com...
> clearly, you need this
>
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CT
LG%5F003%5F001%5F001%5F000&product%5Fid=15%2D1880
>
> picks up signals from space, too
>
>
>
> On 17 Nov 2003 10:30:34 -0800, mfc9327@aol.com (mfc) wrote:
>
> >I recently made a TV antenna to receive Channel 5 using a paper clip
> >and 3 feet of rolled up aluminum foil. It works pretty well, but
> >there are these diagonal lines that keep "swimming" across the screen
> >from left to right. Also, there's a little room for improvement in
> >the picture. Does anyone know how I can improve my antenna to get a
> >much clearer picture? Maybe I should use tin foil instead of aluminum
> >foil or something like that? Any ideas?
> >
> >Thanks for all your help.
>

4724. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 14:53:35 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fba3288_4@newsfeed.slurp.net>
Source record: 104357

Phil, get a piece of PVC or ABS pipe, large enough to slide the ground rod into. Glue an adapter to the pipe that will allow you to connect it to a garden hose. With the ground rod inside the pipe, turn the water on, and let it drill the ground rod in for you. Unless we're talking solid rock, this works pretty well even with hardpan.

Uh, BTW, what are you grounding?

73,
Mike KI6PR
El Rancho R.F., CA

"Northern Lights" wrote
> I have a mundane question.
>
> Does anyone have suggestions for installing ground rods in rocky soil?
The
> topsoil on my property tends to be very shallow, at times only 12 in.
deep.
> I would rather use earth ground and not go the route of an artificial
> ground.
>
> I think I know the answer to my question but wanted to see if anyone out
> there had a silver bullet solution.
>
> Phil, K4NE
>
>
>

4725. Re: Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 16:14:04 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <VaqdnRGXGoBKCyaiRVn-iw@comcast.com>
Source record: 104340

Joey,

You will have to feed power to the preamp anyhow. So turn it off when the transmitter is on. You should be able to arrange it so that the preamp power goes off automatically when the transmitter is on. For good measure, you could put a relay at the preamp input to disconnect the antenna input when there is no power to the preamp.

Tam/WB2TT
"Joey" <noone@nowhere.com> wrote in message
news:79elrvcnk3cub8bvivtquo956afhdi2h4q@4ax.com...
> Hi,
>
> I have a scanner (or whatever else I plug in to the coax at the time)
> fed by a discone that's about 8 feet from my 2m/440 large vertical
> antenna. I run at most 50W into the vertical, usually just 5W, and
> have yet to run into any major overload problems into the scanner. At
> most, it just stops recieving but I haven't blown anything yet,
> probably because it's a 120ft RG-8 run. lossy :) Anyway I'd like to
> put a pre-amp at the antenna on the recieve only feed and am worried
> that I could overload the pre-amp while transmitting on the other
> antenna. What to do here? Relocating it further away would be a last
> resort. Shutting the recieve side off during TX is fine. Is there
> some remote rf sensing auto coax disconnect device out there?
>
> 73
> J
>

4726. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 16:22:25 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <df5nrvst1loua3mj5e536e2lah32rg1amm@4ax.com>
Source record: 104341

On Tue, 18 Nov 2003 23:32:11 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

|Wes Stewart wrote:
|
|> Jim Kelley <jwkelley@uci.edu> wrote:
|>
|> |Cecil Moore wrote:
|> |> Shirley, you jest. Reference pages 17-20 in _T-Lines & Networks_ by Johnson.
|
|Now change the context from a DC example to an RF example:
|
|> |> Consider a T-line with an SWR of 5.8284:1 and a constant 100W Z0-matched
|> |> source. The forward power will be 100W, 150W, 175W, 187.5W, 193.75W,
|> |> 196.875W, 198.4375W, ..., 200W. After steady-state is reached, the
|> |> reflected power is a constant 100W (sans modulation and noise).
|> |
|> |Interesting reference. Wish I had it.
|>
|> I have it and it doesn't say anything of the sort.
|
|I didn't quote anything it says, Wes, I just gave it as a reference. Then I
|suggested a different example to be considered. When the SWR is 5.8284:1,
|the reflected power is 1/2 of the forward power making mental calculations
|easy. The RF example was out of my head, not out of the reference.

Well then, I'm citing Einstein's Theory of Relatively, but I'm going
to use another example.

How about a DC voltage source and a switch connected to a Zo
transmission line terminated in R = 3*Zo. Sound familiar? (For those
without the text, it's Johnson's example)

Johnson says in part, "The first reflected wave will in turn be
reflected when it reaches the sending end. The terminating impedance
is *zero* (emphasis added) at the end....."

It's quite a leap from a DC situation with zero source impedance to a
RF situation with a matched source.

4727. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 16:53:17 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <bpg6hv$1d1$1@news.service.uci.edu>
Source record: 104342

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fbb007f_3@corp.newsgroups.com...
> I didn't quote anything it says, Wes, I just gave it as a reference. Then
I
> suggested a different example to be considered. When the SWR is 5.8284:1,
> the reflected power is 1/2 of the forward power making mental calculations
> easy. The RF example was out of my head, not out of the reference.

But how does that relate to the topic of multiple reflections? Perhaps if
you had just quoted the reference instead....?

73, Jim AC6XG

4728. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 17:00:59 UTC
From: jder8745@aol.com
Message-ID: <20031119120059.03468.00000534@mb-m29.aol.com>
Source record: 104343

Howdy,

If the currents in the two conductors are equal in amplitude and 180 degrees out of phase, there would be no significant rf field if you are a few interconductor distances away from the line.

73 de Jack, K9CUN

4729. What are the chances of BPL getting defeated?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 17:08:09 UTC
From: cns <private@private.com>
Message-ID: <3FBBA379.B5842FA3@private.com>
Source record: 104344

Are there any cases similiar to the BPL in the past?

If the FCC does allow widespread use of this BPL shit
how can it be appealed and to who?
A lawsuit in federal court I imagine.

4730. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 17:47:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbace9$1_4@corp.newsgroups.com>
Source record: 104345

Wes Stewart wrote:
> Johnson says in part, "The first reflected wave will in turn be
> reflected when it reaches the sending end. The terminating impedance
> is *zero* (emphasis added) at the end....."

Yep, that's why Walter Maxwell calls a Z0-match point a "virtual short"
i.e. a virtual *zero* impedance, because the results are similar. I
call that Z0-match a point of interference because IMO that is a
more accurate description of what is occurring than a "virtual short".

> It's quite a leap from a DC situation with zero source impedance to a
> RF situation with a matched source.

The source I chose for my example was a *constant power source*.

Assume the source is a 50 ohm signal generator with a circulator load
so Pfwd1 below is a constant 100 watts.

Source----50 ohm lossless coax--+---291.5 ohm lossless twinlead---50 ohm load
Pfwd1--> Pfwd2-->
<--Pref1 <--Pref2

Let time t1 be when the first non-zero Pref2 value arrives back at the '+'
point. tn is steady-state.

Pfwd1 Pref1 Pfwd2 Pref2
t0 100w 0w 0w 0w
t1 100w 50w 50w 25w
tn 100w 0w 200w 100w

If one plots the points between t1 and tn, the diagram will look much like
Johnson's. Pfwd2 steps up to 200w and Pref2 steps up to 100w.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

4731. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 17:50:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbad8b_4@corp.newsgroups.com>
Source record: 104346

Jim Kelley wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>The RF example was out of my head, not out of the reference.
>
> But how does that relate to the topic of multiple reflections?

How does the transient state relate to the topic of multiple
reflections????? Maybe I don't understand your question.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4732. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:00:13 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBBAFAD.A8AD956E@uci.edu>
Source record: 104347

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>The RF example was out of my head, not out of the reference.
> >
> > But how does that relate to the topic of multiple reflections?
>
> How does the transient state relate to the topic of multiple
> reflections????? Maybe I don't understand your question.

Is your assertion that multiple reflections occur only during the
transient period?

73, Jim AC6XG

4733. Re: Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:17:14 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpgc68mhb1@newshost.mot.com>
Source record: 104349

And short it to ground.
k
9
d
c
i

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:VaqdnRGXGoBKCyaiRVn-iw@comcast.com...
> Joey,
>
> You will have to feed power to the preamp anyhow. So turn it off when the
> transmitter is on. You should be able to arrange it so that the preamp
power
> goes off automatically when the transmitter is on. For good measure, you
> could put a relay at the preamp input to disconnect the antenna input when
> there is no power to the preamp.
>
> Tam/WB2TT
> "Joey" <noone@nowhere.com> wrote in message
> news:79elrvcnk3cub8bvivtquo956afhdi2h4q@4ax.com...
> > Hi,
> >
> > I have a scanner (or whatever else I plug in to the coax at the time)
> > fed by a discone that's about 8 feet from my 2m/440 large vertical
> > antenna. I run at most 50W into the vertical, usually just 5W, and
> > have yet to run into any major overload problems into the scanner. At
> > most, it just stops recieving but I haven't blown anything yet,
> > probably because it's a 120ft RG-8 run. lossy :) Anyway I'd like to
> > put a pre-amp at the antenna on the recieve only feed and am worried
> > that I could overload the pre-amp while transmitting on the other
> > antenna. What to do here? Relocating it further away would be a last
> > resort. Shutting the recieve side off during TX is fine. Is there
> > some remote rf sensing auto coax disconnect device out there?
> >
> > 73
> > J
> >
>
>

4734. 1.2Ghz antenna that can be cut for 160mtrs...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:20:12 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <wvOub.85252$Ec1.4232961@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104348
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

Now there's something to think about.....
Ya'll need to get over the 220 antenna deal, and get a life. I made a
f..... mistake, excuse the hell out of me!!
1.2ghz antenna for 160mtrs, now that's an antenna.
Nothing a modern day tuner can't take care of!!!

4735. Re: 1.2Ghz antenna that can be cut for 160mtrs...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:55:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <x0Pub.246164$HS4.2183078@attbi_s01>
Source record: 104350
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

A very easy problem to solve. [GRIN]

A 160 meter antenna is approximately 260 feet long.

A 1.2 GHz antenna is approximately 0.4 foot long.

Conclusion, the 1.2 GHz antenna is a 650 wavelength non terminated
Beverage Antenna.

Deacon Dave

CommCtr1 wrote:
> Now there's something to think about.....
> Ya'll need to get over the 220 antenna deal, and get a life. I made a
> f..... mistake, excuse the hell out of me!!
> 1.2ghz antenna for 160mtrs, now that's an antenna.
> Nothing a modern day tuner can't take care of!!!
>
>
>
>
>
>
>

4736. Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:55:37 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <J0Pub.488$Vu5.17667@twister.southeast.rr.com>
Source record: 104351

Perhaps this is off topic, but I was wondering if anyone else saw NOVA last night. (11/18/03) The program was about the reversing of polarity of Earth every few hundred thousand years. In the show, some of the scientists referred to Earth as a dipole with a magnetic field that alternates.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

4737. Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 18:55:54 UTC
From: nammys@netzero.com
Message-ID: <dace1f05.0311191055.6e9f4573@posting.google.com>
Source record: 104352

I have always heard that this is true, and that I should tune antennas for maximum field strength and not for minimum SWR. Why wouldn't they occur at the same time?

Nathan

4738. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 19:13:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gufnrv4lcchp2lgtgq528l85jo0b0ngomh@4ax.com>
Source record: 104353

On Wed, 19 Nov 2003 18:55:37 GMT, "Alan"
<alannc44@{nospam}ix.netcom.com> wrote:

>Perhaps this is off topic, but I was wondering if anyone else saw NOVA last
>night. (11/18/03) The program was about the reversing of polarity of Earth
>every few hundred thousand years. In the show, some of the scientists
>referred to Earth as a dipole with a magnetic field that alternates.
>
>Alan
>WN4HOG

Hi Alan,

And so?

Actually the program revealed through closer analysis that the earth
is a multipole (the anomalies) and that through the addition of all
poles (the anomalies) this creates an overall dipole behavior (when
interacted upon from space).

Much could be said of the standard halfwave antenna within/without the
near/far field regions.

73's
Richard Clark, KB7QHC

4739. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 19:22:52 UTC
From: Ken <wa0sbu@yahoo.com>
Message-ID: <0ggnrvs9lm7mkaq7bdtft84569sj2e7m6t@4ax.com>
Source record: 104354

On Wed, 19 Nov 2003 19:13:24 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 19 Nov 2003 18:55:37 GMT, "Alan"
><alannc44@{nospam}ix.netcom.com> wrote:
>
>>Perhaps this is off topic, but I was wondering if anyone else saw NOVA last
>>night. (11/18/03) The program was about the reversing of polarity of Earth
>>every few hundred thousand years. In the show, some of the scientists
>>referred to Earth as a dipole with a magnetic field that alternates.
>>
>>Alan
>>WN4HOG
>
>Hi Alan,
>
>And so?
>
>Actually the program revealed through closer analysis that the earth
>is a multipole (the anomalies) and that through the addition of all
>poles (the anomalies) this creates an overall dipole behavior (when
>interacted upon from space).
>
>Much could be said of the standard halfwave antenna within/without the
>near/far field regions.
>
>73's

>Richard Clark, KB7QHC

Thats what the the Movie "The Core" was based on. If you believe the
movie, reversing of polarity could cause earth quakes, storms and the
shuttle to crash.

Ken

4740. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 19:26:55 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpgg65$65vm$1@news3.infoave.net>
Source record: 104355

If the poles flip, will that make me a Yankee? Is my Southern heritage at risk? Will I need to turn my tin foil hat inside out? :>)

A bit of mental masturbation to think of all the consequences of day to day life if the magnetic poles once again flip... I did in fact do a bit of eyeball rolling during the espousing of some of the theories.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:gufnrv4lcchp2lgtgq528l85jo0b0ngomh@4ax.com...
> On Wed, 19 Nov 2003 18:55:37 GMT, "Alan"
> <alannc44@{nospam}ix.netcom.com> wrote:
>
> Actually the program revealed through closer analysis that the earth
> is a multipole (the anomalies) and that through the addition of all
> poles (the anomalies) this creates an overall dipole behavior (when
> interacted upon from space).
>
> Much could be said of the standard halfwave antenna within/without the
> near/far field regions.
>
> 73's
> Richard Clark, KB7QHC

4741. Re: 1.2Ghz antenna that can be cut for 160mtrs...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 19:27:45 UTC
From: Alex Flinsch <alex@localhost.localdomain>
Message-ID: <slrnbrnhbq.7gf.alex@homer.linux1.lan>
Source record: 104356
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

In article <x0Pub.246164$HS4.2183078@attbi_s01>, Dave Shrader wrote:
> A very easy problem to solve. [GRIN]
>
> A 160 meter antenna is approximately 260 feet long.
>
> A 1.2 GHz antenna is approximately 0.4 foot long.
>
> Conclusion, the 1.2 GHz antenna is a 650 wavelength non terminated
> Beverage Antenna.
>

I was thinking that it would be a looooooooooongwire, but same reasoning.

4742. DAK-AD Dipole Adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:03:28 UTC
From: tubal <mail@tubal.co.uk>
Message-ID: <G1Qub.10497$lm1.74757@wards.force9.net>
Source record: 104358

Anyone used the adapter with 40 m whips? Is it any good and is it best H or V mounted?

Cheers

4743. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:07:47 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbcdb8$1_7@corp.newsgroups.com>
Source record: 104359

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>How does the transient state relate to the topic of multiple
>>reflections????? Maybe I don't understand your question.
>
> Is your assertion that multiple reflections occur only during the
> transient period?

No, but during the transient period, they are visible and measurable.
Sans modulation and noise, they are invisible and unmeasurable during
steady-state. Some people say because they are invisible and unmeasurable
during steady-state, they cease to exist. But that's not me.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4744. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:10:57 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311191210.1a6e9a4c@posting.google.com>
Source record: 104360

So, where can I get a balun? Radio Shack doesn't seem to carry them.

'Doc <w5lz@cwis.net> wrote in message news:<3FBA90DA.D3FFCD6F@cwis.net>...
> mfc,
> You're just making an easy job much more complicated
> than it needs to be. Build the antenna as suggested.
> 'Doc

4745. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:13:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbcef4_7@corp.newsgroups.com>
Source record: 104361

Alan wrote:
> Perhaps this is off topic, but I was wondering if anyone else saw NOVA last
> night. (11/18/03) The program was about the reversing of polarity of Earth
> every few hundred thousand years. In the show, some of the scientists
> referred to Earth as a dipole with a magnetic field that alternates.

They just mean a magnetic field with a 1-North and 2-South pole. Every magnet
has at least two poles. So far, to the best of my knowledge, nobody (on earth)
has detected a magnetic monopole (although such is predicted by some theories).
--
73, Cecil http://www.qsl.net/w5dxp

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4746. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:15:27 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBBCF5F.846AA268@uci.edu>
Source record: 104362

Cecil Moore wrote:
>
> Jim Kelley wrote:
> >
> > Cecil Moore wrote:
> >>How does the transient state relate to the topic of multiple
> >>reflections????? Maybe I don't understand your question.
> >
> > Is your assertion that multiple reflections occur only during the
> > transient period?
>
> No, but during the transient period, they are visible and measurable.
> Sans modulation and noise, they are invisible and unmeasurable during
> steady-state. Some people say because they are invisible and unmeasurable
> during steady-state, they cease to exist. But that's not me.

Would you assert that what happens during the transient period and what happens during the steady state are even necessarily the same thing?

73, Jim AC6XG

4747. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:27:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbd25f$1_7@corp.newsgroups.com>
Source record: 104363

nathan wrote:
> I have always heard that this is true, and that I should tune antennas
> for maximum field strength and not for minimum SWR. Why wouldn't they
> occur at the same time?

I read somewhere that maximum power is transferred when the load is
the complex conjugate of the impedance presented to the load by the
transmission line. I think that was explained in "Transmission Lines"
by Chipman. Minimum SWR seems to occur when the load impedance is equal
to the characteristic impedance of the transmission line. These are not
necessarily the same points if Z0 has a reactive component.

Also, if the field strength measurement is not being made in the far
field, it may not be an accurate indication of far field radiation
which is what matters. Measured near field photons may simply recombine
with the antenna's free electrons and not contribute to far field
radiation.
--
73, Cecil http://www.qsl.net/w5dxp

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4748. Re: 80 meter loop feed point ?s

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:33:33 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbd3c1$1_7@corp.newsgroups.com>
Source record: 104365

Richard wrote:
> Any comments or critiques appreciated

FYI, It is against netnews guidelines to post binaries to an
ASCII-only newsgroup like rec.radio.amateur.*.
--
73, Cecil http://www.qsl.net/w5dxp

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4749. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:34:01 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBBD3B9.24E31D5C@cwis.net>
Source record: 104364

w4jle,
Funny you should mentiuon the 'tin' hat, just got
in a shipment of 'bipolar' tin hats. On sale soon!
'Doc

4750. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:35:40 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBBD41C.DD3B0B75@cwis.net>
Source record: 104366

mfc,
Why do you need a balun?
'Doc

4751. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:39:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbd50f_7@corp.newsgroups.com>
Source record: 104367

w4jle wrote:
> A bit of mental masturbation to think of all the consequences of day to day
> life if the magnetic poles once again flip... I did in fact do a bit of
> eyeball rolling during the espousing of some of the theories.

If I am not mistaken, the sun's magnetic poles reverse every 11 or 22 years.
The fact that the earth's magnetic poles have not reversed during human
history is only because of the meager time that humans have existed. But
it will be interesting to see all the compasses pointing South.
--
73, Cecil http://www.qsl.net/w5dxp

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4752. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:41:54 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a1eef6df2aae2a989687@news.west.earthlink.net>
Source record: 104368
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

In article <1oWdnVbFodc02yiiRVn-vA@centurytel.net>, "Dunc" <Dunc.F
(NoSpam)@CenturyTel.Net> says...
> Thanks Chris.(again!)
>
> Any suggestions for a good no ground plane antenna for both applications?

I think just recently I read of someone who solved the ground-plane
issue for mag-mount antennas by using a big pizza platter. Mag-mounted
the antenna to the platter, and clamped the platter to a Hummer that had
a fiberglass shell. Worked pretty good, according to the author.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

4753. Re: Newbie Question - I need something between 18" and a tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:41:55 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a1f541caa48c4f1989688@news.west.earthlink.net>
Source record: 104419

[This followup was posted to rec.radio.amateur.antenna and a copy was
sent to the cited author.]

In article <65d17d50.0311041101.579ca34a@posting.google.com>,
bill@dwyer.ws says...
> No, it's not one of _those_ spams. I just installed a PCS FM
> transmitter card
> http://www.pcs-electronics.com/en/products.php?sub=pc_fm_trans#Pci%20max
> without the 5 amp booster. My goal is to have a clean signal
> throughout the large (7500 sq ft, 4 levels) house I live in. Using the
> 18" piece of wire PCS provided a get a low level signal but I have to
> to boost it so much it gets noisy. I have tried a software
> limiter/filter (MLB4) and it helps a little but not enough.
>
> Is there a better antenna I can rig up without a lot of
> expense/difficulty.

I don't have an answer for you right offhand, but thanks for the lead on
the PCI MAX ULTRA card. Looks like an interesting little gadget. I
could use that this holiday season for piping Christmas music around the
house....

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

4754. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:48:20 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <o9ednR9q_pOCSiaiRVn-gg@comcast.com>
Source record: 104420

Your transmitter is designed to drive a load of 50 Ohms. This corresponds to an SWR of 1:1 if you are using 50 Ohm coax. A particular transmitte may very well put out more power into , say, 30 Ohms than 50, but it might not be linear, or the output transistors could overheat.

Tam/WB2TT

"nathan" <nammys@netzero.com> wrote in message
news:dace1f05.0311191055.6e9f4573@posting.google.com...
> I have always heard that this is true, and that I should tune antennas
> for maximum field strength and not for minimum SWR. Why wouldn't they
> occur at the same time?
>
> Nathan

4755. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:49:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbd789$1_7@corp.newsgroups.com>
Source record: 104421

Jim Kelley wrote:
> Would you assert that what happens during the transient period and what
> happens during the steady state are even necessarily the same thing?

Does some new particle of physics manifest itself during steady-state?
--
73, Cecil http://www.qsl.net/w5dxp

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4756. Re: Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:50:26 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <f8udnbprWIMASiaiRVn-vA@comcast.com>
Source record: 104422

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:bpgc68mhb1@newshost.mot.com...
> And short it to ground.
> k
> 9
> d
> c
> i
He means short the preamp input, not the antenna.

Tam/WB2TT

4757. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 20:51:50 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <88KdndpOnJu3RiaiRVn-vA@comcast.com>
Source record: 104424

"nathan" <nammys@netzero.com> wrote in message
news:dace1f05.0311191055.6e9f4573@posting.google.com...
> I have always heard that this is true, and that I should tune antennas
> for maximum field strength and not for minimum SWR. Why wouldn't they
> occur at the same time?
>
> Nathan

Simply speaking, resonance, and the closest impedance match, are frequently
different points.

My CB antenna on the car is that way. 100 ohms resistive when resonant.
I leave it resonant.
I would have preferred nearer to 50, but that's not a huge thing.

4758. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 21:02:25 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <avKdnd1nYPHxRyaiRVn-jg@comcast.com>
Source record: 104423

"mfc" <mfc9327@aol.com> wrote in message
news:3599641a.0311191210.1a6e9a4c@posting.google.com...
> So, where can I get a balun? Radio Shack doesn't seem to carry them.
Yes they do. Have the guy look up part numbers 15-1140, 15-1230, or 15-1143.

Tam/WB2TT

4759. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 21:08:04 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBBDBB4.BC1159CE@uci.edu>
Source record: 104425

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Would you assert that what happens during the transient period and what
> > happens during the steady state are even necessarily the same thing?
>
> Does some new particle of physics manifest itself during steady-state?

The two questions are not equivalent. Yours is ludicrous. Sorta like
this:
"Measured near field photons may simply recombine with the antenna's
free electrons and not contribute to far field radiation."

Onward through the fog.

73, Jim AC6XG

4760. Re: Why doesn't maximum field strength and minimum SWR occur at the...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 21:12:20 UTC
From: richardharrison@webtv.net
Message-ID: <10039-3FBBDCB4-6@storefull-2315.public.lawson.webtv.net>
Source record: 104426

Nathan wrote:
"Why wouldn`t they occur at the same time?"

Suppose you adjust the length of a 1/4-wave antenna to resonance. And, suppose its impedance is 37 ohms. The antenna has no reactance and is resonant but it does not match the coax in spite of zero reactance because the surge impedance of the coax is not 37 ohms.

Best regards, Richard Harrison, KB5WZI

4761. SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 21:29:47 UTC
From: Jon Gauthier <jon.gauthier@spam.killer>
Message-ID: <bpgncb$ra0$1@newslocal.mitre.org>
Source record: 104427

I have a Grundig YachtBoy SW/MW receiver that I'd like to connect to an external long-wire antenna, but I'd like to have the antenna on the roof, while I'd be listening in my office in the basement. I'd like to make a couple of simple baluns to match it to 75 ohm coax. What's the impedance that the receiver is expecting? It's just a phono plug input... Grundig's web site is, ah, not very technical...

--
Jon Gauthier

Given the likely reaction to an increase in
terror-alert level to "severe threat imminent,"
wouldn't a more appropriate alert color be brown?
-Brad Simanek on www.ruminate.com

4762. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 22:05:12 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpgphl$cd8$1@newshost.mot.com>
Source record: 104428

Finally. Someone answers the OP's question. "Di-Pole" two "poles".
Perhaps the OP was thinking of the fact that we all call a half wave, center fed antenna a "dipole" and this is an electrical thing - whereas the NOVA was talking only magnetic field (when referring to the "dipole" concept).
The term applies to either.
Steve, k,9,d,c,i,.

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fbbcef4_7@corp.newsgroups.com...
> Alan wrote:
> > Perhaps this is off topic, but I was wondering if anyone else saw NOVA last
> > night. (11/18/03) .... Earth as a dipole with a magnetic field that alternates.
>
> They just mean a magnetic field with a 1-North and 2-South pole. Every magnet
> has at least two poles. So far, to the best of my knowledge, nobody (on earth)
> has detected a magnetic monopole (although such is predicted by some theories).
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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4763. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 22:37:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbbf0c5$1_8@corp.newsgroups.com>
Source record: 104429

Jim Kelley wrote:
> Cecil Moore wrote:
>
>>Jim Kelley wrote:
>>>Would you assert that what happens during the transient period and what
>>>happens during the steady state are even necessarily the same thing?
>>
>>Does some new particle of physics manifest itself during steady-state?
>
> The two questions are not equivalent. Yours is ludicrous.

Well, if no new particles manifest during steady-state, why wouldn't
the transient state and the steady-state follow exactly the same laws
of physics? Does something supernatural happen at the transient-state
to steady-state threshold? Or not? (Hint: rhetorical question)

> Sorta like this:
> "Measured near field photons may simply recombine with the antenna's
> free electrons and not contribute to far field radiation."

Hmmmmm, I doubt that Feynman would find that statement to be "ludicrous".
I wonder if "ludicrous" is the term the priests used when they condemned
Galileo to house arrest for agreeing with Copernicus? :-) Photons re-
combining with electrons in the near field is a really simple concept.

On second thought, maybe you are inferring that the measured photons cannot
recombine? I would agree with that but the measured photons are negligible
compared to the total number of photons involved in the near field.
--
73, Cecil http://www.qsl.net/w5dxp

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4764. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 22:42:45 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpgro5fkp1@newshost.mot.com>
Source record: 104451

The wires are oriented 180 degrees 'out of phase', so they will then add.
Steve k'9'd'c'i

"JDer8745" <jder8745@aol.com> wrote in message
news:20031119120059.03468.00000534@mb-m29.aol.com...
> Howdy,
>
> If the currents in the two conductors are equal in amplitude and 180
degrees
> out of phase, there would be no significant rf field if you are a few
> interconductor distances away from the line.
>
> 73 de Jack, K9CUN

4765. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 22:53:00 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpgsbegfv1@newshost.mot.com>
Source record: 104450

I started this thread late on, so I don't know what the original issue was.
However, that bit about the reflections from the matched source really threw
me. Its been a long time since I was deep into this stuff in school (it all
made good sense then) & then at work, so I have to really strain the 'ole
brain here. Some of the comments do seem to take a turn off to the side.
With a 5.8:1 with half the power reflected at the load means that the
source'll get warmer to the tune of half the power. The use of a "constant
power" source seems strange to me.
And By the Way, you CAN use a DC circuit to show some of the same
concepts.

Steve, k\9\d\c\i

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fbafbf5$1_3@corp.newsgroups.com...
> Jim Kelley wrote:
> > Interesting reference. Wish I had it. He's showing re-reflections from
> > a Z0-matched source? I don't think I understand all I know about that.
>
> Nope, the reference is a DC transient buildup to steady-state but the
> same principles apply to RMS values.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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4766. Re: MFJ or Autek.....what a fool I am.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 22:58:28 UTC
From: PieroIK2VTJ <ik2vtjnonvogliospam@ardf.it>
Message-ID: <bpgsl0$1njfur$1@ID-83989.news.uni-berlin.de>
Source record: 104430

"Helmut Wabnig" <hXXXwabnig@aXXXon.at> ha scritto nel messaggio
news:mdjmqvshru1bebnhbefirkcinm161g7o44@4ax.com...

>
> Nowhere in the MFJ advertising they do mention,
> that on the 70 cm range (R+jX) measurements are NOT POSSIBLE.
>
> They fooled me.

Don't worry... you're not the only!
Anyway, consider also that Autek do (better to say DO NOT) the same in the
UHF band.

--

73 de IK2VTJ, Piero.
http://www.ardf.it
Togli/Remove 'nonvogliospam' dall'indirizzo/from address

4767. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 23:32:36 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBBFD94.E1C5977F@uci.edu>
Source record: 104431

Cecil Moore wrote:
> Well, if no new particles manifest during steady-state, why wouldn't
> the transient state and the steady-state follow exactly the same laws
> of physics? Does something supernatural happen at the transient-state
> to steady-state threshold? Or not? (Hint: rhetorical question)

Given your propensity for hyperbole, if we can't agree that there are differences between the transient and steady states, I don't think we'll have too much luck discussing the subject further.

> Hmmmmm, I doubt that Feynman would find that statement to be "ludicrous".

Do you really think you're in any postion to be able to speak for Feynman?

> On second thought, maybe you are inferring that the measured photons cannot
> recombine? I would agree with that but the measured photons are negligible
> compared to the total number of photons involved in the near field.

The photon and the electron were never really "combined" to begin with. Therefore, the notion that they "recombine" is somewhat off the mark. Things don't work that way. A photon could on the other hand impart some or all of its energy to an electron. Certainly the near field can be seen as affecting the fields within the conductor, thus having an effect on the charges within that conductor.

73, Jim AC6XG

4768. Re: Cell & VHF/UHF antenna suggestions for fiberglass RVAntenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 23:48:25 UTC
From: "news2.cableaz.com" <$$jfrow2@yahoo.com>
Message-ID: <3fbc014a$1_7@corp.newsgroups.com>
Source record: 104432
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.outdoors.rv-travel

You might look into the Wilson dual band cellular trucker antenna that works without needing a ground plane. Several mounts are available including one for RV's.

http://www.alternativewireless.com/cellular-antennas/wilson-antennas/wilson-trucker-antenna.html

"Dunc" <Dunc.F(NoSpam)@CenturyTel.Net> wrote in message news:SLOdnRt-TtX7pyii4p2dnA@centurytel.net...
> I just bought a new RV that has an all fiberglass shell. It also has
> thermopaine windows. (2 layers of glass with an air space between them.)
>
> In my older RV I used through the glass antennas with great success, but
> with the thickness and air space of the thermopaine windows they will not
> work.
>
> I am looking for suggestions for antennas that would preferable not require
> drilling into the shell, but if necessary the smaller hole the better.
> I my Cell company is Verizon and is a triband phone.
>
> My VHF needs are for 144-148
> and UHF 420-450
>
> Thanks
> 73
> Dunc, KL7RH
>
>
>

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4769. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-19 23:52:58 UTC
From: k9sqg@aol.com
Message-ID: <20031119185258.20183.00000625@mb-m04.aol.com>
Source record: 104433

There are several reasons why maximum field strength and minimum SWR don't occur at the same points, necessarily. The field strength can be considered part of the "efficiency" of the overall system. SWR just relates to the match between the feedline and the coax. Think of the dummy load example; it might exhibit close to a 1:1 SWR but radiates little power.

4770. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 00:13:06 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <IGTub.250745$Tr4.765105@attbi_s03>
Source record: 104434

Cecil Moore wrote:
> w4jle wrote:
>
>> A bit of mental masturbation to think of all the consequences of day
>> to day
>> life if the magnetic poles once again flip... I did in fact do a bit of
>> eyeball rolling during the espousing of some of the theories.
>
>
> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
> years.
> The fact that the earth's magnetic poles have not reversed during human
> history is only because of the meager time that humans have existed. But
> it will be interesting to see all the compasses pointing South.

That's it!! It has been proven!

THE SOUTH WILL RISE AGAIN

4771. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 00:24:53 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <pRTub.252209$Fm2.261447@attbi_s04>
Source record: 104435

nathan wrote:

> I have always heard that this is true, and that I should tune antennas
> for maximum field strength and not for minimum SWR. Why wouldn't they
> occur at the same time?
>
> Nathan

Maximum field strength, far field strength, occurs when the antenna is radiating the MAXIMUM power delivered to it. [Irms^2*Rradiation]

Minimum VSWR occurs when the load impedance of the antenna matches the characteristic impedance [Zo] of the transmission line.

At my previous location I had a very efficient antenna, 1/2 wavelength, fed with 600 ohm transmission line with a VSWR of more than 20:1.

The difference is between the radiation resistance [Rradiation] of the antenna and the feedpoint impedance of the antenna. They are NOT the same thing!

Deacon Dave, W1MCE

4772. Re: What are the chances of BPL getting defeated?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 00:27:32 UTC
From: Thierry <Thierry>, see http: //www.astrosurf.com/lombry/;
Message-ID: <3fbc0a78_1@news.vo.lu>
Source record: 104436

"cns" <private@private.com> wrote in message
news:3FBBA379.B5842FA3@private.com...
> Are there any cases similiar to the BPL in the past?
>
> If the FCC does allow widespread use of this BPL shit
> how can it be appealed and to who?
> A lawsuit in federal court I imagine.
>

Hi,
Send a email or quetsion by mail the following hams, they are lawyers too or know at what door to knock to:

David Funderburk, Congressman, alias K4TPJ,
http://www.qrz.com/callsign/K4TPJ
Judge Roger G. Strand, District Court judge, alias K7NYD,
http://www.qrz.com/callsign/K7NYD
George Pataki, traveler/writer having a strong lobbying attitude in favor of hams, alias WB2AQC, http://www.qrz.com/callsign/WB2AQC
Mike Ross, Congressman, alias WD5DVR, http://www.qrz.com/callsign/WD5DVR
etc.
a few among others US famous hams.

Thierry
ON4SKY
http://www.astrosurf.com/lombry/qsl-rfi-bpl.htm

4773. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 00:52:03 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <deSdnXyRQ-ihjSGiRVn-jg@comcast.com>
Source record: 104437

"'Doc" <w5lz@cwis.net> wrote in message news:3FBBD41C.DD3B0B75@cwis.net...
>
>
> mfc,
> Why do you need a balun?
> 'Doc

Somebody told him to build a foldeddipole. The balun is to presumably match
it to RG6.

Tam/WB2TT

4774. Re: Ground rods in rocky soi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 01:19:52 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <YEUub.4356$m84.2629742@news1.news.adelphia.net>
Source record: 104438

Mikey wrote:

> Phil, get a piece of PVC or ABS pipe, large enough to slide the ground rod
> into. Glue an adapter to the pipe that will allow you to connect it to a
> garden hose. With the ground rod inside the pipe, turn the water on, and
> let it drill the ground rod in for you. Unless we're talking solid rock,
> this works pretty well even with hardpan.
>
> Uh, BTW, what are you grounding?
>
> 73,
> Mike KI6PR
> El Rancho R.F., CA
>
> "Northern Lights" wrote
>
>>I have a mundane question.
>>
>>Does anyone have suggestions for installing ground rods in rocky soil?
>
> The
>
>>topsoil on my property tends to be very shallow, at times only 12 in.
>
> deep.
>
>>I would rather use earth ground and not go the route of an artificial
>>ground.
>>
>>I think I know the answer to my question but wanted to see if anyone out
>>there had a silver bullet solution.

I hear people speaking of simply laying wire on the ground being better
than a rod type ground.

Is this serious? I'm trying to envision this, and even if it works
electrically, it seems like rather dangerous advice in many ways.

- Mike KB3EIA -

4775. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 01:23:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fbc179f_5@corp.newsgroups.com>
Source record: 104439

Jim Kelley wrote:
> Cecil Moore wrote:

> Given your propensity for hyperbole, if we can't agree that there are
> differences between the transient and steady states, I don't think we'll
> have too much luck discussing the subject further.

Maybe you had better list those differences, one by one, so we can agree
or disagree.

> Do you really think you're in any postion to be able to speak for
> Feynman?

Just read one of his books. He says, "An electron emits or absorbs an
electron." "Absorbs" and "combines" sure seems like the same thing to me.

> Things don't work that way. A photon could on the other hand impart
> some or all of its energy to an electron.

When a photon imparts its energy to an electron, doesn't that "combine"
the two energies? What am I missing? Also, please describe how a photon
could impart half its energy to an electron. Is the result half a photon?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

4776. Bobtail curtain / half square ?s

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 01:42:41 UTC
From: Richard <rdavy30@earthlink.net>
Message-ID: <I_Uub.7395$n56.1804@newsread1.news.pas.earthlink.net>
Source record: 104440

Would like to hear from (or see) anyone who has built a bobtail curtain
or half square. I'm interested in your construction techniques.

TNX

Richard / N5YPJ

4777. Re: Ground rods in rocky soi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 02:00:36 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBC2044.D8CCFA86@cwis.net>
Source record: 104441

Mike,
Yes, it's serious, many times a ground radial system
will be 'better' than a ground rod(s). Given the rocky
ground as in the original post, a radial system would be
much preferable to ground rods.
Given that you get the wires deep enough to be missed
by the lawn mower, what's so dangerous about it?
'Doc

4778. Re: Ground rods in rocky soi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 02:40:43 UTC
From: Je Forget <je.forget@frenchconnection.fr>
Message-ID: <BBE193DA.3DD9%je.forget@frenchconnection.fr>
Source record: 104442

Two possibilities:

1. Try a ground plate. They have the same surface area as the rod, but you still have to bury it. However, you will still have to find an area you can dig a hole 1' x 1.5' x (as deep as you can get it, but deeper than 3' should not be necessary.) How is the moisture in the earth? If it's dry, you have yet another problem.

2. Buy a 1/2" x 10' copper pipe, thick wall. Solder on a tee (sideways) and cap the top side, and mount a hose fitting on the perpendicular opening and attach your garden hose. Cut the 'drilling' end of the pipe off on a slight angle. (30 degrees?) Now, use a rubber mallet and some finesse, turn on the water and see if you can coax it down as far as possible. If you hit a big flat rock surface, you're buggered, but if with a little luck you might get at least 8+ feet of it into the earth.

Good luck!

Pat

4779. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 03:13:28 UTC
From: Leo Baumann <ib.baumann@t-online.de>
Message-ID: <bphbgo$q7r$03$1@news.t-online.com>
Source record: 104443

i think, if there is no koax-input, You don't need a balun. The Grundig Satellit 600 has both, a 75 Ohm koax- and a high-impedance-input.

greeting Leo Baumann

www.leobaumann.com
ib@leobaumann.com

4780. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 03:17:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uvborvcpf3v9s97vulc2o14f29aar5pa6u@4ax.com>
Source record: 104444

On Wed, 19 Nov 2003 16:29:47 -0500, Jon Gauthier
<jon.gauthier@spam.killer> wrote:

>I have a Grundig YachtBoy SW/MW receiver that I'd like to connect to an
>external long-wire antenna, but I'd like to have the antenna on the
>roof, while I'd be listening in my office in the basement. I'd like to
>make a couple of simple baluns to match it to 75 ohm coax. What's the
>impedance that the receiver is expecting? It's just a phono plug
>input... Grundig's web site is, ah, not very technical...

Hi Jon,

The matching doesn't really matter all that much for a receiver,
unless it is through an antenna tuner (quite useful even for casual
SWL). This cuts down on intermods and desense caused by local AM
stations (you would be surprised how much they can hammer your DX
without being heard).

On the other hand, the advantage of coax (50/75 Ohm) is in isolating
the noisy environment of the home from the signal path by allowing the
antenna to be remote. Using a feedpoint choke insures that noise does
not get into the picture. That choke can be in the form of 6-10 turns
of coax in a 4-8" diameter, or using a HAM 1:1 Current Balun
(generally 10-25 ferrite beads that fit over the jacket of the coax
cable at the feedpoint end OR the coax wound through a large ferrite
torus 3-5 times).

73's
Richard Clark, KB7QHC

4781. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 03:26:45 UTC
From: Leo Baumann <ib.baumann@t-online.de>
Message-ID: <bphc9m$r0i$03$1@news.t-online.com>
Source record: 104445

Hi,

no question, minimum SWR results maximum power on air.

greeting Leo Baumann

4782. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 04:07:59 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bphen0$6m01$1@news3.infoave.net>
Source record: 104446

Nonsense! I can give you any number of cases where your statement is false.

"Leo Baumann" <ib.baumann@t-online.de> wrote in message
news:bphc9m$r0i$03$1@news.t-online.com...
> Hi,
>
> no question, minimum SWR results maximum power on air.
>
> greeting Leo Baumann
>
>

4783. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 04:39:55 UTC
From: tdonaly@aol.com
Message-ID: <20031119233955.18993.00000667@mb-m18.aol.com>
Source record: 104447

Dave Shrader wrote,
>
>>
>> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
>> years.
>> The fact that the earth's magnetic poles have not reversed during human
>> history is only because of the meager time that humans have existed. But
>> it will be interesting to see all the compasses pointing South.
>
>
>That's it!! It has been proven!
>
>THE SOUTH WILL RISE AGAIN

Which direction in outer space is up?
73,
Tom Donaly

4784. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 04:41:03 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <FuqdnZk_WvtP2iGiRVn-hA@comcast.com>
Source record: 104448

"Leo Baumann" <ib.baumann@t-online.de> wrote in message
news:bphc9m$r0i$03$1@news.t-online.com...
> Hi,
>
> no question, minimum SWR results maximum power on air.

Fits the definition of a dummy load.. Minimum SWR.
Not much radiation there, though.

4785. Re: Home Made Tower

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 06:41:40 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3FBC6224.4BBF4568@rickfrazier.com>
Source record: 104449

Alen:

Given the Sue-happy lawyers out there, I doubt you are going to get much information because of the worry about liability.

In most areas of the US, you wouldn't be able to put up a homemade tower without an engineering review. At least, if you did put one up that wasn't engineered and approved by the local building department, if anything ever happened and it caused damage to your (or even worse, a neighbor's) property, not only would your insurance company fail to pay, but you would likely be sued by everyone within sight.

sigh.... Such is the current legal situation here, at least. Depending on the liability laws where you live, and the permit requirements with your local governmental authority, it may not be much of an issue.

Having welded up a few non-telescoping towers many years ago before the lawyers got so aggressive, I know it is definitely possible to make a decent tower reasonably inexpensively. It shouldn't be all that much more difficult to make one telescope. If you own or have access to an appropriate welder, a nice, level, burn-proof area for construction, and an inexpensive supply of raw materials, you may do well. However, if you'll be paying someone else to do the welding, or supplies aren't available at a good price, perhaps a commercial tower would be less expensive in the end. (If you need to get an engineering stamp on the design, and inspection afterwards, don't forget to add these to the project total.)

Good Luck!
--Rick AH7H

Alen Desanic wrote:

> I tried to find some description about constructing and building 50-100 ft
> telescoping tower but without results. Maybe somebody can help me with
> useful links, PDF's, DOC's.....?
>
> Thanks in advance!
>
> Alen Desanic, 9A3MA

4786. Re: 80 meter loop feed point ?s

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 06:49:50 UTC
From: Rick Frazier <rick@rickfrazier.com>
Message-ID: <3FBC640E.C46B4A84@rickfrazier.com>
Source record: 104452

Richard:

I don't know why it would be a problem, as the amount of "loop back" is a very small portion of the loop. Similar looping is done on a number of antenna types to connect to strain insulators without noticeable effect.

As the wire is already insulated, the function of the insulator is merely strain relief, and it could have been made of nearly anything that is non-porous and non-metallic without significant effect on the antenna performance.

-_Rick AH7H

Richard wrote:

> I recently put up a 80 meter horizontal loop. I was given a 1000' roll
> of "Tuff-Hide super flex" wire which is a #14 wire with a very thick
> insulation, spec'd to 15 kv which is what the loop is made of. I used a
> screw in knob insulator as the feed point insulator, I needed something
> strong due to windy conditions. In attaching the wires to the insulator
> I looped the wires through the insulator and doubled them back on
> themselves and then used tie wraps to hold the wire in place. SEE
> ATTACHMENT. So far the antenna has worked well. My question is - Is
> there a problem in my feed point?, looping the wire back on itself. The
> wire is very tough which is needed here but it also doesn't leave many
> options for attaching it to a feed point insulator.
>
> Any comments or critiques appreciated
>
> Richard / N5YPJ

4787. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 07:35:53 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2003.11.20.07.36.09.140614@spam.spam>
Source record: 104453

On Tue, 18 Nov 2003 14:21:40 -0500, Northern Lights wrote:

> I have a mundane question.
>
> Does anyone have suggestions for installing ground rods in rocky soil? The
> topsoil on my property tends to be very shallow, at times only 12 in. deep.
> I would rather use earth ground and not go the route of an artificial
> ground.

I used a rotary impact drill in my rocky soil. I had to grind a littl off
of the rod to get it to fit but worked fine.

BTW, don;t use the RS ground rod. Very thin plating

4788. Re: Theological Rant

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 10:40:58 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <XS0vb.18361$cX1.6769@fed1read02>
Source record: 104454

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fba9369$1_1@corp.newsgroups.com...
> Zoran Brlecic wrote:
> > If you bothered to investigate the issues in depth, instead of relying
> > on the simplistic pre-packaged sound bites from that hypocrite clown
> > Limbaugh radio show, ...
>
> If Rush Limbaugh was kidnapped, drugged, and an embryo was surgically
> implanted in his gut against his will, who thinks he would not have an
> abortion?

Would that be a human embryo, or......?

Ed
WB6WSN

4789. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 10:45:28 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <9X0vb.18362$cX1.11268@fed1read02>
Source record: 104455

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20031119233955.18993.00000667@mb-m18.aol.com...
> Dave Shrader wrote,
> >
> >>
> >> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
> >> years.
> >> The fact that the earth's magnetic poles have not reversed during human
> >> history is only because of the meager time that humans have existed.
But
> >> it will be interesting to see all the compasses pointing South.
> >
> >
> >That's it!! It has been proven!
> >
> >THE SOUTH WILL RISE AGAIN
>
> Which direction in outer space is up?
> 73,
> Tom Donaly

Opposite of "down".

Ed
WB6WSN

4790. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 10:48:40 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <8_0vb.18363$cX1.10045@fed1read02>
Source record: 104456

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fbbd50f_7@corp.newsgroups.com...
> w4jle wrote:
> > A bit of mental masturbation to think of all the consequences of day to
day
> > life if the magnetic poles once again flip... I did in fact do a bit of
> > eyeball rolling during the espousing of some of the theories.
>
> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
years.
> The fact that the earth's magnetic poles have not reversed during human
> history is only because of the meager time that humans have existed. But
> it will be interesting to see all the compasses pointing South.
> --
> 73, Cecil http://www.qsl.net/w5dxp

Except, of course, in the Dixie, where all compasses will point toward Cuba.

Ed
WB6WSN

4791. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 10:53:12 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <o21vb.18364$cX1.9706@fed1read02>
Source record: 104457

"K9SQG" <k9sqg@aol.com> wrote in message
news:20031119185258.20183.00000625@mb-m04.aol.com...
> There are several reasons why maximum field strength and minimum SWR don't
> occur at the same points, necessarily. The field strength can be
considered
> part of the "efficiency" of the overall system. SWR just relates to the
match
> between the feedline and the coax. Think of the dummy load example; it
might
> exhibit close to a 1:1 SWR but radiates little power.

A dummy load is also physical proof of the existence of an isotropic
radiator (albeit a rather poor radiator <g>).

Ed
WB6WSN

4792. Re: Bobtail curtain / half square ?s

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 11:26:13 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <r19prvgncku4uj21unu1ual072i9je0mlp@4ax.com>
Source record: 104458

On Thu, 20 Nov 2003 01:42:41 GMT, Richard <rdavy30@earthlink.net>
wrote:

>Would like to hear from (or see) anyone who has built a bobtail curtain
>or half square. I'm interested in your construction techniques.
>
>TNX
>
>Richard / N5YPJ

Hi Richard,

I buitl a bobtail a lot of years ago for Forty meters worked great..
but then I was on an island surround by salt water.. what is it your
asking?

Construction was fairly straight forward.. 1/4 wave vertical sections
sperated by Halfwave horizotal sections mine was fed throut a tanks
circut at the center element.

73 Dave

4793. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 12:35:55 UTC
From: Jer <abuse@supernews.com>
Message-ID: <Ly2vb.59795$pE3.32037@twister.socal.rr.com>
Source record: 104459

Yea, but the South of a magnet is based on the earth's south/north relationship, so if earth's magnet field flips, the magnet label would also flip to maintain uniformity since any reference is relative anyway: thus the south will never rise again...

Besides the dip-gyrocompass is used for modern navigation and works off of the center of the earth's rotation because the magnetic center is off. Thus if earth's magnetic field reverses, there will be little if any effect on "TRUE" north or south, GPS or navigation except for birds, insects and so on. And they will adapt quickly too. Again, the south will never rise again....

So there!!!!!!!

"Ed Price" <edprice@cox.net> wrote in message
news:9X0vb.18362$cX1.11268@fed1read02...
>
> "Tdonaly" <tdonaly@aol.com> wrote in message
> news:20031119233955.18993.00000667@mb-m18.aol.com...
> > Dave Shrader wrote,
> > >
> > >>
> > >> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
> > >> years.
> > >> The fact that the earth's magnetic poles have not reversed during
human
> > >> history is only because of the meager time that humans have existed.
> But
> > >> it will be interesting to see all the compasses pointing South.
> > >
> > >
> > >That's it!! It has been proven!
> > >
> > >THE SOUTH WILL RISE AGAIN
> >
> > Which direction in outer space is up?
> > 73,
> > Tom Donaly
>
> Opposite of "down".
>
> Ed
> WB6WSN
>

4794. Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 14:08:01 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bpihut$1nm0mu$1@ID-175933.news.uni-berlin.de>
Source record: 104460

A fairly elaborate paper about transmission line waves and impedances is linked below, and might be good reading for some posters to this NG who believe that standing waves do not exist.

http://home.sandiego.edu/~ekim/e194rfs01/tlsmthek.pdf

RF

4795. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 14:09:42 UTC
From: emma_hentenna@hotmail.com
Message-ID: <7d290799.0311200609.16c7ca08@posting.google.com>
Source record: 104461

Tom,

thank you for your comments.
I will try to make it more clear.
These are some results I arrived at before
I start its construction and carry out the measurements.
Firstly, my aim was to find the exact place of the driven-element
where the SWR is lowest.
I used RICHWIRE for my simulation.This program has an upper limit
for the wire radius.So I had to make two categories of diagams,
one for wire radius 0.00037 [wl], which is rather not realizable,
and one for 0.0037 [wl] ignoring the programs criteria.
I ended up that the Hentenna is unfortunately a narrow band antenna.
So it would be rather difficult to build it.
What I am working on now, is changing the antennas dimensions
so that I would come to an even lower SWR and a broader bandwidth.

Emma

"Emma" <emma_hentenna@hotmail.com> wrote in message news:<bou512$3rd$1@nic.grnet.gr>...
> Yes,"a" in the diagram below is the wire radius.
>
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> /Hentenna%20Geometry.htm
>
> My design results, for two different radius values,
> of R, X, Z, Rho, SWR and Directivity, as they vary with the driving element
> position,
> are shown at
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaA/Henten
> naA.htm
>
> and
>
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaB/Henten
> naB.htm
>
> I would be most grateful if you could have a look at these results and make
> any comments.
>
> I would also appreciate any reference you may point at, in addition to those
> I collected at
>

> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/References/refer
> ences.htm
>
> Thank you in advance for your time,
>
> Emma
>
>
>
> "Tom Bruhns" <k7itm@aol.com> wrote in message
> news:3200347.0311111603.36412349@posting.google.com...
> > (I assume "a" in the diagram you linked to is the wire radius or
> > diameter, though it probably is not critical.)
> >
> > Yes, it appears that it would be best if the feed is balanced. A
> > balun to transform from an unbalanced feed to a balanced one is a good
> > idea for this antenna. You can put the balun at the antenna, or some
> > distance away and feed from the balun to the antenna with balanced
> > line, if the line is arranged symmetrically with respect to the
> > antenna. It would also be good to know the approximate feedpoint
> > impedance of the antenna. An eznec (or similar) model of the antenna
> > should give you an idea about the feedpoint impedance. If you use
> > coaxial feedline to the balun, which connects in turn directly to the
> > antenna, and if you dress the feedline so it runs away from the
> > antenna perpendicular to the wire where the feed point is, a single
> > balun is likely enough, but if the feedline runs away from the antenna
> > at an angle, it may be advisable to also use a choke-type balun
> > perhaps 1/4 wavelength from the feedpoint. On the other hand, I would
> > not expect enough gain from this antenna that it would matter a lot,
> > and you may do fine not using a balun at all and just letting the
> > feedline radiate a little.
> >
> > Cheers,
> > Tom
> >
> > "emma" <emma_hentenna@hotmail.com> wrote in message
> news:<booqk5$4ef$1@nic.grnet.gr>...
> > > In the picture below appears the geometry of the Hentenna.
> > > No constructional details are given.
> > >
> > >
> http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/HentennaGeometry
> > > /Hentenna%20Geometry.htm
> > >
> > > However I can use a balun to connect the coaxial line with the
> connector.
> > > Because of the skin effect there is current in the interior and the
> exterior
> > > of the conductor.
> > > Firstly this current is only superficial.A part of it ends into one of

> two
> > > wires.
> > > As result we connect an unbalanced system(coaxial line) with a balanced
> > > one(conductor).
> > > In order to avoid this we use a balun which is a geometry transformer.
> > >
> > > I ask for more comments.
> > >
> > > Emma

4796. external FM antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 14:21:33 UTC
From: Bill East <beast@pcs.mb.ca>
Message-ID: <k74vb.14063$f7.703353@localhost>
Source record: 104462

I have a portable am/fm/sw handheld type of radio with a 12 inch telescopic whip aerial.
Is there any easy method to connect it to my outside on the roof FM antenna . Tried wrapping the center conductor from the outside FM antenna which is 75 ohm coax but only improved a little . Do I need a transformer perhaps.
thanks,
Bill

4797. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 15:20:18 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <RY4vb.254475$HS4.2297857@attbi_s01>
Source record: 104463

Severely SNIPPED

> When a photon imparts its energy to an electron, doesn't that "combine"
> the two energies? What am I missing? Also, please describe how a photon
> could impart half its energy to an electron. Is the result half a photon?

A photon is modeled as energy as a function of wavelength.

There are high energy photons, gamma rays. [energies at 0.5 MeV and higher]

There are medium energy photons, X rays. [energies at 0.5 KeV to 0.5 MeV]

There are low energy photons, radio [EM] waves. [Energies below 0.05 KeV]

Electrons are bound in their atomic orbits with energies from a few tens of eVs to about 300 KeV. [My cross section tables were retired when I was.][And these energy levels are different for all materials.]

Apply conservation of energy, under the poor assumption of a 100% absorption factor [actually a probability distribution is more appropriate] and it's easy to see that gamma rays surrender ONLY a portion of their energy as they interact with electrons. Elementary Example: 1 MeV photon interacts with and 100% ionizes a H atom releasing 2 electrons totaling about 40 KeV. So, the forward traveling photon's energy changed from 1 MeV to 960 KeV. [i.e. a change in wavelength occurred for the photon ... in radio terms it retuned to a lower frequency band.] Conservation of energy applies to the photon. Conservation of energy also applies to the ionized electron. When it recombines with an ionized H atom the energy may be released in various forms including a 40 KeV photon, or heat, or both.

Medium energy photons also conserve energy. The Absorptions cross sections for most materials are several orders of magnitude larger than for gamma rays but the principle is still the same. There is an additional case where a photon may be absorbed but the energy is insufficient to fully ionized the atom. In these cases there is a transient increase to an excited state for the electrons and a subsequent release of energy, mostly as heat but also a lower energy photon [EM noise source] is created.

So, Cecil to answer your basic question: "The energy in the photon changes [decreases] when there is an interaction with an electron."

Corollary: "The energy level in the electron changes [increases] when it absorbs energy from a photon."

Deacon Dave

4798. Re: Bobtail curtain / half square ?s

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 15:25:11 UTC
From: clard <clark_not_kent@nospam.com>
Message-ID: <3FBCDCD6.13FF365B@nospam.com>
Source record: 104464

Hi,

http://www.cebik.com
many antenna plans, including the bobtail and half squares.
He also has the eznec antenna graphs. All at no charge !

I've built half squares for 2m not hf.

73 clark

Richard wrote:

> Would like to hear from (or see) anyone who has built a bobtail curtain
> or half square. I'm interested in your construction techniques.
>
> TNX
>
> Richard / N5YPJ

4799. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 15:26:15 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <q25vb.258103$Fm2.274544@attbi_s04>
Source record: 104465

If standing waves don't exist then violins, guitars, ukuleles, Cellos,
BAse Fiddles, pianos and other stringed instruments don't work!!

DD

Richard Fry wrote:

> A fairly elaborate paper about transmission line waves and impedances is
> linked below, and might be good reading for some posters to this NG who
> believe that standing waves do not exist.
>
> http://home.sandiego.edu/~ekim/e194rfs01/tlsmthek.pdf
>
> RF
>
>

4800. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 15:26:46 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <mVudnaaYeZryQCGiXTWc9g@ptd.net>
Source record: 104466

"John Passaneau" <jxp16@psu.edu> wrote in message
news:bpbaad$1jm2$1@f04n12.cac.psu.edu...
> Hi:
> I like the crimp on BNC's myself but the solder kind are OK. The twist on
RS
> ones are probably OK in low frequency low power but I wouldn't trust them
> myself. In fact, I wouldn't buy one except in desperation.
> Your concerns are the same ones I have. As I can buy Amphonal crimp BNC's
> for $1.85 each anywhere, I would invest $50 in a crimp tool and go that
> route.

I also have serious doubts about the screw-on BNCs for anything but low
power
and low frequency - they may work moderately well for video, but I wouldn't
trust them for RF either.

WRT the crimped variety, the military uses them extensively and test data
seems
to clearly indicate that they are 1) easier to assemble correctly, given the
correct
strip lengths and crimping tool, and 2) if properly assembled they are at
least as
reliable as soldered BNCs and probably moreso.

I use crimp BNCs exclusively when I want BNC connectors.

73,
Carl - wk3c

4801. stub for 20 meters

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 15:42:35 UTC
From: Iol <speltasas@libero.it>
Message-ID: <Lh5vb.133859$e6.4788583@twister2.libero.it>
Source record: 104467

What is the costructional detail for a stub for 20 meters (radio 1 in 20 meters , radio 2 in 10 meters). Thanks

4802. Need help on T2FD antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 16:19:56 UTC
From: Mike Blake <k9jri@hotmail.com>
Message-ID: <MQ5vb.11758$P%1.10138840@newssvr28.news.prodigy.com>
Source record: 104468

I am attempting to build a T2FD antenna for use on the 20 through 10 meter ham bands with my new Ten-Tec Argonaut V transceiver. While not a part of the issue my wife of almost 40 years has ordered the Argonaut V for me for Christmas.

Well, back to the issue at hand:

The design requires a 6:1 ratio broadband transformer to match 50 ohm cable to the impeance of the antenna. I have not been able to find any simple construction data for a 6:1 (50 - 300 ohm) transformer that would work well over the 14 - 30 mHz frequency range. I would appreciate it if someone would point me to some practical construction data for such a transformer. The design power would be 100 watts.

The entire antenna can be purchased from B&W but $199 seems awfully pricey.

73 - Mike - K9JRI

4803. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 16:42:37 UTC
From: tdonaly@aol.com
Message-ID: <20031120114237.27917.00000667@mb-m06.aol.com>
Source record: 104269

Richard Fry wrote,
>
>A fairly elaborate paper about transmission line waves and impedances is
>linked below, and might be good reading for some posters to this NG who
>believe that standing waves do not exist.
>
> http://home.sandiego.edu/~ekim/e194rfs01/tlsmthek.pdf
>
>RF
>
>

Who believes that standing waves don't exist?
73,
Tom Donaly, KA6RUH

4804. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 16:51:17 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpire6$7d57$1@news3.infoave.net>
Source record: 104270

Are you saying the same force that causes the poles to flip will come to my house and relabel my compass?

"Jer" <abuse@supernews.com> wrote in message news:Ly2vb.59795$pE3.32037@twister.socal.rr.com...
> Yea, but the South of a magnet is based on the earth's south/north
> relationship, so if earth's magnet field flips, the magnet label would also
> flip to maintain uniformity since any reference is relative anyway: thus the
> south will never rise again...
>
> Besides the dip-gyrocompass is used for modern navigation and works off of
> the center of the earth's rotation because the magnetic center is off. Thus
> if earth's magnetic field reverses, there will be little if any effect on
> "TRUE" north or south, GPS or navigation except for birds, insects and so
> on. And they will adapt quickly too. Again, the south will never rise
> again....
>
> So there!!!!!!!
>
> "Ed Price" <edprice@cox.net> wrote in message
> news:9X0vb.18362$cX1.11268@fed1read02...
> >
> > "Tdonaly" <tdonaly@aol.com> wrote in message
> > news:20031119233955.18993.00000667@mb-m18.aol.com...
> > > Dave Shrader wrote,
> > > >
> > > >>
> > > >> If I am not mistaken, the sun's magnetic poles reverse every 11 or 22
> > > >> years.
> > > >> The fact that the earth's magnetic poles have not reversed during
> human
> > > >> history is only because of the meager time that humans have existed.
> > But
> > > >> it will be interesting to see all the compasses pointing South.
> > > >
> > > >
> > > >That's it!! It has been proven!
> > > >
> > > >THE SOUTH WILL RISE AGAIN

> > >
> > > Which direction in outer space is up?
> > > 73,
> > > Tom Donaly
> >
> > Opposite of "down".
> >
> > Ed
> > WB6WSN
> >
>
>

4805. TOWER ON TRAILER WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 16:58:23 UTC
From: n2ion@aol.com
Message-ID: <20031120115823.11680.00000573@mb-m22.aol.com>
Source record: 104271

WE ARE LOOKING FOR A COUPLE OF TOWERS ON TRAILERS. THE OLD EASY WAY OR SOMETHING COMPARABLE WITH BE JUST WAT THE DOCTOR ORDERED

PLEASE EMAIL WITH ANY DETAILS.

THANKS & 73

4806. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 16:58:55 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBCF2CF.717854DC@uci.edu>
Source record: 104272

Cecil Moore wrote:
> Just read one of his books. He says, "An electron emits or absorbs an
> electron." "Absorbs" and "combines" sure seems like the same thing to me.

Note that he did not use the word combine. Do you think that was an
oversight on his part?

73, Jim AC6XG

4807. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 17:05:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bpis94bms1@hercules.btinternet.com>
Source record: 104273

"nathan" wrote
> I have always heard that this is true, and that I should tune antennas
> for maximum field strength and not for minimum SWR. Why wouldn't they
> occur at the same time?
>
.....

Minimum SWR informs you your transmitter is loaded with the nearest possible impedance to 50 ohms.

Maximum field strength informs you your transmitter is sending out maximum possible power.

There's no way of knowing whether or not the two conditions coincide.

It may occur at maximum field strength that the load on the transmitter causes distortion and poor efficiency in the PA with excessive internal volts or amps or watts.

So to avoid flogging the PA or power supply to an early death you should always tune up to minimum, preferably zero SWR.

You have to balance the probabilities. What are the chances of winning the contest before the PA issues smoke.

Reg, G4FGQ

4808. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 17:37:30 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpiu7l$kk6$1@newshost.mot.com>
Source record: 104276

Remember, the thing near the Earth's north geo pole _already is_ a _South_
magnetic pole. So it already happened and nobody even noticed!
Steve N.
k-9-d;c\i

"'Doc" <w5lz@cwis.net> wrote in message news:3FBBD3B9.24E31D5C@cwis.net...
>
>
> w4jle,
> Funny you should mentiuon the 'tin' hat, just got
> in a shipment of 'bipolar' tin hats. On sale soon!
> 'Doc

4809. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 17:47:00 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpiumt$7etu$1@news3.infoave.net>
Source record: 104274

Two different issues Reg, Does a tuner change the SWR of an antenna? Or does it simply transform an impedence to one that makes the transmitter happy? Will the maximum field strength coincide with 1:1 SWR at the tuner in all cases?

With my old DX-100 with Pi net output (read not stuck with a 50 ohm output) I tuned for the max field strength that did not exceed the current ratings of the 6146's. I will admit that in a contest the rule changed to "Tune for maximum smoke and replace all charred components".

Having an SWR bridge is like wearing dark trousers, if you pee your pants, no one notices - but it gives you a warm feeling. As soon as I become dictator of the world, I am outlawing them...

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bpis94bms1@hercules.btinternet.com...
> "nathan" wrote
> > I have always heard that this is true, and that I should tune antennas
> > for maximum field strength and not for minimum SWR. Why wouldn't they
> > occur at the same time?
> >
> .....
>
> Minimum SWR informs you your transmitter is loaded with the nearest possible
> impedance to 50 ohms.
>
> Maximum field strength informs you your transmitter is sending out maximum
> possible power.
>
> There's no way of knowing whether or not the two conditions coincide.
>
> It may occur at maximum field strength that the load on the transmitter
> causes distortion and poor efficiency in the PA with excessive internal
> volts or amps or watts.
>
> So to avoid flogging the PA or power supply to an early death you should
> always tune up to minimum, preferably zero SWR.
>
> You have to balance the probabilities. What are the chances of winning the
> contest before the PA issues smoke.
> ----
> Reg, G4FGQ

>
>
>
>
>
>

4810. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 17:47:00 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpjg6j$7ni3$1@news3.infoave.net>
Source record: 104288

Two different issues Reg, Does a tuner change the SWR of an antenna? Or does it simply transform an impedence to one that makes the transmitter happy? Will the maximum field strength coincide with 1:1 SWR at the tuner in all cases?

With my old DX-100 with Pi net output (read not stuck with a 50 ohm output) I tuned for the max field strength that did not exceed the current ratings of the 6146's. I will admit that in a contest the rule changed to "Tune for maximum smoke and replace all charred components".

Having an SWR bridge is like wearing dark trousers, if you pee your pants, no one notices - but it gives you a warm feeling. As soon as I become dictator of the world, I am outlawing them...

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bpis94bms1@hercules.btinternet.com...
> "nathan" wrote
> > I have always heard that this is true, and that I should tune antennas
> > for maximum field strength and not for minimum SWR. Why wouldn't they
> > occur at the same time?
> >
> .....
>
> Minimum SWR informs you your transmitter is loaded with the nearest possible
> impedance to 50 ohms.
>
> Maximum field strength informs you your transmitter is sending out maximum
> possible power.
>
> There's no way of knowing whether or not the two conditions coincide.
>
> It may occur at maximum field strength that the load on the transmitter
> causes distortion and poor efficiency in the PA with excessive internal
> volts or amps or watts.
>
> So to avoid flogging the PA or power supply to an early death you should
> always tune up to minimum, preferably zero SWR.
>
> You have to balance the probabilities. What are the chances of winning the
> contest before the PA issues smoke.
> ----
> Reg, G4FGQ

>
>
>
>
>
>

4811. General Coverage Attic Antenna Suggestions ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 17:49:35 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <XridnT_hev39YyGiRVn-sA@comcast.com>
Source record: 104275

Hello:

Do general sw listening from the broadcast band up to 30 MHz.
No transmitting.

Presently have a single long wire (guess it's technically called a random
length wire)
running around the 4 sides of my attic, and then down to receiver.

Works "fairly" well, but can't help feeling I might do better.

Was wondering if there is anything "better" that would easily fit in an
attic and still have pretty broad coverage (would settle for 0..5 - 20 MHz)
that I might consider ?

Thanks,
Bob

4812. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 19:08:23 UTC
From: richardharrison@webtv.net
Message-ID: <14447-3FBD1127-25@storefull-2318.public.lawson.webtv.net>
Source record: 104277

Dave Shrader wrote:
"The fact that the earth`s magnetic poles have not reversed during human history is only because of the meager time that humans have existed."

True. Magnets have 2 poles called north and south in reference to the direction they seek on the earth. Like poles repel and unlike poles attract.

Earth`s magnetic field produces an electron and ion flow which protects Earth from the solar wind, turns aside charged cosmic rays, and causes auroras. A magnetosphere turns with the rotation of the planet.

The earth`s magnetic poles don`t agree exactly with its geographic poles on its axis of rotation. The magnetic poles slowly circle about the geographic poles by about 0.04-degrees of longitude per year. About every 100,000 years the Earth`s magnetic field reverses, interchanging north and south magnetic poles.

So, if the earth keeps on turning as it always has, the magnetic polarities will continue their reversals as throughout history when man did not exist or was too primative to record such events.

Best regards, Richard Harrison, KB5WZI

4813. Re: General Coverage Attic Antenna Suggestions ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 19:34:36 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBD174C.AE77DDB@cwis.net>
Source record: 104278

Bob,
You might try completing the partial 'loop' that you
have now. Probably no large difference in performance
but who knows? If there is any particular band of
frequencies you listen to you might try an antenna resonant
for that. Probably the one thing that will make the most
difference is a change to vertical polarization, a vertical
of some kind. There are a lot of "ought to"s and "shoulds"
but experimenting is one good way to find out...
'Doc

4814. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 19:39:59 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBD188F.528A7140@cwis.net>
Source record: 104279

w4jle wrote:
>
" Does a tuner change the SWR of an antenna? Or
> does it simply transform an impedence to one that makes the transmitter
> happy? Will the maximum field strength coincide with 1:1 SWR at the tuner in
> all cases?"

1. A tuner doesn't change the SWR of an antenna. It will change
the SWR of the system to something the transmitter 'likes'.
2. In all cases? Probably not. In 'most' cases? A definite
maybe.
'Doc

4815. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 19:53:00 UTC
From: richardharrison@webtv.net
Message-ID: <9356-3FBD1B9C-177@storefull-2314.public.lawson.webtv.net>
Source record: 104280

Dave Shrader wrote:
"If standing waves don`t exist then violins---and other stringed instruments don`t work!"

True. Terman shows the details of a "standing-wave detector for a coaxial line." on page 105 of his 1955 edition. It`s a slotted (trough) line.

Without a reflected wave there would be no interference pattern which as Dave points out can be observed with the naked eye in some stringed instruments, especially with the help of a good photographic series.

Best regards, Richard Harrison, KB5WZI

4816. New version of APRSPoint available with MapPoint 2004

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 20:16:04 UTC
From: hxc98@yahoo.com
Message-ID: <aa8577c5.0311201216.776aac3@posting.google.com>
Source record: 104281

A new version of APRSPoint is available. It incorporates a lot of new changes and enhancements and works with both MapPoint 2002 and 2004. MapPoint 2004 was just released by Microsoft and is available as part of the package. It contains lots of new additional map data for North America and Europe. You are welcome to visit http://www.aprspoint.com/ for details. Thanks.

4817. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 20:35:32 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FBD2594.7466FA6D@uci.edu>
Source record: 104283

Richard Harrison wrote:
>
> Dave Shrader wrote:
> "If standing waves don`t exist then violins---and other stringed
> instruments don`t work!"
>
> True. Terman shows the details of a "standing-wave detector for a
> coaxial line." on page 105 of his 1955 edition. It`s a slotted (trough)
> line.
>
> Without a reflected wave there would be no interference pattern which as
> Dave points out can be observed with the naked eye in some stringed
> instruments, especially with the help of a good photographic series.

A frequency adjustable strobe light can also be useful for demonstrating
the effect.

73, Jim AC6XG

4818. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 20:36:50 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <bpj8l2$6a3$0@216.39.144.81>
Source record: 104282

On Thu, 20 Nov 2003 13:53:00 -0600 (CST), Richard Harrison wrote:
> Dave Shrader wrote:
> "If standing waves don`t exist then violins---and other stringed
> instruments don`t work!"

That also applies to wind instruments, which are really just acoustical circular waveguides. The boundary conditions at the mouthpiece and other openings create partial reflections and certain (multiple) frequencies, not necessarily harmonics, are reinforced.

Standing waves also occur with percussion instruments (a pulse applied to a tuned-circuit). The mathematics of acoustics can get interesting--many of the equations involved are identical to those used for electromagnetics, only with different constants.

>
> True. Terman shows the details of a "standing-wave detector for a
> coaxial line." on page 105 of his 1955 edition. It`s a slotted (trough)
> line.
>
> Without a reflected wave there would be no interference pattern which as
> Dave points out can be observed with the naked eye in some stringed
> instruments, especially with the help of a good photographic series.

Or a strobe light.

--
Bob Nielsen, N7XY n7xy (at) n7xy.net
Bainbridge Island, WA http://www.n7xy.net

4819. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 21:27:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <678qrv415q5thd8d50bh5tvikseldp0540@4ax.com>
Source record: 104284

On Thu, 20 Nov 2003 15:20:18 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:
>Medium energy photons also conserve energy.

Hi Dave,

Such responses wholly lack the context of RF, where the energy of a
Photon is NOT imparted to ANY single atom as there is absolutely no
elemental atom that supports the necessary de Broglie wavelength for
this to occur. Nor does it occur for any molecule at the atomic
scale. It must then be a product of the super-Macro scale (of course,
at the wavelength involved) in the far far conduction bands.

One may argue the conservation of energy, but the energy of such
photons are incredibly weak, they in no sense qualify as "medium
energy" (qualifiers are not necessary).

73's
Richard Clark, KB7QHC

4820. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 21:45:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <12dqrvch00j1qn68oupk2f02kkoikbkqok@4ax.com>
Source record: 104285

On 20 Nov 2003 06:09:42 -0800, emma_hentenna@hotmail.com (emma) wrote:

>I will try to make it more clear.
>These are some results I arrived at before
>I start its construction and carry out the measurements.
>Firstly, my aim was to find the exact place of the driven-element
>where the SWR is lowest.
>I used RICHWIRE for my simulation.This program has an upper limit
>for the wire radius.So I had to make two categories of diagams,
>one for wire radius 0.00037 [wl], which is rather not realizable,
>and one for 0.0037 [wl] ignoring the programs criteria.
>I ended up that the Hentenna is unfortunately a narrow band antenna.
>So it would be rather difficult to build it.
>What I am working on now, is changing the antennas dimensions
>so that I would come to an even lower SWR and a broader bandwidth.
>
>Emma
>

Hi Emma,

How do you arrive at the conclusion your (or any) Hentenna is narrow band? What data supports this? The numerous links you provided suggest nothing remarkable except gain. In other words, what bandwidth do you call narrow? Normal? Wide?

To my eye, this design is a shorted stub that is tapped within to find a match from a continuum of impedances available as a product of its resonant geometry and the position of the tap. Loss, being inferentially linked to bandwidth, is a product of bulk conductor (wire radius for sure). Wire radius certainly impacts resonance vs. size (and we are back to geometry of resonance to find the Z of choice).

73's
Richard Clark, KB7QHC

4821. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 22:02:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sfdqrvs8f1q4p43ube0q03rf4scm1na1or@4ax.com>
Source record: 104286

On Thu, 20 Nov 2003 15:26:46 -0000, "Carl R. Stevenson"
<wk3cqth@wk3c.com> wrote:

>I also have serious doubts about the screw-on BNCs for anything but low
>power
>and low frequency - they may work moderately well for video, but I wouldn't
>trust them for RF either.
>

Hi Carl,

I've measured the properties of BNC/RG-58 out into the GHz and aside from loss (easily referenced by numerous sources), there are no surprises. If you trust them for Video, that makes them premium choices as Video is far more demanding than RF (at least into the HF). However, as terms, Video and RF are hardly distinctive except that Video describes an implicit bandwidth and modulation (which encompasses much of the HF) which is, of necessity, RF.

So, the choice is: do you use BNC for 100KHz-12MHz Video; or do you use BNC for 100KHz - 1GHz RF? People only abandon BNC for small geometry considerations: components too close together for breakdown at high power at high frequency or too small for the currents involved. Actually, most of those arguments are cable based. In other words, if you don't trust BNC for any of a variety of reasons, you are actually arguing against the use of the associated cable it comfortably mates to. SO/PL are larger dimensionally, but beyond VHF they are definitely inferior to the smaller BNC.

73's
Richard Clark, KB7QHC

4822. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 22:17:21 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <R3bvb.1433$Vu5.350976@twister.southeast.rr.com>
Source record: 104287

One interesting point brought up was that Mars doesn't have a magnetic field. The idea was that its core was too cool. Similarly, as Earth's core cools, albeit slowly, its magnetic field will become weaker and weaker.

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:14447-3FBD1127-25@storefull-2318.public.lawson.webtv.net...

>
> So, if the earth keeps on turning as it always has, the magnetic
> polarities will continue their reversals as throughout history when man
> did not exist or was too primative to record such events.
>
> Best regards, Richard Harrison, KB5WZI
>

4823. What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 22:52:46 UTC
From: "R. Scott" <washingtonham@yahoo.com>
Message-ID: <2Bbvb.463$UI1.413@nwrddc01.gnilink.net>
Source record: 104289

Want the windowed kind. Any big stores carry it, or if anyone from the puget sound area know someone that carries it. Would like to avoid the mail order grind.

Thanks

Rick N7HJ

4824. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:01:33 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031120180133.28917.00000706@mb-m17.aol.com>
Source record: 104290

> preferably zero SWR.
>
>Reg, G4FGQ

How do you get that mr. snotty?
The closest I am able to get is 1 or 1:1
Care to enlighten us dumbells?

BUm

4825. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:06:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <74iqrvgr69i28m1v3e0e7ug77m8etnm77o@4ax.com>
Source record: 104291

On Thu, 20 Nov 2003 22:17:21 GMT, "Alan"
<alannc44@{nospam}ix.netcom.com> wrote:

>One interesting point brought up was that Mars doesn't have a magnetic
>field. The idea was that its core was too cool. Similarly, as Earth's core
>cools, albeit slowly, its magnetic field will become weaker and weaker.

Call back in, say, a billion years or two, and maybe the long term
average will be down 3dB.

73's
Richard Clark, KB7QHC

4826. Re: What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:08:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <28iqrvgt2qe5796v4r6frv8tcejtm7410r@4ax.com>
Source record: 104292

On Thu, 20 Nov 2003 22:52:46 GMT, "R. Scott" <washingtonham@yahoo.com>
wrote:

>Want the windowed kind. Any big stores carry it, or if anyone from the
>puget sound area know someone that carries it. Would like to avoid the
>mail order grind.
>
>Thanks
>
>Rick N7HJ

Hi Rick,

Big stores? :-)

Try the Puyallup Swap Meet next spring.

73's
Richard Clark, KB7QHC

4827. Re: Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:10:26 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <CRbvb.34519$IN.14739@newssvr27.news.prodigy.com>
Source record: 104293

You could also put the relay on the transmit antenna and short it to ground during transmit, that would keep the preamp happy.

He he he.

Tarmo Tammaru wrote:
> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> news:bpgc68mhb1@newshost.mot.com...
>
>>And short it to ground.
>>k
>>9
>>d
>>c
>>i
>
> He means short the preamp input, not the antenna.
>
> Tam/WB2TT
>
>

4828. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:13:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mciqrv8lq2bc8ul4n9fnhj2qq782mmoj9t@4ax.com>
Source record: 104294

On Thu, 20 Nov 2003 12:47:00 -0500, "w4jle" <W4JLE(remove this to
reply)@pbtcomm.net> wrote:
>Having an SWR bridge is like wearing dark trousers, if you pee your pants,
>no one notices - but it gives you a warm feeling.

Not having a SWR meter merely means you can't feel the warm sensation
for the same circumstances ... which may lead to everyone noticing.

(An example of how similes fail.)

73's
Richard Clark, KB7QHC

4829. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:46:55 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpjjsb$ma7$1@newshost.mot.com>
Source record: 104296

Imbeded comments:

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:14447-3FBD1127-25@storefull-2318.public.lawson.webtv.net...
> Dave Shrader wrote: (amoung other things...)
> ...
> Earth`s magnetic field produces an electron and ion flow which protects
> Earth from the solar wind, turns aside charged cosmic rays, and causes
> auroras. A magnetosphere turns with the rotation of the planet.

I do not believe Earth`s magnetic field "produces" any electrons or ions.
It deflects them coming from the sun because of the effect a magnetic field
has on electrical charges - the charges tend to move alonf the lines of
force and, therefore, the stuff gets routed to the poles or around the
planet.
I'm also not so sure that a magnetic field "turns" when the magnet
rotates about an axis through the poles. I think the lines going around one
of Earth's hemispheres (east-west speaking) are indestinguishable from those
of another hemisphere. Something in the field will not be dragged around
with the rotation of the planet.

> every 100,000 years the Earth`s magnetic field reverses, interchanging
> north and south magnetic poles.

The NOVA the other evening said it is something like 200 to 700 million
years, I believe. (May have the multiplier wrong, but the significant digit
is what they said)

> So, if the earth keeps on turning as it always has, the magnetic
> polarities will continue their reversals as throughout history when man
> did not exist or was too primative to record such events.
Best regards, Richard Harrison, KB5WZI

The NOVA was not too clear about how a rotating molten conductor
creates a field, but once you get one, I can understand how the field and
current in the core can cross couple and keep each other going.

Regards, Steve k.9,d;c/i

4830. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-20 23:48:30 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <L_adnW_hgLF60yCiRVn-tA@ctc.net>
Source record: 104295

>
> Went to R/S today to pick up some BNC connectors to make a short coax
patch
> wire.
>
> Was somewhat surprised to see that they only carry, now, the "screw-on"
> variety.
> No more soldered ones.
>
> Apparently you insert the stripped end of the coax into the connector, and
> twist a portion of the rear
> of the connector barrel which clamps the braid.
> My guess is that this probably is OK for the braid, but I can't imagine
how
> it connects, relaiably, to the center pin.
>
> Looking at it in the package, it seems the coax wire just pokes into the
> center pin, and that's that.
> Maybe they expect gravity to make a contact.
>
> Seems like this would make a really poor connector, but perhaps I'm too
old
> fashioned in thinking that
> the only good contact is a soldered one.
>
> Am I missing anything here ?
>
> Do they actually work ?
> Work good enough for a receiver's coax run ?

Almost nothing from RS works very well . They do have some already built
things with a good reputaion but you have to be careful even then.

4831. Re: What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 00:27:22 UTC
From: "R. Scott" <washingtonham@yahoo.com>
Message-ID: <KZcvb.557$UI1.328@nwrddc01.gnilink.net>
Source record: 104297

> Try the Puyallup Swap Meet next spring.
>
> 73's
> Richard Clark, KB7QHC

Yea I know the Mike and Key has it next year, but I kinda wanted to get my NVIS dipole up a bit, and since I was monkeying with it I thought I would add teh 450 Window Twin lead to make a psudo G5RV.

Rick N7HJ

4832. Re: Why doesn't maximum field strength and minimum SWR occur at the same frequency?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 00:34:32 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bpjmio$4cd$1@titan.btinternet.com>
Source record: 104298

I'll allow your fellow amateurs to judge who's the dumbell.

4833. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 00:37:12 UTC
From: jgboyles@aol.com
Message-ID: <20031120193712.17343.00000467@mb-m19.aol.com>
Source record: 104299

>Almost nothing from RS works very well .

That's a very general statement Ralph. I have bought electronic components and various connectors from Radio Shack for 28 years and all worked. (works, works well, or works very well, take your pick). I paid more for them, but that was because they were the only place I could get the stuff I needed locally. I have bought things from my local electronics supply house lately that didn't work, and they are not open on weekends.
RS doesn't manufacture their components or connectors. They are reselling.
I for one am glad they do, they have saved me time and money persuing this Hobby. As to whether the solderless BNC connector works, the RS one will work as good or bad as OEM.
73 Gary N4AST

4834. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 01:09:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tpoqrvo86m9cntoqvc5djo48cr4ham5jc5@4ax.com>
Source record: 104300

On Thu, 20 Nov 2003 17:46:55 -0600, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>
>The NOVA the other evening said it is something like 200 to 700 million
>years, I believe. (May have the multiplier wrong, but the significant digit
>is what they said)

Off by three orders of magnitude. The average (100K-200K) is lower
than what has been observed (700K) since the last flip.

>
>> So, if the earth keeps on turning as it always has, the magnetic
>> polarities will continue their reversals as throughout history when man
>> did not exist or was too primative to record such events.
> Best regards, Richard Harrison, KB5WZI
>
> The NOVA was not too clear about how a rotating molten conductor
>creates a field, but once you get one, I can understand how the field and
>current in the core can cross couple and keep each other going.

Hi Steve,

This is an example of how generators used to work (when the battery
was dead). The "residual" magnetism within the iron bulk presented
enough excitation for a formerly motionless coil to cause current to
be generated. That current was then used in the excitation coil to
build a field that in turn created more current for a larger
excitation field - and so on. The term in electronics is called
variously as "bootstrapping," "fly-back," "buck-boosting," or
"bucking."

73's
Richard Clark, KB7QHC

4835. Re: What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 01:14:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qepqrvgmr8k22cqpvlfsnl0p21g7916ici@4ax.com>
Source record: 104301

On Fri, 21 Nov 2003 00:27:22 GMT, "R. Scott" <washingtonham@yahoo.com>
wrote:

>> Try the Puyallup Swap Meet next spring.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Yea I know the Mike and Key has it next year, but I kinda wanted to get
>my NVIS dipole up a bit, and since I was monkeying with it I thought I
>would add teh 450 Window Twin lead to make a psudo G5RV.
>
>Rick N7HJ

Hi Rick,

Listen to the 80M Swap at 1000 Sundays. 3915KHz if memory serves.

73's
Richard Clark, KB7QHC

4836. Re: Ground rods in rocky soi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 01:38:50 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <K0evb.8080$m84.2960058@news1.news.adelphia.net>
Source record: 104302

'Doc wrote:

>
> Mike,
> Yes, it's serious, many times a ground radial system
> will be 'better' than a ground rod(s). Given the rocky
> ground as in the original post, a radial system would be
> much preferable to ground rods.
> Given that you get the wires deep enough to be missed
> by the lawn mower, what's so dangerous about it?
> 'Doc

If it is under the surface, then no problem. But I'm referring to the laying the wires on the ground comment I've heard of a few times here. And that would be dangerous for people crossing the lawn, and myself, after the XYL is done with me! 8^)

- Mike KB3EIA -

4837. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 02:06:24 UTC
From: Jon Gauthier <jon@spamsux.net>
Message-ID: <G7OdnQ3Z0dG_7iCiRVn-sQ@comcast.com>
Source record: 104303

Thanks, Richard - I'll give it a try.

Richard Clark wrote:
> On Wed, 19 Nov 2003 16:29:47 -0500, Jon Gauthier
> <jon.gauthier@spam.killer> wrote:
>
>
>>I have a Grundig YachtBoy SW/MW receiver that I'd like to connect to an
>>external long-wire antenna, but I'd like to have the antenna on the
>>roof, while I'd be listening in my office in the basement. I'd like to
>>make a couple of simple baluns to match it to 75 ohm coax. What's the
>>impedance that the receiver is expecting? It's just a phono plug
>>input... Grundig's web site is, ah, not very technical...
>
>
> Hi Jon,
>
> The matching doesn't really matter all that much for a receiver,
> unless it is through an antenna tuner (quite useful even for casual
> SWL). This cuts down on intermods and desense caused by local AM
> stations (you would be surprised how much they can hammer your DX
> without being heard).
>
> On the other hand, the advantage of coax (50/75 Ohm) is in isolating
> the noisy environment of the home from the signal path by allowing the
> antenna to be remote. Using a feedpoint choke insures that noise does
> not get into the picture. That choke can be in the form of 6-10 turns
> of coax in a 4-8" diameter, or using a HAM 1:1 Current Balun
> (generally 10-25 ferrite beads that fit over the jacket of the coax
> cable at the feedpoint end OR the coax wound through a large ferrite
> torus 3-5 times).
>
> 73's
> Richard Clark, KB7QHC

4838. Re: Ground rods in rocky soi

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 02:32:45 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpjth9$7tsu$1@news3.infoave.net>
Source record: 104304

Simply lay the wires on the ground. Take old coat hangers and cut 6" pieces
from them. Fold in half and place over the radial wire stapling it to the
ground. By next spring you will not be able to find a wire let alone trip
over it.

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:K0evb.8080$m84.2960058@news1.news.adelphia.net...
> 'Doc wrote:
>
> >
> > Mike,
> > Yes, it's serious, many times a ground radial system
> > will be 'better' than a ground rod(s). Given the rocky
> > ground as in the original post, a radial system would be
> > much preferable to ground rods.
> > Given that you get the wires deep enough to be missed
> > by the lawn mower, what's so dangerous about it?
> > 'Doc
>
> If it is under the surface, then no problem. But I'm referring to the
> laying the wires on the ground comment I've heard of a few times here.
> And that would be dangerous for people crossing the lawn, and myself,
> after the XYL is done with me! 8^)
>
> - Mike KB3EIA -
>

4839. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 02:36:46 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpjtoh$7ued$1@news3.infoave.net>
Source record: 104305

Those are outside the ham band effects, everyone knows the rules change once one is inside the band edges.

At that point real imaginary standing waves become virtual imaginary standing waves.

"Jim Kelley" <jwkelley@uci.edu> wrote in message news:3FBD2594.7466FA6D@uci.edu...
>
>
> Richard Harrison wrote:
> >
> > Dave Shrader wrote:
> > "If standing waves don`t exist then violins---and other stringed
> > instruments don`t work!"
> >
> > True. Terman shows the details of a "standing-wave detector for a
> > coaxial line." on page 105 of his 1955 edition. It`s a slotted (trough)
> > line.
> >
> > Without a reflected wave there would be no interference pattern which as
> > Dave points out can be observed with the naked eye in some stringed
> > instruments, especially with the help of a good photographic series.
>
> A frequency adjustable strobe light can also be useful for demonstrating
> the effect.
>
> 73, Jim AC6XG

4840. Re: What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 02:44:22 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <bpju66jtf0@216.39.144.81>
Source record: 104306

On Thu, 20 Nov 2003 22:52:46 GMT, R. Scott wrote:
> Want the windowed kind. Any big stores carry it, or if anyone from the
> puget sound area know someone that carries it. Would like to avoid the
> mail order grind.

I picked some up while driving through Tigard, OR (HRO). Nothing
locally although I suspect that Radio Depot may have carried it prior
to their demise.

--
Bob Nielsen, N7XY n7xy (at) n7xy.net
Bainbridge Island, WA http://www.n7xy.net

4841. Re: TOWER ON TRAILER WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 02:48:00 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fbd7ee7_2@news1.prserv.net>
Source record: 104307

www.bergsupply.com/rap_up/rap_up.htm

--
Crazy George
Remove N O and S P A M imbedded in return address
"N2ION" <n2ion@aol.com> wrote in message
news:20031120115823.11680.00000573@mb-m22.aol.com...
> WE ARE LOOKING FOR A COUPLE OF TOWERS ON TRAILERS. THE OLD EASY WAY OR
> SOMETHING COMPARABLE WITH BE JUST WAT THE DOCTOR ORDERED
>
> PLEASE EMAIL WITH ANY DETAILS.
>
> THANKS & 73

4842. Re: TOWER ON TRAILER WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 06:29:16 UTC
From: "Ryan, KC8PMX" <REMOVETHISkc8pmx@diamondcs.net>
Message-ID: <bpm6kt$1osorj$4@ID-189073.news.uni-berlin.de>
Source record: 104233

I have a three place snowmobile trailer that I am willing to sell for $300.
I was gonna fabricate a setup to do the same thing. Measures 8 foot wide by
12 foot long (front to back) I believe.

Ryan KC8PMX

"N2ION" <n2ion@aol.com> wrote in message
news:20031120115823.11680.00000573@mb-m22.aol.com...
> WE ARE LOOKING FOR A COUPLE OF TOWERS ON TRAILERS. THE OLD EASY WAY OR
> SOMETHING COMPARABLE WITH BE JUST WAT THE DOCTOR ORDERED
>
> PLEASE EMAIL WITH ANY DETAILS.
>
> THANKS & 73

4843. Re: Need help on T2FD antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 07:53:35 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <1agkpb-6p1.ln@p400bob.lse.com.au>
Source record: 104308

Hi Mike

Funny - I am doing almost the same thing. Mine is based on the cebik data (http://www.cebik.com/wbfd.html) on T2FD's that covers 80-10M. (You may have heard that Oz limited call amateurs get HF on Jan 1...)

His calls for an 800r termination and hence a 800r feedpoint with a 16:1 balun. I have just purchased the toroid (F25 material from Neosid - about 35mm OD, 17mm thick) and am working out the winding details. Someone told me that you work on the primary side XL being 10x the source Z (ie 500r - about 8 turns) but I havent been able to clarify which end or whether the middle freq was being talked about. I actually intend working through a document on it this weekend (lack of good weather permiting)

Oh yeah the turns ration is a square/Z function. ie 4x the turns ratio = 16X the Z.

This size toroid seems to be about anecdotally correct for 100W. I seem to remember 40mm being able to handle 400W. Higher powers you need to consider arcing between turns and to the ferrite itself. Some rings come with teflon like insulation for just that reason. I am just going to wrap mine in tape and hang it from the feedpoint! If the tape discolours from heat I'll do something about it

The terminating resistor needs to be non inductive and be able to dissipate half the TX power. I actually wonder that given the broad nature of the antenna whether the non-inductance is so critical. YMMV!

I'll repost as I get more toroid details. Oh BTW they were all of about AUD4 each!

Cheers Bob VK2YQA

> I am attempting to build a T2FD antenna for use on the 20 through 10 meter
> ham bands with my new Ten-Tec Argonaut V transceiver. While not a part of
> the issue my wife of almost 40 years has ordered the Argonaut V for me for
> Christmas.
>
> Well, back to the issue at hand:
>
> The design requires a 6:1 ratio broadband transformer to match 50 ohm
> cable
> to the impeance of the antenna. I have not been able to find any simple
> construction data for a 6:1 (50 - 300 ohm) transformer that would work
> well
> over the 14 - 30 mHz frequency range. I would appreciate it if someone
> would point me to some practical construction data for such a transformer.

> The design power would be 100 watts.
>
> The entire antenna can be purchased from B&W but $199 seems awfully
> pricey.
>
> 73 - Mike - K9JRI

--

(The reply address is broken. Put bcnoop in front of the at!)

4844. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 12:45:44 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <46acnXOBlNiplCOiXTWc9g@ptd.net>
Source record: 104309

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:sfdqrvs8f1q4p43ube0q03rf4scm1na1or@4ax.com...
> On Thu, 20 Nov 2003 15:26:46 -0000, "Carl R. Stevenson"
> <wk3cqth@wk3c.com> wrote:
>
> >I also have serious doubts about the screw-on BNCs for anything but low
> >power
> >and low frequency - they may work moderately well for video, but I
wouldn't
> >trust them for RF either.
> >
>
> Hi Carl,
>
> I've measured the properties of BNC/RG-58 out into the GHz and aside
> from loss (easily referenced by numerous sources), there are no
> surprises. If you trust them for Video, that makes them premium
> choices as Video is far more demanding than RF (at least into the HF).
> However, as terms, Video and RF are hardly distinctive except that
> Video describes an implicit bandwidth and modulation (which
> encompasses much of the HF) which is, of necessity, RF.
>
> So, the choice is: do you use BNC for 100KHz-12MHz Video; or do you
> use BNC for 100KHz - 1GHz RF? People only abandon BNC for small
> geometry considerations: components too close together for breakdown
> at high power at high frequency or too small for the currents
> involved. Actually, most of those arguments are cable based. In
> other words, if you don't trust BNC for any of a variety of reasons,
> you are actually arguing against the use of the associated cable it
> comfortably mates to. SO/PL are larger dimensionally, but beyond VHF
> they are definitely inferior to the smaller BNC.
>
> 73's
> Richard Clark, KB7QHC

Richard,

I know well that BNCs are good into the GHz range - if properly installed to
maintain impedance.

My reservation is not with BNCs, but with the screw-on variety, which I
don't trust.

Properly installed solder-on BNCs or crimped ones are fine. I prefer the
crimp ones myself as they are easier to install and at least as reliable as

the soldered ones.

I think you missed my point - I hope this clarifies.

73,
Carl - wk3c

4845. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 13:07:58 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <l6ovb.3975$m24.3072@fed1read02>
Source record: 104310

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20031120193712.17343.00000467@mb-m19.aol.com...
> >Almost nothing from RS works very well .
>
> That's a very general statement Ralph. I have bought electronic
components and
> various connectors from Radio Shack for 28 years and all worked. (works,
works
> well, or works very well, take your pick). I paid more for them, but that
was
> because they were the only place I could get the stuff I needed locally.
I
> have bought things from my local electronics supply house lately that
didn't
> work, and they are not open on weekends.
> RS doesn't manufacture their components or connectors. They are
reselling.
> I for one am glad they do, they have saved me time and money persuing this
> Hobby. As to whether the solderless BNC connector works, the RS one will
work
> as good or bad as OEM.
> 73 Gary N4AST

Last time I went into my local Radio Shack, I found they didn't stock 50 ohm
coax anymore. Special order; yes. On the shelf; no.

Ed
wb6wsn

4846. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 13:13:30 UTC
From: Nisse <nisse@nospam.com>
Message-ID: <3FBE0F7A.29CD34DF@nospam.com>
Source record: 104311

One h_ll of a problem.

First: What do You need the ground rods for?
Is it RF earth or lightening protection.

For Lightening protection, almost anything will do. Remember, You only will have
to make it EASIER for the lightning to take a predictable way, than taking a un-predictable one. Just drill a hole, put in the rod, put some soil in the hole and
enjoy.

For RF ground, things go from acceptable to nightmare(-ish). First of all, You will
need at least three rods. Then, You HAVE soil on Your property. 1 foot of it (30 cm). What you do now, is to take out the showel, and start digging. Three holes, in a triangle some 10 feet apart. The diameter of the holes, say 2 feet.

Dig until You hit the rocks. Then, find an electric or pneumatic drilling machine.
There are excellent machines that makes holes in rock as it was butter. Then, You
put in 3 rods, length about 4 feet in the holes. The small hole in the rock is filled
with salt (NaOH). The digged part of the holes are filled up to 3/4 (You need a small part below ground level for "refilling") with a mixture 50% soil, 50% salt.
Then You dig a ring around EACH hole. This ring is 4'' deep, 4" wide.
Connect Your rods to Your RF earth system. Before You plan to go QRV, take a watering can, and fill the rings with water 1 hour in advance (dry season only). Two times a year, You fill the holes with extra salt, until it reaches ground
level (the "refilling" described above).

Remember, that Your plants will die, and perhaps, thus Your marriage. Your Neighbors
will turn their dislike of radio amateurs into pure hate. A small price for a decent RF
ground in rocky environment! You COULD of course use wires instead. But that's cheating!

Northern Lights wrote:

> I have a mundane question.
>
> Does anyone have suggestions for installing ground rods in rocky soil? The

> topsoil on my property tends to be very shallow, at times only 12 in. deep.
> I would rather use earth ground and not go the route of an artificial
> ground.
>
> I think I know the answer to my question but wanted to see if anyone out
> there had a silver bullet solution.
>
> Phil, K4NE

4847. From another newsgroup near You

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 13:18:53 UTC
From: Nisse <nisse@nospam.com>
Message-ID: <3FBE10BD.6AE0B37E@nospam.com>
Source record: 104312

FYI (cut from uk.tech.digital-tv)
:-))))

My least favorite customers are the radio hams. They ring up saying they want
an aerial fixed up, which sounds promising, then it turns out its a great big
HF beam weighing half a ton, with a rotator as well. All you can do is tell
them how much the parts will cost and how much you will charge per hour, and
thats when they get stroppy. They seem to think I am quite happy to spend half
a day pratting about on there roof with a monster aerial and charge peanuts.
Usually the price gets rid of them and next time you drive past theres an
abortion of a job on there roof. Sometimes they want it doing though, no matter
how much I tell them it will be, and thats where the trouble starts. They just
want to use me as monkey to climb on the roof, they think all aerial riggers
are thick as pigshit. I don't mind that but I had one today wanted me to put a
2 meter beam (10 foot long) on a mast that he'd bought. The mast was nowhere
near strong enough but he wouldnt have it that it was dangerous. One time I was
fixing a TV aerial on a mast with a rotator on it when the radio ham decided to
have a play with his beam. The rotator nearly took my finger off. One time this
bloke got me to fix a little dish thing on his roof, pointing as his pals house
a few miles away. Whatever it was supposed to do it didnt, something to do with
a computer I think, and of course it was all my fault because I cant have lined
it up right. In the end they found out it was the receiver or transmitter or
something, after they had been nasty to me. I think the trouble with hams is
they are all big headed and think they know it all, and actually they

know
sweet FA about aerials. They think they know more about aerials than
people who
fix them up every day actually. Theyve all got there little pet theorys
about
aerials and coax and radio waves and woe betide anybody who tries to put
them
right. Another thing there all as tight as a ducks arse. They dont like
to pay
thats for sure. They always have a great store of old poles and clamps
and
stuff and they want me to spend ages struggling to make this rusty old
stuff
fix together. They are always really old, I don't think young people
bother
with it. Maybe it will die out (cheer). They most of them smoke smelly
pipes
and call me son or sonny or lad, which really pisses me off.
Wayne

4848. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 14:38:38 UTC
From: mfc9327@aol.com
Message-ID: <3599641a.0311210638.bd93de0@posting.google.com>
Source record: 104313

Okay. I got part number 15-1140 at Radio Shack. I haven't really
tried it out yet, but I have a quick question about it. How do most
people connect wires to those two metal "horseshoes" that are coming
out of it? I was thinking of just taping some wire to them, but I'd
like it fastened more securely if possible.

Thanks for all the help.

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<avKdnd1nYPHxRyaiRVn-jg@comcast.com>...
> "mfc" <mfc9327@aol.com> wrote in message
> news:3599641a.0311191210.1a6e9a4c@posting.google.com...
> > So, where can I get a balun? Radio Shack doesn't seem to carry them.
> Yes they do. Have the guy look up part numbers 15-1140, 15-1230, or 15-1143.
>
> Tam/WB2TT

4849. Re: Need help on T2FD antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 15:37:44 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <KcGdnTD_rt7PrCOiRVn-sw@comcast.com>
Source record: 104315

Mike,

You can get 6:1 baluns from Amidon. go to
http://www.amidoncorp.com/aai_hampricing.htm#
and click on baluns.

Tam/WB2TT
"Mike Blake" <k9jri@hotmail.com> wrote in message
news:MQ5vb.11758$P%1.10138840@newssvr28.news.prodigy.com...
> I am attempting to build a T2FD antenna for use on the 20 through 10 meter
> ham bands with my new Ten-Tec Argonaut V transceiver. While not a part of
> the issue my wife of almost 40 years has ordered the Argonaut V for me for
> Christmas.
>
> Well, back to the issue at hand:
>
> The design requires a 6:1 ratio broadband transformer to match 50 ohm
cable
> to the impeance of the antenna. I have not been able to find any simple
> construction data for a 6:1 (50 - 300 ohm) transformer that would work
well
> over the 14 - 30 mHz frequency range. I would appreciate it if someone
> would point me to some practical construction data for such a transformer.
> The design power would be 100 watts.
>
> The entire antenna can be purchased from B&W but $199 seems awfully
pricey.
>
> 73 - Mike - K9JRI
>
>

4850. Re: From another newsgroup near You

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 15:42:04 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031121104204.16444.00000497@mb-m23.aol.com>
Source record: 104316

>
>Well, I am old and I am cheap, but I do my own antenna work, Sonny.
>
>Harold
>

and you can spell too :-)

4851. Re: What Chain stores or local in Puget sound carry 300/450 ohm twinlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 15:48:21 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <l7udnYuC8_pNriOiRVn-jw@comcast.com>
Source record: 104317

I have never seen this stuff in a store. You might as well go the mail order route. If you can find a place within a few hundred miles from you, you will get it in one or two days. Most likely places would be Cablexperts, Radioworks, Texas Towers, AES, and HRO.

Tam/WB2TT
"R. Scott" <washingtonham@yahoo.com> wrote in message news:2Bbvb.463$Ul1.413@nwrddc01.gnilink.net...
> Want the windowed kind. Any big stores carry it, or if anyone from the
> puget sound area know someone that carries it. Would like to avoid the
> mail order grind.
>
> Thanks
>
> Rick N7HJ
>

4852. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:01:24 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <kpudndhtovlDqyOiRVn-jg@comcast.com>
Source record: 104318

John,

A single wire is going to have a huge variation in impedance over the 5 - 30 MJz range. You are much better of with a fan type antenna that has multiple dipoles, all tied together at the feedpoint. I saw one of these in a ham catalog, but can't remeber where. For a compromise, I would cut dipoles for 6.5, 11, and 16 MHz. Tie them together at the feedpoint, and fan out the ends. You don't really need a balun, but if you want to, use a 1:1 with either 50 or 75 Ohm coax. The length of eacch dipole in feet is 468/MHz, half of that length on each side.

Tam/WB2TT
"Jon Gauthier" <jon.gauthier@spam.killer> wrote in message
news:bpgncb$ra0$1@newslocal.mitre.org...
> I have a Grundig YachtBoy SW/MW receiver that I'd like to connect to an
> external long-wire antenna, but I'd like to have the antenna on the
> roof, while I'd be listening in my office in the basement. I'd like to
> make a couple of simple baluns to match it to 75 ohm coax. What's the
> impedance that the receiver is expecting? It's just a phono plug
> input... Grundig's web site is, ah, not very technical...
>
> --
> Jon Gauthier
>
> Given the likely reaction to an increase in
> terror-alert level to "severe threat imminent,"
> wouldn't a more appropriate alert color be brown?
> -Brad Simanek on www.ruminate.com
>

4853. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:03:30 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <3vGdnQMaIMFuXiOiRTvUqA@speakeasy.net>
Source record: 104241
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>, "Wes Stewart" <n7ws@_arrl.net> wrote:

> Antennas are reciprocal, if they wouldn't work well for transmitting,
> they will work equally poorly for receiving.

The reciprocity principle is usually good physics (but watch out for Faraday rotation). However, the engineering virtues of a good transmitting and good receiving antenna are different. At HF and below, efficiency is much less important for receiving than it is for transmitting. The reason is that the natural noise level is high at these frequencies: at 10 MHz it's >30 dB above thermal, while a good receiver's noise floor is <10 dB above thermal. This leaves plenty of room for inefficiency without SNR degradation. At lower frequencies the natural noise is higher. In practice 10 meters of untuned inverted L into a 500 ohm input suffices to reach the natural noise floor from 100 kHz to 30 MHz with a good receiver.

Back in the days of the omega navigation system, we used tuned 2 meter whips to receive signals from around the world in the 10 kHz band.

For the results of quantitative engineering calculations on this subject, see:

http://anarc.org/naswa/badx/antennas/SWL_longwire.html

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

4854. HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:19:09 UTC
From: res08z36 <res08z36@verizon.net>
Message-ID: <1Wqvb.353$b91.145@nwrddc01.gnilink.net>
Source record: 104219

I could use some help in setting up a HF antenna and another antenna to work VHF. I live in a condo that doesn't allow outside antennas at all, so I'm trying to set something up in my garage...maybe set up in the rafters above the car.

I have a set of Iron Horse HF antenna sticks for the HF radio and a Diamond X50 for the VHF/UHF radio. The problem is I can't get either to work. I suspect it is because there is no ground going to the antennas. They are mounted on a antenna mast that is sitting on the concrete slap of the garage.

Does anyone have some ideas of what I can do? Is there a different antenna that I should consider that would solve this problem (of not having a real ground...just a cement floor)?

-Bruce

4855. Re: HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:34:26 UTC
From: rc12234@aol.com
Message-ID: <20031121113426.00947.00000730@mb-m28.aol.com>
Source record: 104220

I used an aluminum extension ladder as
a ground plane with a Hustler vertical
antenna attached to it.
W7ALC

4856. brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:40:03 UTC
From: Cecil.A.Moore@ieee.org
Message-ID: <9001ac09.0311210840.5d795cc1@posting.google.com>
Source record: 104221

Here's an interesting exercise. The source is a 100W signal generator
equipped with a circulator and load that dissipates all reflected power
reaching the source so Pfwd1 is a constant 100W. The lossless twinlead is
an integral number of wavelengths long. rho at the load is 0.707 so 1/2
of the incident power is reflected. Pfwd1 and Pref1 are measured just to
the left of the impedance discontinuity at '+'. Pfwd2 and Pref2 are
measured just to the right of the impedance discontinuity at '+'.

Source---50 ohm coax---+---n*WL lossless 291.5 ohm twinlead---50 ohm load
Pfwd1--> Pfwd2-->
<--Pref1 <--Pref2

t0 will be when the source 100W is first incident upon point '+'.
t1 will be when the first reflections from the load arrive at '+'.
t2 will be when the second set of reflections from the load arrive at '+'.

At t1, Pfwd1=100W, Pref1=50W, Pfwd2=50W, Pref2=25W

Question: Between t1 and t2, what is the equation and magnitude of Pfwd2?
--
73, Cecil, W5DXP

4857. Re: From another newsgroup near You

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 16:53:43 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <vrs9n8evdo0m64@corp.supernews.com>
Source record: 104314

"Nisse" <nisse@nospam.com> wrote in message
news:3FBE10BD.6AE0B37E@nospam.com...
> FYI (cut from uk.tech.digital-tv)
> :-))))
>
> My least favorite customers are the radio hams. They ring up saying they
> want
> an aerial fixed up, which sounds promising, then it turns out its a
> great big
> HF beam weighing half a ton, with a rotator as well. All you can do is
> tell
> them how much the parts will cost and how much you will charge per hour,
> and
> thats when they get stroppy. They seem to think I am quite happy to
> spend half
> a day pratting about on there roof with a monster aerial and charge
> peanuts.
> Usually the price gets rid of them and next time you drive past theres
> an
> abortion of a job on there roof. Sometimes they want it doing though, no
> matter
> how much I tell them it will be, and thats where the trouble starts.
> They just
> want to use me as monkey to climb on the roof, they think all aerial
> riggers
> are thick as pigshit. I don't mind that but I had one today wanted me to
> put a
> 2 meter beam (10 foot long) on a mast that he'd bought. The mast was
> nowhere
> near strong enough but he wouldnt have it that it was dangerous. One
> time I was
> fixing a TV aerial on a mast with a rotator on it when the radio ham
> decided to
> have a play with his beam. The rotator nearly took my finger off. One
> time this
> bloke got me to fix a little dish thing on his roof, pointing as his
> pals house
> a few miles away. Whatever it was supposed to do it didnt, something to
> do with
> a computer I think, and of course it was all my fault because I cant
> have lined
> it up right. In the end they found out it was the receiver or
> transmitter or
> something, after they had been nasty to me. I think the trouble with

> hams is
> they are all big headed and think they know it all, and actually they
> know
> sweet FA about aerials. They think they know more about aerials than
> people who
> fix them up every day actually. Theyve all got there little pet theorys
> about
> aerials and coax and radio waves and woe betide anybody who tries to put
> them
> right. Another thing there all as tight as a ducks arse. They dont like
> to pay
> thats for sure. They always have a great store of old poles and clamps
> and
> stuff and they want me to spend ages struggling to make this rusty old
> stuff
> fix together. They are always really old, I don't think young people
> bother
> with it. Maybe it will die out (cheer). They most of them smoke smelly
> pipes
> and call me son or sonny or lad, which really pisses me off.
> Wayne

Well, I am old and I am cheap, but I do my own antenna work, Sonny.

Harold

4858. Re: 2-way splitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 17:09:50 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <2sqdnf2nba5l2yOiRVn-tA@comcast.com>
Source record: 104222

"mfc" <mfc9327@aol.com> wrote in message
news:3599641a.0311210638.bd93de0@posting.google.com...
> Okay. I got part number 15-1140 at Radio Shack. I haven't really
> tried it out yet, but I have a quick question about it. How do most
> people connect wires to those two metal "horseshoes" that are coming
> out of it? I was thinking of just taping some wire to them, but I'd
> like it fastened more securely if possible.

Normally, they go under screws.

You could use a #8 screw and nut to compress them against your wire.

4859. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 17:38:55 UTC
From: jder8745@aol.com
Message-ID: <20031121123855.16652.00000733@mb-m07.aol.com>
Source record: 104223

Beats the heck out of me.

Jack

4860. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 18:17:33 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <i7idnbfIDJPAfiOiRTvUqA@speakeasy.net>
Source record: 104248
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <bpmjib$99v4$1@news3.infoave.net>, "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote:

> Believe what you will, the law of reciprocity will ignore your beliefs
> and continue to function.

1. It's only a "law" for scalar radiation (like sound), not vector radiation (radio). To be sure, it's a fine approximation for most HF antenna systems, but watch out a microwave frequencies, especially if your antenna system contains a "circulator".

2. In the cases where reciprocity applies you would be correct to say that it requires that the antenna directivity and efficiency are the same for transmitting and receiving. It does not follow, however, that a poor transmitting antenna is necessarily a poor receiving antenna. Efficiency matters much more when transmitting than it does when receiving.

Franks's observations are correct, and can be verified if you do a detailed signal to noise calculation. You could also try the experiment yourself.

>
> "Frank" <dlwxzqffcx@cqvdqntcxxawvjpo.com> wrote in message
> news:01c3b0a2$989de120$0125250a@cqvdqntcxxawvjpo...
>> Wes Stewart <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>...
>>
>> ^ Antennas are reciprocal, if they wouldn't work well for
>> ^ transmitting, they will work equally poorly for receiving.
>>
>> I don't believe that. It's been my experience that an antenna used for
>> receiving will function satisfactorily over a much broader range of
>> conditions (environment, antenna length, etc.) than it will if used for
>> transmitting under those same conditions.
>>
>> Frank

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

4861. Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 18:37:02 UTC
From: "A.Pismo Clam" <Alaininvc@'86DASPAMnetscape.net>
Message-ID: <1069439807.747164@news-1.nethere.net>
Source record: 104224
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Hello All!

I live in San Diego and have been a PBS supporter for many years. An article in this months "On Air" PBS magazine has made my day! The article is on page #3. It is written by the General Manager of the tv station. I have not read the document in question, but it does sound too good to be true. How curious are you? If you live in San Diego, you might find a copy in your local library.

In essence he says that the:

"...[Federal] government will defend your right to crawl up on the roof and put up a BIG, HONKING antenna, despite the protests of nosy neighbors, community planners, rental management companies, local governemnt bureaucrats and other meddlesome busybodies."

Want to know how? Here is the URL:

www.fcc.gov/mb/facts/otard.html

Now you may have to prove to "the opposition" that the antenna you have erected can indeed receive "local" television stations, but that should not be that difficult to do...

4862. Re: Need help on T2FD antenna construction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 18:54:12 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <k0nlpb-0lc.ln@p400bob.lse.com.au>
Source record: 104225

Try this one for the toroid Mike

http://www.electronics-tutorials.com/basics/wide-band-rf-transformers.htm

Cheers Bob VK2YQA

> Funny - I am doing almost the same thing. Mine is based on the cebik data
> (http://www.cebik.com/wbfd.html) on T2FD's that covers 80-10M. (You may
> have heard that Oz limited call amateurs get HF on Jan 1...)
>
> His calls for an 800r termination and hence a 800r feedpoint with a 16:1
> balun. I have just purchased the toroid (F25 material from Neosid - about
> 35mm OD, 17mm thick) and am working out the winding details. Someone told
> me that you work on the primary side XL being 10x the source Z (ie 500r -
> about 8 turns) but I havent been able to clarify which end or whether the
> middle freq was being talked about. I actually intend working through a
> document on it this weekend (lack of good weather permiting)

(The reply address is broken. Put bcnoop in front of the at!)

4863. Re: HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 19:10:48 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <pvnlpb-5ld.ln@p400bob.lse.com.au>
Source record: 104226

Magloop? Trapped dipole (use coaxial traps)

You could always do some tuning by moving the car back and forth! (grin)

Cheers Bob VK2QYA

> I could use some help in setting up a HF antenna and another antenna to
> work
> VHF. I live in a condo that doesn't allow outside antennas at all, so
> I'm trying to set something up in my garage...maybe set up in the rafters
> above the car.

(The reply address is broken. Put bcnoop in front of the at!)

4864. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 20:05:36 UTC
From: Pappy127@usa.net
Message-ID: <3FBE7010.3717EB16@usa.net>
Source record: 104229
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Thank you.... ....

I am moving into a housing plan with such antenna restrictions. But
what housing plan doesn't have them. There is always someone trying to
tell some else how to live their lives, or knows what's best for you.

"A.Pismo Clam" wrote:
>
> Hello All!
>
> I live in San Diego and have been a PBS supporter for many years. An
> article in this months "On Air" PBS magazine has made my day! The
> article is on page #3. It is written by the General Manager of the tv
> station. I have not read the document in question, but it does sound too
> good to be true. How curious are you? If you live in San Diego, you
> might find a copy in your local library.
>
> In essence he says that the:
>
> "...[Federal] government will defend your right to crawl up on the roof
> and put up a BIG, HONKING antenna, despite the protests of nosy
> neighbors, community planners, rental management companies, local
> governemnt bureaucrats and other meddlesome busybodies."
>
> Want to know how? Here is the URL:
>
> www.fcc.gov/mb/facts/otard.html
>
> Now you may have to prove to "the opposition" that the antenna you have
> erected can indeed receive "local" television stations, but that should
> not be that difficult to do...

4865. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 20:25:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fgrsrv0rgdvlq9a02jpukp4gks7r9e5doe@4ax.com>
Source record: 104227
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 10:37:02 -0800, "A.Pismo Clam"
<Alaininvc@'86DASPAMnetscape.net> wrote:

>... I have not read the document in question, but it does sound too
>good to be true.

Such feelings are generally indications of dreaming.

>In essence he says that the:
>
>"...[Federal] government will defend your right to crawl up on the roof
>and put up a BIG, HONKING antenna..."

The government will DO NOTHING! Which means you won't get arrested.
The converse notion of their helping is dreaming in technicolor.

>Want to know how? Here is the URL:
>
>www.fcc.gov/mb/facts/otard.html
>
>Now you may have to prove to "the opposition" that the antenna you have
>erected can indeed receive "local" television stations, but that should
>not be that difficult to do...

Hi Pismo,

Big honkin' antennas? This completes the picture with dreaming in
surround-sound:
> (1) A "dish" antenna that is one meter (39.37") or less in diameter
> (2) An antenna that is one meter or less in diameter or diagonal measurement
> (3) ... Masts higher than 12 feet above the roofline
> may be subject to local permitting requirements.

Such interpretation of the law, while asleep, has created a vast
culture of lawyers who are willing to do follow-up work.

The trick is to design your antenna to within the law.
1. Choose the highest point of your roof line and erect the allowed
12
foot mast;
2. Place suitable dish or simple TV antenna (remember, local means no
40 element booms);
3. Run your favorite coax STRAIGHT UP (as nearly you can) to the top;
4. Ground to radial system and AC earth ground at bottom;
5. Gamma match to coax shield at the bottom (hidden).

Antenna does not have to be functional. It only needs to look functional (do not point at the northern star, Polaris, for example). If it is functional, you may need to provide for a choke at the feedpoint to the antenna (to separate the two functions - your hobby from your TV). Try to place this effort away from major home interference sources (TV's and computer monitors, fish tanks, fluorescent fixtures, and so on).

To extend the service frequencies in the HF region (because the mast is still too short), then add guy wires attached at the top electrically and physically, which are insulated about halfway down with egg type insulators, or use rope the rest of the way to ground. This top-load skirt may also serve as the choke, but don't count on it without figuring in the time to experiment and confirm.

73's
Richard Clark, KB7QHC

4866. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 20:32:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ietsrv0atvaffa50e9ei8kdchquk9aistd@4ax.com>
Source record: 104228

On 21 Nov 2003 17:38:55 GMT, jder8745@aol.com (JDer8745) wrote:
>Beats the heck out of me.
A Rodney King exercise?

4867. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 20:56:05 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBE7BE5.F994F096@cwis.net>
Source record: 104230
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

The only one you can blame for this problem is your
self. You signed the lease...
'Doc

4868. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 21:09:05 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <R9vvb.94012$Ec1.4456259@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104231
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"A.Pismo Clam" <Alaininvc@'86DASPAMnetscape.net> wrote in message
news:1069439807.747164@news-1.nethere.net...
> Hello All!
>
> I live in San Diego and have been a PBS supporter for many years. An
> article in this months "On Air" PBS magazine has made my day! The
> article is on page #3. It is written by the General Manager of the tv
> station. I have not read the document in question, but it does sound
too
> good to be true. How curious are you? If you live in San Diego, you
> might find a copy in your local library.
>

[snip]

Why do you want to live in a neighborhood in which all the homes have a
dress code? I suppose renters are stuck with such restrictions, but
what do "owners" "own" if they can get hassled for stringing a wire?

Frank Dresser

4869. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 21:51:29 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bpm1fv$dv2$1@newshost.mot.com>
Source record: 104255

Hi Richard,

Please re-read my comment. I understand the self sustaining concept. It
is the getting started part that I have trouble with. I know about auto
generators too.
To support your version, there must exist some residual magnetism in the
molten core from day one. OR something has to "twang" the core to get it
started - like the experiment using the molten sodium.
Steve k.9,d'c\i

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:tpoqrvo86m9cntoqvc5djo48cr4ham5jc5@4ax.com...
> On Thu, 20 Nov 2003 17:46:55 -0600, "Steve Nosko"
> <suteuve.nosukowicuz@moutouroula.com> wrote:
> >The NOVA the other evening said it is something like 200 to 700 million
> >years, I believe. (May have the multiplier wrong, but the significant
digit
> >is what they said)
> Off by three orders of magnitude. The average (100K-200K) is lower
> than what has been observed (700K) since the last flip.

OK. I knew I had the digits right.

>> The NOVA was not too clear about how a rotating molten conductor
> >creates a field, but once you get one, I can understand how the field and
> >current in the core can cross couple and keep each other going.
>
> Hi Steve,
>
> This is an example of how generators used to work (when the battery
> was dead). The "residual" magnetism within the iron bulk presented
> enough excitation for a formerly motionless coil to cause current to
> be generated. That current was then used in the excitation coil to
> build a field that in turn created more current for a larger
> excitation field - and so on. The term in electronics is called
> variously as "bootstrapping," "fly-back," "buck-boosting," or
> "bucking."
>
> 73's
> Richard Clark, KB7QHC

4870. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-21 22:58:40 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <ulwvb.21653$ow5.14641@bignews2.bellsouth.net>
Source record: 104232
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Homeowners associations are a good thing! They are basically an agreement that you and your neighbors will follow some clearly defined rules for the specific purpose of maintining optimum property values for everyone. In other words, you won't have to worry about buying an expensive house and having your next-door neighbor decide to use his yard to store a dozen wrecked automobiles while he builds a hot-rod or runs a car-repair business. Common sense should tell anyone that their rights end when they start to infringe on anyone else's, but sometimes you need it in writing. ;^)

Receiving antennas are easily concealed. If you can find mine from the street, you were born on Krypton. I think this is an overly-hyped problem.

Broadcasting antennas are another animal, though. For instance, nobody wants to live next to some clown running a bunch of linear amps through a CB "base station." It will literally be "seen" on well-shielded cable television connections, and is a nuisance. I think that's a lot of what the "external antenna" rules are meant to curb.

-- Stinger

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:R9vvb.94012$Ec1.4456259@bgtnsc05-news.ops.worldnet.att.net...
>
> "A.Pismo Clam" <Alaininvc@'86DASPAMnetscape.net> wrote in message
> news:1069439807.747164@news-1.nethere.net...
> > Hello All!
> >
> > I live in San Diego and have been a PBS supporter for many years. An
> > article in this months "On Air" PBS magazine has made my day! The
> > article is on page #3. It is written by the General Manager of the tv
> > station. I have not read the document in question, but it does sound
> too
> > good to be true. How curious are you? If you live in San Diego, you
> > might find a copy in your local library.
> >
>
> [snip]
>
> Why do you want to live in a neighborhood in which all the homes have a
> dress code? I suppose renters are stuck with such restrictions, but
> what do "owners" "own" if they can get hassled for stringing a wire?
>
> Frank Dresser

>
>

4871. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:05:18 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <qtOdnRiM26RuPyOiRVn-sQ@ctc.net>
Source record: 104234

> I have a Grundig YachtBoy SW/MW receiver that I'd like to connect to an
> external long-wire antenna, but I'd like to have the antenna on the
> roof, while I'd be listening in my office in the basement. I'd like to
> make a couple of simple baluns to match it to 75 ohm coax. What's the
> impedance that the receiver is expecting? It's just a phono plug
> input... Grundig's web site is, ah, not very technical...

Forget the balun and other matching devices. While trying to cover a wide
frequency range it is a waste of time. There will be more than enough
signal for receiving without any matching devices.

4872. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:33:56 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>
Source record: 104235
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 16:58:40 -0600, "Stinger"
<contact@newsserveronly.com> wrote:

|Homeowners associations are a good thing! They are basically an agreement
|that you and your neighbors will follow some clearly defined rules for the
|specific purpose of maintining optimum property values for everyone. In
|other words, you won't have to worry about buying an expensive house and
|having your next-door neighbor decide to use his yard to store a dozen
|wrecked automobiles while he builds a hot-rod or runs a car-repair business.
|Common sense should tell anyone that their rights end when they start to
|infringe on anyone else's, but sometimes you need it in writing. ;^)

I happen to subscribe to Fine Homebuilding Magazine and in one of the
latest issues there is some discussion about people who will not make
any changes to their house without considering resale value. They
could be eight feet tall and planning to remodel the kitchen, but will
they think of raising the height of the countertops to make it easier
on themselves? Nooooo. It will affect resale value. They might be
planning to die in the house but they worry that their heirs will have
a hard time selling.

The same mentality prevails in people who willingly submit to the
whims of the homeowners' association board. If I want to leave my
garage door open while I use my woodworking tools or work on my car, I
don't want the guy across the street getting his panties in a bunch
over it. Likewise, I don't want to be told when to mow the grass.

Of course, in my case, across the street is 80 acres of Sonoran Desert
and my landscaping is whatever grows here. (I gave the lawnmower to
the guy that bought my last house.) And I'm not trying to keep up
with Jones either because where I live, *I'm* Jones. Heh heh.

|
|Receiving antennas are easily concealed. If you can find mine from the
|street, you were born on Krypton. I think this is an overly-hyped problem.

If you don't want to hear anything, by all means conceal your antenna.
Antennas are reciprocal, if they wouldn't work well for transmitting,
they will work equally poorly for receiving.

|
|Broadcasting antennas are another animal, though.

Broadcasting is done by broadcasting stations. Broadcasting is
one-way communication.

Hobbists; licensed radio amateurs (hams), and CBers (not to be
confused with hams) are operating transmitting stations designed for
two-way communications.

|For instance, nobody
|wants to live next to some clown running a bunch of linear amps through a CB
|"base station."

Nobody? That is an all-encompassing term. "Few", "some", "not too
many" might be better. Not that I'm in favor of CBers running illegal
stations.

|It will literally be "seen" on well-shielded cable
|television connections, and is a nuisance.

A "well-shielded" system will not "see" anything of the sort. The
problem will more likely be from some upstanding homeowner, who
wouldn't dare leave his garage door open and violate association
rules, making an illegal tap on the cable.

| I think that's a lot of what the
|"external antenna" rules are meant to curb.

No, most antenna restrictions have nothing to do with the possibility
of interference. The restrictions are for the same reasons as not
wanting the garage door open, the grass an inch too high, painting the
house the wrong shade of white, etc...

4873. "Fluxuated" Still Around?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:37:52 UTC
From: Alex <Alex@aol.com>
Message-ID: <N5mdnY_rhNhaMiOiRVn-iQ@comcast.com>
Source record: 104236
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

I haven't seen that moron "Fluxuated" post here for a while. Jeez what a dumb ass!

Well I guess that anyone that "doing" his sister, can't be too bright!

Alex

4874. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:47:06 UTC
From: Frank <ruseidnvck@tliprrgyrllxlemz.com>
Message-ID: <01c3b092$27262170$0125250a@tliprrgyrllxlemz>
Source record: 104237
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Dave Holford article <3FBE8441.32C89004@.deletethis.sympatico.ca>...

^ I have personal experience, some 40 years ago, with an
^ HF antenna which consisted of the top half of the tail
^ (about a 15 to 20 foot square metal surface) which was
^ tuned by a remote ATU (Collins CU-351 ISTR) and performed
^ at least as well as a fixed wire over the range of 2.5 to
^ 30 MHz.

If I could put an antenna like that 20,000 feet over my house I would be very happy indeed!

Frank

4875. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:55:58 UTC
From: jgboyles@aol.com
Message-ID: <20031121195558.11708.00000540@mb-m22.aol.com>
Source record: 104238

>Last time I went into my local Radio Shack, I found they didn't stock 50 ohm
>coax anymore.

Sad but true. From what I understand RS made nothing from their electronic parts, did it as a favor to us experimenters. Must be same with coax now. How much could they make on a 10 cent resistor pack?
I hope they keep the parts section open, but afraid it won't be much longer.
73 Gary N4AST

4876. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 00:56:25 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311211656.7deb381c@posting.google.com>
Source record: 104239

For instantaneous values,
Vf2 = (2*Z2*Vf1+(Z1-Z2)*Vr2)/(Z1+Z2)
Vr1 = ((Z2-Z1)*Vf1+2*Z1*Vr2)/(Z1+Z2)

You get to think about the phase of Vr2 with respect to Vf1, and the
answer should then be obvious.

Cheers,
Tom

Cecil.A.Moore@ieee.org (Cecil Moore) wrote in message
news:<9001ac09.0311210840.5d795cc1@posting.google.com>...
> Here's an interesting exercise. The source is a 100W signal generator
> equipped with a circulator and load that dissipates all reflected power
> reaching the source so Pfwd1 is a constant 100W. The lossless twinlead is
> an integral number of wavelengths long. rho at the load is 0.707 so 1/2
> of the incident power is reflected. Pfwd1 and Pref1 are measured just to
> the left of the impedance discontinuity at '+'. Pfwd2 and Pref2 are
> measured just to the right of the impedance discontinuity at '+'.
>
> Source---50 ohm coax---+---n*WL lossless 291.5 ohm twinlead---50 ohm load
> Pfwd1--> Pfwd2-->
> <--Pref1 <--Pref2
>
> t0 will be when the source 100W is first incident upon point '+'.
> t1 will be when the first reflections from the load arrive at '+'.
> t2 will be when the second set of reflections from the load arrive at '+'.
>
> At t1, Pfwd1=100W, Pref1=50W, Pfwd2=50W, Pref2=25W
>
> Question: Between t1 and t2, what is the equation and magnitude of Pfwd2?

4877. Re: HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 01:41:31 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <f9zvb.6002$Vu5.679666@twister.southeast.rr.com>
Source record: 104240

Can you run a ground lead out your garage door to any real dirt? Pound in a ground rod and tie off to it. Any ground rod is better than no ground rod. You aren't looking for perfection here.

Good luck,

Bill, W4WNT

"res08z36" <res08z36@verizon.net> wrote in message news:1Wqvb.353$b91.145@nwrddc01.gnilink.net...
> I could use some help in setting up a HF antenna and another antenna to work
> VHF. I live in a condo that doesn't allow outside antennas at all, so I'm
> trying to set something up in my garage...maybe set up in the rafters above
> the car.
>
> I have a set of Iron Horse HF antenna sticks for the HF radio and a Diamond
> X50 for the VHF/UHF radio. The problem is I can't get either to work. I
> suspect it is because there is no ground going to the antennas. They are
> mounted on a antenna mast that is sitting on the concrete slap of the
> garage.
>
> Does anyone have some ideas of what I can do? Is there a different
> antenna that I should consider that would solve this problem (of not having
> a real ground...just a cement floor)?
>
> -Bruce
>
>

4878. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 02:44:57 UTC
From: Frank <dlwxzqffcx@cqvdqntcxxawvjpo.com>
Message-ID: <01c3b0a2$989de120$0125250a@cqvdqntcxxawvjpo>
Source record: 104242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Wes Stewart <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>...

^ Antennas are reciprocal, if they wouldn't work well for
^ transmitting, they will work equally poorly for receiving.

I don't believe that. It's been my experience that an antenna used for receiving will function satisfactorily over a much broader range of conditions (environment, antenna length, etc.) than it will if used for transmitting under those same conditions.

Frank

4879. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 03:01:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpmjib$99v4$1@news3.infoave.net>
Source record: 104243
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Believe what you will, the law of reciprocity will ignore your beliefs and continue to function.

"Frank" <dlwxzqffcx@cqvdqntcxxawvjpo.com> wrote in message news:01c3b0a2$989de120$0125250a@cqvdqntcxxawvjpo...
> Wes Stewart <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>...
>
> ^ Antennas are reciprocal, if they wouldn't work well for
> ^ transmitting, they will work equally poorly for receiving.
>
> I don't believe that. It's been my experience that an antenna used for
> receiving will function satisfactorily over a much broader range of
> conditions (environment, antenna length, etc.) than it will if used for
> transmitting under those same conditions.
>
> Frank
>

4880. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 03:12:59 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <%uAvb.95462$Ec1.4488120@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:uIwvb.21653$ow5.14641@bignews2.bellsouth.net...
> Homeowners associations are a good thing! They are basically an
agreement
> that you and your neighbors will follow some clearly defined rules for
the
> specific purpose of maintining optimum property values for everyone.

Homeowners associations are private governmental authorities which rule over people who signed away their Constitutional rights! For what -- the promise that othersuch people will pay more later on? Well, maybe so. This Homeowner Association thing sounds like yet another odious invention of the New World Order.

> In
> other words, you won't have to worry about buying an expensive house
and
> having your next-door neighbor decide to use his yard to store a dozen
> wrecked automobiles while he builds a hot-rod or runs a car-repair
business.
> Common sense should tell anyone that their rights end when they start
to
> infringe on anyone else's, but sometimes you need it in writing. ;^)

Common sense says there's considerable value in a neighbor who can fix your car. Especially if you need a Sunday afternoon repair! I've done plenty of car work, back when I had a driveway. I got along fine with the neighbors. I suppose fixing their cars helped. We'd talk about cars, laugh at the Cubs, etc. It's the American way!

>
> Receiving antennas are easily concealed. If you can find mine from
the
> street, you were born on Krypton. I think this is an overly-hyped
problem.

Anyone who is bothered by the sight of a wire belongs on another planet.

>
> Broadcasting antennas are another animal, though. For instance,
nobody
> wants to live next to some clown running a bunch of linear amps
through a CB
> "base station." It will literally be "seen" on well-shielded cable

> television connections, and is a nuisance. I think that's a lot of
what the
> "external antenna" rules are meant to curb.
>
> -- Stinger
>

External antenna rules and the rest are meant to intimidate lily-livered weenies who won't help fix their cars but are happy to sign away their Constitutional rights.

And if some radio operator is splattering all over, there's plenty of Real Governmental Authority to answer to.

Frank Dresser

4881. Re: HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 03:40:01 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <0tltrvcito6v2tticabfql2g97pjl4ieln@4ax.com>
Source record: 104245

On Fri, 21 Nov 2003 16:19:09 GMT, "res08z36" <res08z36@verizon.net>
wrote:

>I could use some help in setting up a HF antenna and another antenna to work
>VHF. I live in a condo that doesn't allow outside antennas at all, so I'm
>trying to set something up in my garage...maybe set up in the rafters above
>the car.
>
>I have a set of Iron Horse HF antenna sticks for the HF radio and a Diamond
>X50 for the VHF/UHF radio. The problem is I can't get either to work. I
>suspect it is because there is no ground going to the antennas. They are
>mounted on a antenna mast that is sitting on the concrete slap of the
>garage.

Get some wire, and cut some radials that you attach to the ground side
of the antenna (coax braid side). Lay the radials on the concrete. You
may have to adjust their length to get a low swr. Basically, you're
setting up a ground plane antenna, with the Iron Horse doo-dad as the
vertical element, and some homebrew radials for the ground plane. I'd
try 4 radials per band.

Another idea would be to string up, in and around your property, a
crooked dipole of nearly invisible wire -- I believe the Wireman has
#26 wire at his web site -- use little plastic buttons for insulators,
and feed it with that clear-colored 300 ohm line from Radio Shack, to
a little antenna tuner. That might do ya a lot better than trying to
cram a vertical into your garage.

Bob
k5qwg

>
>Does anyone have some ideas of what I can do? Is there a different
>antenna that I should consider that would solve this problem (of not having
>a real ground...just a cement floor)?
>
>-Bruce
>

4882. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 03:47:29 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <dXAvb.21767$ow5.5401@bignews2.bellsouth.net>
Source record: 104246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Sit on a cactus or something, Wes? You seem a little edgy.

Nobody is forced to buy into a neighborhood with covenants. One can do exactly what you have done and buy some distance from your neighbors. That's great if it works out for you.

However, my case is obviously different from yours. The home where I now live is not the home I will own when I retire. I won't need nearly as many bedrooms, etc., and it will be out on an acreage I own (that's currently a little farther than I care to commute to my job). Living in a good neighborhood with covenants makes sense for me right now, because I do want to protect the hefty investment I've made in my home, specifically because I do intend to sell it someday.

Just because covenants aren't ideal for your situation doesn't make them a bad thing. As for your hair-splitting over "broadcasting," it was clear my intent was "transmitting." -- just as it is clear your intent is to act like an asshole.

-- Stinger

"Wes Stewart" <n7ws@_arrl.net> wrote in message
news:hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com...
> On Fri, 21 Nov 2003 16:58:40 -0600, "Stinger"
> <contact@newsserveronly.com> wrote:
>
> |Homeowners associations are a good thing! They are basically an
agreement
> |that you and your neighbors will follow some clearly defined rules for
the
> |specific purpose of maintining optimum property values for everyone. In
> |other words, you won't have to worry about buying an expensive house and
> |having your next-door neighbor decide to use his yard to store a dozen
> |wrecked automobiles while he builds a hot-rod or runs a car-repair
business.
> |Common sense should tell anyone that their rights end when they start to
> |infringe on anyone else's, but sometimes you need it in writing. ;^)
>
> I happen to subscribe to Fine Homebuilding Magazine and in one of the
> latest issues there is some discussion about people who will not make
> any changes to their house without considering resale value. They
> could be eight feet tall and planning to remodel the kitchen, but will
> they think of raising the height of the countertops to make it easier

> on themselves? Nooooo. It will affect resale value. They might be
> planning to die in the house but they worry that their heirs will have
> a hard time selling.
>
> The same mentality prevails in people who willingly submit to the
> whims of the homeowners' association board. If I want to leave my
> garage door open while I use my woodworking tools or work on my car, I
> don't want the guy across the street getting his panties in a bunch
> over it. Likewise, I don't want to be told when to mow the grass.
>
> Of course, in my case, across the street is 80 acres of Sonoran Desert
> and my landscaping is whatever grows here. (I gave the lawnmower to
> the guy that bought my last house.) And I'm not trying to keep up
> with Jones either because where I live, *I'm* Jones. Heh heh.
>
> |
> |Receiving antennas are easily concealed. If you can find mine from the
> |street, you were born on Krypton. I think this is an overly-hyped
problem.
>
>
> If you don't want to hear anything, by all means conceal your antenna.
> Antennas are reciprocal, if they wouldn't work well for transmitting,
> they will work equally poorly for receiving.
>
> |
> |Broadcasting antennas are another animal, though.
>
> Broadcasting is done by broadcasting stations. Broadcasting is
> one-way communication.
>
> Hobbists; licensed radio amateurs (hams), and CBers (not to be
> confused with hams) are operating transmitting stations designed for
> two-way communications.
>
> |For instance, nobody
> |wants to live next to some clown running a bunch of linear amps through a
CB
> |"base station."
>
> Nobody? That is an all-encompassing term. "Few", "some", "not too
> many" might be better. Not that I'm in favor of CBers running illegal
> stations.
>
> |It will literally be "seen" on well-shielded cable
> |television connections, and is a nuisance.
>
> A "well-shielded" system will not "see" anything of the sort. The
> problem will more likely be from some upstanding homeowner, who
> wouldn't dare leave his garage door open and violate association

> rules, making an illegal tap on the cable.
>
> | I think that's a lot of what the
> |"external antenna" rules are meant to curb.
>
> No, most antenna restrictions have nothing to do with the possibility
> of interference. The restrictions are for the same reasons as not
> wanting the garage door open, the grass an inch too high, painting the
> house the wrong shade of white, etc...
>

4883. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 04:07:39 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <7eBvb.21793$ow5.16257@bignews2.bellsouth.net>
Source record: 104247
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Frank,

As I mentioned to Wes, nobody forces you to buy into a neighborhood with covenants. I also mentioned that they are not for everybody. In my case, they are a good idea, and one of the reasons I built my house where I did was specifically because I knew what to expect from neighbors as they built nearby.

I don't feel bad that I can't let my yard get waist high, park junk cars on the lawn, or paint my roof purple. Rather, I feel good knowing my neighbor won't.

By the way, I happen to be a Republican Kung-Fu black belt (Dragon Claw 1992) that knows a good, honest mechanic that helped me teach my son how to change the heads on his antique T-Bird in his garage.

So much for your lily-livered weenie who won't fix their own car argument.

I honestly don't understand the hostility in your tone, Frank. What's the real problem?

-- Stinger

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:%uAvb.95462$Ec1.4488120@bgtnsc05-news.ops.worldnet.att.net...
>
> "Stinger" <contact@newsserveronly.com> wrote in message
> news:uIwvb.21653$ow5.14641@bignews2.bellsouth.net...
> > Homeowners associations are a good thing! They are basically an
> agreement
> > that you and your neighbors will follow some clearly defined rules for
> the
> > specific purpose of maintining optimum property values for everyone.
>
> Homeowners associations are private governmental authorities which rule
> over people who signed away their Constitutional rights! For what --
> the promise that othersuch people will pay more later on? Well, maybe
> so. This Homeowner Association thing sounds like yet another odious
> invention of the New World Order.
>
>
> > In
> > other words, you won't have to worry about buying an expensive house
> and

> > having your next-door neighbor decide to use his yard to store a dozen
> > wrecked automobiles while he builds a hot-rod or runs a car-repair
> business.
> > Common sense should tell anyone that their rights end when they start
> to
> > infringe on anyone else's, but sometimes you need it in writing. ;^)
>
> Common sense says there's considerable value in a neighbor who can fix
> your car. Especially if you need a Sunday afternoon repair! I've done
> plenty of car work, back when I had a driveway. I got along fine with
> the neighbors. I suppose fixing their cars helped. We'd talk about
> cars, laugh at the Cubs, etc. It's the American way!
>
> >
> > Receiving antennas are easily concealed. If you can find mine from
> the
> > street, you were born on Krypton. I think this is an overly-hyped
> problem.
>
> Anyone who is bothered by the sight of a wire belongs on another planet.
>
> >
> > Broadcasting antennas are another animal, though. For instance,
> nobody
> > wants to live next to some clown running a bunch of linear amps
> through a CB
> > "base station." It will literally be "seen" on well-shielded cable
> > television connections, and is a nuisance. I think that's a lot of
> what the
> > "external antenna" rules are meant to curb.
> >
> > -- Stinger
> >
>
> External antenna rules and the rest are meant to intimidate lily-livered
> weenies who won't help fix their cars but are happy to sign away their
> Constitutional rights.
>
> And if some radio operator is splattering all over, there's plenty of
> Real Governmental Authority to answer to.
>
> Frank Dresser
>
>

4884. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 05:20:50 UTC
From: kashe@rahul.net
Message-ID: <bhstrvg70uvpk6en97nov295d3iki0b6h6@4ax.com>
Source record: 104249

On Fri, 21 Nov 2003 14:13:30 +0100, Nisse <nisse@nospam.com> wrote:

>You
>put in 3 rods, length about 4 feet in the holes. The small hole in the rock is
>filled
>with salt (NaOH). The digged part of the holes are filled up to 3/4 (You need
>a small part below ground level for "refilling") with a mixture 50% soil, 50%
>salt.

Do you _really_ mean sodium hydroxide (NaOH, lye), not sodium
chloride (NaCl, table salt)?

4885. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 05:23:52 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <PuOdnRU47rIV4iKiRTvUqQ@speakeasy.net>
Source record: 104267
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <sp2urv0u3otkhd4b1bs6hktumi9rjl209p@4ax.com>, "Wes Stewart" <n7ws@_arrl.net> wrote:

> Heh heh. When the guys from MIT come out to argue with you, you know
> you're in trouble. But fools rush in...
>
> I have made thousands of measurements in anechoic antenna ranges and I
> have never seen a difference between measuring s21 and s12. (Without the
> circulators, and accounting for mismatch effects of course)
>
> Where did I go wrong?

You didn't ionize the air in the range :-)

Seriously, for your purposes you did nothing wrong. Just don't call reciprocity a "law", OK? It's a useful idea of wide applicability, but physics does not require it in general. Calling it a law confuses people.

Many years ago in grad school my advisor would vex visitors to his office with a little disk that looked like a piece of tinted glass. Put a quarter on the table, put the disk on top of it, the quarter looks black. Flip the disk over, put it back on the quarter, the quarter looks shiny. What was the construction of this thing? Some world class physicists couldn't figure it out.

> |2. In the cases where reciprocity applies you would be correct to say
> that
> |it requires that the antenna directivity and efficiency are the same
> for
> |transmitting and receiving. It does not follow, however, that a poor
> |transmitting antenna is necessarily a poor receiving antenna.
> Efficiency
> |matters much more when transmitting than it does when receiving.

> It also does not follow that a lousy receiving antenna is good enough.
>
> For example, I *always* got better moon echos on 2-meter EME using the
> same antenna for transmit and receive. When I tried a wet string on
> receive I didn't hear nuthin' <g>

Directivity matters equally for receiving and transmitting. Was your wet string as directive as your other antenna? 2 meters is also quiet enough that there's not much room for inefficiency: in some directions the sky temperature is <200K.

>
> I have observed the same on 20 meters. My Yagi at a modest height of
> 50 feet is *always* better than an indoor wire.

Throw a thin wire with dark brown insulation over a tall tree, up over one side, partway down the other (shaped like a "?"). Tie it in place with nylon fishing line. It will be invisible unless you're very close. Couple to coax with a grounded 9:1 broadband matching transformer. Bury the coax run to the house.

Not only will this be much less conspicuous than a Yagi, but it will outperform your Yagi as a receiving antenna for nearly every signal over the range 100 kHz - 30 MHz. A Yagi is just too specialized an antenna for a listener.

> A trailing wire under sea water receives just fine at ELF and doesn't
> work worth a damn for transmitting. But those are special cases that
> can always be manufactured. Beverage antennas are also not something to
> be used for transmitting but you won't be disguising one as a chimney
> cap either :)

For the listener from ELF to HF these are not manufactured special cases, they are the general case. MW and tropical band listeners often target their regions of interest with Beverages, either temporary or permanent. A Beverage is another antenna that can be very inconspicuous: if your soil's dry you can even bury a Beverage! For listening, a simple broadband antenna like a Beverage is much more practical than a complicated narrowband antenna like a Yagi.

>
> In the general sense of h-f to microwave, I stand by my claim.

For the special case of confinement to a small number of narrow bands (as in ham radio), you are reasonably correct above 10 MHz. To me as a hobbyist listing to LW/MW/SW, that isn't the general case. Of course the game changes when I'm operating a satellite, but that isn't my *hobby*.

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

4886. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 05:43:54 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <uICvb.96113$Ec1.4504381@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104250
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:7eBvb.21793$ow5.16257@bignews2.bellsouth.net...
> Frank,
>
> As I mentioned to Wes, nobody forces you to buy into a neighborhood
with
> covenants. I also mentioned that they are not for everybody. In my
case,
> they are a good idea, and one of the reasons I built my house where I
did
> was specifically because I knew what to expect from neighbors as they
built
> nearby.
>
> I don't feel bad that I can't let my yard get waist high, park junk
cars on
> the lawn, or paint my roof purple. Rather, I feel good knowing my
neighbor
> won't.
>
> By the way, I happen to be a Republican Kung-Fu black belt (Dragon
Claw
> 1992) that knows a good, honest mechanic that helped me teach my son
how to
> change the heads on his antique T-Bird in his garage.
>
> So much for your lily-livered weenie who won't fix their own car
argument.
>
> I honestly don't understand the hostility in your tone, Frank. What's
the
> real problem?
>
> -- Stinger
>
>
>

I am hostile to the whole concept to a Homeowner's Association. These
are contractual arrangements, and not laws. If a person is penalized,
he doesn't have his usual legal rights. He either pays the penalty,
sells the property or sues the Homeowner's Association. If he sues,

it's the Homeowner's Association which will get the benefit of doubt in Court. Policing power is one of genuine responsibilities of the publicly elected government, and it ought to be done by public employees who are directly answerable to the courts.

And there's the related issue of ownership. Let's say, after another marathon session of listening to SW kooks, I completely lose it and paint my roof purple. It's my roof, isn't it? If it does cause some damage to someone else it should be provable. But the complainer ought to be prepared to put up some sort of evidence.

So, yeah, homeowner's associations ain't for me.

I could go on with my opinions about the public sector getting improperly in the private sector and vice versa.

My brother and I practically rebuilt his 64 T-Bird right in the driveway. If I was bothering anybody, nobody spoke up.

4887. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 06:12:40 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <k3Dvb.22042$ow5.9549@bignews2.bellsouth.net>
Source record: 104251
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Different strokes for different folks, Frank.

In my view, I didn't give up anything when I built in a neighborhood with restrictive covenants. Instead, I gained the peace-of-mind that the neighborhood wouldn't decay. I gained "rights" as I agreed to covenants that I would have followed anyway, because my neighbors will as well.

Your "public sector versus private sector" infringement of rights arguments isn't simply valid in this case because it is voluntary. My rights are just fine, thank you.

However I do agree that there are plenty of cases where the public sector (government) does infringe on the rights of private property owners. I am vehemently against it. I believe it is unconstitutional for a city government to use eminent domain laws to force an owner of private property to sell it (so the government can grant the land to a developer who will build a shopping center) because the government will make more tax revenue on a new shopping center. Yet this is happening time and again all over the United States. It' just plain wrong.

-- Stinger

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:uICvb.96113$Ec1.4504381@bgtnsc05-news.ops.worldnet.att.net...
>
> "Stinger" <contact@newsserveronly.com> wrote in message
> news:7eBvb.21793$ow5.16257@bignews2.bellsouth.net...
> > Frank,
> >
> > As I mentioned to Wes, nobody forces you to buy into a neighborhood
> with
> > covenants. I also mentioned that they are not for everybody. In my
> case,
> > they are a good idea, and one of the reasons I built my house where I
> did
> > was specifically because I knew what to expect from neighbors as they
> built
> > nearby.
> >
> > I don't feel bad that I can't let my yard get waist high, park junk
> cars on
> > the lawn, or paint my roof purple. Rather, I feel good knowing my
> neighbor

> > won't.
> >
> > By the way, I happen to be a Republican Kung-Fu black belt (Dragon
> Claw
> > 1992) that knows a good, honest mechanic that helped me teach my son
> how to
> > change the heads on his antique T-Bird in his garage.
> >
> > So much for your lily-livered weenie who won't fix their own car
> argument.
> >
> > I honestly don't understand the hostility in your tone, Frank. What's
> the
> > real problem?
> >
> > -- Stinger
> >
> >
> >
>
> I am hostile to the whole concept to a Homeowner's Association. These
> are contractual arrangements, and not laws. If a person is penalized,
> he doesn't have his usual legal rights. He either pays the penalty,
> sells the property or sues the Homeowner's Association. If he sues,
> it's the Homeowner's Association which will get the benefit of doubt in
> Court. Policing power is one of genuine responsibilities of the
> publicly elected government, and it ought to be done by public employees
> who are directly answerable to the courts.
>
> And there's the related issue of ownership. Let's say, after another
> marathon session of listening to SW kooks, I completely lose it and
> paint my roof purple. It's my roof, isn't it? If it does cause some
> damage to someone else it should be provable. But the complainer ought
> to be prepared to put up some sort of evidence.
>
> So, yeah, homeowner's associations ain't for me.
>
> I could go on with my opinions about the public sector getting
> improperly in the private sector and vice versa.
>
> My brother and I practically rebuilt his 64 T-Bird right in the
> driveway. If I was bothering anybody, nobody spoke up.
>
>

4888. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 06:16:05 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <favtrvsgra94dq91krk9ndp0rbt2s5kn9i@4ax.com>
Source record: 104252
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Sat, 22 Nov 2003 02:44:57 -0000, "Frank"
<dlwxzqffcx@cqvdqntcxxawvjpo.com> wrote:

|Wes Stewart <hc9trvg0bhujfvdraicb2bfnusd48svrie@4ax.com>...
|
|^ Antennas are reciprocal, if they wouldn't work well for
|^ transmitting, they will work equally poorly for receiving.
|
|I don't believe that. It's been my experience that an antenna used for
|receiving will function satisfactorily over a much broader range of
|conditions (environment, antenna length, etc.) than it will if used for
|transmitting under those same conditions.

Mmm. In the case of atmospheric limited SNRs that is true. A trailing
wire under sea water receives just fine at ELF and doesn't work worth
a damn for transmitting. But those are special cases that can always
be manufactured. Beverage antennas are also not something to be used
for transmitting but you won't be disguising one as a chimney cap
either :)

In the general sense of h-f to microwave, I stand by my claim.

Wes

4889. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 06:45:42 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FBF062E.7010202@get.lost>
Source record: 104253

Nisse wrote:

> For Lightening protection, almost anything will do. Remember, You only will
> have
> to make it EASIER for the lightning to take a predictable way, than taking a
> un-predictable one. Just drill a hole, put in the rod, put some soil in the
> hole and enjoy.

If you honestly think this is Lightening (sic) protection, I wouldn't
put any antennas higher than three feet if I were you.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

4890. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 07:07:03 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <6m2urv8mb567i6v42p0q2e457ge6ol32u3@4ax.com>
Source record: 104254
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 21:47:29 -0600, "Stinger"
<contact@newsserveronly.com> wrote:

|just as it is clear your intent is to act like
|an asshole.

No, just having a little fun, but some folks take this stuff waaaay
too seriously.

4891. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 07:10:04 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <sp2urv0u3otkhd4b1bs6hktumi9rjl209p@4ax.com>
Source record: 104256
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 23:17:33 +0500, "John Doty" <jpd@w-d.org> wrote:

|In article <bpmjib$99v4$1@news3.infoave.net>, "w4jle" <W4JLE(remove this
|to reply)@pbtcomm.net> wrote:
|
|> Believe what you will, the law of reciprocity will ignore your beliefs
|> and continue to function.
|
|1. It's only a "law" for scalar radiation (like sound), not vector
|radiation (radio). To be sure, it's a fine approximation for most HF
|antenna systems, but watch out a microwave frequencies, especially if your
|antenna system contains a "circulator".

Heh heh. When the guys from MIT come out to argue with you, you know
you're in trouble. But fools rush in...

I have made thousands of measurements in anechoic antenna ranges and I
have never seen a difference between measuring s21 and s12. (Without
the circulators, and accounting for mismatch effects of course)

Where did I go wrong?

|2. In the cases where reciprocity applies you would be correct to say that
|it requires that the antenna directivity and efficiency are the same for
|transmitting and receiving. It does not follow, however, that a poor
|transmitting antenna is necessarily a poor receiving antenna. Efficiency
|matters much more when transmitting than it does when receiving.

It also does not follow that a lousy receiving antenna is good enough.

For example, I *always* got better moon echos on 2-meter EME using the
same antenna for transmit and receive. When I tried a wet string on
receive I didn't hear nuthin' <g>

I have observed the same on 20 meters. My Yagi at a modest height of
50 feet is *always* better than an indoor wire.

|
|Franks's observations are correct, and can be verified if you do a
|detailed signal to noise calculation. You could also try the experiment
|yourself.

Two experiments cited above.

4892. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 07:19:14 UTC
From: Restricted Ham <restricted.ham@no_antenna_allowed.com>
Message-ID: <3FBF0DF1.62B0CD85@no_antenna_allowed.com>
Source record: 104257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Hi,

For ongoing topic on antenna restrictions and related subject go here:

http://www.eham.net/forums/AntennaRestrictions

I also live in a restricted lower middle class working guy/gal development (PUD)

all new construction in the area had these restricted covenants. No way around it
unless you buy older homes in older neighborhoods and you may pay a lot of money
for smaller home but well built and no restrictions.

Most restrictions duplicate local rules, like letting the lawn grow a foot tall or parking
any cars on the front lawn or backyard, etc...

a few crazy people on our board, one rides his mobility scooter and takes photos of any
and all things he don't like, get a life pal ! he is crazy.

As you will read in the above eham topic, one poster points out that the homes in the
big buck area like beverly hills etc, have NO RESTRICTIONS and many are hams !

he also writes that these restrictions do nothing to increase home values.

do visit the above link very informative

73 and keep it stealth !

"A.Pismo Clam" wrote:

> Hello All!
>
> I live in San Diego and have been a PBS supporter for many years. An
> article in this months "On Air" PBS magazine has made my day! The
> article is on page #3. It is written by the General Manager of the tv
> station. I have not read the document in question, but it does sound too
> good to be true. How curious are you? If you live in San Diego, you
> might find a copy in your local library.
>
> In essence he says that the:

>
> "...[Federal] government will defend your right to crawl up on the roof
> and put up a BIG, HONKING antenna, despite the protests of nosy
> neighbors, community planners, rental management companies, local
> governemnt bureaucrats and other meddlesome busybodies."
>
> Want to know how? Here is the URL:
>
> www.fcc.gov/mb/facts/otard.html
>
> Now you may have to prove to "the opposition" that the antenna you have
> erected can indeed receive "local" television stations, but that should
> not be that difficult to do...

4893. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 07:19:33 UTC
From: Restricted Ham <restricted.ham@no_antenna_allowed.com>
Message-ID: <3FBF0E04.A7A49910@no_antenna_allowed.com>
Source record: 104258
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Hi,

For ongoing topic on antenna restrictions and related subject go here:

http://www.eham.net/forums/AntennaRestrictions

I also live in a restricted lower middle class working guy/gal development (PUD)

all new construction in the area had these restricted covenants. No way around it
unless you buy older homes in older neighborhoods and you may pay a lot of money
for smaller home but well built and no restrictions.

Most restrictions duplicate local rules, like letting the lawn grow a foot tall or parking
any cars on the front lawn or backyard, etc...

a few crazy people on our board, one rides his mobility scooter and takes photos of any
and all things he don't like, get a life pal ! he is crazy.

As you will read in the above eham topic, one poster points out that the homes in the
big buck area like beverly hills etc, have NO RESTRICTIONS and many are hams !

he also writes that these restrictions do nothing to increase home values.

do visit the above link very informative

73 and keep it stealth !

"A.Pismo Clam" wrote:

> Hello All!
>
> I live in San Diego and have been a PBS supporter for many years. An
> article in this months "On Air" PBS magazine has made my day! The
> article is on page #3. It is written by the General Manager of the tv
> station. I have not read the document in question, but it does sound too
> good to be true. How curious are you? If you live in San Diego, you
> might find a copy in your local library.
>
> In essence he says that the:

>
> "...[Federal] government will defend your right to crawl up on the roof
> and put up a BIG, HONKING antenna, despite the protests of nosy
> neighbors, community planners, rental management companies, local
> governemnt bureaucrats and other meddlesome busybodies."
>
> Want to know how? Here is the URL:
>
> www.fcc.gov/mb/facts/otard.html
>
> Now you may have to prove to "the opposition" that the antenna you have
> erected can indeed receive "local" television stations, but that should
> not be that difficult to do...

4894. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 08:07:07 UTC
From: RP Jones <rparsley@verizon.NOSPAMnet>
Message-ID: <LOEvb.1440$rS5.780@nwrdny02.gnilink.net>
Source record: 104259
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Big BIG mistake, its all over for him.
Nothing worse then board members of these associations, I rather live in an
airplane fuselage with livestock.
I suggest this guy try and get out of the lease
Show up to a meeting babbling in pajamas and pee on the floor !!!
-RP
"'Doc" <w5lz@cwis.net> wrote in message news:3FBE7BE5.F994F096@cwis.net...

> The only one you can blame for this problem is your
> self. You signed the lease...
> 'Doc

4895. Re: Earth as a "dipole"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 08:09:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g26urvofhub3reral517stcoeq30l3ldi4@4ax.com>
Source record: 104260

On Fri, 21 Nov 2003 15:51:29 -0600, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:
> To support your version, there must exist some residual magnetism in the
>molten core from day one.

Hi Steve,

The "first" magnetism could have been "twanged" exactly as you
expressed but didn't follow through with. Any number of meteor
strikes could have done that, if in fact it wasn't already there from
the primordial conditions of plasmas and moving charges during the
cosmic soup coagulating into the initial mass. This, after all, was
bred from a condition of extreme heat, escaping now to a Mars
condition of a frozen core in some several billion years hence.

73's
Richard Clark, KB7QHC

4896. Re: Ground rods in rocky soil

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 08:14:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sf6urv8d493e02s5ptrsbsg1gont79c76l@4ax.com>
Source record: 104261

>> Just drill a hole, put in the rod, put some soil in the
>> hole and enjoy.
>If you honestly think this is Lightening (sic) protection, I wouldn't
>put any antennas higher than three feet if I were you.
Reminds me of the joke of astronauts taking a barrel of dirt with them
into outer space so they could be buried if they died out there.

4897. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 08:22:10 UTC
From: John Doty <jpd@w-d.org>
Message-ID: <J_WdnRKZ2NDPNCKiRTvUqQ@speakeasy.net>
Source record: 104184
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <oa0vrv8n4j77blle247nouopu3hcoe5vc2@4ax.com>, "Wes Stewart" <n7ws@_arrl.net> wrote:

> |Seriously, for your purposes you did nothing wrong. Just don't call
> |reciprocity a "law", OK? It's a useful idea of wide applicability, but
> |physics does not require it in general. Calling it a law confuses
> people.
>
> I never made that statement.

Oops, you're right.. It was "w4jle". But you took his side :-)

> See, one of the groups this got cross-posted to is an *Amateur Radio
> Antenna* group. I'm reading and writing it from this group and
> commenting from that perspective. I normally don't cross post but did
> the first one by accident and since I've developed such a loyal
> following I didn't want to lose anybody <G>.

But we were discussing Frank's observation:

> It's been my experience that an antenna used for receiving will function
> satisfactorily over a much broader range of conditions (environment,
> antenna length, etc.) than it will if used for transmitting under those
> same conditions.

Certainly below 30 MHz this is represents a correct observation, verifiable both by calculation and experiment. Why should this reality change with the newsgroup?

> Tall tree? What's a tall tree? The best I have is some 35 foot tall
> Saguaro cactii. They're a bitch to climb, although when the coyotes
> went after the cat, she managed. Let's see, I could tie a string to the
> cat's tail and find a coyote.....

Sounds like you're in "Beverage on the ground" territory. That works too, I'm told (I live next to a swamp, so the tall maples are my friends :-). I've never tried a Beverage on the ground, although I have used a long skinny island as a slot antenna (worked very well from longwave through tropical bands, useless above 10 MHz).

--
| John Doty "You can't confuse me, that's my job."
| Home: jpd@w-d.org
| Work: jpd@space.mit.edu

4898. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 08:48:02 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <6pFvb.96762$Ec1.4519389@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:k3Dvb.22042$ow5.9549@bignews2.bellsouth.net...
> Different strokes for different folks, Frank.
>
> In my view, I didn't give up anything when I built in a neighborhood
with
> restrictive covenants. Instead, I gained the peace-of-mind that the
> neighborhood wouldn't decay. I gained "rights" as I agreed to
covenants
> that I would have followed anyway, because my neighbors will as well.
>
> Your "public sector versus private sector" infringement of rights
arguments
> isn't simply valid in this case because it is voluntary. My rights
are just
> fine, thank you.

This probably doesn't have anything to do with anything, but it crossed my mind some weeks ago, with all the controversy over the removal of Judge Moore's monument to the Ten Commandments. After the removal, I pretty much expected Judge Moore would put the monument on his front lawn. It's his property, and he should be free to do so. Well, maybe Judge Moore rents an apartment or lives in a condo and doesn't own a front lawn. But wouldn't be ironic if Judge Moore negligently signed onto a list of restrictions which effectively banned any such monument on his own property?

>
> However I do agree that there are plenty of cases where the public
sector
> (government) does infringe on the rights of private property owners.
I am
> vehemently against it. I believe it is unconstitutional for a city
> government to use eminent domain laws to force an owner of private
property
> to sell it (so the government can grant the land to a developer who
will
> build a shopping center) because the government will make more tax
revenue
> on a new shopping center. Yet this is happening time and again all
over the
> United States. It' just plain wrong.
>

> -- Stinger
>

If it's government using eminent domain to effectivly transfer private property from one owner to another private owner, yeah, there's a big problem there. Even if it's not a Constitutional problem, the voters should be deeply skeptical of all the promises the politicians make about these wasteful projects. But we have a long history of being negligent with our votes, as well.

Frank Dresser

4899. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 13:18:40 UTC
From: Soliloquy <invalid@invalid.com>
Message-ID: <Xns943B548B427D8invalidinvalidcom@216.168.3.44>
Source record: 104263
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"RP Jones" <rparsley@verizon.NOSPAMnet> wrote in
news:LOEvb.1440$rS5.780@nwrdny02.gnilink.net:

I work with a guy that is the president of a Home Owners Association.
Talk about an asshole. A woman in his area approached him to get
permission to have a yard sale. Of course he vacillated, and she grew
angry. He reassured her that her request would be considered by the
council.

Of course, her request was denied. All those cars parking in front of
other people's property would not be fair to the other people.

Fair, fair, fair. boy have I tired of this word.

This guy seems severely traumatized by the fact that these neighborhood
associations no longer have the ability to regulate satellite antennas
39.37" or smaller in diameter.

We have trouble with our interloping neighbor even though we don't live
in an area covered by these prohibitions. The neighbor is the vice
president of the city council in the small borough that we live in near
Pittsburgh. We first moved here, she expressed a desire for us to cut
down (for safety reasons of course LOL), every freakin tree on our
property. She made sure to tell us that the leaves on our property were
"our responsibility" to rake up. (hell, I didn't put them there, the
trees should have to rake them up). We had the diseased trees removed at
a considerable cost, and had the others trimmed.

You think that she would have had a geriatric orgasm. Noooo, she found
more things to harp about. My son had bought a 1967 Chevy that we parked
at the top of our driveway, even though the car was not licensed, as it
needed work before it was roadworthy. We were away for the weekend when
the local police drove onto our property and tagged our car as abandoned,
we had a week to get the car licensed. Enter Classic car plates. We had
to get regular plates for our car, then subsequently applied and were
issued classic car plates. The car was legal, they couldn't tow it, and
there it sat as before her interloping started.

But she never quits. We wanted to erect a privacy fence, but in this
relatively dilapidated neighborhood, believe it or not, there is an
ordinance against them. We had to resort to a shadow box fence. Prior to
this, we had the property surveyed, and the front of our property
includes a small part of what the neighbors assumed were theirs.
Apparently the loss of a small part of their property was too much to

bear, as the survey spike was removed and moved closer to our property.

Imagine this woman in charge of a homeowners association? I'd rather live in the country in West Virginia (I like West Virginia, very pretty country) with a refrigerator on the front porch and a small junk yard in my front yard than to live in a neighborhood covered by a covenant. Years ago in a telecommunications magazine, I read an article in which an amateur had crafted an antenna, essentially a pole with a narrow skirt, and placed it in the yard. He told the neighbors that it was a birdfeeder, and that the design was to preclude squirrels from climbing it. The only problem was that other neighbors began to ask if he could help them construct similar birdfeeders. Well, at least theirs won't require a buried wire running to them.

http://www.arrl.org/FandES/field/regulations/antenna-restrictions.html

> Big BIG mistake, its all over for him.
> Nothing worse then board members of these associations, I rather live
> in an airplane fuselage with livestock.
> I suggest this guy try and get out of the lease
> Show up to a meeting babbling in pajamas and pee on the floor !!!
> -RP
> "'Doc" <w5lz@cwis.net> wrote in message
> news:3FBE7BE5.F994F096@cwis.net...
>
>> The only one you can blame for this problem is your
>> self. You signed the lease...
>> 'Doc
>
>
>

4900. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 13:40:08 UTC
From: Fred Garvin <Garvin@Truss.net>
Message-ID: <bpnovovss2@216.221.129.15>
Source record: 104264
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 13:37:02 -0500, A.Pismo Clam wrote:

(snip)

> "...[Federal] government will defend your right to crawl up on the roof
> and put up a BIG, HONKING antenna, despite the protests of nosy
> neighbors, community planners, rental management companies, local
> governemnt bureaucrats and other meddlesome busybodies."
>
> Want to know how? Here is the URL:
>
> www.fcc.gov/mb/facts/otard.html
>
> Now you may have to prove to "the opposition" that the antenna you have
> erected can indeed receive "local" television stations, but that should
> not be that difficult to do...

I would NEVER live in a place that tries to tell me how to run my house or yard. I'd tell them to go F%^K themselves and move.

I never understood why people put up with such bulls^&t.

4901. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:02:05 UTC
From: Pappy127@usa.net
Message-ID: <3FBF7A6D.CFC429E4@usa.net>
Source record: 104265
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

That's how much you know about me. I don't sign leases.

'Doc wrote:
>
> The only one you can blame for this problem is your
> self. You signed the lease...
> 'Doc

4902. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:05:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpntv6$a164$1@news3.infoave.net>
Source record: 104266
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

The supreme court has ruled that it s perfectly legal if the aim is to
improve the tax base.

The most oppressive, draconian, government entities are your local zoning
boards.

"Stinger" <contact@newsserveronly.com> wrote in message
news:k3Dvb.22042$ow5.9549@bignews2.bellsouth.net...
. I believe it is unconstitutional for a city
> government to use eminent domain laws to force an owner of private
property
> to sell it (so the government can grant the land to a developer who will
> build a shopping center) because the government will make more tax revenue
> on a new shopping center. Yet this is happening time and again all over
the
> United States. It' just plain wrong.
>
> -- Stinger
>
> "Frank Dresser" <analogdial@worldnet.att.net> wrote in message
> news:uICvb.96113$Ec1.4504381@bgtnsc05-news.ops.worldnet.att.net...
> >
> > "Stinger" <contact@newsserveronly.com> wrote in message
> > news:7eBvb.21793$ow5.16257@bignews2.bellsouth.net...
> > > Frank,
> > >
> > > As I mentioned to Wes, nobody forces you to buy into a neighborhood
> > with
> > > covenants. I also mentioned that they are not for everybody. In my
> > case,
> > > they are a good idea, and one of the reasons I built my house where I
> > did
> > > was specifically because I knew what to expect from neighbors as they
> > built
> > > nearby.
> > >
> > > I don't feel bad that I can't let my yard get waist high, park junk
> > cars on
> > > the lawn, or paint my roof purple. Rather, I feel good knowing my
> > neighbor
> > > won't.
> > >
> > > By the way, I happen to be a Republican Kung-Fu black belt (Dragon

> > Claw
> > > 1992) that knows a good, honest mechanic that helped me teach my son
> > how to
> > > change the heads on his antique T-Bird in his garage.
> > >
> > > So much for your lily-livered weenie who won't fix their own car
> > argument.
> > >
> > > I honestly don't understand the hostility in your tone, Frank. What's
> > the
> > > real problem?
> > >
> > > -- Stinger
> > >
> > >
> > >
> >
> > I am hostile to the whole concept to a Homeowner's Association. These
> > are contractual arrangements, and not laws. If a person is penalized,
> > he doesn't have his usual legal rights. He either pays the penalty,
> > sells the property or sues the Homeowner's Association. If he sues,
> > it's the Homeowner's Association which will get the benefit of doubt in
> > Court. Policing power is one of genuine responsibilities of the
> > publicly elected government, and it ought to be done by public employees
> > who are directly answerable to the courts.
> >
> > And there's the related issue of ownership. Let's say, after another
> > marathon session of listening to SW kooks, I completely lose it and
> > paint my roof purple. It's my roof, isn't it? If it does cause some
> > damage to someone else it should be provable. But the complainer ought
> > to be prepared to put up some sort of evidence.
> >
> > So, yeah, homeowner's associations ain't for me.
> >
> > I could go on with my opinions about the public sector getting
> > improperly in the private sector and vice versa.
> >
> > My brother and I practically rebuilt his 64 T-Bird right in the
> > driveway. If I was bothering anybody, nobody spoke up.
> >
> >
>
>

4903. You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:26:29 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpo0j1$a0to$1@news3.infoave.net>
Source record: 104170

The FCC has ruled that they have no problem with people using the "F" word as a comment or as an insult.

The only way to incur the wrath of the FCC is using it in a sexual context.

http://www.fcc.gov/eb/Orders/2003/DA-03-3045A1.html

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<----------
Editor - Gilbert News On-Line
Http://gilbertnews.net

4904. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:31:35 UTC
From: Pappy127@usa.net
Message-ID: <3FBF8157.56DE0733@usa.net>
Source record: 104177
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Stinger, HOA are mostly comprised of residents that never have had a job where they supervised other humans and now is their chance to tell someone what to do. I do agree that no one want's a junk yard in their neighborhood. But I don't agree that the guy next door can/should be able to tell you what you are permitted to do on property you pay the mortgage, taxes and up keep on. He/she or they can frankly go to hell. The plan I (for DOC) "BOUGHT" a home in even has restrictions of 18' satellite dishes, part of the antenna restriction clause. Since the latest FCC decision the HOA can kiss that part good by. And yes, receiving antennas can be hidden quite well. Some of us are licensed ham and enjoy our hobby as you do. Just because we move into a new home in a new area why should we give up the hobby we so enjoy? We shouldn't have too. Not all hams have gigantic towers and beams, some of use are satisfied to use a piece of wire to TRANSMIT on. I have and will continue to do so when I move. HOA's bring out the evils in good people, we have to get sneaky and stealthy to enjoy life as we have for many years.

I know, I've heard this before. It was our choice to purchase in a plan with restrictions, show me a plan or find me a plot (1/2 acre) of land where there there are no restrictions in the U.S.A.. If the politicians arn't telling you what to do it's some nosey neighbor.

Ya'll have a positive day.

Stinger wrote:
>
> Homeowners associations are a good thing! They are basically an agreement
> that you and your neighbors will follow some clearly defined rules for the
> specific purpose of maintining optimum property values for everyone. In
> other words, you won't have to worry about buying an expensive house and
> having your next-door neighbor decide to use his yard to store a dozen
> wrecked automobiles while he builds a hot-rod or runs a car-repair business.
> Common sense should tell anyone that their rights end when they start to
> infringe on anyone else's, but sometimes you need it in writing. ;^)
>
> Receiving antennas are easily concealed. If you can find mine from the
> street, you were born on Krypton. I think this is an overly-hyped problem.
>
> Broadcasting antennas are another animal, though. For instance, nobody
> wants to live next to some clown running a bunch of linear amps through a CB
> "base station." It will literally be "seen" on well-shielded cable
> television connections, and is a nuisance. I think that's a lot of what the

> "external antenna" rules are meant to curb.
>
> -- Stinger
>

4905. HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:34:04 UTC
From: "Lee." <vulcanNOSPAM@ihug.com.au>
Message-ID: <bpnvks$ac9$1@lust.ihug.co.nz>
Source record: 104268

Hello Folks
I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
recommend one? opinions please???

Lee.

4906. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:46:00 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <oa0vrv8n4j77blle247nouopu3hcoe5vc2@4ax.com>
Source record: 104169
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Sat, 22 Nov 2003 10:23:52 +0500, "John Doty" <jpd@w-d.org> wrote:

|In article <sp2urv0u3otkhd4b1bs6hktumi9rjl209p@4ax.com>, "Wes Stewart"
|<n7ws@_arrl.net> wrote:
|
|> Heh heh. When the guys from MIT come out to argue with you, you know
|> you're in trouble. But fools rush in...
|>
|> I have made thousands of measurements in anechoic antenna ranges and I
|> have never seen a difference between measuring s21 and s12. (Without the
|> circulators, and accounting for mismatch effects of course)
|>
|> Where did I go wrong?
|
|You didn't ionize the air in the range :-)
|
|Seriously, for your purposes you did nothing wrong. Just don't call
|reciprocity a "law", OK? It's a useful idea of wide applicability, but
|physics does not require it in general. Calling it a law confuses people.

I never made that statement.

[snip]
|
|Directivity matters equally for receiving and transmitting. Was your wet
|string as directive as your other antenna?

I don't know. Remember I live in the desert; I couldn't keep the
string wet long enough to find out.

|2 meters is also quiet enough
|that there's not much room for inefficiency: in some directions the sky
|temperature is <200K.

Yep. Love that quiet sky.
|
|>
|> I have observed the same on 20 meters. My Yagi at a modest height of
|> 50 feet is *always* better than an indoor wire.
|
|Throw a thin wire with dark brown insulation over a tall tree, up over one
|side, partway down the other (shaped like a "?"). Tie it in place with
|nylon fishing line. It will be invisible unless you're very close. Couple
|to coax with a grounded 9:1 broadband matching transformer. Bury the coax

|run to the house.

Tall tree? What's a tall tree? The best I have is some 35 foot tall
Saguaro cactii. They're a bitch to climb, although when the coyotes
went after the cat, she managed. Let's see, I could tie a string to
the cat's tail and find a coyote.....

[snip]

|> In the general sense of h-f to microwave, I stand by my claim.
|
|For the special case of confinement to a small number of narrow bands (as
|in ham radio), you are reasonably correct above 10 MHz. To me as a
|hobbyist listing to LW/MW/SW, that isn't the general case. Of course the
|game changes when I'm operating a satellite, but that isn't my *hobby*.

See, one of the groups this got cross-posted to is an *Amateur Radio
Antenna* group. I'm reading and writing it from this group and
commenting from that perspective. I normally don't cross post but did
the first one by accident and since I've developed such a loyal
following I didn't want to lose anybody <G>.

Regards,

Wes Stewart, N7WS

4907. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 15:46:29 UTC
From: Pappy127@usa.net
Message-ID: <3FBF84D5.19ECCC35@usa.net>
Source record: 104179
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Typical example where that woman runs her house with an iron hand and tries to do the same with other households, like yours. Just do as she tells you or she may sell your home from under you.

She needs to wake up. The would doesn't revolve around her.

Soliloquy wrote:
>
> "RP Jones" <rparsley@verizon.NOSPAMnet> wrote in
> news:LOEvb.1440$rS5.780@nwrdny02.gnilink.net:
>
> I work with a guy that is the president of a Home Owners Association.
> Talk about an asshole. A woman in his area approached him to get
> permission to have a yard sale. Of course he vacillated, and she grew
> angry. He reassured her that her request would be considered by the
> council.
>
> Of course, her request was denied. All those cars parking in front of
> other people's property would not be fair to the other people.
>
> Fair, fair, fair. boy have I tired of this word.
>
> This guy seems severely traumatized by the fact that these neighborhood
> associations no longer have the ability to regulate satellite antennas
> 39.37" or smaller in diameter.
>
> We have trouble with our interloping neighbor even though we don't live
> in an area covered by these prohibitions. The neighbor is the vice
> president of the city council in the small borough that we live in near
> Pittsburgh. We first moved here, she expressed a desire for us to cut
> down (for safety reasons of course LOL), every freakin tree on our
> property. She made sure to tell us that the leaves on our property were
> "our responsibility" to rake up. (hell, I didn't put them there, the
> trees should have to rake them up). We had the diseased trees removed at
> a considerable cost, and had the others trimmed.
>
> You think that she would have had a geriatric orgasm. Noooo, she found
> more things to harp about. My son had bought a 1967 Chevy that we parked
> at the top of our driveway, even though the car was not licensed, as it
> needed work before it was roadworthy. We were away for the weekend when
> the local police drove onto our property and tagged our car as abandoned,
> we had a week to get the car licensed. Enter Classic car plates. We had
> to get regular plates for our car, then subsequently applied and were

> issued classic car plates. The car was legal, they couldn't tow it, and
> there it sat as before her interloping started.
>
> But she never quits. We wanted to erect a privacy fence, but in this
> relatively dilapidated neighborhood, believe it or not, there is an
> ordinance against them. We had to resort to a shadow box fence. Prior to
> this, we had the property surveyed, and the front of our property
> includes a small part of what the neighbors assumed were theirs.
> Apparently the loss of a small part of their property was too much to
> bear, as the survey spike was removed and moved closer to our property.
>
> Imagine this woman in charge of a homeowners association? I'd rather
> live in the country in West Virginia (I like West Virginia, very pretty
> country) with a refrigerator on the front porch and a small junk yard in
> my front yard than to live in a neighborhood covered by a covenant.
> Years ago in a telecommunications magazine, I read an article in which an
> amateur had crafted an antenna, essentially a pole with a narrow skirt,
> and placed it in the yard. He told the neighbors that it was a
> birdfeeder, and that the design was to preclude squirrels from climbing
> it. The only problem was that other neighbors began to ask if he could
> help them construct similar birdfeeders. Well, at least theirs won't
> require a buried wire running to them.
>
> http://www.arrl.org/FandES/field/regulations/antenna-restrictions.html
>
> > Big BIG mistake, its all over for him.
> > Nothing worse then board members of these associations, I rather live
> > in an airplane fuselage with livestock.
> > I suggest this guy try and get out of the lease
> > Show up to a meeting babbling in pajamas and pee on the floor !!!
> > -RP
> > "'Doc" <w5lz@cwis.net> wrote in message
> > news:3FBE7BE5.F994F096@cwis.net...
> >
> >> The only one you can blame for this problem is your
> >> self. You signed the lease...
> >> 'Doc
> >
> >
> >

4908. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 16:05:06 UTC
From: Pappy127@usa.net
Message-ID: <3FBF8932.FBEEF200@usa.net>
Source record: 104180
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Frank it's called a "sky hook".

Frank wrote:
>
> Dave Holford article <3FBE8441.32C89004@.deletethis.sympatico.ca>...
>
> ^ I have personal experience, some 40 years ago, with an
> ^ HF antenna which consisted of the top half of the tail
> ^ (about a 15 to 20 foot square metal surface) which was
> ^ tuned by a remote ATU (Collins CU-351 ISTR) and performed
> ^ at least as well as a fixed wire over the range of 2.5 to
> ^ 30 MHz.
>
> If I could put an antenna like that 20,000 feet over my house I would be very
> happy indeed!
>
> Frank

4909. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 16:52:04 UTC
From: Frank <rzalwrsahm@ltgichxlmxftvimy.com>
Message-ID: <01c3b118$f504a680$0125250a@ltgichxlmxftvimy>
Source record: 104171
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Wes Stewart <oa0vrv8n4j77blle247nouopu3hcoe5vc2@4ax.com>...

^ Tall tree? What's a tall tree? The best I have is some
^ 35 foot tall Saguaro cactii.

That might serve as a 40m vertical if the roots are dry and shallow.

Frank

4910. Re: You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 16:58:47 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBF95C7.9CAFCE13@cwis.net>
Source record: 104173

w4jle,
You can also knock your head against a brick
wall if you want to. You can be as stupid as
you want to. You can nail your foot to the floor
if you want to. The question is, "Why would you
want to?".
'Doc

4911. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 16:58:49 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <5BMvb.7531$m24.6537@fed1read02>
Source record: 104172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"RP Jones" <rparsley@verizon.NOSPAMnet> wrote in message
news:LOEvb.1440$rS5.780@nwrdny02.gnilink.net...
> Big BIG mistake, its all over for him.
> Nothing worse then board members of these associations, I rather live in
an
> airplane fuselage with livestock.
> I suggest this guy try and get out of the lease
> Show up to a meeting babbling in pajamas and pee on the floor !!!
> -RP

That's also prohibited by the CC&R's.

Ed
WB6WSN

4912. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:02:08 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vrv5n1jot8sse6@corp.supernews.com>
Source record: 104174

"Lee." <vulcanNOSPAM@ihug.com.au> wrote in message
news:bpnvks$ac9$1@lust.ihug.co.nz...
> Hello Folks
> I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> recommend one? opinions please???
>
> Lee.
>
>
Check out www.SteppIR.com .
I was looking for a log once.
Bought the SteppIR yagi.
73
H.
NQ5H

4913. TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:14:31 UTC
From: anonymous@coolgroups.com
Message-ID: <3fbf9977_9@news.athenanews.com>
Source record: 104175

I recently made a TV antenna, and strangely it seems to pick up some cable channels like VH1 and TNT. They're a bit snowy, but they're definitely there. Does anyone know why this might be? I live in an apartment, so could I be getting signals from someone else's wires?

Thanks

4914. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:18:15 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBF9A57.5ABF9572@cwis.net>
Source record: 104176
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Pappy127,
You are absolutely right! I don't know anything
about you.
The point being, that if you sign an agreement with
the knowledge that you do not intend to abide by that
agreement, then you shouldn't be upset when you are
penalized for breaking the agreement. Is that so hard
to understand?
'Doc

4915. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:30:52 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <g3Nvb.17109$Wy4.14433@newsread2.news.atl.earthlink.net>
Source record: 104178
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"A.Pismo Clam" wrote:
>
> I live in San Diego and have been a PBS
> supporter for many years. An article in this
> months "On Air" PBS magazine has made
> my day! The article is on page #3. It is
> written by the General Manager of the tv
> station. I have not read the document in
> question, but it does sound too good to
> be true. How curious are you? If you live
> in San Diego, you might find a copy in
> your local library. (snip)

There was legislation proposed last year in the House of Representatives that would have prevented Home Owner Associations, and similar groups, from banning the use of outside antennas by Ham Operators. The idea was to apply the same "reasonable accommodation" rules that previous legislation had done regarding towns and cities. The legislation was supported by several House members, sent to committee for review, and I never heard anything else about it. Perhaps someone else is aware of what actually happened to it.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

4916. Re: You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:41:28 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bpo74m$a5qp$1@news3.infoave.net>
Source record: 104181

Doc, I found the reasoning of the FCC less than stellar and was pointing out the fact.

I don't use the word in personal conversations, let alone on the air. I was at a local high school to cover an event, and heard the word more times, spoken by young girls, than during my 10 years in the Navy.

"'Doc" <w5lz@cwis.net> wrote in message news:3FBF95C7.9CAFCE13@cwis.net...
>
>
> w4jle,
> You can also knock your head against a brick
> wall if you want to. You can be as stupid as
> you want to. You can nail your foot to the floor
> if you want to. The question is, "Why would you
> want to?".
> 'Doc

4917. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 17:46:42 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <6iNvb.17122$Wy4.8191@newsread2.news.atl.earthlink.net>
Source record: 104182
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jim Higgins" wrote:
>
> It limits you to antennas 1 meter in diameter
> or across the diagonal. No 6-ele 20M beams
> here.

No, it doesn't have that limit. The first paragraph describes antennas for satellite services and the second paragraph describes antennas for video programming services. The third paragraph...

(3) An antenna that is designed to receive
local television broadcast signals. Masts
higher than 12 feet above the roofline may
be subject to local permitting requirements.

...describes antennas for broadcast television and no size limit is described (only the height limit). By the way, a large 20M beam should receive broadcast television fairly nicely (with a little hardware to cut out the television while transmitting).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

4918. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:08:56 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <YCNvb.98397$Ec1.4561443@bgtnsc05-news.ops.worldnet.att.net>
Source record: 104183
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Soliloquy" <invalid@invalid.com> wrote in message
news:Xns943B548B427D8invalidinvalidcom@216.168.3.44...
>
>
> I work with a guy that is the president of a Home Owners Association.
> Talk about an asshole. A woman in his area approached him to get
> permission to have a yard sale. Of course he vacillated, and she grew
> angry. He reassured her that her request would be considered by the
> council.
>
> Of course, her request was denied. All those cars parking in front of
> other people's property would not be fair to the other people.
>
> Fair, fair, fair. boy have I tired of this word.
>
> This guy seems severely traumatized by the fact that these
neighborhood
> associations no longer have the ability to regulate satellite antennas
> 39.37" or smaller in diameter.
>
> We have trouble with our interloping neighbor even though we don't
live
> in an area covered by these prohibitions. The neighbor is the vice
> president of the city council in the small borough that we live in
near
> Pittsburgh. We first moved here, she expressed a desire for us to cut
> down (for safety reasons of course LOL), every freakin tree on our
> property. She made sure to tell us that the leaves on our property
were
> "our responsibility" to rake up. (hell, I didn't put them there, the
> trees should have to rake them up). We had the diseased trees removed
at
> a considerable cost, and had the others trimmed.

Trees! Can't live with 'em, can't live without 'em! Mr. T moved into one of our most exclusive suburbs back in the 80s. Like many new homeowners, he wanted to do some landscaping. In Mr. T's case, landscaping meant shaving everything outside his mansion down to a stubble. Mr. T announced his landscaping decision with a wailing chainsaw. The startled neighbors reacted as strongly as if T had been firing a poorly aimed automatic weapon. Amusing court battles between the Newly Wealthy Thespian and the Inheritors of the Robber Barons

ensued. Oh, if only the oil refiners, the meat packers and the industrialists who built the North Shore suburbs had the foresight to see that an environmental vandal might show up right there in their midst!! And all of this happened without CC&Rs. Just as well. I'd pity the fool who'd try to write up Mr. T to a Homeowner's Association.

> You think that she would have had a geriatric orgasm. Noooo, she found
> more things to harp about. My son had bought a 1967 Chevy that we parked
> at the top of our driveway, even though the car was not licensed, as it
> needed work before it was roadworthy. We were away for the weekend when
> the local police drove onto our property and tagged our car as abandoned,
> we had a week to get the car licensed. Enter Classic car plates. We had
> to get regular plates for our car, then subsequently applied and were
> issued classic car plates. The car was legal, they couldn't tow it, and
> there it sat as before her interloping started.
>
> But she never quits. We wanted to erect a privacy fence, but in this
> relatively dilapidated neighborhood, believe it or not, there is an
> ordinance against them. We had to resort to a shadow box fence. Prior to
> this, we had the property surveyed, and the front of our property
> includes a small part of what the neighbors assumed were theirs.
> Apparently the loss of a small part of their property was too much to
> bear, as the survey spike was removed and moved closer to our property.
>
> Imagine this woman in charge of a homeowners association? I'd rather
> live in the country in West Virginia (I like West Virginia, very pretty
> country) with a refrigerator on the front porch and a small junk yard in
> my front yard than to live in a neighborhood covered by a covenant.
> Years ago in a telecommunications magazine, I read an article in which an
> amateur had crafted an antenna, essentially a pole with a narrow skirt,
> and placed it in the yard. He told the neighbors that it was a
> birdfeeder, and that the design was to preclude squirrels from climbing
> it. The only problem was that other neighbors began to ask if he could
> help them construct similar birdfeeders. Well, at least theirs won't
> require a buried wire running to them.

I have no doubt that most Homeowner's Associations are run by decent and reasonable folk. I'm sure that's true of most small public governments, as well. But what happens when things go bad? Given the sorry state of human nature, it will, sooner or later. There's small time control freaks in private and public life. But we have a better chance with them if we don't sign away our rights.

Frank Dresser

>
>
> http://www.arrl.org/FandES/field/regulations/antenna-restrictions.html
>
>
>
>

4919. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:27:04 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <YTNvb.12149$P%1.10543662@newssvr28.news.prodigy.com>
Source record: 104186
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:uIwvb.21653$ow5.14641@bignews2.bellsouth.net...
> Homeowners associations are a good thing! They are basically an agreement
> that you and your neighbors will follow some clearly defined rules for the
> specific purpose of maintining optimum property values for everyone. In
> other words, you won't have to worry about buying an expensive house and
> having your next-door neighbor decide to use his yard to store a dozen
> wrecked automobiles while he builds a hot-rod or runs a car-repair
business.
> Common sense should tell anyone that their rights end when they start to
> infringe on anyone else's, but sometimes you need it in writing. ;^)
>

Don't need a homeowner's association to prevent those kinds of violations.
Cities have ordinances against them. If someone violates the ordinance you
can file a complaint.

> Receiving antennas are easily concealed. If you can find mine from the
> street, you were born on Krypton. I think this is an overly-hyped
problem.
>
> Broadcasting antennas are another animal, though. For instance, nobody
> wants to live next to some clown running a bunch of linear amps through a
CB
> "base station." It will literally be "seen" on well-shielded cable
> television connections, and is a nuisance. I think that's a lot of what
the
> "external antenna" rules are meant to curb.
>
> -- Stinger
>

Again such CB operation is illegal and they can be just as big or bigger a
nuisance with a mobile operation. Some of these guys have multikilowatt
amps in their vehicles.

Such association rules force the LEGALLY LICENSED operator to use low height
indoor and hidden antennas. Theses types of antennas are far more prone to
generate interference than something well up on a tower.

Dee D. Flint, N8UZE

4920. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:27:30 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBFAA92.A43B5B6A@cwis.net>
Source record: 104185

anonymous,
You're probably right. You're picking up the signal
from someone else's connection, or, there's an unterminated
line near enough for you to pick up. At any rate, enjoy
it while you can.
'Doc

4921. Re: HF & VHF antennas for my garage.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:32:21 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <VYNvb.12151$P%1.10544709@newssvr28.news.prodigy.com>
Source record: 104187

"Bob Miller" <bxmiller@texas.netNOSPAM> wrote in message
news:0tltrvcito6v2tticabfql2g97pjl4ieln@4ax.com...
> On Fri, 21 Nov 2003 16:19:09 GMT, "res08z36" <res08z36@verizon.net>
> wrote:
>
> >I could use some help in setting up a HF antenna and another antenna to
work
> >VHF. I live in a condo that doesn't allow outside antennas at all, so
I'm
> >trying to set something up in my garage...maybe set up in the rafters
above
> >the car.
> >
> >I have a set of Iron Horse HF antenna sticks for the HF radio and a
Diamond
> >X50 for the VHF/UHF radio. The problem is I can't get either to work.
I
> >suspect it is because there is no ground going to the antennas. They
are
> >mounted on a antenna mast that is sitting on the concrete slap of the
> >garage.
>
> Get some wire, and cut some radials that you attach to the ground side
> of the antenna (coax braid side). Lay the radials on the concrete. You
> may have to adjust their length to get a low swr. Basically, you're
> setting up a ground plane antenna, with the Iron Horse doo-dad as the
> vertical element, and some homebrew radials for the ground plane. I'd
> try 4 radials per band.
>
> Another idea would be to string up, in and around your property, a
> crooked dipole of nearly invisible wire -- I believe the Wireman has
> #26 wire at his web site -- use little plastic buttons for insulators,
> and feed it with that clear-colored 300 ohm line from Radio Shack, to
> a little antenna tuner. That might do ya a lot better than trying to
> cram a vertical into your garage.
>
> Bob
> k5qwg
>
>
> >
> >Does anyone have some ideas of what I can do? Is there a different
> >antenna that I should consider that would solve this problem (of not
having

> >a real ground...just a cement floor)?
> >
> >-Bruce
> >
>

There are several antennas that do not require a ground. Try a half wave dipole mounted vertically. Or you can try a 1/2 wave vertical. This latter will require some inductance and/or capacitance to get the feed point impedance down to 50 ohms but no ground plane is required. Another antenna that does not require a ground plane is the discone. I used the Radio Shack one quite successfully and it will work on both 2 meters and 440mhz bands with no tuner.

Dee D. Flint, N8UZE

4922. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:34:20 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <M_Nvb.12152$P%1.10544985@newssvr28.news.prodigy.com>
Source record: 104188
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:dXAvb.21767$ow5.5401@bignews2.bellsouth.net...
> Sit on a cactus or something, Wes? You seem a little edgy.
>
> Nobody is forced to buy into a neighborhood with covenants. One can do
> exactly what you have done and buy some distance from your neighbors.
> That's great if it works out for you.
>
> However, my case is obviously different from yours. The home where I now
> live is not the home I will own when I retire. I won't need nearly as
many
> bedrooms, etc., and it will be out on an acreage I own (that's currently a
> little farther than I care to commute to my job). Living in a good
> neighborhood with covenants makes sense for me right now, because I do
want
> to protect the hefty investment I've made in my home, specifically because
I
> do intend to sell it someday.
>

There are often good communities without covenants, where your property values do increase and the sale of a home is relatively easy. This lets you "have your cake and eat it too". You could put up that antenna now and take it down when it is time to sell.

Dee D. Flint, N8UZE

4923. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:36:13 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <x0Ovb.12153$P%1.10545493@newssvr28.news.prodigy.com>
Source record: 104189
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:7eBvb.21793$ow5.16257@bignews2.bellsouth.net...
> Frank,
>
> I don't feel bad that I can't let my yard get waist high, park junk cars
on
> the lawn, or paint my roof purple. Rather, I feel good knowing my
neighbor
> won't.
>

As I said before, cities and communities have ordinances against these things (except the purple roof). Except in decaying neighborhoods, such city ordinances are enforced.

Dee D. Flint, N8UZE

4924. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:40:46 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <F3Ovb.2063$87.1903@bignews6.bellsouth.net>
Source record: 104190
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

We've strayed pretty far from radio, so this will be my last post on this subject. I hardly want to be in the position of defending ALL homeowner's associations.

I think the key to being happy with a homeowner's association is to have clear, concise, SPECIFIC covenants that aren't subject to liberal interpretations and that cannot be amended by the board without 100% approval from every single property owner. The ones in my neighborhood follow that model and are just that -- simple, and basically just commonsense good-neighbor policies.

There is a neighborhood in our town that did not follow that key, and they do indeed have problems. A bunch of retired busybodies managed to get control of the board, and have become a pain in the neck for working families or people trying to build new homes. I would never have built there. Their problem is that the development was originally designed to be a resort / weekend home development, but retirees have moved in and want to pretend that it's a high-end property.

Meanwhile, our neighborhood is great, and is in high demand.

Again, the point I am making is that neighborhood covenants are not ALL bad -- just some of them. (But these are the examples I'm seeing time and again on this thread, mostly from people that don't live in covenated neighborhoods anyway).

Frankly, I think that anyone that doesn't have their attorney help them review neighborhood covenants before they purchase property deserves exactly what they get. I'll bet most of these people don't have a Will, either, which is an similarly foolish situation.

-- Stinger

<Pappy127@usa.net> wrote in message news:3FBF8157.56DE0733@usa.net...
> Stinger, HOA are mostly comprised of residents that never have had a
> job where they supervised other humans and now is their chance to tell
> someone what to do. I do agree that no one want's a junk yard in their
> neighborhood. But I don't agree that the guy next door can/should be
> able to tell you what you are permitted to do on property you pay the
> mortgage, taxes and up keep on. He/she or they can frankly go to hell.
> The plan I (for DOC) "BOUGHT" a home in even has restrictions of 18'
> satellite dishes, part of the antenna restriction clause. Since the
> latest FCC decision the HOA can kiss that part good by. And yes,
> receiving antennas can be hidden quite well. Some of us are licensed ham

> and enjoy our hobby as you do. Just because we move into a new home in a
> new area why should we give up the hobby we so enjoy? We shouldn't have
> too. Not all hams have gigantic towers and beams, some of use are
> satisfied to use a piece of wire to TRANSMIT on. I have and will
> continue to do so when I move. HOA's bring out the evils in good people,
> we have to get sneaky and stealthy to enjoy life as we have for many
> years.
>
> I know, I've heard this before. It was our choice to purchase in a plan
> with restrictions, show me a plan or find me a plot (1/2 acre) of land
> where there there are no restrictions in the U.S.A.. If the politicians
> arn't telling you what to do it's some nosey neighbor.
>
> Ya'll have a positive day.
>
> Stinger wrote:
> >
> > Homeowners associations are a good thing! They are basically an
agreement
> > that you and your neighbors will follow some clearly defined rules for
the
> > specific purpose of maintining optimum property values for everyone. In
> > other words, you won't have to worry about buying an expensive house and
> > having your next-door neighbor decide to use his yard to store a dozen
> > wrecked automobiles while he builds a hot-rod or runs a car-repair
business.
> > Common sense should tell anyone that their rights end when they start to
> > infringe on anyone else's, but sometimes you need it in writing. ;^)
> >
> > Receiving antennas are easily concealed. If you can find mine from the
> > street, you were born on Krypton. I think this is an overly-hyped
problem.
> >
> > Broadcasting antennas are another animal, though. For instance, nobody
> > wants to live next to some clown running a bunch of linear amps through
a CB
> > "base station." It will literally be "seen" on well-shielded cable
> > television connections, and is a nuisance. I think that's a lot of what
the
> > "external antenna" rules are meant to curb.
> >
> > -- Stinger
> >

4925. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:42:13 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <96Ovb.12154$P%1.10546636@newssvr28.news.prodigy.com>
Source record: 104191
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:k3Dvb.22042$ow5.9549@bignews2.bellsouth.net...
> Different strokes for different folks, Frank.
>
> In my view, I didn't give up anything when I built in a neighborhood with
> restrictive covenants. Instead, I gained the peace-of-mind that the
> neighborhood wouldn't decay. I gained "rights" as I agreed to covenants
> that I would have followed anyway, because my neighbors will as well.
>

Many areas with restrictive covenants DO decay. The homes get old and out of date. The shingles aren't replaced often enough and so on. The covenants generally do not and cannot force a specific maintenance cyle on people. I seen some very run down areas that had covenants. Yeah the grass was mowed and there weren't any junk cars but the houses looked old and tired.

> Your "public sector versus private sector" infringement of rights
arguments
> isn't simply valid in this case because it is voluntary. My rights are
just
> fine, thank you.
>

While you have every right to sign away rights, the rest of it will continue to consider it foolish.

> However I do agree that there are plenty of cases where the public sector
> (government) does infringe on the rights of private property owners. I am
> vehemently against it. I believe it is unconstitutional for a city
> government to use eminent domain laws to force an owner of private
property
> to sell it (so the government can grant the land to a developer who will
> build a shopping center) because the government will make more tax revenue
> on a new shopping center. Yet this is happening time and again all over
the
> United States. It' just plain wrong.
>

That is not the purpose of eminent domain laws. If the law has been abused in such a manner, then the citizens affected should be filing a class action suit.

Dee D. Flint, N8UZE

4926. Re: You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 18:53:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qdavrvsc65q8njjj6eq8qcqt2i3dpppe9f@4ax.com>
Source record: 104192

On Sat, 22 Nov 2003 12:41:28 -0500, "w4jle" <W4JLE(remove this to
reply)@pbtcomm.net> wrote:
>Doc, I found the reasoning of the FCC less than stellar and was pointing out
>the fact.
Since the Right Whiner Hegemony, they've replaced their banner of
morality with the Dollar. A decade ago Senate hearings were held to
investigate the poor standards of vulgar TV and other forms of "Art."
The pursuit of that agenda has all but evaporated in the auctioning of
the spectrum to obscenely rich Rap Artists and Home shopping networks.

Talk of a balanced budget?
Nary a whisper.

Want reduced Capital Gains tax?
Not on the radar.

States Rights?
Give me a break.

Terms limits?
Only for suckers.

Flag amendment?
After they take away our rights.

Hold onto the Panama Canal?
Lost their grip.

Remember the Contract with America?
They don't either.

Don't get involved overseas?
Don't go there.

Take out Ossama?
Who?

Take out Saddam?
This is about WMDs not some camel-jockey!

Lower taxes?
You mean there are still some? Lower troop's pay and return that
money to the people who earned and own them.

Solve the economy and jobs?
What did you do with your $600?

Got a buck left?
You have their attention now! But at that price, barely.

73's
Richard Clark, KB7QHC
(busy packing to visit a Git'mo timeshare condo presentation)

4927. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 19:10:44 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <UwOvb.204932$mZ5.1532037@attbi_s54>
Source record: 104193
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Any time i have asked people why they would live with such restrictions, they always say that they don't want their neighbors having junk cars in their front yard. I have never lived in a neighborhood with a homeowners association. I have also never had the junk car problem. Generally, if you don't live in a slum, you do't have much to worry about. In any case, most towns have "eyesore laws" that cover this.
"Fred Garvin" <Garvin@Truss.net> wrote in message news:bpnovovss2@216.221.129.15...

> I never understood why people put up with such bulls^&t.

4928. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 19:12:35 UTC
From: Cecil.A.Moore@ieee.org
Message-ID: <9001ac09.0311221112.70fa66d1@posting.google.com>
Source record: 104194

k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0311211656.7deb381c@posting.google.com>...
> For instantaneous values,
> Vf2 = (2*Z2*Vf1+(Z1-Z2)*Vr2)/(Z1+Z2)
> Vr1 = ((Z2-Z1)*Vf1+2*Z1*Vr2)/(Z1+Z2)

My ISP doesn't seem to be making it lately so I am posting from Google.
Your equation represents Vf1 times the transmission coefficient plus
Vr2 times the reflection coefficient. This is perfectly logical but
IMO doesn't represent what is happening in reality. I hope I am wrong.
Re-arranging the terms:

Vf2 = 2*Z2*Vf1/(Z1+Z2) + Vr2(Z1-Z2)/(Z1+Z2)

For the example presented, I don't think there is enough interference
to support the above superposition. Again, I hope I am wrong but please
bear with me while you prove I am wrong. If I am wrong, it will resolve
something I have been wrestling with for three years.

Please calculate the two voltages, superpose them, and calculate the
resulting Pfwd2 forward power and then let's discuss the results.
--
73, Cecil, W5DXP

4929. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 20:57:31 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <%4Qvb.311544$0v4.18337753@bgtnsc04-news.ops.worldnet.att.net>
Source record: 104195
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stinger" <contact@newsserveronly.com> wrote in message
news:F3Ovb.2063$87.1903@bignews6.bellsouth.net...

[snip]

>
> Frankly, I think that anyone that doesn't have their attorney help
them
> review neighborhood covenants before they purchase property deserves
exactly
> what they get. I'll bet most of these people don't have a Will,
either,
> which is an similarly foolish situation.
>
> -- Stinger
>

Richard Oulton is an attorney. And more:

http://www.ccfj.net/flyoldgloryOulton.html

Frank Dresser

4930. WTB: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 21:15:27 UTC
From: "M.M." <junquemaile@cox.net>
Message-ID: <Xns943B910962FB0nobodynowhere@68.6.19.6>
Source record: 104196
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Looking for a 2M/70cm base antenna. Prefer a Diamond or a Comet but tell me whatch got...make, model, condition, price.

73... Mark AA7TA

4931. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 21:26:03 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vrvl4qabh56pde@corp.supernews.com>
Source record: 104197
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

When I lived in Austin, a ham on the air gave me an
excellent possible solution to the problem of
annoying home owner association self-appointed
gods.

He had lived in such a "anti-antenna" residence
at one time that didn't allow him to erect any outside
antennas. Therefore, he put a dipole up in his attic,
took ALL filtering out of line that he possibly could
and put the largest amplifier his money could buy
inline and began blasting away.

Of course he got knocks on the door, and people
beginning to complain, but they no longer had a legal
leg to stand on due to the FCC's requirements that
nearly all electrical gizmos and doo-dads "accept
any interference that results from other nearby
operating .... blah blah blah..."

The ham then told the home owners that this
was the result of having to move an antenna to the inside
of his attic to remove it from site, and gave them some
mumbo-jumbo jargon about why it causes more
interference than having it outside and high in the air
(referring to his antenna). Of course, he simply didn't
mention the huge planet-busting amplifier or the fact
that he removed all his filtering that he possibly could.

The home owners, believe it or not, made an exception
for him, after all the residential complaints about televisions,
telephones, baby monitors, answering machines and everything
else getting tore up constantly from RFI.

I recommend more hams doing this if thier home owner
gods become assholes as well.

Clint

4932. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 21:37:49 UTC
From: jder8745@aol.com
Message-ID: <20031122163749.12054.00000627@mb-m26.aol.com>
Source record: 104198

Shucks,

Why not use F connectors?

Jack K9CUN

4933. Re: Imaginary Standing Waves?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 21:39:34 UTC
From: jder8745@aol.com
Message-ID: <20031122163934.12054.00000628@mb-m26.aol.com>
Source record: 104199

Howdy,

Then there's always the naked ear.

Jack, K9CUN

4934. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 23:30:07 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FBFF17F.D166DB6C@cwis.net>
Source record: 104200
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Clint,
----clipped---
>
> I recommend more hams doing this if thier home owner
> gods become assholes as well.
>
> Clint

I wouldn't. I'd recomend that if you can't abide by the
rules
that you said you would, then either don't sign the contract, or
move. All these little tales say more about the person's moral
fortitude than it does the HOA's policies...
'Doc

4935. Digital cable filter spam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 23:40:09 UTC
From: Joe <ace@net1.com>
Message-ID: <ttSvb.81594$Dw6.389754@attbi_s02>
Source record: 104201

I've been getting a lot spam hawking this filter. My question is, do these filters really work or are they a rip-off?
73's

4936. Re: R/S Solderless BNC Connectors: How Can They Possibly Work Well ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-22 23:46:20 UTC
From: Jim <NN7K@Reno.Rmci.Net>
Message-ID: <vrvta56fr09e36@corp.supernews.com>
Source record: 104202

Actually, these connectors were originally designed for LAN service (IBM 3764) controller. and, have been used for coax for other services- tho they may not meet everyones needs at 1 gig range, the still will beat the pants off of SO-239-PL259, when comes to impedence shifting (transformation). as it takes a fair amount of length to cause an impedence transformation (1/4 wavelength for maximum effect), and the length of the connector parts is quite small by comparison, should be ok to a fairly high frequency, even figureing the velocity factors of the coax, and the connectors dielectriecs! It might not be perfect, but then, these work great for test cables, and other applications and, still would beat the crap out of the afformentioned (and misnamed) "UHF" connectors! Their biggest disadvantage(s) are: 1) that these , unlike a normal bnc, are available in 1 size (read - one IMPEDENCE) only (remember the lans versions were at aprox. 90 ohm!) and 2) they won't work with stranded center conductors. Otherwise, these are much prefered to adaptors, and connnectorsnwith components that are longer then the center pins of these bnc's (at least in my book,) and wouldn't hesitate to use them in place of "UHF" connectors , especially when useing smaller size coax. And, for OVERKILL, look at HARRIS radios, useing SMA connectors to measure BASEBAND LEVELS to a max of maybe 4 MHz (stacked SSB signals, 4 KHz apart, maybe 600 channels , tops! ! Need I say more??
Jim NN7K

"John Passaneau" <jxp16@psu.edu> wrote in message news:bpbaad$1jm2$1@f04n12.cac.psu.edu...
> Hi:
> I like the crimp on BNC's myself but the solder kind are OK. The twist on RS
> ones are probably OK in low frequency low power but I wouldn't trust them
> myself. In fact, I wouldn't buy one except in desperation.
> Your concerns are the same ones I have. As I can buy Amphonal crimp BNC's
> for $1.85 each anywhere, I would invest $50 in a crimp tool and go that
> route.

4937. Re: Digital cable filter spam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 00:10:13 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <ee-dneG7e510ZyKi4p2dnA@crocker.com>
Source record: 104203

"Joe" <ace@net1.com> wrote in message
news:ttSvb.81594$Dw6.389754@attbi_s02...
> I've been getting a lot spam hawking this filter. My question is, do these
> filters really work or are they a rip-off?
> 73's
>
>
well, lets see... if they did work, they would be illegal. if you bought
one and it didn't work and you wanted to complain that a product that would
be illegal didn't work, who would listen? what do you think?

4938. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 00:48:18 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311221648.3430f62a@posting.google.com>
Source record: 104204

So what do YOU get? As I recall, it comes out to a voltage equivalent
to 112.5W for Pf2, and 12.5W for Pr1. Maybe I can head you off at the
pass, and give you the values for further rounds of the echo:
round Pf2 Pr1
1 112.5 12.5
2 153.125 3.125
3 175.78125 0.78125
4 187.69531... 0.19531...
5 193.79883... 0.04883...
6 196.88721... 0.01221...
7 198.44055... 0.00305...
8 199.21951... 0.00076...
9 199.60957... 0.00019...
10 199.80474... 0.00005...

Don't see anything worth discussing about it at the moment.

Cheers,
Tom

Cecil.A.Moore@ieee.org (Cecil Moore) wrote in message
news:<9001ac09.0311221112.70fa66d1@posting.google.com>...
> k7itm@aol.com (Tom Bruhns) wrote in message
news:<3200347.0311211656.7deb381c@posting.google.com>...
> > For instantaneous values,
> > Vf2 = (2*Z2*Vf1+(Z1-Z2)*Vr2)/(Z1+Z2)
> > Vr1 = ((Z2-Z1)*Vf1+2*Z1*Vr2)/(Z1+Z2)
>
> My ISP doesn't seem to be making it lately so I am posting from Google.
> Your equation represents Vf1 times the transmission coefficient plus
> Vr2 times the reflection coefficient. This is perfectly logical but
> IMO doesn't represent what is happening in reality. I hope I am wrong.
> Re-arranging the terms:
>
> Vf2 = 2*Z2*Vf1/(Z1+Z2) + Vr2(Z1-Z2)/(Z1+Z2)
>
> For the example presented, I don't think there is enough interference
> to support the above superposition. Again, I hope I am wrong but please
> bear with me while you prove I am wrong. If I am wrong, it will resolve
> something I have been wrestling with for three years.
>
> Please calculate the two voltages, superpose them, and calculate the
> resulting Pfwd2 forward power and then let's discuss the results.

4939. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 01:14:52 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <gSTvb.15708$Rk5.7068@newsread1.news.atl.earthlink.net>
Source record: 104205

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:vrv5n1jot8sse6@corp.supernews.com...
>
> "Lee." <vulcanNOSPAM@ihug.com.au> wrote in message
> news:bpnvks$ac9$1@lust.ihug.co.nz...
> > Hello Folks
> > I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> > recommend one? opinions please???
> >
> > Lee.
> >
> >
> Check out www.SteppIR.com .
> I was looking for a log once.
> Bought the SteppIR yagi.
> 73
> H.
> NQ5H
>
>

Yeah but the spacing don't change. Course either does a standard quad. hi.

Tennadyne make a nice looking LP.

Haven't used one tho.

Dan/W4NTI

4940. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 01:53:27 UTC
From: Restricted_HAM <restricted_ham@noanetnna.com>
Message-ID: <3FC01315.E92D9D74@noanetnna.com>
Source record: 104206
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Hi

I agree with you, however, all the new homes have these restrictions, why ?

answer, to get a loan the banks want the restrictions and the builder wants them
so nobody gets out of line before he sells out all the homesites.

Otherwise he gets stuck with unsold lots and homes and can't pay the loans he got.

It I wanted to drive north or south of the city I live in I could get a nice lot, build a nice
house and do anything I want.
Problem is the schools are not as new and up to date compared to those in my county
I currently live in.

Also the commute is something to think about and utilities available.

> I would NEVER live in a place that tries to tell me how to run my house or
> yard. I'd tell them to go F%^K themselves and move.
>
> I never understood why people put up with such bulls^&t.

4941. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 02:13:38 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <mJUvb.281650$Fm2.290932@attbi_s04>
Source record: 104207

I used a Tennadyne T8 for years.

Lee. wrote:

> Hello Folks
> I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> recommend one? opinions please???
>
> Lee.
>
>

4942. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:01:21 UTC
From: Noon-Air <noon-air@comcast.net>
Message-ID: <ss2dnfIlHtGZvl2iRVn-vg@comcast.com>
Source record: 104208
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Try this one
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943650735&category=4672
or this one
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943658202&category=4672

No I don't have an interest in the place, I just ran across these and am
going to purchase one my self.

--
Steve @ Noon-Air Heating and A/C (n6ojn)
Noon-Air@comcast.net

When a work lifts your spirits and inspires bold and noble thoughts in you,
do not look for any other standard to judge by:
the work is good, the product of a master craftsman.
- -- La Bruyere

"M.M." <junquemaile@cox.net> wrote in message
news:Xns943B910962FB0nobodynowhere@68.6.19.6...
> Looking for a 2M/70cm base antenna. Prefer a Diamond or a Comet but tell
me
> whatch got...make, model, condition, price.
>
> 73... Mark AA7TA

4943. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:12:57 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vs09fbqce5ll47@corp.supernews.com>
Source record: 104209
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"'Doc" <w5lz@cwis.net> wrote in message news:3FBFF17F.D166DB6C@cwis.net...
>
>
> Clint,
> ----clipped---
> >
> > I recommend more hams doing this if thier home owner
> > gods become assholes as well.
> >
> > Clint
>
> I wouldn't. I'd recomend that if you can't abide by the
> rules
> that you said you would, then either don't sign the contract, or
> move. All these little tales say more about the person's moral
> fortitude than it does the HOA's policies...
> 'Doc

..kinda like sympathizing with HOA's that also frequently ban
flying an american flag as well.

Clint

4944. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:13:59 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vs09h9op10iscf@corp.supernews.com>
Source record: 104210
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FBF7A6D.CFC429E4@usa.net...
> That's how much you know about me. I don't sign leases.
>
> 'Doc wrote:
> >
> > The only one you can blame for this problem is your
> > self. You signed the lease...
> > 'Doc

as much as this person defends the jack-booted thugs of HOA's,
there must be something more to it that we don't know, wouldn't
you say?

Clint

4945. Re: Preamp + adjacent antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:17:41 UTC
From: Joey <noone@nowhere.com>
Message-ID: <cm90svg434i6eeqal4afj8hifbfdh7qcd8@4ax.com>
Source record: 104211

Thanks for the tips all!

On Thu, 20 Nov 2003 23:10:26 GMT, Mike <km6ab@pacbell.net> wrote:

>You could also put the relay on the transmit antenna and short it to
>ground during transmit, that would keep the preamp happy.
>
>
>
>
>
>He he he.
>
>Tarmo Tammaru wrote:
>> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
>> news:bpgc68mhb1@newshost.mot.com...
>>
>>>And short it to ground.
>>>k
>>>9
>>>d
>>>c
>>>i
>>
>> He means short the preamp input, not the antenna.
>>
>> Tam/WB2TT
>>
>>

4946. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:34:20 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vs0al98pnohi68@corp.supernews.com>
Source record: 104212

Dear "Lee"
You do not tell us where you are nor whether you wish the antenna
for amateur radio or commercial radio. In different parts of the world,
different answers might be appropriate.

http://www.tennadyne.com/
These people make a series of LPDAs that are competently designed and
executed. However, if you are in the ice "zone" you need to know that
at about 7 mm of ice the elements almost point straight down. As is
often the case with antenna manufacturers who are selling mostly to
radio amateurs, the safety factor on the wind rating is optimistic.
This should be of interest only if you are hit by very destructive winds
or if you are to place the antenna in the clear in an area of clear
fields. (The usual urban area significantly reduces wind load.)
Two hints: one needs the optional rear boom reinforcement and the
optimum way to connect to the antenna is to connect a piece of coax to
the front of the boom (obvious part) and run the same coax under the
bottom boom (the antenna uses a twin boom) to the insulated boom to mast
clamp. At that clamp, wind the coax on a uv stable plastic tube to form
a choke and bridge the clamp with the choke. Do not put the choke out
at the end of the boom.
Let us know what you decide.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Lee." <vulcanNOSPAM@ihug.com.au> wrote in message
news:bpnvks$ac9$1@lust.ihug.co.nz...
> Hello Folks
> I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> recommend one? opinions please???
>
> Lee.
>
>

4947. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:41:43 UTC
From: Joey <noone@nowhere.com>
Message-ID: <qma0svsbif6ei0jcmsu7s2tdok1m7mjkvi@4ax.com>
Source record: 104213

I'll NEVER buy into any property with such nonsense. PERIOD.

If you want to live under the paint & lawn Nazis go live in Irvine (Calif). Oh and make sure your window coverings all match. I was working on one building were the Irvine Co. (land nazis who own lots of the county) had a shit-fit because the intercom on the building didn't "match" the rest of the bland non-threatening colors. They even ripped up the sidewalk cause it was 1 shade off of some oppressive color scheme. And repainted the generator enclosed *3* times for the same reason.

Thank god I live in an older town where there are plenty of bullshit-free properties that you actually OWN without restrictions. The city only has a few ordinances such as not storing piece of shit cars on the street for more than 72 hours, and not paving over your entire front yard for parking. You can have however many RV's and boats that you want in the back yard and long as there's a 6' fence. And yes we allow fences.

On Fri, 21 Nov 2003 15:05:36 -0500, Pappy127@usa.net wrote:

>Thank you.... ....
>
>I am moving into a housing plan with such antenna restrictions. But
>what housing plan doesn't have them. There is always someone trying to
>tell some else how to live their lives, or knows what's best for you.
>
>"A.Pismo Clam" wrote:
>>
>> Hello All!
>>
>> I live in San Diego and have been a PBS supporter for many years. An
>> article in this months "On Air" PBS magazine has made my day! The
>> article is on page #3. It is written by the General Manager of the tv
>> station. I have not read the document in question, but it does sound too
>> good to be true. How curious are you? If you live in San Diego, you
>> might find a copy in your local library.
>>
>> In essence he says that the:
>>
>> "...[Federal] government will defend your right to crawl up on the roof
>> and put up a BIG, HONKING antenna, despite the protests of nosy
>> neighbors, community planners, rental management companies, local
>> governemnt bureaucrats and other meddlesome busybodies."

>>
>> Want to know how? Here is the URL:
>>
>> www.fcc.gov/mb/facts/otard.html
>>
>> Now you may have to prove to "the opposition" that the antenna you have
>> erected can indeed receive "local" television stations, but that should
>> not be that difficult to do...

4948. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 03:57:10 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bpp8mhomm1@news1.kornet.net>
Source record: 104214
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Clint" <rattlehead at computron dot net> wrote in message
news:vs09h9op10iscf@corp.supernews.com...
>
> <Pappy127@usa.net> wrote in message news:3FBF7A6D.CFC429E4@usa.net...
> > That's how much you know about me. I don't sign leases.
> >
> > 'Doc wrote:
> > >
> > > The only one you can blame for this problem is your
> > > self. You signed the lease...
> > > 'Doc
>
> as much as this person defends the jack-booted thugs of HOA's,
> there must be something more to it that we don't know, wouldn't
> you say?
>

All part of the fascist-izing of America.. whatever happened to "a man's home is his castle"?

I can understand where people have a right to not want someone storing a dozen rusty cars on their front lawn, or allowing their grass to get 3' tall.. but as far as antennas, etc.. they have no business telling a homeowner what to do. It's not right that they should be telling people what color they can paint their house, what kind of plants or animals they can or cannot have, etc..

4949. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 04:04:23 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031122230423.20023.00000687@mb-m02.aol.com>
Source record: 104215

>Try this one
>http://cgi.ebay.com/

>or this one
>http://cgi.ebay.com

>No I don't have an interest in the place, I just ran across these and am
>going to purchase one my self.
>

I'd stay away from Antenna Warehouse if I were you. I bought one of their antennas after they offered free shipping. When I paid for it and asked to have it shipped USPS, they asked for $4.50 for shipping, claiming that although the auction didn't specify that they would only ship free via UPS, they had the right to charge me more because I didn't want the item delivered to my house.

I filled a complaint with the BBB and they didn't reply to it, so it's on record with them as well. Also, with their antennas, you get what you pay for. http://www.buxcomm.com has good antennas for reasonable prices.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

4950. Re: Digital cable filter spam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 05:39:58 UTC
From: All Your Base <k6ayb@arrl.net>
Message-ID: <oah0sv4e8tkl0bbokvvlq4jdcph9545mnd@4ax.com>
Source record: 104216

The filter will not get you any free HBO or Skinemax.

It may block the return path on 2-way systems - it seems that people
are selling anything that looks like a filter as a 'digital
descrambler'. I have seen 5-13 traps, attenuator pads, AC blocks, etc
being pushed as descramblers.

With the return path blocked, the box will not send back pay per view
'buys' to the cable company. Sound cool? well . . .

The cable companies have known about 2-way boxes not reporting their
status before the filters - only difference now is that they are more
hardcore in reacting, when they used to just disable PPV, now they
shut off either the entire premium lineup or the entire box. When the
filter user reports that the box is dead, they are told to exchange
it. When it gets back to the QC lab all the PPV buys are reported and
the user gets a whopping bill.

"Joe" <ace@net1.com> wrote:

>I've been getting a lot spam hawking this filter. My question is, do these
>filters really work or are they a rip-off?
>73's
>

--
"From spongecake to satellites, it's gotta be Krebstar"

4951. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 10:39:02 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <%60wb.10910$m24.7915@fed1read02>
Source record: 104217
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bpp8mhomm1@news1.kornet.net...
>
> "Clint" <rattlehead at computron dot net> wrote in message
> news:vs09h9op10iscf@corp.supernews.com...
> >
> > <Pappy127@usa.net> wrote in message news:3FBF7A6D.CFC429E4@usa.net...
> > > That's how much you know about me. I don't sign leases.
> > >
> > > 'Doc wrote:
> > > >
> > > > The only one you can blame for this problem is your
> > > > self. You signed the lease...
> > > > 'Doc
> >
> > as much as this person defends the jack-booted thugs of HOA's,
> > there must be something more to it that we don't know, wouldn't
> > you say?
> >
>
>
> All part of the fascist-izing of America.. whatever happened to "a man's
> home is his castle"?
>
> I can understand where people have a right to not want someone storing a
> dozen rusty cars on their front lawn, or allowing their grass to get 3'
> tall.. but as far as antennas, etc.. they have no business telling a
> homeowner what to do. It's not right that they should be telling people
> what color they can paint their house, what kind of plants or animals they
> can or cannot have, etc..
>

Brenda obviously never had a neighbor whose hobby was arc-welding hot-rod chassis from 6PM till midnight, or who thought having a few roosters was cute, or who installed a couple of 55-gallon drums in their backyard so that they could burn the insulation off of (likely stolen) wire to reclaim the copper, or who painted their house purple and pink, or whose brother & significant other lived in a 5-level treehouse overlooking her back yard for two years. (BTW, Tarzan & Jane actually complained about RFI to their boom box from my all-band vertical!) All these antics happened in the last 20 years to me. However, as I don't appreciate CC&R's, and the Bulgarian border guard mentality of those who enforce them, I try to overlook my neighbors'

eccentricities. And I have no sympathy for anyone who contracts into a CC&R situation, and then expects special dispensation for themselves.

Ed
WB6WSN

4952. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 10:46:13 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Ld0wb.10940$m24.4936@fed1read02>
Source record: 104218
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:6iNvb.17122$Wy4.8191@newsread2.news.atl.earthlink.net...
> "Jim Higgins" wrote:
> >
> > It limits you to antennas 1 meter in diameter
> > or across the diagonal. No 6-ele 20M beams
> > here.
>
>
> No, it doesn't have that limit. The first paragraph describes antennas
for
> satellite services and the second paragraph describes antennas for video
> programming services. The third paragraph...
>
> (3) An antenna that is designed to receive
> local television broadcast signals. Masts
> higher than 12 feet above the roofline may
> be subject to local permitting requirements.
>
> ...describes antennas for broadcast television and no size limit is
> described (only the height limit). By the way, a large 20M beam should
> receive broadcast television fairly nicely (with a little hardware to cut
> out the television while transmitting).
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net/
>

Read the rest of the ruling. It defines that the antenna may be located only in your private area (patio, balcony), not in the public or mutually owned areas (roof, outside wall). This makes it none too helpful for apartment and condo dwellers. Accept it; there are some hobbies that are incompatible with high-density dwellings.

Ed
WB6WSN

4953. FA: Excellent working 6 meter gain antenna...at a great price!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 13:27:44 UTC
From: superskyhooks@juno.com
Message-ID: <aff1d4b5.0311230527.7d5f7b92@posting.google.com>
Source record: 104119
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.swap

Check it out! You wont be sorry.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3060793681

4954. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 13:44:58 UTC
From: oldtime radio <nospam@spam.net>
Message-ID: <kce1sv84sp24esmommvgfcbog36n9ptgfe@4ax.com>
Source record: 104120

Try KMA Antennas at www.kmaantennas.com
There are reviews on eham.net

otr

4955. Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 13:48:57 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <iJudna6UFMjkJ12iRVn-jA@comcast.com>
Source record: 104121

Hello:

Will probably try a coax feed, and a Balun, to the random length wire
running around the four sides of
my attic to reduce noise, hopefully. Do listening only, up to 30 MHz.

a. For a receiving 9:1 Balun (coax to a random length wire in attic),
does the Balun have to be grounded ?

Or, is it grounded "adequately" via the coax - to the radio chassis -
to an earth ground from the radio chassis ?

[If the Balun Does require a ground (also), wouldn't this possibly
cause a ground loop in that it would be grounded at both ends ?]

b. Anyone have any experience with, or opinions on:

-the 9:1 Balun by RF Systems in the Netherlands
(termed a magnetic balun, how it's different from a normal toroidal
transformer coupling, I have no idea ?)

-or the unit by Win Radio (WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter
$39.95 ADP35)

c. Any significant difference in the type of coax used for listening only,
with a run of about 50 feet.
Used LMR 400 for my attic scanner, but would like to avoid the hassle
of stringing the large diameter coax again, and possibly
just use a small diameter coax. Would one likely notice any difference
up to 30 MHz ?

Thanks,
Bob

4956. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 14:57:08 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <8V3wb.23821$do1.3373@twister.austin.rr.com>
Source record: 104122
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Wow, a refreshing ray of truth and logic shines thru the smog.
Why indeed would someone agree to something they did not intend to abide by?

(excluding all women, of course)

Willee

"'Doc" <w5lz@cwis.net> wrote in message news:3FBF9A57.5ABF9572@cwis.net...
>
>
> Pappy127,
> You are absolutely right! I don't know anything
> about you.
> The point being, that if you sign an agreement with
> the knowledge that you do not intend to abide by that
> agreement, then you shouldn't be upset when you are
> penalized for breaking the agreement. Is that so hard
> to understand?
> 'Doc

4957. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 15:02:34 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <e_3wb.23842$do1.5349@twister.austin.rr.com>
Source record: 104123
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FBF8157.56DE0733@usa.net...

> And yes,
> receiving antennas can be hidden quite well. Some of us are licensed ham
> and enjoy our hobby as you do. Just because we move into a new home in a
> new area why should we give up the hobby we so enjoy?

Why, if ham radio is such an importaint part of your life, was it not
included in your plans for a new home?
If I wanted an antenna farm the last place I would look for property would
be in a housing project.
I would be looking at a rual area where there is lots of trees to hang wire
from and lots of ground to plant towers.

Willee

4958. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 15:24:07 UTC
From: Marylou@city.net
Message-ID: <3FC0D117.530533E8@city.net>
Source record: 104130
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

What Ed is saying is: If you enjoy a hobby that requires an antenna or anything outside your home forget it, buckle down to raising fish and sell the radio hobby stuff.

That will be the day I turn my home over the HOA Cops, agreement or not. If homeowners keep buckling down to these people next thing you will be paying their mortgage and taxes.

Go Bless America for the freedoms our proud veterans fought for.

Ed Price wrote:
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:6iNvb.17122$Wy4.8191@newsread2.news.atl.earthlink.net...
> > "Jim Higgins" wrote:
> > >
> > > It limits you to antennas 1 meter in diameter
> > > or across the diagonal. No 6-ele 20M beams
> > > here.
> > >
> > >
> > No, it doesn't have that limit. The first paragraph describes antennas
> for
> > satellite services and the second paragraph describes antennas for video
> > programming services. The third paragraph...
> > >
> > (3) An antenna that is designed to receive
> > local television broadcast signals. Masts
> > higher than 12 feet above the roofline may
> > be subject to local permitting requirements.
> > >
> > ...describes antennas for broadcast television and no size limit is
> > described (only the height limit). By the way, a large 20M beam should
> > receive broadcast television fairly nicely (with a little hardware to cut
> > out the television while transmitting).
> > >
> > >
> > Dwight Stewart (W5NET)
> > >
> > http://www.qsl.net/w5net/
> > >
>
> Read the rest of the ruling. It defines that the antenna may be located only

> in your private area (patio, balcony), not in the public or mutually owned
> areas (roof, outside wall). This makes it none too helpful for apartment and
> condo dwellers. Accept it; there are some hobbies that are incompatible with
> high-density dwellings.
>
> Ed
> WB6WSN

4959. Software

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 15:31:33 UTC
From: The Genie <the_genie@btopenworld.com>
Message-ID: <bpqjsk$41m$1@titan.btinternet.com>
Source record: 104124

Hi,
Does anyone know of any software I can install with windows XP that
if I were to input a "point of origin" NGR and a receiving station NGR
would give the range in Km and bearing wrt to magnetic north.
UK ONLY
Cheers,
Mike

4960. WTB 160m transmatch parts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 15:39:26 UTC
From: mike nelson <mike_nelson@acm.org>
Message-ID: <3fc0d54c$1_2@athena.netset.com>
Source record: 104125

Does anyone have some 3 inch coil stock (10tpi, about 10-12 inches long) they'd be willing to sell?

Also need a 1200pf variable capacitor (100 watt level spacing) and a dual 200 pf per section variable (also 100 watt level).

Am building a link-coupled 160 meter transmatch per a very old Lew McCoy article.

thanks

Mike
W8LPR

4961. Antenna Restrictions -- What to Do !

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 15:42:58 UTC
From: Wilderness Keyboard <KIYW@zilch.net>
Message-ID: <6A4wb.4704$ML6.2688@fed1read01>
Source record: 104126

Here are some links for reading:
HR 1478, Amateur Radio Emergency Communications Consistency Act of 2003
BE SURE TO READ THIS AND WRITE YOUR CONGRESSPERSON !!!!

http://www.arrl.org/govrelations/hr1478/

Condo Communicator -- Help for Condo and Apartment Dwellers

http://www.uga.edu/~barc/ccindex.html

CC&R's? (You Got) -- Info from the ARRL

http://www.arrl.org/FandES/field/regulations/local/ccr.html

K3QK's Legal Resources -- For hams can use it for that "tower project"

http://www.qsl.net/k3qk/tower.html

eHam.net CC&R Survival Series

http://www.eham.net/articles/1662

eHam Forum on Antenna Restrictions

http://www.eham.net/forums/AntennaRestrictions

FCC Fact Sheet - Over-the-Air Reception Devices Rule Preemption of
Restrictions on Placement of Direct Broadcast Satellite, Multi-channel
Multi-point Distribution Service, and Television Broadcast Antennas.

http://www.fcc.gov/mb/facts/otard.html

Antenna Restrictions? -- From AC6TS

http://members.fortunecity.com/ac6ts/index-9.html

Antenna Restrictions - How To Chart - From The ARRL

http://www.remote.arrl.org/news/stories/2002/01/07/2/?nc=1

Antenna Zoning for the Radio Amateur - ARRL Book On legal aspects of antenna
restrictions

http://www.arrl.org/catalog/?item=8217

AND Finally -- STEALTH ANTENNAS

http://ac6v.com/antprojects.htm#STANT
--
73 From The Wilderness Keyboard

4962. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 16:09:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC0DBB2.A97AF8DB@cwis.net>
Source record: 104129
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Clint,
Actually, it's exactly like what I said. Please
don't attribute any more to what I said than what
was actually there. You don't have the slightest idea
of how I feel about HOAs so comments like yours only
show an ability to jump to a conclusion without any
supporting evidence. Sort of like reading the "National
Enquirer"(s), entertaining but worthless...
'Doc

4963. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 16:12:30 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <LISdnegnF5CyRV2iRVn-sA@ctc.net>
Source record: 104127

>
> Will probably try a coax feed, and a Balun, to the random length wire
> running around the four sides of
> my attic to reduce noise, hopefully. Do listening only, up to 30 MHz.
>
> a. For a receiving 9:1 Balun (coax to a random length wire in attic),
> does the Balun have to be grounded ?
>
> Or, is it grounded "adequately" via the coax - to the radio chassis -
> to an earth ground from the radio chassis ?
>
> [If the Balun Does require a ground (also), wouldn't this possibly
> cause a ground loop in that it would be grounded at both ends ?]
>
> b. Anyone have any experience with, or opinions on:
>
> -the 9:1 Balun by RF Systems in the Netherlands
> (termed a magnetic balun, how it's different from a normal toroidal
> transformer coupling, I have no idea ?)
>
> -or the unit by Win Radio (WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter
> $39.95 ADP35)
>
> c. Any significant difference in the type of coax used for listening
only,
> with a run of about 50 feet.
> Used LMR 400 for my attic scanner, but would like to avoid the hassle
> of stringing the large diameter coax again, and possibly
> just use a small diameter coax. Would one likely notice any
difference
> up to 30 MHz ?
>
> Thanks,
> Bob

Forget the balun for receiving. For under 30 mhz you will not notice any
differance in the smaller coax cables. You may want to look at some of the
cable TV (RG-6 size) 70 ohm coax. Cost less than most other coax and for
under 30 mhz has low loss. Don't worry about the 70 ohm impedance for
receiving. YOu may have a problem dealing with the shield not being able to
take solder in some cases.

4964. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 16:20:35 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <LISdnesnF5CtRV2iRVn-sA@ctc.net>
Source record: 104128
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

> > receiving antennas can be hidden quite well. Some of us are licensed ham
> > and enjoy our hobby as you do. Just because we move into a new home in a
> > new area why should we give up the hobby we so enjoy?
>
> Why, if ham radio is such an importaint part of your life, was it not
> included in your plans for a new home?
> If I wanted an antenna farm the last place I would look for property would
> be in a housing project.
> I would be looking at a rual area where there is lots of trees to hang
wire
> from and lots of ground to plant towers.
>
> Willee
>

That is what I am in the process of doing now. As I was a ham when I bought my first house and was very much into VHF weak signal work I told the real estate agent the house had to be on a hill and no restrictions. He found me one that is about 200 feet above most of the county. As I would rather play radio than mow the grass, the second requirement was no restrictions on the land.

I am now looking for another house or some land to build on after 25 years in this house. I have turned down several places just because of the height. Turned down one just because it was in a development that met most of the other requirements.

4965. Re: brainteaser exercise

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 16:27:23 UTC
From: Cecil.A.Moore@ieee.org
Message-ID: <9001ac09.0311230827.4a92315d@posting.google.com>
Source record: 104131

k7itm@aol.com (Tom Bruhns) wrote:
> So what do YOU get? As I recall, it comes out to a voltage equivalent
> to 112.5W for Pf2, and 12.5W for Pr1.

Yep, that's what I got with an s-parameter analysis. After all the negative things said here about an s-parameter analysis, I was expecting someone to post an answer different from the s-parameter answer.

In the s-parameter equation, b2 = s21*a1 + s22*a2, |b2|^2 is Pf2. If the right side of the equation is squared, the (2*s12*a1*s22*a2) term is the magnitude of the interference which is constructive in this case. On the other side of the impedance discontinuity, b1 = s11*a1 + s12*a2. |b1|^2 equals Pr1. If the right side of that equation is squared, the (2*s11*a1*s12*a2) is the magnitude of the interference which is destructive in this case. Note that |(2*s11*a1*s12*a2)| = |(2*s21*a1*s22*a2)|, i.e., the constructive interference magnitude on one side of the impedance discontinuity always equals the destructive interference magnitude on the other side.
--
73, Cecil, W5DXP

4966. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 17:06:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bpqpej$4vo$1@sparta.btinternet.com>
Source record: 104132

For receiving purposes just bring a thin plastic insulated antenna wire all the way to the receiver.

Neither coax or balun serve any any useful purpose except make balun and coax salesmen happier.

Go ahead. It's a simple matter to try.

If you wish to spend any money usefully on the project then make or buy a receiver preselector. (That is if your receiver does not have a built-in preselector.)

(Do NOT confuse a preselector with an antenna tuner or impedance matching network which is used for transmitting purposes. They serve different purposes)

Reg, G4FGQ

4967. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 17:06:55 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <PO5wb.24261$do1.16998@twister.austin.rr.com>
Source record: 104133
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Ya see, Ralph, you got your ducks in a row.
You sat down and thought about what you wanted and went out after it.
Sounds like you got a very good location there.
If you plan to sell your present home I bet there are hams who would like to buy it
.... if you leave the towers up. (grin)

Willee

"Ralph Mowery" <rmowery@ctc.net> wrote in message news:LISdnesnF5CtRV2iRVn-sA@ctc.net...
> > > receiving antennas can be hidden quite well. Some of us are licensed ham
> > > and enjoy our hobby as you do. Just because we move into a new home in a
> > > new area why should we give up the hobby we so enjoy?
> >
> > Why, if ham radio is such an importaint part of your life, was it not
> > included in your plans for a new home?
> > If I wanted an antenna farm the last place I would look for property would
> > be in a housing project.
> > I would be looking at a rual area where there is lots of trees to hang
> wire
> > from and lots of ground to plant towers.
> >
> > Willee
> >
>
> That is what I am in the process of doing now. As I was a ham when I bought
> my first house and was very much into VHF weak signal work I told the real
> estate agent the house had to be on a hill and no restrictions. He found me
> one that is about 200 feet above most of the county. As I would rather play
> radio than mow the grass, the second requirement was no restrictions on the
> land.
>
> I am now looking for another house or some land to build on after 25 years
> in this house. I have turned down several places just because of the
> height. Turned down one just because it was in a development that met

most
> of the other requirements.
>
>
>
>

4968. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 17:35:48 UTC
From: craigm <none@domain.invalid>
Message-ID: <vs1rehelpu8f37@corp.supernews.com>
Source record: 104134
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

```
"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bpp8mh$omm$1@news1.kornet.net...
>
> "Clint" <rattlehead at computron dot net> wrote in message
> news:vs09h9op10iscf@corp.supernews.com...
> >
> > <Pappy127@usa.net> wrote in message news:3FBF7A6D.CFC429E4@usa.net...
> > > That's how much you know about me. I don't sign leases.
> > >
> > > 'Doc wrote:
> > > >
> > > > The only one you can blame for this problem is your
> > > > self. You signed the lease...
> > > > 'Doc
> >
> > as much as this person defends the jack-booted thugs of HOA's,
> > there must be something more to it that we don't know, wouldn't
> > you say?
> >
>
>
> All part of the fascist-izing of America.. whatever happened to "a man's
> home is his castle"?
>
> I can understand where people have a right to not want someone storing a
> dozen rusty cars on their front lawn, or allowing their grass to get 3'
> tall.. but as far as antennas, etc.. they have no business telling a
> homeowner what to do. It's not right that they should be telling people
> what color they can paint their house, what kind of plants or animals they
> can or cannot have, etc..
>
>

And how would you feel if the condition of the neighbor's house reduced the
value of your house by $30,000?

A homeowner aggress to covenants when they buy the house. They have to sign
the paperwork. If you don't like the terms, look elsewhere.

It is called living in a community, being part of the society. It is done
all the time. You give up the right to drive on the wrong side of the road
when you get your driving privileges.
```

When I bought my current house, I made sure there were no silly antenna provisions. It wasn't hard. Also read the terms carefully, "... on the roof and visible from the front..." says towers are cool, roof mounts are not.

Too many of these tales are 'me, me, me' and don't consider the others involved. Unless you live in an isolated area, you should consider being part of the community and not an irritant to the community.

craigm

4969. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 18:23:12 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <kW6wb.215608$9E1.1155036@attbi_s52>
Source record: 104135

And just live with all the noise produced in the modern house. After all, it is your noise, you should hear it.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bpqpej$4vo$1@sparta.btinternet.com...
> For receiving purposes just bring a thin plastic insulated antenna wire all
> the way to the receiver.
>

4970. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 18:43:09 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vs21e9q42t0l4d@corp.supernews.com>
Source record: 104138

```
Build a rotatable loop and you can null out some noise and increase
reception.
hank wd5jfr
"Robert11" <rgsxrose@comcast.net> wrote in message
news:iJudna6UFMjkJ12iRVn-jA@comcast.com...
> Hello:
>
> Will probably try a coax feed, and a Balun, to the random length wire
> running around the four sides of
> my attic to reduce noise, hopefully. Do listening only, up to 30 MHz.
>
> a. For a receiving 9:1 Balun (coax to a random length wire in attic),
> does the Balun have to be grounded ?
>
> Or, is it grounded "adequately" via the coax - to the radio chassis -
> to an earth ground from the radio chassis ?
>
> [If the Balun Does require a ground (also), wouldn't this possibly
> cause a ground loop in that it would be grounded at both ends ?]
>
> b. Anyone have any experience with, or opinions on:
>
> -the 9:1 Balun by RF Systems in the Netherlands
> (termed a magnetic balun, how it's different from a normal toroidal
> transformer coupling, I have no idea ?)
>
> -or the unit by Win Radio (WiNRADiO WR-LWA-0130 Long Wire Antenna Adapter
> $39.95 ADP35)
>
> c. Any significant difference in the type of coax used for listening
only,
> with a run of about 50 feet.
> Used LMR 400 for my attic scanner, but would like to avoid the hassle
> of stringing the large diameter coax again, and possibly
> just use a small diameter coax. Would one likely notice any
difference
> up to 30 MHz ?
>
> Thanks,
> Bob
>
>
```

4971. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 18:45:44 UTC
From: Antenna Warehouse <antennawarehousexxx@cis.net>
Message-ID: <vs202fn6pedqea@corp.supernews.com>
Source record: 104136

Hello Andrew,

I see your still misrepresenting your story trying to garner support
and slam us.

Allow me to correct you once again with the facts.

You were charged a additional shipping cost amount that represented
the difference between what the carrier you demanded we use charged and
what our normal carrier would have charged. You were ask to provide
other than a P.O. box address that we could provide free shipping to
using our carrier and you refused, demanding that your alternate carrier
be used. You did not have to accept the amended offer, but you did and
then started your harassment campaign at a later date.

Your flawed contention, that because we advertised Free shipping
without specifying a particular shipping method, we are obligated to use
whatever method you choose, has been rejected by all parties that you
have tried to involve. By your twisted logic we should have ship
overnight by hand courier if that's what you demanded.

Your childish BBB harassment attempt WAS responded to by us. After
we had explained our position the case was closed by the BBB due to your
unreasonable position. Not that the truth has ever stop your silliness
before, but we have copied the "case closed" e-mail we received from the
BBB below so you can refresh your memory.

As for your unfounded jab at the quality of our products, our
feedback on ebaY that is over 2500 strong speaks much louder than your
embellished whining over $4.00 does.

Antenna Warehouse
812 South Washington Blvd.
Camanche, Iowa 52730
563-259-0840 M-F 10am-5pm (Central time)
http://www.antennawarehouse.com
sales@antennawarehouse.com

==========
Copy of e-mail received from BBB on 09/02/03
==========

From - Tue Sep 02 11:47:49 2003
X-UIDL: 29c4c05732c3222fb703afdd7f43d01f
X-Mozilla-Status: 0011
X-Mozilla-Status2: 00000000
Received: from bbbnt1.desmoines.bbb.org ([12.13.109.51])

by mail.get.xs2.net (8.8.8/8.8.8) with ESMTP id MAA08813
for <xxx@antennawarehouse.com>; Tue, 2 Sep 2003 12:45:02 -0400 (EDT)
Received: by BBBNT1 with Internet Mail Service (5.0.1460.8)
id <SDRK9MMT>; Tue, 2 Sep 2003 11:25:36 -0500
Message-ID: <011C79B762F2D011921D00805F0595D6421E02@BBBNT1>
From: Carrie Hourigan <Carrie@dm.bbb.org>
To: "'xxx@antennawarehouse.com'" <xxx@antennawarehouse.com>
Subject: RE: Andrew Cogswell complaint
Date: Tue, 2 Sep 2003 11:25:35 -0500
MIME-Version: 1.0
X-Mailer: Internet Mail Service (5.0.1460.8)
Content-Type: multipart/alternative;
boundary="----_=_NextPart_001_01C3716E.D6D0AC20"
X-UIDL: 29c4c05732c3222fb703afdd7f43d01f

RE: Andrew Cogswell <vhfradiobuff@aol.com>

Dear Mr. Francis:

Thank you for your cooperation in responding to the above consumer's
complaint. Following our usual procedure, we notified the consumer of
your response and requested notification of whether or not it was
satisfactorily resolved. The consumer has notified our office they are
not satisfied. Your company has made a good faith effort in an attempt
to resolve this issue; therefore we are closing the case at this time.

Again, thank you

Sincerely,

Carrie Hourigan

Dispute Resolution Specialist

BBB-Quad Cities

carrie@dm.bbb.org

==========
End copy of e-mail received from BBB on 09/02/03
==========

<vhfradiobuff@aol.com> wrote:
>>Try this one
>>http://cgi.ebay.com/
>
>
>>or this one
>>http://cgi.ebay.com
>
>
>>No I don't have an interest in the place, I just ran across these and am
>>going to purchase one my self.
>>

>
>
> I'd stay away from Antenna Warehouse if I were you. I bought one of their
> antennas after they offered free shipping. When I paid for it and
asked to have
> it shipped USPS, they asked for $4.50 for shipping, claiming that
although the
> auction didn't specify that they would only ship free via UPS, they
had the
> right to charge me more because I didn't want the item delivered to
my house.
>
> I filled a complaint with the BBB and they didn't reply to it, so it's on
> record with them as well. Also, with their antennas, you get what you
pay for.
> http://www.buxcomm.com has good antennas for reasonable prices.
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

VHFRadioBuff wrote:

>>Try this one
>>http://cgi.ebay.com/
>
>
>>or this one
>>http://cgi.ebay.com
>
>
>>No I don't have an interest in the place, I just ran across these and am
>>going to purchase one my self.
>>
>
>
> I'd stay away from Antenna Warehouse if I were you. I bought one of their
> antennas after they offered free shipping. When I paid for it and asked to have
> it shipped USPS, they asked for $4.50 for shipping, claiming that although the
> auction didn't specify that they would only ship free via UPS, they had the
> right to charge me more because I didn't want the item delivered to my house.
>
> I filled a complaint with the BBB and they didn't reply to it, so it's on
> record with them as well. Also, with their antennas, you get what you pay for.
> http://www.buxcomm.com has good antennas for reasonable prices.
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

4972. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 19:05:13 UTC
From: wa8ulx@aol.com
Message-ID: <20031123140513.00739.00000828@mb-m28.aol.com>
Source record: 104137

>Hello Andrew,
>
> I see your still misrepresenting your story trying to garner support
>and slam us.
>
> Allow me to correct you once again with the facts.
>

Dont waste your time with ANDY, He is just a born loser.

4973. Re: Software

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 20:38:41 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <lV8wb.33099$KI4.22220@twister.tampabay.rr.com>
Source record: 104139

This freeware may not meet all your needs, but it's amazing!
http://www.qsl.net/w6elprop/

W6ELProp predicts ionospheric (sky-wave) propagation between any two
locations on the earth on frequencies between 3 and 30 MHz. There is no
charge for W6ELProp when used for non-commercial purposes.

This is the primary W6ELProp distribution site. Any new version of W6ELProp
will first be available at this site.

Version 2.70 permits the user to specify a terminal location by its IARU
Grid Locator, and permits the user to optionally display areas for only one
prediction frequency at a time in the Frequency Map.

yodar

"The Genie" <the_genie@btopenworld.com> wrote in message
news:bpqjsk$41m$1@titan.btinternet.com...
> Hi,
> Does anyone know of any software I can install with windows XP that
> if I were to input a "point of origin" NGR and a receiving station NGR
> would give the range in Km and bearing wrt to magnetic north.
> UK ONLY
> Cheers,
> Mike
>
>
>

4974. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 20:41:54 UTC
From: John P Vassel <kc8ske@cybiko.com>
Message-ID: <vs26sifaik8r3c@corp.supernews.com>
Source record: 104140
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

"Noon-Air" <noon-air@comcast.net> wrote in
news:ss2dnfIlHtGZvl2iRVn-vg@comcast.com:

> Try this one
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943650735&category=
> 4672 or this one
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943658202&category=
> 4672
>
> No I don't have an interest in the place, I just ran across these and
> am going to purchase one my self.
>
>

As someone who now has one of these antennas laying in a heap in his
yard, if you're in an area prone to high winds, I'd think twice. The
antenna was a fine functioning one, but upon an evening of 45-60mph wind
gusts, and a year in the air, it crumpled. From looking at it, I'd say
their cost savings comes from a cheaper fiberglass tubing on the
exterior.

john

4975. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 20:56:59 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <8m72sv45akevbmkd1vbc2khsrj89c31s3n@4ax.com>
Source record: 104141

On Sun, 23 Nov 2003 18:23:12 GMT, "CW" <clinton.magers@comcast.net>
wrote:

>And just live with all the noise produced in the modern house. After all, it
>is your noise, you should hear it.

With his antenna in the attic, I'm not sure a coax feed will cut out
much home-produced noise.

Bob
k5qwg

>
>
>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>news:bpqpej$4vo$1@sparta.btinternet.com...
>> For receiving purposes just bring a thin plastic insulated antenna wire
>all
>> the way to the receiver.
>>
>

4976. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 21:36:54 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <WL9wb.18869$Wy4.12608@newsread2.news.atl.earthlink.net>
Source record: 104142
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Ed Price" wrote:
>
> Read the rest of the ruling. It defines that the
> antenna may be located only in your private
> area (patio, balcony), not in the public or
> mutually owned areas (roof, outside wall).
> This makes it none too helpful for apartment
> and condo dwellers. Accept it; there are
> some hobbies that are incompatible with
> high-density dwellings.

How does that chance anything I said, Ed? I said nothing about apartment
and condo dwellers, and nothing about antenna location.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

4977. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 21:39:28 UTC
From: Antenna Warehouse <antennawarehousexxx@cis.net>
Message-ID: <vs2a86lum0j9c7@corp.supernews.com>
Source record: 104145
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Hello John,

The one you bought back on 05/06/02 is not one of the current models
that we are selling. Sometime back when it was brought to our attention
that the former models of these antennas had wind survivability problems
we changed manufactures. The new manufacture is providing much heavier
duty units that do not exhibit the same problem.

The former models came from here:

http://www.ningbo-export.com/prosound

The current models are coming from here:

http://www.greaterland.com

If you'll gather up the pieces of the damaged one from the heap and
send them back to us along with a copy of your sales receipt we will see
if we can get it replaced for you.

Tim

Antenna Warehouse
812 South Washington Blvd.
Camanche, Iowa 52730
563-259-0840 M-F 10am-5pm (Central time)
http://www.antennawarehouse.com
sales@antennawarehouse.com

John P Vassel wrote:

> "Noon-Air" <noon-air@comcast.net> wrote in
> news:ss2dnfIlHtGZvl2iRVn-vg@comcast.com:
>
>
>>Try this one
>>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943650735&category=
>>4672 or this one
>>http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943658202&category=
>>4672
>>
>>No I don't have an interest in the place, I just ran across these and
>>am going to purchase one my self.
>>
>>
>

>
> As someone who now has one of these antennas laying in a heap in his
> yard, if you're in an area prone to high winds, I'd think twice. The
> antenna was a fine functioning one, but upon an evening of 45-60mph wind
> gusts, and a year in the air, it crumpled. From looking at it, I'd say
> their cost savings comes from a cheaper fiberglass tubing on the
> exterior.
>
> john

4978. Re: Balun Grounding Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 21:39:58 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC1292E.42751EE8@cwis.net>
Source record: 104143

CW,
And if you think either a balun or coaxial feed line
will make much difference in the amount of noise you will
hear with the antenna in the attic, think again.
'Doc

4979. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 21:42:50 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <uR9wb.18875$Wy4.14824@newsread2.news.atl.earthlink.net>
Source record: 104144
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dee D. Flint" wrote:
>
> There are often good communities without
> covenants, where your property values do
> increase and the sale of a home is relatively
> easy. (snip)

I agree, Dee. And, in addition, I've never heard of a house where the property value went down, or the property actually failed to sell, solely because of a neighbor's antenna. If anyone is aware of such a situation, I'd certainly like to see some evidence of it.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

4980. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 22:46:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k1e2svk7f4tj8metf8ekam1jsnjla4aire@4ax.com>
Source record: 104147

On Sun, 23 Nov 2003 16:25:14 -0800, "Michael Melland"
<w9wis@charter.net> wrote:

>Looking for opinions..... seems conventional wisdom indicates a discone.
>There are active antennas covering this range too. Any opinions or
>recommendations ?
>
>Mike

Hi Mike,

Unless you want to UHF DX Satellites, you might want to consider more
than one size.

73's
Richard Clark, KB7QHC

4981. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 22:48:13 UTC
From: Arf! Arf! <DoggieDaze@lLiberalz.com>
Message-ID: <GLawb.10495$6c3.5522@bignews1.bellsouth.net>
Source record: 104148
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Hell it is all cheap Chicom crap!

Antenna Warehouse wrote:

> Hello John,
>
> The one you bought back on 05/06/02 is not one of the current models
> that we are selling. Sometime back when it was brought to our attention
> that the former models of these antennas had wind survivability problems
> we changed manufactures. The new manufacture is providing much heavier
> duty units that do not exhibit the same problem.
>
> The former models came from here:
>
> http://www.ningbo-export.com/prosound
>
> The current models are coming from here:
>
> http://www.greaterland.com
>
> If you'll gather up the pieces of the damaged one from the heap and
> send them back to us along with a copy of your sales receipt we will see
> if we can get it replaced for you.
>
> Tim
>
> Antenna Warehouse
> 812 South Washington Blvd.
> Camanche, Iowa 52730
> 563-259-0840 M-F 10am-5pm (Central time)
> http://www.antennawarehouse.com
> sales@antennawarehouse.com
>
> John P Vassel wrote:
>
>> "Noon-Air" <noon-air@comcast.net> wrote in
>> news:ss2dnfIlHtGZvl2iRVn-vg@comcast.com:
>>
>>> Try this one
>>> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943650735&category=
>>> 4672 or this one
>>> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=1943658202&category=
>>> 4672
>>> No I don't have an interest in the place, I just ran across these and

>>> am going to purchase one my self.
>>>
>>>
>>
>>
>> As someone who now has one of these antennas laying in a heap in his
>> yard, if you're in an area prone to high winds, I'd think twice. The
>> antenna was a fine functioning one, but upon an evening of 45-60mph wind
>> gusts, and a year in the air, it crumpled. From looking at it, I'd say
>> their cost savings comes from a cheaper fiberglass tubing on the
>> exterior.
>> john
>
>

4982. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 23:14:13 UTC
From: "Ed G." <Spectrumhog@_REMOVE_StarBand.net>
Message-ID: <Xns943C9B2EEA0CBFrog207Junocom@148.78.248.75>
Source record: 104149
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

> Hell it is all cheap Chicom crap!
>

As is some, if not most, of the computer you are using....

Ed

4983. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 23:15:42 UTC
From: Arf! Arf! <DoggieDaze@lLiberalz.com>
Message-ID: <r9bwb.10591$6c3.6987@bignews1.bellsouth.net>
Source record: 104150
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Very true...

Ed G. wrote:

>>Hell it is all cheap Chicom crap!
>>
>
>
> As is some, if not most, of the computer you are using....
>
>
>
>
> Ed

4984. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 23:20:00 UTC
From: "Ed G." <Spectrumhog@_REMOVE_StarBand.net>
Message-ID: <Xns943C9C29FE44BFrog207Junocom@148.78.248.75>
Source record: 104151
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

> Hell it is all cheap Chicom crap!
>

For the record, http://www.greaterland.com is not a "Chicom"
product, as you indicate. It is a company in Taiwan, a Democratically
governed company.

Ed

4985. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 23:45:06 UTC
From: djboutit2@aol.com
Message-ID: <20031123184506.08468.00000738@mb-m24.aol.com>
Source record: 104152

Get this wideband discone antenna it is a good and antenna and you can transmitt 200watts with it http://www.grove-ent.com/ANT9.html/

4986. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-23 23:51:04 UTC
From: Noon-Air <noon-air@comcast.net>
Message-ID: <W--dnTVMSfFx2lyiRVn-vw@comcast.com>
Source record: 104153
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

"Ed G." <Spectrumhog@_REMOVE_StarBand.net> wrote in message
news:Xns943C9C29FE44BFrog207Junocom@148.78.248.75...
>
>
> > Hell it is all cheap Chicom crap!
> >
>
> For the record, http://www.greaterland.com is not a "Chicom"
> product, as you indicate. It is a company in Taiwan, a Democratically
> governed company.
>
>
>
> Ed

If ignorance is bliss, then is he euphoric??
I'm not saying......I'm just saying....

Please don't feed the trolls

--
Steve @ Noon-Air Heating and A/C
Noon-Air@comcast.net

When a work lifts your spirits and inspires bold and noble thoughts in you,
do not look for any other standard to judge by:
the work is good, the product of a master craftsman.
- -- La Bruyere

4987. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 00:07:18 UTC
From: "Ed G." <Spectrumhog@_REMOVE_StarBand.net>
Message-ID: <Xns943CA42E68707Frog207Junocom@148.78.248.75>
Source record: 104154
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

>
> If ignorance is bliss, then is he euphoric??
> I'm not saying......I'm just saying....
>
> Please don't feed the trolls

Understood, but I have similar feelings as this "Troll" does. Just wanted to make the facts clear in that the one Amateur product supplier mentioned was not in Communist China. I try to buy my amateur radio gear made in USA but it is tough to compete prices with the great stuff from the East.

Ed WB6SAT

4988. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 00:20:52 UTC
From: Arf! Arf! <DoggieDaze@lLiberalz.com>
Message-ID: <x6cwb.10851$6c3.5948@bignews1.bellsouth.net>
Source record: 104155
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

The borders are open, you could always go there for good.

Ed G. wrote:

>>If ignorance is bliss, then is he euphoric??
>>I'm not saying......I'm just saying....
>>
>>Please don't feed the trolls
>
>
>
> Understood, but I have similar feelings as this "Troll" does. Just
> wanted to make the facts clear in that the one Amateur product supplier
> mentioned was not in Communist China. I try to buy my amateur radio gear
> made in USA but it is tough to compete prices with the great stuff from
> the East.
>
>
>
> Ed WB6SAT
>
>
>
>

4989. Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 00:25:14 UTC
From: Michael Melland <w9wis@charter.net>
Message-ID: <vs2cumm1tuqc80@corp.supernews.com>
Source record: 104146

Looking for opinions..... seems conventional wisdom indicates a discone.
There are active antennas covering this range too. Any opinions or
recommendations ?

Mike

--
Michael Melland, W9WIS
Winneconne, WI USA
http://webpages.charter.net/w9wis

4990. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 03:19:37 UTC
From: bob <k6rtm@nospam.comcast.net>
Message-ID: <231120031919381870%k6rtm@nospam.comcast.net>
Source record: 104156

In article <vs2cumm1tuqc80@corp.supernews.com>, Michael Melland
<w9wis@charter.net> wrote:

> Looking for opinions..... seems conventional wisdom indicates a discone.
> There are active antennas covering this range too. Any opinions or
> recommendations ?
>
> Mike

Depends on what you're listning to--

You can get a log-periodic to cover that range (Create makes one). You
can go the discone route.

The LP has gain, and needs to be pointed.

The discone doesn't exhibit gain (over isotropic), and the radiation
pattern changes with frequency. In particular, the take-off angle
increases with frequency. If you have 25 MHz as your low point, by the
time you get to 440, the main lobe is going to be around 50 degrees.
Oh, and the discone, along with ground-plane antennas, has a pretty
good null directly vertical from the antenna. Makes it kind of a pain
for satellite work, when your antenna has a sharp null when the bird is
directly overhead!

For info on discones, see for example, the RSGB VHF/UHF manual.
Discones are covered in section 8.37, and log periodics are in section
8.21. The RSGB book gives a lucid explanation of construction if you
want to roll your own, and for 440 MHz and up, that's pretty easy and
pretty small.

I use a pair of discones, one for the lower end of things (50-250 MHz
or so), and a second for the higher end (440-1300 MHz). I also have an
eggbeater (from m2) for 137 and 144 MHz birds.

And don't skimp on the feedline -- LM400 is a good starting point.

--
Namaste-

4991. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 03:22:35 UTC
From: John P Vassel <kc8ske@cybiko.com>
Message-ID: <vs2ubrkflqun57@corp.supernews.com>
Source record: 104157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Antenna Warehouse <antennawarehousexxx@cis.net> wrote in
news:vs2a86lum0j9c7@corp.supernews.com:

> Hello John,
>
> The one you bought back on 05/06/02 is not one of the current
> models
> that we are selling. Sometime back when it was brought to our
> attention that the former models of these antennas had wind
> survivability problems we changed manufactures. The new manufacture
> is providing much heavier duty units that do not exhibit the same
> problem.
>
> The former models came from here:
>
> http://www.ningbo-export.com/prosound
>
> The current models are coming from here:
>
> http://www.greaterland.com
>
> If you'll gather up the pieces of the damaged one from the heap and
> send them back to us along with a copy of your sales receipt we will
> see if we can get it replaced for you.
>
> Tim
>
> Antenna Warehouse
> 812 South Washington Blvd.
> Camanche, Iowa 52730
> 563-259-0840 M-F 10am-5pm (Central time)
> http://www.antennawarehouse.com
> sales@antennawarehouse.com
>

Tim, I'll do just that over the next week or so.
I just failed last week, figured 'buyer beware' and It was tough bananas
for me. I'd be elated if something could come of it. For the record, the
mounting portion, ground plane, and bottom of the center element are
still in the mount, and it works wonderfully recieving uhf..lol But upon
inspecting what lay in the yard, it looked like little more than a
glorified cardboard tube. :(Glad to hear you've improved the product,
and you'll be hearing from me before the new year.

John Vassel
KC8SKE
RTFD

4992. J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 03:35:47 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <n0fwb.90628$Dw6.449290@attbi_s02>
Source record: 104158

Hi Fella's

I have recently built a J pole for 2 meters from the handbook and I was wondering if any of you had some tuning tips.

Thank you in advance.

Mike Burch K8MB

Apache Junction AZ

4993. Wb site to Cubix Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 04:20:53 UTC
From: Kirk Mohror <kmohror@comcast.net>
Message-ID: <bpCdnW_Nwty7GlyiRVn-gQ@comcast.com>
Source record: 104159

I need the web site to the Cubix Quad Antennas. When a search is done, I get an IT web site.

Thanks,
Kirk Mohror
K7EKM

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.542 / Virus Database: 336 - Release Date: 11/18/2003

4994. Re: Wb site to Cubix Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 04:33:48 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <5e23sv4jo3u0efu0ogogleh4cjf9h7uakp@4ax.com>
Source record: 104160

Kirk,
Try this: http://www.cubex.com/

What probably hung you up on the search is the spelling of Cubex; and
if I had a dollar for every time I put in the wrong spelling ....

Good luck,
Howard KE6MAK
On Sun, 23 Nov 2003 20:20:53 -0800, "Kirk Mohror"
<kmohror@comcast.net> wrote:

>I need the web site to the Cubix Quad Antennas. When a search is done, I get
>an IT web site.
>
>Thanks,
>Kirk Mohror
>K7EKM
>
>
>---
>Outgoing mail is certified Virus Free.
>Checked by AVG anti-virus system (http://www.grisoft.com).
>Version: 6.0.542 / Virus Database: 336 - Release Date: 11/18/2003
>

4995. Re: Wb site to Cubix Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 04:34:04 UTC
From: Kirk Mohror <kmohror@comcast.net>
Message-ID: <3Y6dnWkbpMeiF1yiRVn-hg@comcast.com>
Source record: 104161

Never mind...it's spelled CUBEX.
I found the web site.
"Kirk Mohror"

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.542 / Virus Database: 336 - Release Date: 11/18/2003

4996. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 04:57:49 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031123235749.18993.00000990@mb-m18.aol.com>
Source record: 104162

>Your childish BBB harassment attempt WAS responded to by us.

It's called consumer rights, not harrassment. The last letter sent to you by the BBB went unresponded to. Besides, you are the one that harrassed me by sending me threatening email, then when I blocked one email address, you sent me more threatening email from another email address.

>As for your unfounded jab at the quality of our products

I have one of your antennas. It's very shaky . The top of the antenna (it's a dualband vertical) didn't even have any kind of cap to keep out water. I had to rig something up myself.

>whining over $4.00

$4.50

>Copy of e-mail received from BBB on 09/02/03

Copy of e-mail received from BBB on 09/04/03:

Return-Path: <Carrie@dm.bbb.org>
Received: from rly-xa02.mx.aol.com (rly-xa02.mail.aol.com [172.20.105.71]) by air-xa01.mail.aol.com (v95.12) with ESMTP id MAILINXA13-563f5788bd3d6; Thu, 04 Sep 2003 14:48:05 -0400
Received: from bbbnt1.desmoines.bbb.org ([12.13.109.51]) by rly-xa02.mx.aol.com (v95.1) with ESMTP id MAILRELAYINXA26-563f5788bd3d6; Thu, 04 Sep 2003 14:47:26 -0400
Received: by BBBNT1 with Internet Mail Service (5.0.1460.8) id <SHVFXC85>; Thu, 4 Sep 2003 13:28:48 -0500
Message-ID: <011C79B762F2D011921D00805F0595D6421E16@BBBNT1>
From: Carrie Hourigan <Carrie@dm.bbb.org>
To: "'VHFRadioBuff@aol.com'" <VHFRadioBuff@aol.com>
Subject: RE: Antenna Warehouse complaint
Date: Thu, 4 Sep 2003 13:28:47 -0500
MIME-Version: 1.0
X-Mailer: Internet Mail Service (5.0.1460.8)
Content-Type: multipart/alternative; boundary="----_=_NextPart_001_01C37312.6142B0C0"
X-AOL-IP: 12.13.109.51
X-AOL-SCOLL-SCORE: 0:XXX:XX
X-AOL-SCOLL-URL_COUNT: 0

Per your request, I will forward your last letter of complaint to the company in attempt to resolve this issue. I will notify you of any response we receive. Please allow 10-15 days for us to work with the company.

Sincerely,

Carrie Hourigan
Dispute Resolution Specialist

***END
Unfortunatly I don't seem to have the final email from them anymore, saying the case was closed without a reply from the last email. I do believe I got something in the mail from the BBB saying that there was no reply from the company.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

4997. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 04:59:51 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031123235951.18993.00000991@mb-m18.aol.com>
Source record: 104163

>If you'll gather up the pieces of the damaged one from the heap and
>send them back to us along with a copy of your sales receipt we will see
>if we can get it replaced for you.

Hey, if I send mine back, will you properly cap the top of the antenna to keep
water from getting in? :)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

4998. Dipole Next To Home-Is That A Problem??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 05:44:26 UTC
From: xtx99@aol.com
Message-ID: <20031124004426.01837.00000589@mb-m27.aol.com>
Source record: 104164

I'm finally getting ready to make the jump from 2m/70cm to an old Kenwood TS-520SE which I purchased several years ago. My available antenna space is very limited, and I'm therefore looking at a Van Gorden PD-4010 parallel dipole (10/20/15/40, 66 feet long) or a Van Gorden "Shorty" Dipole (160-10 with antenna tuner). The maximum run I have is about 70 feet (and I'll probably use about 75 feet of RG-8). Unfortunately the dipole must run about 15 feet off ground level and one half of the dipole would have to be run about a foot from the side of a wooden house. Approximately 10 feet higher than the dipole on the side of the house is a rain gutter (probably aluminum). Would this be a problem? (high swr, etc.) Any suggestions are appreciated.

4999. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 08:40:21 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <fog3sv8gf47887d04lvo0hu2kjm8tqr01e@4ax.com>
Source record: 104165

On 22 Nov 2003 12:14:31 -0500, anonymous@coolgroups.com wrote:

>I recently made a TV antenna, and strangely it seems to pick
>up some cable channels like VH1 and TNT. They're a bit
>snowy, but they're definitely there. Does anyone know why
>this might be? I live in an apartment, so could I be
>getting signals from someone else's wires?
>
Some one has probably taken the chap way and just wired their outside
antenna to their set in parallel with the outside antenna. That turns
the antenna into a radiator as far as the cable signals are concerned.

It could also be a leak in the line. When the line leaks bad enough
to receive channels even over a short distance it's a pretty bad leak.

If you have 2-meter capability, tune to 145.25 which is the audio sub
carrier for channel 18 on cable. If you hear a strong signal there
operating on two probably wipes out that channel and maybe others.
I've completely saturated an amp like that and shut down the maid
distribution amps for a cable company. They fixed the leaks right
away.

You'll have to fix the return add due to viruses not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>Thanks

5000. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 10:36:46 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <2blwb.220398$275.835004@attbi_s53>
Source record: 104166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

I've also yet to have someone post information that can be validated
that a neighbor received a tax abatement [loss of property value]
because a ham had an tower/antenna installation in the neighborhood.

Deacon Dave

Dwight Stewart wrote:

>
>
> I agree, Dee. And, in addition, I've never heard of a house where the
> property value went down, or the property actually failed to sell, solely
> because of a neighbor's antenna.

5001. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 11:17:22 UTC
From: K4SQR@juno.com
Message-ID: <7c8be5b4.0311240317.1438869e@posting.google.com>
Source record: 104167

The Tennadyne LPDA was developed in Colorado to withstand 100 MPH
winds, snow and ice. They offer T-6, T-8, T-10 and T-12 element models
from 12' to 30 booms.
They have been in TX about 5 years now. Prices include UPS Ground
service in lower 48 states. (The KMA is basically a T-8.)

GL,
Jim, K4SQR

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:<vs0al98pnohi68@corp.supernews.com>...
> Dear "Lee"
> You do not tell us where you are nor whether you wish the antenna
> for amateur radio or commercial radio. In different parts of the world,
> different answers might be appropriate.
>
> http://www.tennadyne.com/
> These people make a series of LPDAs that are competently designed and
> executed. However, if you are in the ice "zone" you need to know that
> at about 7 mm of ice the elements almost point straight down. As is
> often the case with antenna manufacturers who are selling mostly to
> radio amateurs, the safety factor on the wind rating is optimistic.
> This should be of interest only if you are hit by very destructive winds
> or if you are to place the antenna in the clear in an area of clear
> fields. (The usual urban area significantly reduces wind load.)
> Two hints: one needs the optional rear boom reinforcement and the
> optimum way to connect to the antenna is to connect a piece of coax to
> the front of the boom (obvious part) and run the same coax under the
> bottom boom (the antenna uses a twin boom) to the insulated boom to mast
> clamp. At that clamp, wind the coax on a uv stable plastic tube to form
> a choke and bridge the clamp with the choke. Do not put the choke out
> at the end of the boom.
> Let us know what you decide.
> 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
> "Lee." <vulcanNOSPAM@ihug.com.au> wrote in message
> news:bpnvks$ac9$1@lust.ihug.co.nz...
> > Hello Folks
> > I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> > recommend one? opinions please???
> >

> > Lee.
> >
> >

5002. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 13:17:03 UTC
From: wa8ulx@aol.com
Message-ID: <20031124081703.02000.00000731@mb-m16.aol.com>
Source record: 104069

>Per your request, I will forward your last letter of complaint to the company
>in attempt to resolve this issue. I will notify you of any response we
>receive.
>Please allow 10-15 days for us to work with the company.

Typical ANDY the whinner, crying about $4.00 stinkin dollars, get a life Andy
and get back on CB where you belong.

5003. Source For Coax Patch-Cables ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 13:17:47 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <nIadnbeWIoo3mV-iRVn-gg@comcast.com>
Source record: 104168

Hi,

Decided to (finally) clean things up a bit.

Might anyone suggest a source for ordering a few coax patch-cables of various lengths with
BNC connectors crimped on. Would be a small order, but don't have a crimping tool.

R/S only seems to sell them in lengths from 12 feet and up; I need shorter ones.

Thanks,
Bob

5004. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 13:36:54 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fc20891.918862390@news.galilei.com>
Source record: 104070

Hi Mike

You can place a brass machine screw in the pipe caps for fine tuning.
EG moving the center frequency up and down. (vertical screw)
Changing the impedance slightly (stub screw)
Adjusting the SWR is by moving the coax connect point up or down
slightly.

TTUL
Gary

Mike Burch <mburch46@mchsi.com> verbositized:

>Hi Fella's
>
>I have recently built a J pole for 2 meters from the handbook and I was
>wondering if any of you had some tuning tips.
>
>Thank you in advance.
>
>Mike Burch K8MB
>
>Apache Junction AZ
>

5005. Re: "Fluxuated" Still Around?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 15:44:00 UTC
From: Fluxuated <Fluxuated@XHotmail.com>
Message-ID: <tIpwb.4345$Eq1.447099@news20.bellglobal.com>
Source record: 104071
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

What about you getting your Auntie Pregnant?

Lets hear something constructive from your pie hole?

"Alex" <Alex@aol.com> wrote in message
news:N5mdnY_rhNhaMiOiRVn-iQ@comcast.com...
> I haven't seen that moron "Fluxuated" post here for a while. Jeez what a
> dumb ass!
>
> Well I guess that anyone that "doing" his sister, can't be too bright!
>
> Alex
>
>

5006. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 18:12:09 UTC
From: Tom S <nobody@home.com>
Message-ID: <bptgr2il1@avnika.corp.mot.com>
Source record: 104073
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Mark,

For around $60, you can get a decent new antenna. I have the Anli-A100 (http://www.anli.com/Webpage/wP7.html). Very sturdy, well built antenna. I got mine from Advanced Specialists (http://www.advancedspecialties.net/) I'm not affiliated, just a satisfied customer.

Tom - AC9TS

"M.M." <junquemaile@cox.net> wrote in message news:Xns943B910962FB0nobodynowhere@68.6.19.6...
> Looking for a 2M/70cm base antenna. Prefer a Diamond or a Comet but tell me
> whatch got...make, model, condition, price.
>
> 73... Mark AA7TA

5007. Re: Source For Coax Patch-Cables ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 18:13:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3gi4svglg4pu8hjbsjgsbqlncfc1en41g3@4ax.com>
Source record: 104072

On Mon, 24 Nov 2003 08:17:47 -0500, "Robert11" <rgsxrose@comcast.net>
wrote:
>Might anyone suggest a source for ordering a few coax patch-cables of
>various lengths with BNC connectors crimped on.

Hi Bob,

Try:
http://www.pomonaelectronics.com/

73's
Richard Clark, KB7QHC

5008. Tram Antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 18:32:10 UTC
From: "M.M." <junquemaile@cox.net>
Message-ID: <Xns943D755A7AD6Anobodynowhere@68.6.19.6>
Source record: 104074

Anyone know anything about Tram antennas? I'm considering one (1481) listed on eBay. The reviews on eHam are a mostly favorable with a couple guys having problems but it's a pretty small sample. Just wondering if anyone here had any experience with them.

Thanks & 73... Mark AA7TA

5009. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 19:20:25 UTC
From: Jon Van Allen <kf7yn@qwest.net>
Message-ID: <%Rswb.533$f62.34973@news.uswest.net>
Source record: 104075
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

I'll second Tom's opinion of the Anli A100. It's a superbly made antenna and performs much better than the Cushcraft AR-270 it replaced.

Jon

"Tom S" <nobody@home.com> wrote in message
news:bptgr2il1@avnika.corp.mot.com...
> Mark,
>
> For around $60, you can get a decent new antenna. I have the Anli-A100
> (http://www.anli.com/Webpage/wP7.html). Very sturdy, well built antenna.
I
> got mine from Advanced Specialists (http://www.advancedspecialties.net/)
> I'm not affiliated, just a satisfied customer.
>
> Tom - AC9TS
>
>
>
> "M.M." <junquemaile@cox.net> wrote in message
> news:Xns943B910962FB0nobodynowhere@68.6.19.6...
> > Looking for a 2M/70cm base antenna. Prefer a Diamond or a Comet but tell
> me
> > whatch got...make, model, condition, price.
> >
> > 73... Mark AA7TA
>
>

5010. Re: 2M/70cm Base Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 19:35:29 UTC
From: "M.M." <junquemaile@cox.net>
Message-ID: <Xns943D801726F66nobodynowhere@68.6.19.6>
Source record: 104076
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Jon Van Allen wrote:

> I'll second Tom's opinion of the Anli A100. It's a superbly made
> antenna and performs much better than the Cushcraft AR-270 it
> replaced.
>

Thanks to both of you for the info. I'll certainly have a look.

Funny thing...I'm replacing an AR-270 also...

73... Mark

5011. Re: Dipole Next To Home-Is That A Problem??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 20:11:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <suo4svoq9kp06ii52rj8v7umquqnf179nh@4ax.com>
Source record: 104077

On 24 Nov 2003 05:44:26 GMT, xtx99@aol.com (Xtx99) wrote:

>I'm finally getting ready to make the jump from 2m/70cm to an old Kenwood
>TS-520SE which I purchased several years ago. My available antenna space is
>very limited, and I'm therefore looking at a Van Gorden PD-4010 parallel dipole
>(10/20/15/40, 66 feet long) or a Van Gorden "Shorty" Dipole (160-10 with
>antenna tuner). The maximum run I have is about 70 feet (and I'll probably use
>about 75 feet of RG-8). Unfortunately the dipole must run about 15 feet off
>ground level and one half of the dipole would have to be run about a foot from
>the side of a wooden house. Approximately 10 feet higher than the dipole on
>the side of the house is a rain gutter (probably aluminum). Would this be a
>problem? (high swr, etc.) Any suggestions are appreciated.

Hi OM,

Actually, your problems is no less common than many, and they do quite
well. This doesn't mean that it will be cake walk, however.

One antenna that attempts to be all bands must invariably disappoint
somewhere. Given the proximity of ground, issues of being within 1
foot of your house doesn't really add any more problems. Getting
higher should be a goal (why does your gutter have the 10 foot
advantage?) rather than further away.

Yes, being close to the house can present possible problems, but
trying first is quicker than worrying forever. If it does, reduce the
size of the dipole. Small dipoles have loss (all things considered),
but not so much to deafen or mute your signals. You can force your
truncated dipole to perform, or turn it into a top-loaded vertical
(drive both sides of the transmission line at the drop, against a
modest radial field). Same investment in time, money, and real-estate
and you move past the problem when and if it arises.

73's
Richard Clark, KB7QHC

5012. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 20:16:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kgp4sv8pnh7kq0v4din777osecevrgr8i8@4ax.com>
Source record: 104078

On Mon, 24 Nov 2003 08:40:21 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:
>It could also be a leak in the line. When the line leaks bad enough
>to receive channels even over a short distance it's a pretty bad leak.

Hi All,

It could also be an equipment shielding leak. Modern VCR's, DVD
players and so on have minimal shielding (or none) that could easily
become a source. Myself, I suffer this in some degree for local,
over-the-air signals that come in nearly as strong as cable feed. It
is odd to see ghost overlays arriving (a couple of seconds) before the
cable feed image.

73's
Richard Clark, KB7QHC

5013. Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 20:32:08 UTC
From: Edgar <edesign@sala.lt>
Message-ID: <bptps7$1qj4b0$1@ID-208708.news.uni-berlin.de>
Source record: 104079

Hello,
I've purchased an 1962 tube HF receiver. Well the problem is I don't know exact antenna input impendence value of it. I use simple 40m. dipole on a regular TV cable of 75 ohm. I would like to do some experiments with random wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any circuit that can help me to mach the impendence?

Thx,
Edgar
73!

5014. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 21:00:41 UTC
From: Jimmy <Gfender@carolina.rr.com>
Message-ID: <Zjuwb.29790$I53.1021574@twister.southeast.rr.com>
Source record: 104080

What usually causes this in an apatment is that someone has their "rabbit ears" connected in paralell with the input to their TV. I discovered this when I was in the USAF and they installed cabel in the barracks. By connecting the cable to a set of rabbit ears we were able to broadcast the signal from the second floor to rooms about 3 or 4 doors each way on the first second and third floors. No fuzzy pictures either. Later someone connected an antenna directly to the main cable instead of off a splitter so the whole barracks could get free TV.

<anonymous@coolgroups.com> wrote in message
news:3fbf9977_9@news.athenanews.com...
> I recently made a TV antenna, and strangely it seems to pick
> up some cable channels like VH1 and TNT. They're a bit
> snowy, but they're definitely there. Does anyone know why
> this might be? I live in an apartment, so could I be
> getting signals from someone else's wires?
>
> Thanks

5015. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 21:43:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <apu4svc54tbs6okj5s9lm0919osk08o8pm@4ax.com>
Source record: 104081

On Mon, 24 Nov 2003 22:32:08 +0200, "Edgar" <edesign@sala.lt> wrote:

>Hello,
>I've purchased an 1962 tube HF receiver. Well the problem is I don't know
>exact antenna input impendence value of it. I use simple 40m. dipole on a
>regular TV cable of 75 ohm. I would like to do some experiments with random
>wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
>circuit that can help me to mach the impendence?
>
>Thx,
>Edgar
>73!
>

Hi Edgar,

How many tubes does it have?

73's
Richard Clark, KB7QHC

5016. Hy-Gain AV-14AVQ - top radials

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 21:43:56 UTC
From: ELLIS <prellis@pcug.org.au>
Message-ID: <newscache$7plvoh$d2b$1@tomato.pcug.org.au>
Source record: 104082

Can anyone tell me the length of the three, short, mast-top radials of the Hy-Gain AV-14AVQ, please?

I have bought one ex-deceased estate and they were missing along with some other hardware.

My guess from the diagrams are something like 20-30cm.

With thanks,
Peter VK1KEP

5017. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 21:56:32 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <k6KdnYfJJoRF41-iRVn-ig@crocker.com>
Source record: 104083

receiver input impedance is usually not too important... but proper matching
can increase the signal getting to the receiver and give better sensitivity.
use the same type of matching network as for a transmit antenna, though
smaller components are permissable of course. adjust for max receive signal
unless you have proper test equipment to measure input impedance. some old
radios included a simple peaking control that did some input matching, check
the schematic for anything adjustable before the first rx rf amp tube.

"Edgar" <edesign@sala.lt> wrote in message
news:bptps7$1qj4b0$1@ID-208708.news.uni-berlin.de...
> Hello,
> I've purchased an 1962 tube HF receiver. Well the problem is I don't know
> exact antenna input impendence value of it. I use simple 40m. dipole on a
> regular TV cable of 75 ohm. I would like to do some experiments with
random
> wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
> circuit that can help me to mach the impendence?
>
> Thx,
> Edgar
> 73!
>
>

5018. How far can a antenna see?Highthwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 22:36:35 UTC
From: kc5cqa@yahoo.com
Message-ID: <6b15sv4kke1da00npd8ra8g927gfcsumf4@4ax.com>
Source record: 104084

I seem to recall reading about a 'standard', it went something like this,,,, a two meter antenna at 100 feet can "see" or be useable for 17 miles. I don't recall where I read this,,, but would really appreciate any and all input on the question,,,,,,,,,,,, How far can a base two meter radio antenna transmit and recieve so as to be 'useable' when the antenn is 100 feet tall above the earth, and the surronding area is fairly level. (no hills or mountains). I am talking about a 50 watt base and 50watt mobil. If there is a formula somewhere, would appreciate the input.
The reason I ask, is on the way by some very tall tv antennas 1000 and 1200feet, I got to wondering,,, they don't work well with ""my formula"" (17miles=100feet) they (the tv channels #2,#4 #5) are out of 'gas' at about 70 miles.....?????????? Hope you can 'blumb up my brain'. thanks in advance. cl.73

5019. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-24 23:02:00 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ad35svct78tlp7ae7q8g1dq8sotmbibsgg@4ax.com>
Source record: 104085

On Mon, 24 Nov 2003 22:32:08 +0200, "Edgar" <edesign@sala.lt> wrote:

>Hello,
>I've purchased an 1962 tube HF receiver. Well the problem is I don't know
>exact antenna input impendence value of it. I use simple 40m. dipole on a
>regular TV cable of 75 ohm. I would like to do some experiments with random
>wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
>circuit that can help me to mach the impendence?
>
>Thx,
>Edgar
>73!
>

Does it have antenna terminals with screws, or a coax plug, or both?

What's the make & model?

Bob
k5qwg

5020. Re: How far can a antenna see?Highthwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 00:13:01 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <57adnUUT472jCI-iRVn-iQ@ctc.net>
Source record: 104086

> I seem to recall reading about a 'standard', it went something
> like this,,,, a two meter antenna at 100 feet can "see" or be useable
> for 17 miles. I don't recall where I read this,,, but would really
> appreciate any and all input on the question,,,,,,,,,,,, How far can a
> base two meter radio antenna transmit and recieve so as to be
> 'useable' when the antenn is 100 feet tall above the earth, and the
> surronding area is fairly level. (no hills or mountains). I am
> talking about a 50 watt base and 50watt mobil. If there is a formula
> somewhere, would appreciate the input.
> The reason I ask, is on the way by some very tall tv antennas
> 1000 and 1200feet, I got to wondering,,, they don't work well with
> ""my formula"" (17miles=100feet) they (the tv channels #2,#4 #5) are
> out of 'gas' at about 70 miles.....?????????? Hope you can 'blumb up
> my brain'. thanks in advance. cl.73

A rough rule of thumb is to take the square root of the height in feet and that will give you the miles from the antenna to the ground. YOu do this again for the other antenna and add the number of miles. This can be multiplied by about 1.2 to 1.3 for radio waves. For example if the transmitter antenna is 625 feet high and the receiving antenna is 16 feet high. YOu get sqrt 625 = 25 miles, then sqrt 16 = 4 miles. YOu add 25+4 = 29 miles for the visual distance. Then multiply this by 1.3 to get 37.7 miles of radio range.

5021. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 00:43:42 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <2Bxwb.20735$Wy4.2567@newsread2.news.atl.earthlink.net>
Source record: 104087
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dave Shrader" wrote:
>
> I've also yet to have someone post information
> that can be validated that a neighbor received
> a tax abatement [loss of property value] because
> a ham had an tower/antenna installation in the
> neighborhood.

Amen to that, Deacon Dave. The "lost of property value" is the most touted reason for opposition to antennas, but absolutely no evidence is ever presented to support that claim. In the end, I personally think all this is the result of cable companies pushing for the removal of television antennas in exchange for reduced rates on the installation of cable wiring in new housing developments. Since developers couldn't really justify a restriction on television antennas if radio antennas were installed in the area, they adopted rules to eliminate all antennas instead.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5022. More SAM's from Arrow Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 00:46:52 UTC
From: arrow146@aol.com
Message-ID: <20031124194652.03493.00001102@mb-m29.aol.com>
Source record: 104088

Hello,

Finally got pictures up of SAM 8 and SAM 9.
Just incase you want to take a look
<A HREF="http://arrowantennas.com/sams/sam.html">SAM'S</A>
http://arrowantennas.com/sams/sam.html

Let me know what you think.
73 Al Lowe N0IMW
<A HREF="http://ArrowAntennas.com">ArrowAntenna.com</A>

5023. Re: How far can a antenna see?Highthwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 00:58:04 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <vOxwb.223111$9E1.1221660@attbi_s52>
Source record: 104089

Ralph Mowery wrote:
>> I seem to recall reading about a 'standard', it went something
>>like this,,,, a two meter antenna at 100 feet can "see" or be useable
>>for 17 miles. I don't recall where I read this,,, but would really
>>appreciate any and all input on the question,,,,,,,,,,,, How far can a
>>base two meter radio antenna transmit and recieve so as to be
>>'useable' when the antenn is 100 feet tall above the earth, and the
>>surronding area is fairly level. (no hills or mountains). I am
>>talking about a 50 watt base and 50watt mobil. If there is a formula
>>somewhere, would appreciate the input.
>> The reason I ask, is on the way by some very tall tv antennas
>>1000 and 1200feet, I got to wondering,,, they don't work well with
>>""my formula"" (17miles=100feet) they (the tv channels #2,#4 #5) are
>>out of 'gas' at about 70 miles.....?????????? Hope you can 'blumb up
>>my brain'. thanks in advance. cl.73
>
>
> A rough rule of thumb is to take the square root of the height in feet and
> that will give you the miles from the antenna to the ground. YOu do this
> again for the other antenna and add the number of miles. This can be
> multiplied by about 1.2 to 1.3 for radio waves. For example if the
> transmitter antenna is 625 feet high and the receiving antenna is 16 feet
> high. YOu get sqrt 625 = 25 miles, then sqrt 16 = 4 miles. YOu add 25+4 =
> 29 miles for the visual distance. Then multiply this by 1.3 to get 37.7
> miles of radio range.
>

Yep!! That's the way to do it!!

>
>

5024. domestic reception issues

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 02:32:09 UTC
From: wrightsaerials@aol.com.co
Message-ID: <20031124213209.26041.00001015@mb-m05.aol.com>
Source record: 104090

Our website has a lot of good stuff about TV and radio reception. Our Rogues' Gallery is amazing!
http://www.wrightsaerials.tv/index.html
On the subject of television interference, there can be no doubt that the most effective solution is the one that prevents the interference from ever occurring.
Practical Television, August 1950.

5025. Re: Wind on antennas (was HF LPDA)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 03:13:53 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vs5i6skehp1db2@corp.supernews.com>
Source record: 104091

Dear Jim:
Note the careful wording that I used.
One person's 100 mph wind is not what an engineer considers 100 mph wind. If one considers the average density of air at sea level (kg/m^3) and assumes that it is impacting a flat plate while traveling at a steady speed (m/s) one will estimate a resultant pressure (newtons/m^2), which is proportional to the square of the speed. If one then assumes a discounting factor for a round element with respect to the just mentioned flat plate and multiplies the distributed element area times the factor times the pressure one will produce a distribution of force along the element. Making assumptions about the mechanical properties of the element, one can calculate an estimate of when the element will be loaded to the yield point somewhere along the element.
The steady-wind-speed-to-yield (suggested by the above scheme) is significantly higher than that suggested by good engineering practice. Good engineering practice applies safety factors to the steps just described. One of two major safety factors is the use of a higher safety factor than one in the pressure calculation. This safety factor takes into account the fact that real world wind is not steady (it also takes into account the increased likelihood of faster wind on taller antennas). The second major safety factor has to do with the strength of the element material. It is bad engineering to take material to theoretical yield. This is especially inappropriate with antenna elements that are able to flex in wind gusts.

It might be true that an antenna element that has been very carefully assembled from selected materials could be placed in a wind tunnel, have the wind speed slowly increased to a laminar 100 mph, and have the element just have a permanent bend.

Note that I have said that the LPDAs are competently designed - both electromagnetically and mechanically. They are good value. However, the mechanical ratings, as is common with most antennas sold to radio amateurs, are optimistic.
The standard of care for the mechanical design of non-amateur antennas includes the use of safety factors.
It is reasonable to expect that most radio amateurs will effect this class of antenna in an urban area to a height of no more than about 70 feet. Under such conditions, the probability of damaging winds is small. Ice, in the North country, is the most likely agent that will kill an antenna. However, antennas of this class that are placed in clear, rural sites at serious heights will be much more likely to fail from wind than their counterparts in town.

What I would like to see is a standard to rate amateur antennas in
terms of pressure. 73 Mac N8TT
--
J. Mc Laughlin - Michigan USA

"Jim" <K4SQR@juno.com> wrote in message
news:7c8be5b4.0311240317.1438869e@posting.google.com...
> The Tennadyne LPDA was developed in Colorado to withstand 100 MPH
> winds, snow and ice. They offer T-6, T-8, T-10 and T-12 element models
> from 12' to 30 booms.
> They have been in TX about 5 years now. Prices include UPS Ground
> service in lower 48 states. (The KMA is basically a T-8.)
>
> GL,
> Jim, K4SQR
>

5026. Re: How far can a antenna see?Highthwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 03:20:17 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311241920.d252d63@posting.google.com>
Source record: 104092

Ht of ant over gd Optical range limit Ht ant above sealevel limit
optical rg

5 ft 3.2 miles 1000 ft 45
miles
20 6.4 2000 63.5
50 10.0 3000 78
100 14.2 4000 90
500 32 5000 100

Horisontal dist calculated from S = 1.42root H
S = miles H = ht of observers eyes in feet above sea level Above table
gives horizon distance for various heights of antenna above sea level

RADIO DATA REFERANCE BOOK
RSGB

aRT

"Ralph Mowery" <rmowery@ctc.net> wrote in message news:<57adnUUT472jCl-iRVn-iQ@ctc.net>...
> > I seem to recall reading about a 'standard', it went something
> > like this,,,, a two meter antenna at 100 feet can "see" or be useable
> > for 17 miles. I don't recall where I read this,,, but would really
> > appreciate any and all input on the question,,,,,,,,,,,, How far can a
> > base two meter radio antenna transmit and recieve so as to be
> > 'useable' when the antenn is 100 feet tall above the earth, and the
> > surronding area is fairly level. (no hills or mountains). I am
> > talking about a 50 watt base and 50watt mobil. If there is a formula
> > somewhere, would appreciate the input.
> > The reason I ask, is on the way by some very tall tv antennas
> > 1000 and 1200feet, I got to wondering,,, they don't work well with
> > ""my formula"" (17miles=100feet) they (the tv channels #2,#4 #5) are
> > out of 'gas' at about 70 miles.....?????????? Hope you can 'blumb up
> > my brain'. thanks in advance. cl.73
>
> A rough rule of thumb is to take the square root of the height in feet and
> that will give you the miles from the antenna to the ground. YOu do this
> again for the other antenna and add the number of miles. This can be
> multiplied by about 1.2 to 1.3 for radio waves. For example if the
> transmitter antenna is 625 feet high and the receiving antenna is 16 feet
> high. YOu get sqrt 625 = 25 miles, then sqrt 16 = 4 miles. YOu add 25+4 =
> 29 miles for the visual distance. Then multiply this by 1.3 to get 37.7
> miles of radio range.

5027. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 03:37:26 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fc2d089_4@news1.prserv.net>
Source record: 104093

If it has 2 or 3 terminals (#3=gnd.), it is 200 ohms. If it has an original coax connector it is 50 ohms. See EIA receiver standards for 1958.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Edgar" <edesign@sala.lt> wrote in message
news:bptps7$1qj4b0$1@ID-208708.news.uni-berlin.de...
> Hello,
> I've purchased an 1962 tube HF receiver. Well the problem is I don't know
> exact antenna input impendence value of it. I use simple 40m. dipole on a
> regular TV cable of 75 ohm. I would like to do some experiments with
random
> wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
> circuit that can help me to mach the impendence?
>
> Thx,
> Edgar
> 73!
>
>

5028. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 03:37:54 UTC
From: richardharrison@webtv.net
Message-ID: <13200-3FC2CE92-65@storefull-2313.public.lawson.webtv.net>
Source record: 104094

Bob, K6RTM wrote:
"Discones are covered in section 8.37 and log periodics are covered in section 8.21."

In my 3rd edition of the RSGB VHF/UHF Manual, the discone is on page 7.28 and the log periodic is on page 7.35.

Bob also wrote:
"The take-off angle increases with the frequency."

In my experience, the vertical angle of maximum radiation, in general, decreases with antenna height above the earth, when the height of the antenna in is not over 5/8 wavelength.

Increasing the frequency used with an antenna of fixed height is equivalent to increasing the height of an antenna using a fixed frequency because it is a function of antenna height above the reflecting surface in terms of wavelength. It is all a matter of scale. At double the frequency, an antenna only needs half the physical height to be the same elevation above ground to have the same elevation in terms of wavelength. Soil conductivity and depth of penetration in the earth are being ignored in the comparison for simplicity. It`s no big deal.

A 1/2-wave horizontal dipole erected 1/4-wave over good earth has its maximum radiation toward the zenith. The same antenna elevated to 1/2-wave above the earth has a take-off angle near 30 degrees above the horizon.

When antenna height exceeds 5/8 wavelength, added lobes appear in the vertical radiation pattern. The additional lobes appear in the vertical radiation patterns of vertical antennas too when their heights exceed 5/8-wavelength. It is for this reason that AM broadcast stations usually limit their towers to no more than 5/8-wavelength. Sky wave propagation could produce substantial interference with the ground wave signal at relatively short distances at night from the high-angle radiation.

In a sense Bob is correct in that some of the take-off angle increases with frequency, in that it produces growth of additional lobes in the take-off pattern.

Best regards, Richard Harrison, KB5WZI

5029. Re: How far can a antenna see?Highthwise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 04:11:29 UTC
From: richardharrison@webtv.net
Message-ID: <24769-3FC2D671-167@storefull-2317.public.lawson.webtv.net>
Source record: 104095

Art, KB9MZ wrote:
"Horizontal distance calculated from

S = 1.42 root H----."

The 1.42 is rounded from 1.414 which is the square root of 2. The formula previously given is:

Miles to the horizon = sq rt 2H

H is in feet.

You can remove 2 from under the radical by expressing it as 1.414. That is all the RSGB did. I think it is easer to leave the 2 under the radical, that is just to take the square root of 2x the antenna height in feet when you are estimating the distance to the horizon in miles. Usually you can do this in an instant in your head. The results are most often good enough.

Best regards, Richard Harrison, KB5WZI

5030. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 05:35:48 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <TSBwb.14594$yM6.11303@lakeread06>
Source record: 104096

Richard wrote:
> In my experience, the vertical angle of maximum radiation, in general,
> decreases with antenna height above the earth, when the height of the
> antenna in is not over 5/8 wavelength.

That's a good paraphrase of the standard writings on the subject, but..

Richard also wrote:
> A 1/2-wave horizontal dipole erected 1/4-wave over good earth has its
> maximum radiation toward the zenith. The same antenna elevated to
> 1/2-wave above the earth has a take-off angle near 30 degrees above the
> horizon.

Please explain this (apparent) contradiction? I expended significant effort to get a dipole 1/2 wavelength above ground, and did so specifically for long-haul communications. I may have missed any theory about the 1/4 wavelength being the optimal height, as I was always told (as I read) that 1/2 wavelength height was considered optimal for a number of reasons, not the least of which was the best take-off angle.

Thanks,

Jack Painter
NF05CM
Oceana Radio

5031. Re: Good Wideband RX Antenna for 25 -1300 MHz ? Correction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 05:45:12 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <F%Bwb.14595$yM6.10242@lakeread06>
Source record: 104097

Well, maybe the late hour contributed to MY mix up of Zenith (overhead) and Azimuth, horizon, etc. Thanks for the nice piece anyway Richard!

"Jack Painter" <223bthp@cox.net> wrote in message news:TSBwb.14594$yM6.11303@lakeread06...
> Richard wrote:
> > In my experience, the vertical angle of maximum radiation, in general,
> > decreases with antenna height above the earth, when the height of the
> > antenna in is not over 5/8 wavelength.
>
> That's a good paraphrase of the standard writings on the subject, but..
>
> Richard also wrote:
> > A 1/2-wave horizontal dipole erected 1/4-wave over good earth has its
> > maximum radiation toward the zenith. The same antenna elevated to
> > 1/2-wave above the earth has a take-off angle near 30 degrees above the
> > horizon.
>
> Please explain this (apparent) contradiction? I expended significant effort
> to get a dipole 1/2 wavelength above ground, and did so specifically for
> long-haul communications. I may have missed any theory about the 1/4
> wavelength being the optimal height, as I was always told (as I read) that
> 1/2 wavelength height was considered optimal for a number of reasons, not
> the least of which was the best take-off angle.
>
> Thanks,
>
> Jack Painter
> NF05CM
> Oceana Radio
>
>

5032. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 07:44:32 UTC
From: Edgar <edesign@sala.lt>
Message-ID: <bpv18u$1souib$1@ID-208708.news.uni-berlin.de>
Source record: 104098

The radio receiver is russian made "Volna-K" it means "Vawe-K" in english.
It has a coxial output.

Here is some more information about it:
Go to
http://babelfish.altavista.com/

and Translate a Web page form russian to english
http://www.cqham.ru/trx/volna.html

Tnx,
Edgar
73

5033. Re: Best all round antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 09:04:38 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a2847148011d74d989691@news.west.earthlink.net>
Source record: 104099

In article <CAKrb.213$zR6.8220@nnrp1.ozemail.com.au>,
NOSPAMvk2hxy@hotmail.com says...
> Hi there ladies and gents. I have a question that has most likely come up
> here before, and I do apologise if this is visiting old ground.
>
> I am a novice limited license holder in Australia and pretty soon I will
> have access to the 10-15 and 80M bands. I would like to know what you
> consider as being the best all round antenna for my purpose? I have plenty
> of room to mount an 80M dipole antenna, although height is a problem. I can
> go up no more than about 50 feet.
>
> I also have a mast and rotator, so a 0-80 triband yagi is also on the cards.
>
> Just looking for decent ideas here guy's. I know the question is fairly
> open ended, but I would like to consider all my options from those who have
> all the best knowledge of what works and what doesn't. To wire or not to
> wire? To beam or not to beam? To G5RV??????
>
> I am running a TS-850, an MFJ 989C Tuner running 100W out of the box.
>
> Thanks very much for your time and I really appreciate your response to my
> questions.
>
> Warmest regards
>
> 73 de VK2HXY
> Troy

Troy -- I would suggest a G5RV antenna for starters. It'll give you the
whole spectrum from 10m to 80m. If you want to go with a beam as well
for 10/15/20, that would be a good idea as well. In my particular case,
I'm using a "shorty" G5RV which covers from 10m to 40m (about 1/2 the
size of a regular G5RV) and it does a great job, especially when you
consider I'm using an FT-817 and only putting five watts max into the
antenna!

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

5034. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 09:04:39 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a284e359af69fc6989692@news.west.earthlink.net>
Source record: 104100
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <1069439807.747164@news-1.nethere.net>,
Alaininvc@'86DASPAMnetscape.net says...
> Hello All!
>
> I live in San Diego and have been a PBS supporter for many years. An
> article in this months "On Air" PBS magazine has made my day! The
> article is on page #3. It is written by the General Manager of the tv
> station. I have not read the document in question, but it does sound too
> good to be true. How curious are you? If you live in San Diego, you
> might find a copy in your local library.
>
> In essence he says that the:
>
> "...[Federal] government will defend your right to crawl up on the roof
> and put up a BIG, HONKING antenna, despite the protests of nosy
> neighbors, community planners, rental management companies, local
> governemnt bureaucrats and other meddlesome busybodies."
>
> Want to know how? Here is the URL:
>
> www.fcc.gov/mb/facts/otard.html
>
> Now you may have to prove to "the opposition" that the antenna you have
> erected can indeed receive "local" television stations, but that should
> not be that difficult to do...

Apparently you didn't read the page to which you referred in your message. OTARD covers video receiving antennas, like those from DirecTV or Dish Network. It does NOT cover "big, honking" antennas such as those for amateur radio. To quote from the FCC's website:

-=-=-

The rule applies to the following types of video antennas:

(1) A "dish" antenna that is one meter (39.37") or less in diameter (or any size dish if located in Alaska) and is designed to receive direct broadcast satellite service, including direct-to-home satellite service, or to receive or transmit fixed wireless signals via satellite.

(2) An antenna that is one meter or less in diameter or diagonal measurement and is designed to receive video programming services via MMDS (wireless cable) or to receive or transmit fixed wireless signals

other than via satellite.

(3) An antenna that is designed to receive local television broadcast signals. Masts higher than 12 feet above the roofline may be subject to local permitting requirements.

In addition, antennas covered by the rule may be mounted on "masts" to reach the height needed to receive or transmit an acceptable quality signal (e.g. maintain line-of-sight contact with the transmitter or view the satellite). Masts higher than 12 feet above the roofline may be subject to local permitting requirements for safety purposes. Further, masts that extend beyond an exclusive use area may not be covered by this rule.

-=-=-

For that, you have to look to PRB-1, but the FCC says that does not apply to deed restrictions (CC&Rs). There is legislation before Congress at present to extend PRB-1's authority to CC&Rs as well as local governments, but it has yet to be passed by Congress and be signed into law by the President.

I doubt very seriously that you can convince any HOA that your tri-bander beam is needed for receiving TV signals. A better, and more honest, approach would be to explain to them how actively involved you are with your local ARES or RACES group -- you ARE, aren't you? -- and how vital a resource you can be if you have the necessary capabilities to provide communications in the event of an emergency. Also:

- make your request reasonable
- offer to show them your station at home
- enlighten them as to what it is that ham radio is all about
- ensure they understand the difference between ham radio and CB
- assure them that they won't be opening up the neighborhood to complaints about interference
- don't plan on running a kilowatt linear, as you will be guaranteed to cause at least some interference with that much wattage (with buildings as close to one another as you have in most condo associations, you'll find that anything more than 250 watts is going to guarantee some complaints)

You know, the usual stuff. Right now I have a very agreeable relationship with my HOA at home. I live in a condo in Fountain Valley, CA. Our CC&Rs allow for an antenna mast attached to the chimney, not more than eight feet above the highest point of the house. I can use that to support the center of my G5RV when I can get up there to remount it, plus I will be putting a discone atop that mast for VHF/UHF communications and to feed signals to my scanner. I've had a shorty G5RV up at home for the past couple of years, not mounted in the optimum configuration but it does a fair job -- and I've never had a TVI/RFI complaint in all that time. Using QRP power levels helps, of course, but even with 100 watts I didn't have any problems.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

5035. Re: Half-Squares

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 10:49:41 UTC
From: kb1ln@arrl.net
Message-ID: <bb6b865e.0311250249.2b8956a0@posting.google.com>
Source record: 104101

Hello Rick,

I have built and used half-squares on the 40m band for many years.
I'm very happy with their performance, for a wire antenna that isn't
rotatable, on that band. I feed mine at one of the top corners
directly with 50 ohm coax and the match is pretty good without needing
much trimming at all to make it work in the desired part of the band.

I put the ends of the vertical sections at least 10 feet off the
ground, not only for safety - so no one can touch it while I'm
transmitting - but from what I've read, it lowers the take-off angle
somewhat and results in longer path DX. If I had the room I'd build
one for 80m as well!!

Check out http://www.cebik.com/scv4.html for details.

I'd be glad to answer any questions - juste-mail me directly.

73 and GUD LUK de Bob KB1LN

5036. Re: Hy-Gain AV-14AVQ - top radials

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 11:38:49 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <nnf6sv056gnrrgvm7n74jcji0k706iu2rr@4ax.com>
Source record: 104102

On Mon, 24 Nov 2003 21:43:56 GMT, "ELLIS" <prellis@pcug.org.au> wrote:

>Can anyone tell me the length of the three, short, mast-top radials of the
>Hy-Gain AV-14AVQ, please?
>
>I have bought one ex-deceased estate and they were missing along with some
>other hardware.
>
>My guess from the diagrams are something like 20-30cm.
>
>With thanks,
>Peter VK1KEP
>

Hi Peter,

You can download the entire manual for free in pdf format from :
http://www.hy-gain.com/manuals.php

Good Luck I use a 14 AVQ from many years it was a good antenna for a
vertical.
73 Dave kc1di

5037. Re: Good Wideband RX Antenna for 25 -1300 MHz ? Correction

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 13:01:50 UTC
From: richardharrison@webtv.net
Message-ID: <27187-3FC352BE-61@storefull-2316.public.lawson.webtv.net>
Source record: 104104

Jack Painter wrote:
"I may have missed any theory about the 1/4 wavelength being the optimal height---."

I missed that too, unless your aim is near vertical incidence reflection from the ionosphere for nearby contacts. Some hams have that goal and argue that 1/4-wave height is enough because it gives the first elevation that produces the drivepoint impedance of the horizontal dipole in free-space.

The purpose of the antenna is communication, not impedance. A friendly impedance helps of course.

Best regards, Richard Harrison, KB5WZI

5038. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 13:03:08 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <gqlwb.815$Cv6.176@twister.tampabay.rr.com>
Source record: 104103
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

what i dont understand is if you guys dont like the deed restrictions
you are legally free not to sign the deed and move to another area
why should the federal government step in and tell some city or housing
community that the CONTRACT you knowingly and willing signed is worthless
you guys and your wives all want the nice classy neighborhoods and gated
communities with the fine trimmed lawns and lexus in every driveway but
you think your special cause you want to have an outside antenna
well how would you feel if your next door neighbor paintes his house the
most aful shade of slime yellow you ever saw? you would be down to the
community meeting griping your heads off so either live with the
contract your signed or move

5039. Re: More SAM's from Arrow Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 13:54:45 UTC
From: derswede@aol.comspam.com
Message-ID: <20031125085445.20316.00000947@mb-m04.aol.com>
Source record: 104105

<< Finally got pictures up of SAM 8 and SAM 9.
Just incase you want to take a look
http://arrowantennas.com/sams/sam.html >>

Very nice production setup! Good antennas, too. Great to be able to buy a US manufactured product....one with great quality and some innovation. I like PAR Electronics, too, esp. for the halos and Moxons. Keep turning out good products!

Cheers!
A

5040. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 13:59:05 UTC
From: Pappy127@usa.net
Message-ID: <3FC36029.C3D2F9BE@usa.net>
Source record: 104106
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Dennis Kaylor wrote:
>
> what i dont understand is if you guys dont like the deed restrictions
> you are legally free not to sign the deed and move to another area
> why should the federal government step in and tell some city or housing
> community that the CONTRACT you knowingly and willing signed is worthless
> you guys and your wives all want the nice classy neighborhoods and gated
> communities with the fine trimmed lawns and lexus in every driveway but
> you think your special cause you want to have an outside antenna
> well how would you feel if your next door neighbor paintes his house the
> most aful shade of slime yellow you ever saw? you would be down to the
> community meeting griping your heads off so either live with the
> contract your signed or move

Dear HOA's COPS,

NO, it's not time to move. It's time to get sneaky and stealthy with your antennas, find me if you can. But there isn't a darn thing you can do about it as long as it's not in the public's eye. By the way, my Dish Networks dish is going up. Thank you FCC for making them LEGAL. But is was going up regardless, just like the others have in this housing plan with such antenna restrictions. HOA's that restricted antennas made cable the only way your could receive any tv stations. That was illegal from the start.

As I have said, I am moving into such a housing plan. "WE" don't own a lexus or similar vehicle and I haven't seen one in the plan. The majority of people there seem to be down to earth everyday nice people, until you get to the HOA Cops, which every housing plan with HOA restrictions of any kind has.

Normal people who reside in a nice house isn't going to paint their house some weird color, park junk vehicles, let their grass turn to weed or put up gigantic towers and antennas, etc..

By the way, I haven't signed any such agreement when I bought the house. I do know that such HOA "BS" does exist just to please the people residing there that doesn't trust their neighbors. They are the ones that should move. "TRUST" is the word. I did some checking and the first house sold in the plan was to a nice family (mechanic) with two children. He/they have an immaculate looking yard and house. He is a scanner enthusiast and has his antennas located in his attic, aside from his dish which is located on the back of roof.

Where there's a will there is a way.

"God Bless America" for the freedoms we still have.

Have a positive day.

5041. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 14:28:29 UTC
From: richardharrison@webtv.net
Message-ID: <21754-3FC3670D-540@storefull-2311.public.lawson.webtv.net>
Source record: 104107

Edgar wrote:
"---I don`t know exact antenna input impedance of it (the 1962 tube HF receiver)."

The Radiotron Designer`s Handbook says on page 918:
"For use with domestic type receivers operating on the short wave band, the standard dummy antenna is taken as being 400 ohms resistive, even though the aerial reactance will not be zero across the tuning range, as this gives an indication of average operating conditions."

Then on page 912 the book says:
"From the considerations detailed above, it can be seen that the coupled circuit arrangement (an ordinary 2-winding antenna coil) of Fig. 23.2 is generally satisfactory since it readily lends itself with minor modifications, to applications using balanced or unbalanced aerial systems."

Best regards, Richard Harrison, KB5WZI

5042. antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 14:50:20 UTC
From: Richard <rdavy30@earthlink.net>
Message-ID: <M_Jwb.14355$n56.12700@newsread1.news.pas.earthlink.net>
Source record: 104108

Anyone have any experiences with using 2 7/8" tubing as an antenna
support? I'd like to cement the bottom three feet and guy as needed.

5043. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 14:51:35 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fc36ec9_2@news1.prserv.net>
Source record: 104109

What wall thickness?
What alloy?

--
Crazy George
Remove N O and S P A M imbedded in return address
"Richard" <rdavy30@earthlink.net> wrote in message
news:M_Jwb.14355$n56.12700@newsread1.news.pas.earthlink.net...
> Anyone have any experiences with using 2 7/8" tubing as an antenna
> support? I'd like to cement the bottom three feet and guy as needed.
>

5044. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 14:56:48 UTC
From: richardharrison@webtv.net
Message-ID: <21754-3FC36DB0-542@storefull-2311.public.lawson.webtv.net>
Source record: 104110

Edgar wrote:
"The radio receiver is Russian made "Volna-K" it means "Wave-K" in English."

I don`t know either Russian or English, but guess that there may be similarities, as there are between Portuguese and Spanish which I do speak. Portuguese and Spanish have many words in common but they often have many differences in the most used words.

Thousands of times I`ve heard the station ID which sounded to me as:

"Radio Volna Europa, Vloss Volna Polska"

I always thought it must mean:

"Radio Free Europe, Voice of Free Poland"

Just a guess. I never looked it up nor asked any of the Polish exiles I worked with.

Best regards, Richard Hsarrison, KB5WZI

5045. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 15:13:52 UTC
From: Wilderness Keyboard <KIYW@zilch.net>
Message-ID: <PkKwb.6439$ML6.5839@fed1read01>
Source record: 104111

See Guide to Transmitter Range From Artsci --- URL:

http://www.artscipub.com/simpleton/simp.range.html

Also see VHF/UHF Line of Sight Calculator
http://www.vwlowen.demon.co.uk/java/horizon.htm

And Calculating the Distance to the Horizon URL:
http://www.wolfram.demon.co.uk/rp_horizon_distance.html

--
73 From The Wilderness Keyboard

<kc5cqa@yahoo.com> wrote in message
news:6b15sv4kke1da00npd8ra8g927gfcsumf4@4ax.com...
> I seem to recall reading about a 'standard', it went something
> like this,,,, a two meter antenna at 100 feet can "see" or be useable
> for 17 miles. I don't recall where I read this,,, but would really
> appreciate any and all input on the question,,,,,,,,,,,, How far can a
> base two meter radio antenna transmit and recieve so as to be
> 'useable' when the antenn is 100 feet tall above the earth, and the
> surronding area is fairly level. (no hills or mountains). I am
> talking about a 50 watt base and 50watt mobil. If there is a formula
> somewhere, would appreciate the input.
> The reason I ask, is on the way by some very tall tv antennas
> 1000 and 1200feet, I got to wondering,,, they don't work well with
> ""my formula"" (17miles=100feet) they (the tv channels #2,#4 #5) are
> out of 'gas' at about 70 miles.....?????????? Hope you can 'blumb up
> my brain'. thanks in advance. cl.73

5046. Re: Wind on antennas (was HF LPDA)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 15:57:16 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311250757.9c0ed8@posting.google.com>
Source record: 104112

Mac,
I understand your line of work is a patent attorney
but it easily could have been one as a mechanical engineer.
Your description of antenna mechanical design is outstanding.
As far as designing to a yield point, Rohn did that with the
fold over tower and from experience after selling a few did
some retroactive strengthening (I calculated it out myself
when my one failed)
On antennas I have for years resorted to the use of fishing
poles covered with aluminum foil. With respect to cost and
survivability it easily beats the traditional aluminum designs
which are rapidly getting beyond the amateurs reach.
Do the math, fishing poles cost $1 a foot
for a $800 commercial antenna you get how many feet of aluminum that
you have to lift to the tower top !
Regards
Art

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:<vs5i6skehp1db2@corp.supernews.com>...
> Dear Jim:
> Note the careful wording that I used.
> One person's 100 mph wind is not what an engineer considers 100 mph
> wind. If one considers the average density of air at sea level (kg/m^3)
> and assumes that it is impacting a flat plate while traveling at a
> steady speed (m/s) one will estimate a resultant pressure (newtons/m^2),
> which is proportional to the square of the speed. If one then assumes a
> discounting factor for a round element with respect to the just
> mentioned flat plate and multiplies the distributed element area times
> the factor times the pressure one will produce a distribution of force
> along the element. Making assumptions about the mechanical properties
> of the element, one can calculate an estimate of when the element will
> be loaded to the yield point somewhere along the element.
> The steady-wind-speed-to-yield (suggested by the above scheme) is
> significantly higher than that suggested by good engineering practice.
> Good engineering practice applies safety factors to the steps just
> described. One of two major safety factors is the use of a higher
> safety factor than one in the pressure calculation. This safety factor
> takes into account the fact that real world wind is not steady (it also
> takes into account the increased likelihood of faster wind on taller
> antennas). The second major safety factor has to do with the strength
> of the element material. It is bad engineering to take material to
> theoretical yield. This is especially inappropriate with antenna
> elements that are able to flex in wind gusts.

>
> It might be true that an antenna element that has been very
> carefully assembled from selected materials could be placed in a wind
> tunnel, have the wind speed slowly increased to a laminar 100 mph, and
> have the element just have a permanent bend.
>
> Note that I have said that the LPDAs are competently designed - both
> electromagnetically and mechanically. They are good value. However,
> the mechanical ratings, as is common with most antennas sold to radio
> amateurs, are optimistic.
> The standard of care for the mechanical design of non-amateur
> antennas includes the use of safety factors.
> It is reasonable to expect that most radio amateurs will effect this
> class of antenna in an urban area to a height of no more than about 70
> feet. Under such conditions, the probability of damaging winds is
> small. Ice, in the North country, is the most likely agent that will
> kill an antenna. However, antennas of this class that are placed in
> clear, rural sites at serious heights will be much more likely to fail
> from wind than their counterparts in town.
>
> What I would like to see is a standard to rate amateur antennas in
> terms of pressure. 73 Mac N8TT
> --
> J. Mc Laughlin - Michigan USA
>
> "Jim" <K4SQR@juno.com> wrote in message
> news:7c8be5b4.0311240317.1438869e@posting.google.com...
> > The Tennadyne LPDA was developed in Colorado to withstand 100 MPH
> > winds, snow and ice. They offer T-6, T-8, T-10 and T-12 element models
> > from 12' to 30 booms.
> > They have been in TX about 5 years now. Prices include UPS Ground
> > service in lower 48 states. (The KMA is basically a T-8.)
> >
> > GL,
> > Jim, K4SQR
> >

5047. Re: Good Wideband RX Antenna for 25 -1300 MHz ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 16:09:27 UTC
From: bob <k6rtm@nospam.comcast.net>
Message-ID: <251120030809278274%k6rtm@nospam.comcast.net>
Source record: 104113

In article <13200-3FC2CE92-65@storefull-2313.public.lawson.webtv.net>,
Richard Harrison <richardharrison@webtv.net> wrote:

> Bob, K6RTM wrote:
> "Discones are covered in section 8.37 and log periodics are covered in
> section 8.21."
>
> In my 3rd edition of the RSGB VHF/UHF Manual, the discone is on page
> 7.28 and the log periodic is on page 7.35.

Richard--

I'm working with the second edition -- I'll ask Santa for the third
edition, and then figure out which one to keep at home, and which at
the office!

--
Namaste-

5048. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 16:41:51 UTC
From: richardharrison@webtv.net
Message-ID: <29664-3FC3864F-545@storefull-2312.public.lawson.webtv.net>
Source record: 104114

Wilderness Keyboard wrote:
"See Guide to Transmitter Range from Artsci---."

See the 19th edition of the "ARRL Antenna Book" pages 23.5 and 23.6.

Eqn. 3:

Dmiles = 1.415 sq rt Hfeet

This can be rewritten:
D = sq rt 2H

Wasn`t it Albert Einstein who wrote something like: "Don`t make things any more complicated than necessary?"

Solutions to Eqn 3 are plotted in Fig 6.

Example: 20 ft gives 6 miles. The approximate sq rt of 40 is 6 miles.

Example: 50 ft gives 10 miles. The approximate sq rt of 100 is 10 miles.

Example: 200 Ft gives 20 miles. The approximate sq rt of 400 is 20 miles.

Etc., etc., etc..

Best regards, Richard Harrison, KB5WZI

5049. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 17:11:41 UTC
From: K7JEB <k7jeb.remove_this@qsl.net>
Message-ID: <P7Mwb.7629$o9.232@fed1read07>
Source record: 104115

Richard Harrison, KB5WZI, wrote:

> See the 19th edition of the "ARRL Antenna Book" pages 23.5 and 23.6.
> Eqn. 3:
> Dmiles = 1.415 sq rt Hfeet
> This can be rewritten:
> D = sq rt 2H
>
> Wasn`t it Albert Einstein who wrote something
> like: "Don`t make things any more complicated
> than necessary?"

I think it was:

"Everything should be made as simple as
possible, but not simpler". -- Albert Einstein

But... whatever. I think Herr Doktor Einstein would
appove of the derivation from first principles found
on:

http://www.wolfram.demon.co.uk/rp_horizon_distance.html

K7JEB
Glendale, AZ

5050. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:18:11 UTC
From: Wilderness Keyboard <KIYW@zilch.net>
Message-ID: <C1Nwb.6461$ML6.1711@fed1read01>
Source record: 104118

Artsci takes into account
To properly estimate a signals range, you must have a few important figures:
-- Frequency / Band
-- Transmitter power (in watts)
-- Antenna height (from sea level)
-- Antenna gain (net after coax loss)

And that is what the original poster asked for (I thought)
--
73 From The Wilderness Keyboard

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29664-3FC3864F-545@storefull-2312.public.lawson.webtv.net...
> Wilderness Keyboard wrote:
> "See Guide to Transmitter Range from Artsci---."
>
> See the 19th edition of the "ARRL Antenna Book" pages 23.5 and 23.6.
>
> Eqn. 3:
>
> Dmiles = 1.415 sq rt Hfeet
>
> This can be rewritten:
> D = sq rt 2H
>
> Wasn`t it Albert Einstein who wrote something like: "Don`t make things
> any more complicated than necessary?"
>
> Solutions to Eqn 3 are plotted in Fig 6.
>
> Example: 20 ft gives 6 miles. The approximate sq rt of 40 is 6 miles.
>
> Example: 50 ft gives 10 miles. The approximate sq rt of 100 is 10 miles.
>
> Example: 200 Ft gives 20 miles. The approximate sq rt of 400 is 20
> miles.
>
> Etc., etc., etc..
>
> Best regards, Richard Harrison, KB5WZI
>

5051. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:27:18 UTC
From: bozidar.pasaric@ri.hinet.hr
Message-ID: <1g4zumh.1efcdnrg30vimN%bozidar.pasaric@ri.hinet.hr>
Source record: 104116

Edgar <edesign@sala.lt> wrote:

> Hello,
> I've purchased an 1962 tube HF receiver. Well the problem is I don't know
> exact antenna input impendence value of it. I use simple 40m. dipole on a
> regular TV cable of 75 ohm. I would like to do some experiments with random
> wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
> circuit that can help me to mach the impendence?

Edgar,
Since I can read and understand Russian I looked at the site you gave in
your post. They say that the antenna input us provided for a symmetrical
twin lead 200 ohms impedance. They aso say that it is a double
conversion receiver; the second If is 85 kHz giving rether good
selectivity. The stability of the receiver is rather poor, and the
anateurs used to use it as an IF amplifier of 2 MHz first IF. If you
want me to translate for you some more data, send me an e-mail. They
also say that any longer wire as an antenna will do. Best wishes,
Bozidar, 9a2hl

5052. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:27:19 UTC
From: bozidar.pasaric@ri.hinet.hr
Message-ID: <1g4zv04.19ogegn18u4bdaN%bozidar.pasaric@ri.hinet.hr>
Source record: 104117

Edgar <edesign@sala.lt> wrote:

> Hello,
> I've purchased an 1962 tube HF receiver. Well the problem is I don't know
> exact antenna input impendence value of it. I use simple 40m. dipole on a
> regular TV cable of 75 ohm. I would like to do some experiments with random
> wire, and 50 Ohm coax or 300 Ohm ladder line for dipole. Is there any
> circuit that can help me to mach the impendence?

Edgar,

Since I can understand and read Russian I looked at the site you
mentioned. They say that the antenna input has been forseen for a
symmetrical twin-lead 200 ohms impedance. They also add that any longer
wire would do. They also mention that the receiver has poor stability;
however it is a double mixing superhet, and the second IF is 85 kHz
which gives rather good selectivity. The Russian amateurs used to use it
as an IF amplifier at 2 MHz, so they standardly built a converter with a
crystal XO in it and got a very usable amateur receiver. If you need
some more translation, just send me an e-mail. Best wishes,
Bozidar, 9a2hl

5053. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:41:39 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnbs78j2.1u62.bit-bucket@localhost.config.com>
Source record: 104019

```
On Tue, 25 Nov 2003 08:51:35 -0600, Crazy George top posted:
> What wall thickness?
> What alloy?
>
> "Richard" <rdavy30@earthlink.net> wrote:
>> Anyone have any experiences with using 2 7/8" tubing as an antenna
>> support? I'd like to cement the bottom three feet and guy as needed.

plastic, metal, glass, cardboard ???
```

5054. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:44:19 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <%pNwb.21468$m24.13956@fed1read02>
Source record: 104020
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Marylou@city.net> wrote in message news:3FC0D117.530533E8@city.net...
> What Ed is saying is: If you enjoy a hobby that requires an antenna or
> anything outside your home forget it, buckle down to raising fish and
> sell the radio hobby stuff.
>
> That will be the day I turn my home over the HOA Cops, agreement or not.
> If homeowners keep buckling down to these people next thing you will be
> paying their mortgage and taxes.
>
> Go Bless America for the freedoms our proud veterans fought for.

A very good example of the viewpoint of a rogue who tries to cloak her improprieties in the blood of patriots and the silk of religion.

The fundamental civility of our society is based on our ability to enter into contracts. We promise something and the other party promises something. A contract is simply a permanent record of the defined promises. You are expected to uphold your promises.

What I am saying is quite simple; if you don't like the terms of a contract, then don't enter into it.

Ed
WB6WSN

5055. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:45:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3187svc3iod4gdqo3sfd8quujfs0k382r6@4ax.com>
Source record: 104021

On Tue, 25 Nov 2003 09:44:32 +0200, "Edgar" <edesign@sala.lt> wrote:

>The radio receiver is russian made "Volna-K" it means "Vawe-K" in english.
>It has a coxial output.
>
>Here is some more information about it:
>Go to
>http://babelfish.altavista.com/
>
>and Translate a Web page form russian to english
>http://www.cqham.ru/trx/volna.html
>
>Tnx,
>Edgar
>73
>

Hi Edgar,

Bozidar has already identified the input Z (200 Ohms). As for the rest of it, the schematic reveals it has a turret tuner (or barrel tuner) for changing bands. Such a mechanism allows for tuning over multiple bands to provide for both greater tuning resolution, and linearity. The Tuning mechanism contains an antenna coupling filter (following a general low pass filter with neon tube suppressor at the input connector); two stages of Tuned RF amplification; and one Tuned Mixer/Oscillator. The schematic is pretty rough, so I could be wrong and it is one RF Amp, a Mixer, and an Oscillator. It may need alignment for best service.

Almost any antenna longer than a whip (small wire dipole 10 - 20 feet high) will do.

73's
Richard Clark, KB7QHC

5056. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 18:58:54 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <GDNwb.21471$m24.19515@fed1read02>
Source record: 104022
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:WL9wb.18869$Wy4.12608@newsread2.news.atl.earthlink.net...
> "Ed Price" wrote:
> >
> > Read the rest of the ruling. It defines that the
> > antenna may be located only in your private
> > area (patio, balcony), not in the public or
> > mutually owned areas (roof, outside wall).
> > This makes it none too helpful for apartment
> > and condo dwellers. Accept it; there are
> > some hobbies that are incompatible with
> > high-density dwellings.
>
>
> How does that chance anything I said, Ed? I said nothing about apartment
> and condo dwellers, and nothing about antenna location.
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net/
>

It doesn't change anything you said. I posted my comments to amplify and clarify your (and earlier poster's) comments, not as a refutation. Try not to view everything as a challenge.

Ed
WB6WSN

5057. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 19:18:23 UTC
From: richardharrison@webtv.net
Message-ID: <24768-3FC3AAFF-557@storefull-2317.public.lawson.webtv.net>
Source record: 104023

K7JEB wrote:
"But....whatever, I think Herr Doktor Einstein would approve of the derivation from first principles found on---."

No doubt, as that illustrates it is a problem involving geometry. But in all cases the distance to the horizon is inexact due to constant variations in refraction of the atmosphere. Most often the earth appears to have a radius of about 4/3 the actual which means the earth appears flatter than it is so that radio waves range farther than many predictions. When propagation for line-of-sight signals gets tough in the early am under still air conditions, the earth can apper to have 2/3 its actual radius or even less. Bad news out on the fringes!

Terman says:
"Theoretical analysis indicates that the earth curvature reduces the received signal below the value calculated by Eq. (219) by the factor given by Fig. 362. This factor takes into account that refraction in the atmosphere and also the diffraction of the energy around the curved surface. Under practical conditions the reduction factor of Fig. 362 is negligible as long as a straight line path exists, but at greater distances it decreases rapidly and the signals soon become unusable because of fading, as mentioned below."

Terman also has a height versus distance chart similar to that in the ARRL Antenna Book. Fact is that the experimentally determined formula is related to the geometric calculations and is plenty close enough for practice. I`ve used it commercially many times and for more than half a century and never been embarrassed by inaccuracy causing excess expense nor excess outage time. It is a good indicator of the radio distance to the horizon under "usual" propogation conditions. It is easy to remember and simple to apply.

Best regards, Richard Harrison, KB5WZI

5058. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 19:45:56 UTC
From: richardharrison@webtv.net
Message-ID: <13197-3FC3B174-639@storefull-2313.public.lawson.webtv.net>
Source record: 104026

K1YW wrote:
"Artsci takes into account:
To properly estimate a signal`s range, you must have a few important figures----

Frequency / Band
Transmitter power (in watts)
Antenna height (from sea level)
Antenna gain (net after coax loss)

As a practical matter, first you must have a line-of-sight path. Then you can worry about path attenuation, gains, losses, transmitter power and receiver sensitivity.

Attenuation between stations with an obstructed path (including earth bulge) rises so rapidly with the obstruction that non of the other factors matters except in the case of brute force communication, such as atmospheric scatter.

Best regards, Richard Harrison, KB5WZI

5059. Crossed Field Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 19:46:32 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <skOwb.159572$jy.121564@clgrps13>
Source record: 104024

Posted the following on another NG. Seemed to generate quite a bit of interest.

http://www.antennex.com/shack/Jun00/paperdavos.pdf

5060. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 19:51:53 UTC
From: Edgar <edesign@sala.lt>
Message-ID: <bq0bsm$1ufjbq$1@ID-208708.news.uni-berlin.de>
Source record: 104025

Thank you all,
I can do understand Russian very little too:-(The problem is I am new to all this technical radio stuff. I am an ordinary SWL for two years from LY country:-), I started interesting in ham bands so I bought this radio to explore them. Well as for AM listening the receiver do quite well, but for ham band is worse. I decided to experiment with antenna to expand my listening capabilities. So I came up to impedance question. I thought it is very important. After your replies I try to do some random wire antenna test first:-).

Thanks for your replies.
Your sincerely,
Edgar
73!

5061. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 20:10:01 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FC3B719.40303@psu.edu>
Source record: 104027

Mike Burch wrote:

> I have recently built a J pole for 2 meters from the handbook and I was
> wondering if any of you had some tuning tips.

I just put mine up this past weekend. I made a Jpole out of 3/4 inch copper pipe. My coax is attached with copper pipe clamps. To tune, I used a MFJ antenna analyzer, but anything you have that measures SWR will be okay.

As I moved the clamps up or down on the antenna, I could tune the SWR & resonance pretty easily. Biggest problem was having to walk away from the antenna (on the roof) to keep from affecting the readings. Tuned it for 1:1 on my favorite repeater frequency which happens to be in th emiddle of the band, and have less than 1.5:1 at the edges. The antenna works very well compared with the homebrew 1/4 wave ground plane I had before.

The clamps are supposed to move up and down equally on the antenna, but the position that gave me the best resonance and SWR hade the braided wire clamp just a tad below the center conductor clamp, so that may be another area for adjustment.

Seems like it would be a dead short, doesn't it?

Hope this helps!

- Mike KB3EIA -

5062. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 20:32:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bq0e96$6kg$1@hercules.btinternet.com>
Source record: 104028

Terman also says the radio horizon as seen from a ground-mounted vertical antenna is at distance of -

50 / Cuberoot(FreqMhz) miles.

This does not mean the ground wave suddenly weakens at this distance but that Earth curvature and atmospheric refraction begin to have a significant effect on ground-wave propagation.

At MF and LF, useful ground-wave propagation can occur at distances considerably greater than the radio horizon. At HF the skywave can provide stronger signals.

Reg, G4FGQ

5063. Crossed Yagi polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 20:38:19 UTC
From: G&#65533;ry Duyck <gery@duyck-co.be>
Message-ID: <3fc3bdab$0$3238$ba620e4c@reader0.news.skynet.be>
Source record: 104029

Which polarisation should I best use on my 10 element crossed Yagi,
to work ISS ???
Left Circular or Right circular ?

I can't easy switch between the both right now, so for now on
a receive on one, and transmit on another won't work.
I don't have the right relais boxes...

But I was just curios about what I could best use, just in case ...

Thanks for help,

73's
ON4GDK, Gery D.

5064. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 21:01:45 UTC
From: Wilderness Keyboard <KIYW@zilch.net>
Message-ID: <YqPwb.6493$ML6.1620@fed1read01>
Source record: 104030

Well -- the original post was from kc5cqa@yahoo.com he asked:
"How far can a base two meter radio antenna transmit and recieve so as to be
'useable' when the antenn is 100 feet tall above the earth, and the
surronding area is fairly level. (no hills or mountains). I am
talking about a 50 watt base and 50watt mobil. If there is a formula
somewhere, would appreciate the input."

So Artsci should help him.

--
73 From The Wilderness Keyboard

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:13197-3FC3B174-639@storefull-2313.public.lawson.webtv.net...
> K1YW wrote:
> "Artsci takes into account:
> To properly estimate a signal`s range, you must have a few important
> figures----
>
> Frequency / Band
> Transmitter power (in watts)
> Antenna height (from sea level)
> Antenna gain (net after coax loss)
>
> As a practical matter, first you must have a line-of-sight path. Then
> you can worry about path attenuation, gains, losses, transmitter power
> and receiver sensitivity.
>
> Attenuation between stations with an obstructed path (including earth
> bulge) rises so rapidly with the obstruction that non of the other
> factors matters except in the case of brute force communication, such as
> atmospheric scatter.
>
> Best regards, Richard Harrison, KB5WZI
>

5065. WARNING! Britney Spears

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 22:01:40 UTC
From: jder8745@aol.com
Message-ID: <20031125170140.05208.00000662@mb-m21.aol.com>
Source record: 104031

The download has been a screen saver, .SCR. Be warned that you can get a virus from this file the easy way. Never download screensavers.

73 de Jack, K9CUN

5066. Re: You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 22:04:16 UTC
From: jder8745@aol.com
Message-ID: <20031125170416.05208.00000663@mb-m21.aol.com>
Source record: 104032

FREQUENCY?

I refuse to say, much less post the word to this list.

Jack

FARNSWORTH?

5067. FS, Book, 'Electromagnetic Waves and Radiating Systems' & 'Transmission Technology..."

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 22:40:25 UTC
From: BigS <nospam@here.org>
Message-ID: <3fc3da5a$1@dnews.tpgi.com.au>
Source record: 104034
Cross-posted to: aus.ads.forsale,aus.radio.amateur.misc,rec.radio.amateur.antenna

Ever wanted to understand how radio waves propagate, or how an antenna works? Well here is your chance.

Two books for sale:

#1
Electromagnetic Waves and Radiating Systems, 2nd Edition by Jordan and Balmain.
Hardcover: Dimensions (in inches): 2.00 x 9.50 x 6.50
Publisher: Prentice Hall; 2nd edition (June 1968)
ISBN: 0132499959
Comments: A classic text book, still in use. This is the latest edition (yes 1968)!
Condition: Good to Excellent. Hardback edition. Jacket has been covered in contact. All pages intact. No tears, marks or folds in book.
See:
http://cgi.ebay.com.au/ws/eBayISAPI.dll?ViewItem&category=48692&item=3060373465

#2
Electronic Transmission Technology, 1st Edition by William Sinnema
Hardcover: 264 pages
Publisher: Prentice Hall; 1st edition (January 1979)
ISBN: 0132522217
Condition: Good. Hardback edition. Small marks on front cover. Name written on first page. No torn or marked pages.
See:
http://cgi.ebay.com.au/ws/eBayISAPI.dll?ViewItem&category=48692&item=3060373484

Thanks
Simon

5068. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 22:44:54 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <ZbudnUk7Obo3RF6i4p2dnA@ctc.net>
Source record: 104033
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

> Normal people who reside in a nice house isn't going to paint their
> house some weird color, park junk vehicles, let their grass turn to weed
> or put up gigantic towers and antennas, etc..
>

Hams are not normal people, they want gigantic towers and antennas.

5069. Re: Crossed Field Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 23:25:22 UTC
From: k7itm@aol.com
Message-ID: <3200347.0311251525.583b83ab@posting.google.com>
Source record: 104035

That paper is pretty old, and when I went looking for recent things on
CFA a few months ago, there was practically nothing new. My
impression was that any CFAs that weren't yet dead should be put out
of their misery. Anything newer to report? P. T. Barnum
reincarnated?

Cheers,
Tom

"Frank" <ve6cb@telus.net> wrote in message news:<skOwb.159572$jy.121564@clgrps13>...
> Posted the following on another NG. Seemed to generate quite a bit of
> interest.
>
> http://www.antennex.com/shack/Jun00/paperdavos.pdf

5070. Re: Excellent working 6 meter gain antenna...at a great price!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-25 23:40:23 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <vKRwb.551$17.124@bignews6.bellsouth.net>
Source record: 104036
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.swap

How much power can it handle?

"Super Antennas For Less!" <superskyhooks@juno.com> wrote in message
news:aff1d4b5.0311230527.7d5f7b92@posting.google.com...
> Check it out! You wont be sorry.
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3060793681

5071. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 00:11:21 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a2d4d599e7a22bb9896ab@news.west.earthlink.net>
Source record: 104037

In article <Zjuwb.29790$I53.1021574@twister.southeast.rr.com>,
Gfender@carolina.rr.com says...
> What usually causes this in an apatment is that someone has their "rabbit
> ears" connected in paralell with the input to their TV. I discovered this
> when I was in the USAF and they installed cabel in the barracks. By
> connecting the cable to a set of rabbit ears we were able to broadcast the
> signal from the second floor to rooms about 3 or 4 doors each way on the
> first second and third floors. No fuzzy pictures either. Later someone
> connected an antenna directly to the main cable instead of off a splitter so
> the whole barracks could get free TV.

I'm willing to bet that only lasted until the base frequency management
office started getting complaints of interference on some of the
tactical FM gear, at which point they'd DF it to your barracks building.
Someone probably received a large boot in the backside as a result....

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

5072. Re: Dipole Next To Home-Is That A Problem??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 00:11:22 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a2d4e908ae162969896ac@news.west.earthlink.net>
Source record: 104038

In article <20031124004426.01837.00000589@mb-m27.aol.com>, xtx99@aol.com
says...
> I'm finally getting ready to make the jump from 2m/70cm to an old Kenwood
> TS-520SE which I purchased several years ago. My available antenna space is
> very limited, and I'm therefore looking at a Van Gorden PD-4010 parallel dipole
> (10/20/15/40, 66 feet long) or a Van Gorden "Shorty" Dipole (160-10 with
> antenna tuner). The maximum run I have is about 70 feet (and I'll probably use
> about 75 feet of RG-8). Unfortunately the dipole must run about 15 feet off
> ground level and one half of the dipole would have to be run about a foot from
> the side of a wooden house. Approximately 10 feet higher than the dipole on
> the side of the house is a rain gutter (probably aluminum). Would this be a
> problem? (high swr, etc.) Any suggestions are appreciated.

Given the choice between the two, I would go with the PD-4010 antenna.
I've used that one before and it's a good one. You have some
difficulties in the physical constraings you specified, but not
insurmountable. String it up and give it a go. Run fairly low power
for starters, avoid going above 10 or 15 watts if you can -- my guess is
you're in a fairly crowded neighborhood or you wouldn't have such
physical limitations, so throttle back to low power and see if you
encounter any interference reports before cranking it up to the full
100w that the 520 will do.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net
Web: http://home.earthlink.net/~kb6ojs_steve

5073. Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 00:20:10 UTC
From: lbbs <lbbs@dadffo.ca>
Message-ID: <1fSwb.11$87.2242@read2.cgocable.net>
Source record: 104039
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

I am trying to improve my TV signal. right now I have an old (made in 1995) amplifier that is connected to an TV antenna (aprox 25feet high) mounted on my house. My amplifier is rated at 2.5w and 0.025amp. I would buy a newer amplifier if I thought it would help my signal. Fist of all I am not sure if you can get a more powerful amplifier and whether it would help my signal. Also, I am having trouble understanding the rating system. I looked at a new amplifier at Radio Shack and the rating system seamed to be different now. It was rated at 10dB and I believe it mention something about frequency. Is it better to have a higher or lower dB number in an amplifier? Can someone clarity these points to me. They could not explain it to me at the store.

Second question is about buying one of those omnidirectional TV antennas that look like a flying saucer. I believe they have a built in amplifier. If I bought one should I use it in combination with my old indoor amplifier? Thanks a lot for your help.

5074. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 00:37:35 UTC
From: m@d.com
Message-ID: <jBSwb.308555$Fm2.324614@attbi_s04>
Source record: 104040
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

I'd try a new antenna on a rotor. amps just amplify noisey signals.

In article <1fSwb.11$87.2242@read2.cgocable.net>, lbbs@dadffo.ca says...
>
>I am trying to improve my TV signal. right now I have an old (made in
>1995) amplifier that is connected to an TV antenna (aprox 25feet high)
>mounted on my house. My amplifier is rated at 2.5w and 0.025amp. I
>would buy a newer amplifier if I thought it would help my signal. Fist of
>all I am not sure if you can get a more powerful amplifier and whether it
>would help my signal. Also, I am having trouble understanding the rating
>system. I looked at a new amplifier at Radio Shack and the rating system
>seamed to be different now. It was rated at 10dB and I believe it mention
>something about frequency. Is it better to have a higher or lower dB
>number in an amplifier? Can someone clarity these points to me. They
>could not explain it to me at the store.
>
>Second question is about buying one of those omnidirectional TV antennas
>that look like a flying saucer. I believe they have a built in
>amplifier. If I bought one should I use it in combination with my old
>indoor amplifier? Thanks a lot for your help.
>
>

5075. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 00:39:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5vs7sv8m1dvclg26cmijocg5dghmn8fkjt@4ax.com>
Source record: 104041
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Tue, 25 Nov 2003 19:20:10 -0500, "lbbs" <lbbs @dadffo.ca> wrote:

>I am trying to improve my TV signal. right now I have an old (made in
>1995) amplifier that is connected to an TV antenna (aprox 25feet high)
>mounted on my house. My amplifier is rated at 2.5w and 0.025amp.

That rating is for how much power the amplifier USES. There is no
point in trying to improve upon that (it's pretty good as numbers go).

Old or new, if it works, it pretty much works like it came off the
shelf.

>I would buy a newer amplifier if I thought it would help my signal. Fist of
>all I am not sure if you can get a more powerful amplifier and whether it
>would help my signal. Also, I am having trouble understanding the rating
>system. I looked at a new amplifier at Radio Shack and the rating system
>seamed to be different now. It was rated at 10dB and I believe it mention
>something about frequency. Is it better to have a higher or lower dB
>number in an amplifier?

Larger number means more amplification. Odd as it may seem (this is
technical stuff) 13dB has twice the gain as 10dB. 16dB has four times
the gain of 10dB and twice the gain of 13dB. Basically, each time you
add 3dB (to any number for gain) you get twice as much as before.

> Can someone clarity these points to me. They
>could not explain it to me at the store.
>
>Second question is about buying one of those omnidirectional TV antennas
>that look like a flying saucer. I believe they have a built in
>amplifier. If I bought one should I use it in combination with my old
>indoor amplifier? Thanks a lot for your help.
>
Deep-six that idea and stick with an amplifier with more gain.

However, before that, make sure you have
1. good, clean connections at ALL connections EVERYWHERE;
2. the antenna pointed in the right direction (turn it 360 degrees,
you might be surprised the signal comes from a direction you didn't
think would work).
or
3. add height if that is an option.

73's
Richard Clark, KB7QHC

5076. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 01:05:55 UTC
From: lbbs <lbbs@dadffo.ca>
Message-ID: <WVSwb.22$87.3294@read2.cgocable.net>
Source record: 104042
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

thanks for the info. Just not sure what you mean by "Deep-six that idea"

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:5vs7sv8m1dvclg26cmijocg5dghmn8fkjt@4ax.com...
> On Tue, 25 Nov 2003 19:20:10 -0500, "lbbs" <lbbs @dadffo.ca> wrote:
>
> >I am trying to improve my TV signal. right now I have an old (made in
> >1995) amplifier that is connected to an TV antenna (aprox 25feet high)
> >mounted on my house. My amplifier is rated at 2.5w and 0.025amp.
>
> That rating is for how much power the amplifier USES. There is no
> point in trying to improve upon that (it's pretty good as numbers go).
>
> Old or new, if it works, it pretty much works like it came off the
> shelf.
>
> >I would buy a newer amplifier if I thought it would help my signal.
Fist of
> >all I am not sure if you can get a more powerful amplifier and whether it
> >would help my signal. Also, I am having trouble understanding the
rating
> >system. I looked at a new amplifier at Radio Shack and the rating
system
> >seamed to be different now. It was rated at 10dB and I believe it
mention
> >something about frequency. Is it better to have a higher or lower dB
> >number in an amplifier?
>
> Larger number means more amplification. Odd as it may seem (this is
> technical stuff) 13dB has twice the gain as 10dB. 16dB has four times
> the gain of 10dB and twice the gain of 13dB. Basically, each time you
> add 3dB (to any number for gain) you get twice as much as before.
>
> > Can someone clarity these points to me. They
> >could not explain it to me at the store.
> >
> >Second question is about buying one of those omnidirectional TV antennas
> >that look like a flying saucer. I believe they have a built in
> >amplifier. If I bought one should I use it in combination with my old
> >indoor amplifier? Thanks a lot for your help.
> >
> Deep-six that idea and stick with an amplifier with more gain.
>

> However, before that, make sure you have
> 1. good, clean connections at ALL connections EVERYWHERE;
> 2. the antenna pointed in the right direction (turn it 360 degrees,
> you might be surprised the signal comes from a direction you didn't
> think would work).
> or
> 3. add height if that is an option.
>
> 73's
> Richard Clark, KB7QHC

5077. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 02:02:19 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <LQTwb.32864$m84.4634205@news1.news.adelphia.net>
Source record: 104043

Allodoxaphobia wrote:
> On Tue, 25 Nov 2003 08:51:35 -0600, Crazy George top posted:
>
>>What wall thickness?
>>What alloy?
>>
>>"Richard" <rdavy30@earthlink.net> wrote:
>>
>>>Anyone have any experiences with using 2 7/8" tubing as an antenna
>>>support? I'd like to cement the bottom three feet and guy as needed.
>
>
> plastic, metal, glass, cardboard ???

Rock, Paper, Scissors?

- Mike KB3EIA -

(with all apologies to the original poster - ask a serious question, and
out come the smart A***S!)

5078. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 02:32:23 UTC
From: Impmon <Impmon@digi.mon>
Message-ID: <av38svkj1ek5u6noc9dodov2sr195mpea4@4ax.com>
Source record: 104044
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Tue, 25 Nov 2003 20:05:55 -0500, "lbbs" <lbbs @dadffo.ca> typed:

>thanks for the info. Just not sure what you mean by "Deep-six that idea"

Translation: forget about it. Deep-six refers to dumping into deep part
of the water body.

Indoor antenna don't usually work well unless you're close to a local
station (about 50 miles would be the limit) and the reception is even
lower if you live in paprtment, near big buiuldings, or have lots of
noise devices like vaccuum cleaner and refridgerator.

External attena offers better reception than any indoor antenna. If
your antenna doesn't rotate, consider a rotator. Reception greatly
improves if you aim the antenna toward the TV station.

A signal amplifier sometimes help with weak signal but keep in mind it
only amplify signal and doesn't clean up signal so you would still get
noisy picture, just not as hard to see.
--
space for rent.
To reply, change digi.mon to tds.net

5079. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 02:53:42 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <WAUwb.47489$Ek.42563@twister.austin.rr.com>
Source record: 104045
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

That is right .... put up the bigest antenna as high as you can get it.
If it stays up more than 6 months then it was not big or high enough!

Willee

"Ralph Mowery" <rmowery@ctc.net> wrote in message
news:ZbudnUk7Obo3RF6i4p2dnA@ctc.net...
> > Normal people who reside in a nice house isn't going to paint their
> > house some weird color, park junk vehicles, let their grass turn to weed
> > or put up gigantic towers and antennas, etc..
> >
>
> Hams are not normal people, they want gigantic towers and antennas.
>
>

5080. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 03:21:05 UTC
From: lbbs <lbbs@dadffo.ca>
Message-ID: <EUUwb.48$87.5319@read2.cgocable.net>
Source record: 104046
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

This antenna I saw at the Radio Shack is $200 Can ($150 US). This is not one of those cheap indoor antennas. I is called an indoor/outdoor Omnidirectional antenna. I it suppose to replace the old style antenna, but it can also be mounted on the old antenna tower. The nice thing about it is if you don't have a tower you can put it in your attic and at least get better reception then good old rabbit ears. The nice thing about it is you don't have to always rotate it in order to get ideal reception (I find that a pain to always rotate the old antenna). That is why it is called omnidirectional antenna.

"Impmon" <Impmon@digi.mon> wrote in message
news:av38svkj1ek5u6noc9dodov2sr195mpea4@4ax.com...
> On Tue, 25 Nov 2003 20:05:55 -0500, "lbbs" <lbbs @dadffo.ca> typed:
>
> >thanks for the info. Just not sure what you mean by "Deep-six that
idea"
>
> Translation: forget about it. Deep-six refers to dumping into deep part
> of the water body.
>
> Indoor antenna don't usually work well unless you're close to a local
> station (about 50 miles would be the limit) and the reception is even
> lower if you live in paprtment, near big buiuldings, or have lots of
> noise devices like vaccuum cleaner and refridgerator.
>
> External attena offers better reception than any indoor antenna. If
> your antenna doesn't rotate, consider a rotator. Reception greatly
> improves if you aim the antenna toward the TV station.
>
> A signal amplifier sometimes help with weak signal but keep in mind it
> only amplify signal and doesn't clean up signal so you would still get
> noisy picture, just not as hard to see.
> --
> space for rent.
> To reply, change digi.mon to tds.net

5081. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 03:27:28 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC41DA0.CA8CCC63@cwis.net>
Source record: 104047

Mike,
And while I agree that the replies were not made in a
'serious' manner, you also have to agree that the original
post didn't provide enough information for a 'serious'
answer. I also doubt if the replies were meant in a 'seriously'
derogatory manner (you have to take ~that~ guess for what it's
worth)...
'Doc

5082. Re: Wind on antennas (was HF LPDA)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 04:14:48 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vs8a9qn7e2p191@corp.supernews.com>
Source record: 104048

Dear Art: Indeed, fishing poles are a main stay of amateur radio - and very good value.
As you have pointed out, I am a patent attorney (who is not looking for additional work). I am also a licensed professional engineer in Michigan. These two professions facilitate my "day job."

As a follow on to your note about a certain Rohn tower (with an aside that their commercial products always conformed to standards - I have checked some of their calculations) I note that Heights Tower once included in their literature an accurate account of how to calculate "strength" and wind effects on their line of welded aluminum towers. It was clear from what they presented just what assumptions were being made. Such a full disclosure is commendable.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0311250757.9c0ed8@posting.google.com...
> Mac,
> I understand your line of work is a patent attorney
> but it easily could have been one as a mechanical engineer.
> Your description of antenna mechanical design is outstanding.
<snip>

5083. Re: Wind on antennas (was HF LPDA)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 04:17:23 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vs8a9sdg9ub196@corp.supernews.com>
Source record: 104049

Dear Art: Indeed, fishing poles are a main stay of amateur radio - and very good value.
As you have pointed out, I am a patent attorney (who is not looking for additional work). I am also a licensed professional engineer in Michigan. These two professions facilitate my "day job."

As a follow on to your note about a certain Rohn tower (with an aside that their commercial products always conformed to standards - I have checked some of their calculations) I note that Heights Tower once included in their literature an accurate account of how to calculate "strength" and wind effects on their line of welded aluminum towers. It was clear from what they presented just what assumptions were being made. Such a full disclosure is commendable.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message news:85ed38d.0311250757.9c0ed8@posting.google.com...
> Mac,
> I understand your line of work is a patent attorney
> but it easily could have been one as a mechanical engineer.
> Your description of antenna mechanical design is outstanding.
<snip>

5084. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 05:00:03 UTC
From: Yukio <yano@shaw.ca>
Message-ID: <nrWwb.497117$pl3.470263@pd7tw3no>
Source record: 104050
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

question QTH ? What is your location !!
If your are more than 15 miles or less than 100 miles from your TV transmitter a good antenna system is required, At these distances you must point your antenna with an accuracy of +/- 5 degrees to get a good signal. An Omnidirectional antenna works well up to about 10 miles but then so would a coathanger . I would have to assume that you are outside or beyond a cable TV, COGECO ? service area else why would you want to put up an expensive > $200 antenna to get one station when you can get a satellite setup for ~ $100.00. If you live in a Metropolitan Area., I can understand trying to avoid cable fees. Your question about amplifiers fails to recognize something called Signal to Noise Ratio a weak signal usually implies low SNR, further amplification will bring in a stronger signal but also much more NOISE or snow. A better antenna will improve SNR ie. a stronger signal with the same amout of noise, noise being background atmospheric static which is always present in any signal. I would have to assume that you must be using a dial-up MODEM because this question doesn't make much sense if you are using a Cable MODEM and already have access to a Cable Service

yukio

. They
> could not explain it to me at the store.
>
> Second question is about buying one of those omnidirectional TV antennas
> that look like a flying saucer. I believe they have a built in
> amplifier. If I bought one should I use it in combination with my old
> indoor amplifier? Thanks a lot for your help.
>
>

5085. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 05:30:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c6e8svs4ca69eln7vprdtjkfe30t91thv7@4ax.com>
Source record: 104051
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Tue, 25 Nov 2003 22:21:05 -0500, "lbbs" <lbbs @dadffo.ca> wrote:

>That is why it is called omnidirectional antenna.
comparing with your earlier statement
>I am trying to improve my TV signal. right now I have an old (made in
>1995) amplifier that is connected to an TV antenna (aprox 25feet high)
>mounted on my house.
means that you LOSE gain by the substitution (and add ghosts with the
amplifier).

If an external antenna, 25 feet high, is having a hard time, this
"omni" is NOT your answer even if it went to the top of the mast. An
"omni," by definition, has no gain compared to one with tuned elements
(presumably what you currently have). However, Radio Shack is
probably hedging their bets calling ir an "omni" as long as you turn
it 'round and 'round.

The meaning of "deep six it" is to heave it into Davey Jone's locker.

73's
Richard Clark, KB7QHC

5086. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 05:36:50 UTC
From: richardharrison@webtv.net
Message-ID: <25139-3FC43BF2-669@storefull-2314.public.lawson.webtv.net>
Source record: 104052

K1YW wrote:
"So Artsci should help him (KC5CQA)."

50-watt radios will talk with plenty of exess fade margin over any line-of-sight path from a 100-foot tower to any land mobile in the two-meter band.

Beyond line-of-sight, VHF propagation is kaput because the signal does not follow earth curvature as Reg`s low and medium frequencies do.

Over smooth earth or sea, the horizon is sq rt of 200 from a 100-foot high antenna. That is about 14 miles. Add 4 or 5 miles of range due to the mobile antenna height and that is near the maximum range. 5 watts, 100 watts, or 500 watts make very little difference in range. Range is extended with increased power very slightly. There is some noise reduction. In my experience, I found it advantageous to use 50-watt mobiles and 500-watt base stations. This is because the mobile is often in a noisier environment than the base station. Obviously the path length is the same in both directions in this VHF application.

The dominant requirement in VHF communication is a line-of-sight path. Once that is obtained, all else is secondary.

Most of the microwave stations I`ve put in have 100-milliwatt transmitters and these produced 30 dB fade margins on paths of more than 20 miles. For land mobile VHF service, you usually have no significant antenna gains, but you also have significantly lower path and transmission line losses, higher receiver sensitivities, and higher transmitter powers. Received carrier power to produce full quieting in a good receiver is very small indeed. This makes line-of-sight the only significant requirement for single-channel, single-hop VHF communications. Noise is cumulative, so for a multi-hop system, big signal surplus is required on each hop to supress noise to make the cumulative total acceptable.

Best regards, Richard Harrison, KB5WZI

5087. Re: Hy-Gain AV-14AVQ - top radials

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 11:49:59 UTC
From: K4SQR@juno.com
Message-ID: <7c8be5b4.0311260349.1b9a4113@posting.google.com>
Source record: 104053

Someone needs to physically measure the tophat radial length for
Peter; it is NOT given in the manual. The manual only shows install
procedure and its part #.
Good luck,
Jim, K4SQR

KC1DI <elbc2@gwi.net> wrote in message
news:<nnf6sv056gnrrgvm7n74jcji0k706iu2rr@4ax.com>...
> On Mon, 24 Nov 2003 21:43:56 GMT, "ELLIS" <prellis@pcug.org.au> wrote:
>
> >Can anyone tell me the length of the three, short, mast-top radials of the
> >Hy-Gain AV-14AVQ, please?
> >
> >I have bought one ex-deceased estate and they were missing along with some
> >other hardware.
> >
> >My guess from the diagrams are something like 20-30cm.
> >
> >With thanks,
> >Peter VK1KEP
> >
>
>
> Hi Peter,
>
> You can download the entire manual for free in pdf format from :
> http://www.hy-gain.com/manuals.php
>
> Good Luck I use a 14 AVQ from many years it was a good antenna for a
> vertical.
> 73 Dave kc1di

5088. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 12:38:38 UTC
From: Pappy127@usa.net
Message-ID: <3FC49ECE.162BF6F8@usa.net>
Source record: 104054
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Ralph Mowery wrote:
>
> > Normal people who reside in a nice house isn't going to paint their
> > house some weird color, park junk vehicles, let their grass turn to weed
> > or put up gigantic towers and antennas, etc..
> >
>
> Hams are not normal people, they want gigantic towers and antennas.

Ralph, just what is your ham call???

5089. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 13:11:54 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net>
Source record: 104055
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dennis Kaylor" wrote:
>
> what i dont understand is if you guys
> dont like the deed restrictions you are
> legally free not to sign the deed and
> move to another area why should the
> federal government step in and tell
> some city or housing community that
> the CONTRACT you knowingly
>and willing signed is worthless (snip)

Dennis, either you don't live in a town like this or CC&Rs simply haven't reached your community yet. The major industry in this town is tourism. Because of that, any house built within the last twenty years has a CC&R antenna restriction. Even worse, real estate agencies, hoping to cash in on the tourist trade, have purchased most of the older properties, adding CC&Rs antenna restrictions to those. At this point, unless one is willing to move twenty to thirty miles outside the area, CC&Rs antenna restrictions have become an almost inescapable fact of life. Perhaps you consider that acceptable. However, I don't happen to think people should have to move miles away from work, schools, or shopping, just to have an antenna. And, indeed, many people are not going to do so - which means they will simply have to give up radio as a hobby or recreation instead.

> you guys and your wives all want the
> nice classy neighborhoods and gated
> communities with the fine trimmed lawns
> and lexus in every driveway but you
> think your special cause you want to
> have an outside antenna (snip)

Obviously CC&R antenna restrictions haven't reached your community yet. We're not just talking about gated communities or luxury properties. In this area, these restrictions can be found on even the cheapest properties.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5090. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 13:35:25 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <x_1xb.22611$Wy4.1179@newsread2.news.atl.earthlink.net>
Source record: 104056
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Ed Price" wrote:
>
> It doesn't change anything you said. I posted
> my comments to amplify and clarify your (and
> earlier poster's) comments, not as a refutation.
> Try not to view everything as a challenge.

Perhaps I did respond defensively, but your "read the rest of the ruling" comment suggested there was something in the rest of the ruling which should have my attention (a conflict with what I wrote, perhaps). But, as stated, I saw no conflict (or anything else that would specifically modify what I wrote). Regardless, no big deal - a simple misunderstanding. It happens.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5091. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 13:58:30 UTC
From: "Stephen M.H. Lawrence" <7.3steve@earthlink.net>
Message-ID: <ak2xb.20466$Rk5.17647@newsread1.news.atl.earthlink.net>
Source record: 104057
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

I work as a Title Examiner, so this is right up my alley.
Many, many homeowners take ownership of a property
in "fee simple, subject to reservations, easements, and
covenants of record, if any," and don't inform themselves
about what those reservations (read: Restrictive Covenants)
really are. They're just words on a piece of paper, and
these contracturally obligating encumbrances are effectuated
by conveyance, in other words, they have the power of the
law, even though they don't appear on the deed.

In other words, you have two pieces of paper: The deed,
which makes a glancing reference to restrictions "if any," and
the actual restrictions, which are filed with the County Recorder
or Registrar of Titles. More people than you can imagine are getting
hoodwinked, Dennis. Your thesis that folks are signing a contract
which clearly states the terms of these restrictive covenants just
isn't so....and I have underwritten title insurance in 50 states,
Guam, the USVI and Puerto Rico for years. I have *seldom*
seen a deed which clearly delineates and describes restrictive
covenants. I'd say it happens one in a thousand times, regardless
of the location. Your point is simply not valid.

73,

Steve Lawrence
Burnsville, MN

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...
| "Dennis Kaylor" wrote:
| >
| > what i dont understand is if you guys
| > dont like the deed restrictions you are
| > legally free not to sign the deed and
| > move to another area why should the
| > federal government step in and tell
| > some city or housing community that
| > the CONTRACT you knowingly
| >and willing signed is worthless (snip)
|
|
| Dennis, either you don't live in a town like this or CC&Rs simply
haven't

| reached your community yet. The major industry in this town is tourism.
| Because of that, any house built within the last twenty years has a CC&R
| antenna restriction. Even worse, real estate agencies, hoping to cash in
on
| the tourist trade, have purchased most of the older properties, adding
CC&Rs
| antenna restrictions to those. At this point, unless one is willing to
move
| twenty to thirty miles outside the area, CC&Rs antenna restrictions have
| become an almost inescapable fact of life. Perhaps you consider that
| acceptable. However, I don't happen to think people should have to move
| miles away from work, schools, or shopping, just to have an antenna. And,
| indeed, many people are not going to do so - which means they will simply
| have to give up radio as a hobby or recreation instead.
|
|
| > you guys and your wives all want the
| > nice classy neighborhoods and gated
| > communities with the fine trimmed lawns
| > and lexus in every driveway but you
| > think your special cause you want to
| > have an outside antenna (snip)
|
|
| Obviously CC&R antenna restrictions haven't reached your community yet.
| We're not just talking about gated communities or luxury properties. In
this
| area, these restrictions can be found on even the cheapest properties.
|
|
| Dwight Stewart (W5NET)
|
| http://www.qsl.net/w5net/
|

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.542 / Virus Database: 336 - Release Date: 11/18/03

5092. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 14:42:30 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fc4be58_3@news1.prserv.net>
Source record: 104059

Look, Mike:

I was the initial response with the questions about wall thickness and alloy. Because the answers to his simple question are yes and no. Yes, I have successfully used 2 7/8" tubing as he suggests, and no, 2 7/8" aluminum thin wall tubing won't hardly support itself, nevermind an antenna. Now, I suspect he has a particular piece of tubing in sight, or the specific size wouldn't have been mentioned. But, diameter alone is not enough information to give him a useful answer. And that makes it a less than serious question.

See how it works?

--
Crazy George
Remove N O and S P A M imbedded in return address
"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:LQTwb.32864$m84.4634205@news1.news.adelphia.net...
> Allodoxaphobia wrote:
> > On Tue, 25 Nov 2003 08:51:35 -0600, Crazy George top posted:
> >
> >>What wall thickness?
> >>What alloy?
> >>
> >>"Richard" <rdavy30@earthlink.net> wrote:
> >>
> >>>Anyone have any experiences with using 2 7/8" tubing as an antenna
> >>>support? I'd like to cement the bottom three feet and guy as needed.
> >
> >
> > plastic, metal, glass, cardboard ???
>
> Rock, Paper, Scissors?
>
> - Mike KB3EIA -
>
> (with all apologies to the original poster - ask a serious question, and
> out come the smart A***S!)
>
>
>
>

5093. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 14:51:40 UTC
From: craigm <none@domain.invalid>
Message-ID: <vs9euc803imqfc@corp.supernews.com>
Source record: 104058
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stephen M.H. Lawrence" <7.3steve@earthlink.net> wrote in message
news:ak2xb.20466$Rk5.17647@newsread1.news.atl.earthlink.net...
> I work as a Title Examiner, so this is right up my alley.
> Many, many homeowners take ownership of a property
> in "fee simple, subject to reservations, easements, and
> covenants of record, if any," and don't inform themselves
> about what those reservations (read: Restrictive Covenants)
> really are. They're just words on a piece of paper, and
> these contracturally obligating encumbrances are effectuated
> by conveyance, in other words, they have the power of the
> law, even though they don't appear on the deed.
>
> In other words, you have two pieces of paper: The deed,
> which makes a glancing reference to restrictions "if any," and
> the actual restrictions, which are filed with the County Recorder
> or Registrar of Titles. More people than you can imagine are getting
> hoodwinked, Dennis. Your thesis that folks are signing a contract
> which clearly states the terms of these restrictive covenants just
> isn't so....and I have underwritten title insurance in 50 states,
> Guam, the USVI and Puerto Rico for years. I have *seldom*
> seen a deed which clearly delineates and describes restrictive
> covenants. I'd say it happens one in a thousand times, regardless
> of the location. Your point is simply not valid.
>
> 73,
>
> Steve Lawrence
> Burnsville, MN
>

Do you not sign a document saying you agrree to abide by the terms of a
covenant?

If so, then isn't it your responsibility to read what you are signing and
the document it refers to?

While the terms of the covenant may not be in the deed, I have always
reviewed the covenant before buying a house. Being lazy is different from
getting hoodwinked.

People should be responsible for their actions. If they are agreeing to
something, it is their responsibility to understand the terms. All I had to
do was ask to see the covenant. I also put a condition on the earnest money

agreement requiring my acceptance of the covenants.

It isn't difficult to look out for yourself.

craigm

5094. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 14:54:19 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FC4BE9B.6090603@psu.edu>
Source record: 104060

Mike Coslo wrote:
> Mike Burch wrote:
>
>> I have recently built a J pole for 2 meters from the handbook and I
>> was wondering if any of you had some tuning tips.
>
>
>
> I just put mine up this past weekend. I made a Jpole out of 3/4 inch
> copper pipe. My coax is attached with copper pipe clamps. To tune, I
> used a MFJ antenna analyzer, but anything you have that measures SWR
> will be okay.
>
> As I moved the clamps up or down on the antenna, I could tune the SWR &
> resonance pretty easily. Biggest problem was having to walk away from
> the antenna (on the roof) to keep from affecting the readings. Tuned it
> for 1:1 on my favorite repeater frequency which happens to be in th
> emiddle of the band, and have less than 1.5:1 at the edges. The antenna
> works very well compared with the homebrew 1/4 wave ground plane I had
> before.
>
> The clamps are supposed to move up and down equally on the antenna,
> but the position that gave me the best resonance and SWR hade the
> braided wire clamp just a tad below the center conductor clamp, so that
> may be another area for adjustment.

BTW, I have seen some plans for a Jpole identical to the one I built,
and they call for several turns of coax as a balun for the thing. I
really don't think that is needed. I measured out 1.1:1 SWR @ 50 ohms in
the middle, and good SWR across the band.

Then again, maybe there are some hams that put a balun on everything! ;^)

- mike KB3EIA -

5095. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:00:48 UTC
From: wa8ulx@aol.com
Message-ID: <20031126100048.08153.00000498@mb-m03.aol.com>
Source record: 104061

>BTW, I have seen some plans for a Jpole identical to the one I built,
>and they call for several turns of coax as a balun for the thing. I
>really don't think that is needed. I measured out 1.1:1 SWR @ 50 ohms in
>the middle, and good SWR across the band.
>

Thats not the reason for the Balun. The balun is to keep the feed line from
radiating

5096. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:25:14 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <p5WdnXvi1e1vWFmiRVn-iQ@comcast.com>
Source record: 104062
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Omnidirectional also means that it will work equally poor in all directions. You don't say how many TVs you run off the antenna, or how far you are from the TV stations and if they all are in the same direction. If you have more than one TV, you need a distribution amplifier if there is no amp at the antenna Do *not* connect a cable amplifier to the antenna; it won't work with low level signals like what you get off the antenna.

BTW the 2.5W rating you mentioned refers to how much power the amp draws, not how much gain it has.

Tam/WB2TT
"lbbs" <lbbs @dadffo.ca> wrote in message
news:EUUwb.48$87.5319@read2.cgocable.net...
> This antenna I saw at the Radio Shack is $200 Can ($150 US). This is not
> one of those cheap indoor antennas. I is called an indoor/outdoor
> Omnidirectional antenna. I it suppose to replace the old style antenna,
> but it can also be mounted on the old antenna tower. The nice thing
about
> it is if you don't have a tower you can put it in your attic and at least
> get better reception then good old rabbit ears. The nice thing about it
> is you don't have to always rotate it in order to get ideal reception (I
> find that a pain to always rotate the old antenna). That is why it is
> called omnidirectional antenna.
>
> "Impmon" <Impmon@digi.mon> wrote in message
> news:av38svkj1ek5u6noc9dodov2sr195mpea4@4ax.com...
> > On Tue, 25 Nov 2003 20:05:55 -0500, "lbbs" <lbbs @dadffo.ca> typed:
> >
> > >thanks for the info. Just not sure what you mean by "Deep-six that
> idea"
> >
> > Translation: forget about it. Deep-six refers to dumping into deep part
> > of the water body.
> >
> > Indoor antenna don't usually work well unless you're close to a local
> > station (about 50 miles would be the limit) and the reception is even
> > lower if you live in paprtment, near big buiuldings, or have lots of
> > noise devices like vaccuum cleaner and refridgerator.
> >
> > External attena offers better reception than any indoor antenna. If
> > your antenna doesn't rotate, consider a rotator. Reception greatly
> > improves if you aim the antenna toward the TV station.
> >
> > A signal amplifier sometimes help with weak signal but keep in mind it

> > only amplify signal and doesn't clean up signal so you would still get
> > noisy picture, just not as hard to see.
> > --
> > space for rent.
> > To reply, change digi.mon to tds.net
>
>

5097. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:35:08 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <HLOdneHhEI7ZVVmi4p2dnA@comcast.com>
Source record: 104063

There is almost always some kind of enhanced propagation. With 50W SSB to a 10 element 2 meter beam at 40 feet, 90% of the time my range is 75 - 100 miles when talking to another base station. I don't think they all have 1000 foot towers.

Tam/WB2TT
"Richard Harrison" <richardharrison@webtv.net> wrote in message news:25139-3FC43BF2-669@storefull-2314.public.lawson.webtv.net...
> K1YW wrote:
> "So Artsci should help him (KC5CQA)."
>
> 50-watt radios will talk with plenty of exess fade margin over any
> line-of-sight path from a 100-foot tower to any land mobile in the
> two-meter band.
>
> Beyond line-of-sight, VHF propagation is kaput because the signal does
> not follow earth curvature as Reg`s low and medium frequencies do.
>
> Over smooth earth or sea, the horizon is sq rt of 200 from a 100-foot
> high antenna. That is about 14 miles. Add 4 or 5 miles of range due to
> the mobile antenna height and that is near the maximum range. 5 watts,
> 100 watts, or 500 watts make very little difference in range. Range is
> extended with increased power very slightly. There is some noise
> reduction. In my experience, I found it advantageous to use 50-watt
> mobiles and 500-watt base stations. This is because the mobile is often
> in a noisier environment than the base station. Obviously the path
> length is the same in both directions in this VHF application.
>
> The dominant requirement in VHF communication is a line-of-sight path.
> Once that is obtained, all else is secondary.
>
> Most of the microwave stations I`ve put in have 100-milliwatt
> transmitters and these produced 30 dB fade margins on paths of more than
> 20 miles. For land mobile VHF service, you usually have no significant
> antenna gains, but you also have significantly lower path and
> transmission line losses, higher receiver sensitivities, and higher
> transmitter powers. Received carrier power to produce full quieting in a
> good receiver is very small indeed. This makes line-of-sight the only
> significant requirement for single-channel, single-hop VHF
> communications. Noise is cumulative, so for a multi-hop system, big
> signal surplus is required on each hop to supress noise to make the
> cumulative total acceptable.
>
> Best regards, Richard Harrison, KB5WZI

>

5098. Re: Antenna impendace matching for old tube receivers

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:38:11 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1a2e92f0f8f73372989739@newsstand.cit.cornell.edu>
Source record: 104064

In article <bpv18u$1souib$1@ID-208708.news.uni-berlin.de>,
edesign@sala.lt says...
> http://www.cqham.ru/trx/volna.html
>
cool looking radio...I didn't translate but looks like dual
conversion...serious rig.

At that era, (if my memory hasn't gone west) a standard receiving
antenna on *on this side of the pond* was a 400 ohm resister in series
with a 470 pf cap, that combo in parallel with a 1 uh inductor all in
series w/ a 200 ohm resistor...meaning it was purely resistive 300 ohms
at 7 mhz, capacitively reactive below and inductively reactive above.

Wx the comrades would have used the same standard I have no clue.

5099. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:42:08 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FC4C9D0.8020307@psu.edu>
Source record: 104065

WA8ULX wrote:
>>BTW, I have seen some plans for a Jpole identical to the one I built,
>>and they call for several turns of coax as a balun for the thing. I
>>really don't think that is needed. I measured out 1.1:1 SWR @ 50 ohms in
>>the middle, and good SWR across the band.
>>
>
>
> Thats not the reason for the Balun. The balun is to keep the feed line from
> radiating

Is it going to radiate when everything is set up correctly?

- mike KB3EIA -

5100. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:54:52 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <g14xb.52501$Vs1.36112@twister.austin.rr.com>
Source record: 104066
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

You just gota decide what is important in your life and act accordingly.

Why do so many people spend their health making money only to spend the money to try and regain their health.

If I thought it was a big thing that I had to have a radio antenna over my house then I would never sign or agree not to have one. If I did agree not to have one then I would not put one up or whine and cry later about not having the right to have an antenna. It cant be stated any simpler than that!

On the other hand if you live in California then all bets are off and anything goofy and crazy will prevail.

The great American spoof is "home ownership".
If you ever think you really "own" your home just stop paying money for it and see what happens!

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...

>And,
> indeed, many people are not going to do so - which means they will simply
> have to give up radio as a hobby or recreation instead.

Heaven forbid you should be forced to give something up.
Personally I think that property restrictions of any type are unconstitional as applied against the "right to pursuit of happiness".

5101. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 15:58:31 UTC
From: WilleeCue <n5wrx@nospam.stx.rr.com>
Message-ID: <H44xb.52530$Vs1.49594@twister.austin.rr.com>
Source record: 104067
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

If that is the case then you sir are not doing your job representing the public.
If you know there is someing shady going on you are obgliated to speak out in defense of the public or let someone else that will have the job .

I am no lawyer but I dont see how a person can be held to a contract that has no meaning.

Willee

"Stephen M.H. Lawrence" <7.3steve@earthlink.net> wrote in message news:ak2xb.20466$Rk5.17647@newsread1.news.atl.earthlink.net...
> I work as a Title Examiner, so this is right up my alley.
> Many, many homeowners take ownership of a property
> in "fee simple, subject to reservations, easements, and
> covenants of record, if any," and don't inform themselves
> about what those reservations (read: Restrictive Covenants)
> really are. They're just words on a piece of paper, and
> these contracturally obligating encumbrances are effectuated
> by conveyance, in other words, they have the power of the
> law, even though they don't appear on the deed.
>
> In other words, you have two pieces of paper: The deed,
> which makes a glancing reference to restrictions "if any," and
> the actual restrictions, which are filed with the County Recorder
> or Registrar of Titles. More people than you can imagine are getting
> hoodwinked, Dennis. Your thesis that folks are signing a contract
> which clearly states the terms of these restrictive covenants just
> isn't so....and I have underwritten title insurance in 50 states,
> Guam, the USVI and Puerto Rico for years. I have *seldom*
> seen a deed which clearly delineates and describes restrictive
> covenants. I'd say it happens one in a thousand times, regardless
> of the location. Your point is simply not valid.
>
> 73,
>
> Steve Lawrence
> Burnsville, MN
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...
> | "Dennis Kaylor" wrote:
> | >

> | > what i dont understand is if you guys
> | > dont like the deed restrictions you are
> | > legally free not to sign the deed and
> | > move to another area why should the
> | > federal government step in and tell
> | > some city or housing community that
> | > the CONTRACT you knowingly
> | >and willing signed is worthless (snip)
> |
> |
> | Dennis, either you don't live in a town like this or CC&Rs simply
> haven't
> | reached your community yet. The major industry in this town is tourism.
> | Because of that, any house built within the last twenty years has a CC&R
> | antenna restriction. Even worse, real estate agencies, hoping to cash in
> on
> | the tourist trade, have purchased most of the older properties, adding
> CC&Rs
> | antenna restrictions to those. At this point, unless one is willing to
> move
> | twenty to thirty miles outside the area, CC&Rs antenna restrictions have
> | become an almost inescapable fact of life. Perhaps you consider that
> | acceptable. However, I don't happen to think people should have to move
> | miles away from work, schools, or shopping, just to have an antenna.
And,
> | indeed, many people are not going to do so - which means they will
simply
> | have to give up radio as a hobby or recreation instead.
> |
> |
> | > you guys and your wives all want the
> | > nice classy neighborhoods and gated
> | > communities with the fine trimmed lawns
> | > and lexus in every driveway but you
> | > think your special cause you want to
> | > have an outside antenna (snip)
> |
> |
> | Obviously CC&R antenna restrictions haven't reached your community
yet.
> | We're not just talking about gated communities or luxury properties. In
> this
> | area, these restrictions can be found on even the cheapest properties.
> |
> |
> | Dwight Stewart (W5NET)
> |
> | http://www.qsl.net/w5net/
> |
>

>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.542 / Virus Database: 336 - Release Date: 11/18/03
>
>

5102. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 16:08:35 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <7e4xb.12830$P%1.11380037@newssvr28.news.prodigy.com>
Source record: 104068
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
news:g14xb.52501$Vs1.36112@twister.austin.rr.com...
> You just gota decide what is important in your life and act accordingly.
>
> Why do so many people spend their health making money only to spend the
> money to try and regain their health.
>
> If I thought it was a big thing that I had to have a radio antenna over my
> house then I would never sign or agree not to have one. If I did agree not
> to have one then I would not put one up or whine and cry later about not
> having the right to have an antenna. It cant be stated any simpler than
> that!
>
> On the other hand if you live in California then all bets are off and
> anything goofy and crazy will prevail.
>
> The great American spoof is "home ownership".
> If you ever think you really "own" your home just stop paying money for it
> and see what happens!
>
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...
>
> >And,
> > indeed, many people are not going to do so - which means they will
simply
> > have to give up radio as a hobby or recreation instead.
>
> Heaven forbid you should be forced to give something up.
> Personally I think that property restrictions of any type are
unconstitional
> as applied against the "right to pursuit of happiness".
>

Please list the article and paragraph in the Constitution that says anything about the "right to pursuit of happiness." It isn't there. You are confusing the Declaration of Independence with the Constitution.

Besides just because you have the "right to pursue happiness" doesn't mean you are going to achieve it.

Dee D. Flint, N8UZE

5103. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 16:25:20 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC4D3F0.9F172252@cwis.net>
Source record: 103969

Mike,
Can the feed line radiate if everything is setup
correctly? Yes. Will it radiate? Maybe. Using a
choke at the feed point, or a balun, isn't any trouble,
so why not?
'Doc

5104. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 16:34:36 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FC4D61C.8080700@psu.edu>
Source record: 103971

Crazy George wrote:
> Look, Mike:
>
> I was the initial response with the questions about wall thickness and
> alloy. Because the answers to his simple question are yes and no. Yes, I
> have successfully used 2 7/8" tubing as he suggests, and no, 2 7/8" aluminum
> thin wall tubing won't hardly support itself, nevermind an antenna. Now, I
> suspect he has a particular piece of tubing in sight, or the specific size
> wouldn't have been mentioned. But, diameter alone is not enough information
> to give him a useful answer. And that makes it a less than serious
> question.
>
> See how it works?

Of course! I was poking more fun at myself than anyone else. Mine was
the most irreverant answer of all the postings.
Oy!

- Mike KB3EIA -

5105. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 16:36:52 UTC
From: emma_hentenna@hotmail.com
Message-ID: <7d290799.0311260836.2a1e0a7e@posting.google.com>
Source record: 103970

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<12dqrvch00j1qn68oupk2f02kkoikbkqok@4ax.com>...
> On 20 Nov 2003 06:09:42 -0800, emma_hentenna@hotmail.com (emma) wrote:
>
> >I will try to make it more clear.
> >These are some results I arrived at before
> >I start its construction and carry out the measurements.
> >Firstly, my aim was to find the exact place of the driven-element
> >where the SWR is lowest.
> >I used RICHWIRE for my simulation.This program has an upper limit
> >for the wire radius.So I had to make two categories of diagams,
> >one for wire radius 0.00037 [wl], which is rather not realizable,
> >and one for 0.0037 [wl] ignoring the programs criteria.
> >I ended up that the Hentenna is unfortunately a narrow band antenna.
> >So it would be rather difficult to build it.
> >What I am working on now, is changing the antennas dimensions
> >so that I would come to an even lower SWR and a broader bandwidth.
> >
> >Emma
> >
>
> Hi Emma,
>
> How do you arrive at the conclusion your (or any) Hentenna is narrow
> band? What data supports this? The numerous links you provided
> suggest nothing remarkable except gain. In other words, what
> bandwidth do you call narrow? Normal? Wide?
>
> To my eye, this design is a shorted stub that is tapped within to find
> a match from a continuum of impedances available as a product of its
> resonant geometry and the position of the tap. Loss, being
> inferentially linked to bandwidth, is a product of bulk conductor
> (wire radius for sure). Wire radius certainly impacts resonance vs.
> size (and we are back to geometry of resonance to find the Z of
> choice).
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

I found your comments really interesting.
Firstly, I would like to explain why
I think that the Hentenna is a narrowband antenna.
My design results for SWR vs frequency,

while the antennas dimensions vary,
are shown at

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/freq/Hentenna.htm

The table below could also be usefull

BANDWIDTH

50 Ohm 75 Ohm 300 Ohm
H = wl/2 W = wl/4 : - - 14.4 %

H = wl/4 W = wl : - 3.6 % -

H = wl W = wl/4 : - 3.6 % -

H = wl/2 W = wl/6 : 2.7 % 3.6 % -

Moreover, IMHO I don't think that the Hentenna
is a shorted stub .The distance W is
longer than the distance between two transmission
lines.
I would be most grateful if you could make
any more comments.

Emma

5106. Re: HF Log Periodic WTB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 16:46:23 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <bq3gjt$1uhvc9$1@ID-52642.news.uni-berlin.de>
Source record: 103996

The Tennadyne antennas are well built, perform quite nicely and are ruggedly built. My T-10 withstood 5 major ice storms in central Iowa before I moved. I replaced it with a smaller T-6 at the new I moved. I am VERY pleased with its performance and the customer service at Tennadyne has been superb. Two additional positive factors:

The Tennadynes are light weight and low wind-load, and at the same time rugged.

The price is exceptional.

I made some relatively careful meaurements of F/B on the T-10 with a step attenuator, and found the Front to Back ratio was never less than 17 dB from 13 through 30 Mhz, and I had no trouble working anyone in any pileup that I entered.

I have not made similar measurements on the T-6, which is lower (50 ft instead of 70 ft), but I have yet to not be able to work someone in a pileup that I wanted.

Obviously the forward gain of a yagi is going to be better than a comparbly sized LP. The frequency agility and price performance however, are unmatched, except for the most die hard contester. I like what the SteppIR continuously tuned yagis offer, but I don't like their unproven (over decades) mechanical reliability nor their high price.

If I was starting over, and could afford triple the price of the LP, AND felt certain that the SteppIR would work reliably in all sorts of weather conditions for at least 10 years, I would be sorely tempted. This is not to dump on the reliability of the SteppIR...they just haven't been up long enough, much less long enough in difficult environments. It sure looks like a wonderful concept.

...hasan, N0AN

"Lee." <vulcanNOSPAM@ihug.com.au> wrote in message
news:bpnvks$ac9$1@lust.ihug.co.nz...
> Hello Folks
> I would like to get a HF log periodic antenna 13 - 30 mcs can anyone
> recommend one? opinions please???
>
> Lee.
>
>

5107. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 17:03:05 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fc4dcac.86731281@news.galilei.com>
Source record: 103972

wa8ulx@aol.com (WA8ULX) verbositized:

>>BTW, I have seen some plans for a Jpole identical to the one I built,
>>and they call for several turns of coax as a balun for the thing. I
>>really don't think that is needed. I measured out 1.1:1 SWR @ 50 ohms in
>>the middle, and good SWR across the band.
>>
>
>Thats not the reason for the Balun. The balun is to keep the feed line from
>radiating

If the feedline is inside of the copper pipe as it should be, it can't
radiate!

TTUL
Gary

5108. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 17:22:25 UTC
From: richardharrison@webtv.net
Message-ID: <15250-3FC4E151-79@storefull-2312.public.lawson.webtv.net>
Source record: 103973

Tam, WB2TT wrote:
"There is almost always some kind of enhanced propagation."

True. It is also true that a 10-element beam and high power extend transmission range.

Terman has eqn. (22-7b) on page 820 of his 1955 edition:

"Radio horizon distance in miles = sq rt 2h
Again, h is in feet."

Terman also says: "In the special case of the standard atmosphere, k = 1.33 and the horizon distance becomes, miles = sq rt 2h."

1.33 means the earth`s radius appears as 4/3 the actual value.due to atmosphere causing the radio horizon to be more distant than the optical horizon.

On page 825, Terman says:
"Fading is most pronounced when the received signal is much weaker than the free-space value for the distance involved. Thus fading is usually greatest near the radio horizon and in the shadow zone, and tends to be small when a "good" optical path is present."

My experience agrees with Terman. We all know that VHF propagation does not always follow the simple rules.

My contention is that path clearance outshines other considerations in determining "How far can an antenna see?". Terman`s eqn. (22-7b) is the usual answer.

Best regards, Richard Harrison, KB5WZI

5109. Re: Excellent working 6 meter gain antenna...at a great price!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 17:38:32 UTC
From: qrt <qrt@qrtspam.net>
Message-ID: <n2p9svk8janeo4qmr7e85cigg3bnmm31r8@4ax.com>
Source record: 103974

I have a wire antenna from KMA Antennas called a Secret-Six. It's
similar to a hentenna, but fed differently. Has 4 dB gain over a
dipole and is bi-directional. I've been amazed how well it works. I
don't know if they still make it or not.
Jas

On Tue, 25 Nov 2003 18:40:23 -0500, "Lloyd Mitchell"
<lloydm75@hotmail.com> wrote:

>How much power can it handle?
>
>
>"Super Antennas For Less!" <superskyhooks@juno.com> wrote in message
>news:aff1d4b5.0311230527.7d5f7b92@posting.google.com...
>> Check it out! You wont be sorry.
>>
>> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3060793681
>

5110. Re: Hy-Gain AV-14AVQ - top radials

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 17:48:50 UTC
From: "M.M." <junquemaile@cox.net>
Message-ID: <Xns943F6E0219EECnobodynowhere@68.6.19.6>
Source record: 103975

Jim wrote:

> Someone needs to physically measure the tophat radial length for
> Peter; it is NOT given in the manual. The manual only shows install
> procedure and its part #.

On mine they're 10 inches from the center of the eye to the end. I doubt it's all that critical.

HTH...

73... Mark AA7TA

5111. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 18:03:02 UTC
From: lbbs <nonex@nonee.com>
Message-ID: <1069869804.484910@news.vaxxine.com>
Source record: 103976
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Basically I looking for ways to improve my signal. I am satisfied with the
12 channel or so
that we are presently getting and I don't what to pay for more channel with
cable or dish.
All I want is to get a 15% improvement or so in my TV signal. I get a fair
TV signal now, but I have a couple of channel like 49 that my parents better
then us. I received a few suggestions like replace my coax with RG6 wire
and get an preamplifier at my old tower antenna. The antenna is 35 years
old at most (that is the age of our house), 15 years at best). Anything
else I can do to improve signal. I don't mind putting some money into it
since it is a long term investment. Thanks.

get better that we do.
"Yukio" <yano@shaw.ca> wrote in message
news:nrWwb.497117$pl3.470263@pd7tw3no...
> question QTH ? What is your location !!
> If your are more than 15 miles or less than 100 miles from your TV
> transmitter a good antenna system is required, At these distances you must
> point your antenna with an accuracy of +/- 5 degrees to get a good signal.
> An Omnidirectional antenna works well up to about 10 miles but then so
would
> a coathanger . I would have to assume that you are outside or beyond a
cable
> TV, COGECO ? service area else why would you want to put up an expensive
>
> $200 antenna to get one station when you can get a satellite setup for ~
> $100.00. If you live in a Metropolitan Area., I can understand trying to
> avoid cable fees. Your question about amplifiers fails to recognize
> something called Signal to Noise Ratio a weak signal usually implies low
> SNR, further amplification will bring in a stronger signal but also much
> more NOISE or snow. A better antenna will improve SNR ie. a stronger
signal
> with the same amout of noise, noise being background atmospheric static
> which is always present in any signal. I would have to assume that you
must
> be using a dial-up MODEM because this question doesn't make much sense if
> you are using a Cable MODEM and already have access to a Cable Service
>
>
> yukio
>
>
> . They

> > could not explain it to me at the store.
> >
> > Second question is about buying one of those omnidirectional TV antennas
> > that look like a flying saucer. I believe they have a built in
> > amplifier. If I bought one should I use it in combination with my old
> > indoor amplifier? Thanks a lot for your help.
> >
> >
>
>

5112. Re: How far can a antenna see? Height Wise?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 18:16:31 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311261016.4c1d4401@posting.google.com>
Source record: 103977

O.K. CAN YOU HEAR ME NOW ?

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:<HLOdneHhEI7ZVVmi4p2dnA@comcast.com>...
> There is almost always some kind of enhanced propagation. With 50W SSB to a
> 10 element 2 meter beam at 40 feet, 90% of the time my range is 75 - 100
> miles when talking to another base station. I don't think they all have 1000
> foot towers.
>
> Tam/WB2TT
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:25139-3FC43BF2-669@storefull-2314.public.lawson.webtv.net...
> > K1YW wrote:
> > "So Artsci should help him (KC5CQA)."
> >
> > 50-watt radios will talk with plenty of exess fade margin over any
> > line-of-sight path from a 100-foot tower to any land mobile in the
> > two-meter band.
> >
> > Beyond line-of-sight, VHF propagation is kaput because the signal does
> > not follow earth curvature as Reg`s low and medium frequencies do.
> >
> > Over smooth earth or sea, the horizon is sq rt of 200 from a 100-foot
> > high antenna. That is about 14 miles. Add 4 or 5 miles of range due to
> > the mobile antenna height and that is near the maximum range. 5 watts,
> > 100 watts, or 500 watts make very little difference in range. Range is
> > extended with increased power very slightly. There is some noise
> > reduction. In my experience, I found it advantageous to use 50-watt
> > mobiles and 500-watt base stations. This is because the mobile is often
> > in a noisier environment than the base station. Obviously the path
> > length is the same in both directions in this VHF application.
> >
> > The dominant requirement in VHF communication is a line-of-sight path.
> > Once that is obtained, all else is secondary.
> >
> > Most of the microwave stations I`ve put in have 100-milliwatt
> > transmitters and these produced 30 dB fade margins on paths of more than
> > 20 miles. For land mobile VHF service, you usually have no significant
> > antenna gains, but you also have significantly lower path and
> > transmission line losses, higher receiver sensitivities, and higher
> > transmitter powers. Received carrier power to produce full quieting in a
> > good receiver is very small indeed. This makes line-of-sight the only
> > significant requirement for single-channel, single-hop VHF
> > communications. Noise is cumulative, so for a multi-hop system, big

> > signal surplus is required on each hop to supress noise to make the
> > cumulative total acceptable.
> >
> > Best regards, Richard Harrison, KB5WZI
> >

5113. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 18:19:46 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <696xb.33518$m84.4861924@news1.news.adelphia.net>
Source record: 103978

'Doc wrote:
>
> Mike,
> And while I agree that the replies were not made in a
> 'serious' manner, you also have to agree that the original
> post didn't provide enough information for a 'serious'
> answer. I also doubt if the replies were meant in a 'seriously'
> derogatory manner (you have to take ~that~ guess for what it's
> worth)...

Oh good heavens! I apologize, folks! I was the one being the smart ass
that I was referring to!

mea culpa,
mea culpa,
mea maxima culpa!

- Mike KB3EIA -

5114. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 19:08:16 UTC
From: carl <carl11230@nowhere.com>
Message-ID: <3FC4FA1E.3384CABD@nowhere.com>
Source record: 103979
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Hi,

Do check the coax connections at the antenna and amplifier.
If the coax you have is as old as the antenna, 10+ years,
I would replace it with rg-6 coax and cleanup the connections
at the antenna. The connections will get dirty and that give you loss
and poor signal at the start of the coax run.

How long a run do you have from antenna to your amplifier ?

Just replacing the coax can help your signal.

You also may want to verify your antenna is pointed in the proper
direction of the tv station. Over time, winds can move the antenna off
the desired direction and weather can cause the clamps to get loose.

Regards,

carl

lbbs wrote:

> Basically I looking for ways to improve my signal. I am satisfied with the
> 12 channel or so
> that we are presently getting and I don't what to pay for more channel with
> cable or dish.
> All I want is to get a 15% improvement or so in my TV signal. I get a fair
> TV signal now, but I have a couple of channel like 49 that my parents better
> then us. I received a few suggestions like replace my coax with RG6 wire
> and get an preamplifier at my old tower antenna. The antenna is 35 years
> old at most (that is the age of our house), 15 years at best). Anything
> else I can do to improve signal. I don't mind putting some money into it
> since it is a long term investment. Thanks.
>
> get better that we do.
> "Yukio" <yano@shaw.ca> wrote in message
> news:nrWwb.497117$pl3.470263@pd7tw3no...
> > question QTH ? What is your location !!
> > If your are more than 15 miles or less than 100 miles from your TV
> > transmitter a good antenna system is required, At these distances you must
> > point your antenna with an accuracy of +/- 5 degrees to get a good signal.
> > An Omnidirectional antenna works well up to about 10 miles but then so
> would
> > a coathanger . I would have to assume that you are outside or beyond a
> cable
> > TV, COGECO ? service area else why would you want to put up an expensive

> >
> > $200 antenna to get one station when you can get a satellite setup for ~
> > $100.00. If you live in a Metropolitan Area., I can understand trying to
> > avoid cable fees. Your question about amplifiers fails to recognize
> > something called Signal to Noise Ratio a weak signal usually implies low
> > SNR, further amplification will bring in a stronger signal but also much
> > more NOISE or snow. A better antenna will improve SNR ie. a stronger
> signal
> > with the same amout of noise, noise being background atmospheric static
> > which is always present in any signal. I would have to assume that you
> must
> > be using a dial-up MODEM because this question doesn't make much sense if
> > you are using a Cable MODEM and already have access to a Cable Service
> >
> >
> > yukio
> >
> >
> > . They
> > > could not explain it to me at the store.
> > >
> > > Second question is about buying one of those omnidirectional TV antennas
> > > that look like a flying saucer. I believe they have a built in
> > > amplifier. If I bought one should I use it in combination with my old
> > > indoor amplifier? Thanks a lot for your help.
> > >
> > >
> >
> >

5115. Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 19:08:39 UTC
From: lbbs <nonex@nonee.com>
Message-ID: <1069873720.791121@news.vaxxine.com>
Source record: 103980
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

My low channels and high channels are coming in week (I especially would like to improve channel 49). I like in a small city of 130,000 population. We have Toronto aprox 40 miles north and Buffalo 40 miles south of us. I would to find a way to improve my TV signal. One of the things I would like to try is put a preamp on the antenna, but not sure what dB rating to use so I don't over amplify my signal (I don't want to improve some channels at the expense of other good channels). Any ideas?

Also, what about cleaning up the connection at the antenna, by cutting off the end
that is corroded and reconnecting it to the antenna? Or just cleaning the connection with sand paper?

Other pertinent info:

> Basically I looking for ways to improve my signal. I am satisfied with the

> 12 channel or so

> that we are presently getting and I don't what to pay for more channel with

> cable or dish.

> All I want is to get a 15% improvement or so in my TV signal. I get a fair

> TV signal now, but I have a couple of channel like 49 that my parents better

> then us. I received a few suggestions like replace my coax with RG6 wire

> and get an preamplifier at my old tower antenna. The antenna is 35 years

> old at most (that is the age of our house), 15 years at best). Anything

> else I can do to improve signal. I don't mind putting some money into it

> since it is a long term investment. Thanks.

>

p.s. I am not interested in buying a new antenna.

5116. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 19:21:40 UTC
From: jakdedert <jdedert@bellsouth.net>
Message-ID: <Y17xb.37$s7.36@bignews6.bellsouth.net>
Source record: 103981
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

I think an even 15 year old antenna could stand replacement. In any case, the connections--especially those out in the weather--should be inspected and probably redone, just on general principal. As other posters have mentioned, twinlead has less loss than coax, but all of the antenna preamplifiers that I've seen are set up for coax. A preamp mounted *on the antenna* before the transmission line might be indicated...given that all other components of the installation (antenna, feedline, all connections, alignment) are up to snuff. These are readily available and generally work well.

Back when antennas were more common, a professional would have evaluated your situation with attention to details such as:
1) How far are you from the transmitters? (A high gain antenna is not indicated if the stations are close by.)
2) What direction are they from your location? (If there are several stations in several directions, an antenna rotator is indicated, even if the distance is not great. If they are in only a couple of directions, sometimes it's simpler to mount a second antenna to pick up the off-axis stations. There used to be antennas available which were cut--IOW, optimized--for a single channel. Sometimes they were available from the station itself--not likely these days.)
3) How high is the tower on which your antenna is mounted? (Generally the higher the better.)
4) What are the characteristics of the surrounding terrain. (You're gonna have trouble receiving a station which is on the other side of a mountain...or any other obstruction which interferes with direct 'line of sight' signal transmission between the antenna and transmitter, including buildings.)
5) What is the condition and alignment of the current installation? (It's entirely possible that the existing antenna can be better aimed to receive the problem station(s) more reliably. See above for condition caveats.)

jak

"lbbs" <nonex@nonee.com> wrote in message
news:1069869804.484910@news.vaxxine.com...
> Basically I looking for ways to improve my signal. I am satisfied with
the
> 12 channel or so
> that we are presently getting and I don't what to pay for more channel
with
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> All I want is to get a 15% improvement or so in my TV signal. I get a
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>

5117. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 19:26:03 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <547xb.228$W7.131@bignews1.bellsouth.net>
Source record: 103982
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Before I moved to a cable-wired neighborhood, I had very good success with the 2-piece Radio Shack antenna amplifier kit. It has a little module you attach on the mast (as close as possible to your antenna terminals -- you don't want to lose signal before the amp, especially on UHF signals) and it is connected with standard TV coax to a little plug-in unit that sits near your television (or distribution terminal). It is adjustable, but I think it says +35db on the box.

If your antenna is any good at all (and reasonably unobstructed), you will bring a 40-mile UHF signal (like channel 49) in as a local. I also had Radio Shack's medium-sized antenna (the one that's always going on sale). It's nothing special, yet I was able to get local reception from Baton Rouge as well (70 miles away) if I turned my antenna in that direction.

-- Stinger

"lbbs" <nonex@nonee.com> wrote in message
news:1069873720.791121@news.vaxxine.com...
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49). I like in a small city of 130,000
> population. We have Toronto aprox 40 miles north and Buffalo 40 miles
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> > old at most (that is the age of our house), 15 years at best).
Anything
>
> > else I can do to improve signal. I don't mind putting some money into
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>
> > since it is a long term investment. Thanks.
>
> >
>
> p.s. I am not interested in buying a new antenna.
>
>

5118. Re: You may now use the "F" word on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 19:42:17 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <tm7xb.236203$ao4.843597@attbi_s51>
Source record: 103983

Edmund H. Ramm wrote:
SNIP

> GHOTI!

Where? I presume you are 'fish'ing!!

GHOTI = FISH

5119. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 20:34:40 UTC
From: lbbs <nonex@nonee.com>
Message-ID: <1069878880.707573@news.vaxxine.com>
Source record: 103984
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Can a handy man that has never install antennas, install a preamp. Or do I need
a professional?

"Stinger" <contact@newsserveronly.com> wrote in message
news:547xb.228$W7.131@bignews1.bellsouth.net...
> Before I moved to a cable-wired neighborhood, I had very good success with
> the 2-piece Radio Shack antenna amplifier kit. It has a little module you
> attach on the mast (as close as possible to your antenna terminals -- you
> don't want to lose signal before the amp, especially on UHF signals) and
it
> is connected with standard TV coax to a little plug-in unit that sits near
> your television (or distribution terminal). It is adjustable, but I think
> it says +35db on the box.
>
> If your antenna is any good at all (and reasonably unobstructed), you will
> bring a 40-mile UHF signal (like channel 49) in as a local. I also had
> Radio Shack's medium-sized antenna (the one that's always going on sale).
> It's nothing special, yet I was able to get local reception from Baton
Rouge
> as well (70 miles away) if I turned my antenna in that direction.
>
> -- Stinger
>
>
> "lbbs" <nonex@nonee.com> wrote in message
> news:1069873720.791121@news.vaxxine.com...
> > My low channels and high channels are coming in week (I especially would
> > like to improve channel 49). I like in a small city of 130,000
> > population. We have Toronto aprox 40 miles north and Buffalo 40 miles
> > south of us. I would to find a way to improve my TV signal. One of
> the
> > things I would like to try is put a preamp on the antenna, but not sure
> what
> > dB rating to use so I don't over amplify my signal (I don't want to
> improve
> > some channels at the expense of other good channels). Any ideas?
> >
> >
> >
> > Also, what about cleaning up the connection at the antenna, by cutting
off
> > the end

> > that is corroded and reconnecting it to the antenna? Or just cleaning
> the
> > connection with sand paper?
> >
> >
> >
> >
> > Other pertinent info:
> >
> > > Basically I looking for ways to improve my signal. I am satisfied
with
> > the
> >
> > > 12 channel or so
> >
> > > that we are presently getting and I don't what to pay for more channel
> > with
> >
> > > cable or dish.
> >
> > > All I want is to get a 15% improvement or so in my TV signal. I get
a
> > fair
> >
> > > TV signal now, but I have a couple of channel like 49 that my parents
> > better
> >
> > > then us. I received a few suggestions like replace my coax with RG6
> > wire
> >
> > > and get an preamplifier at my old tower antenna. The antenna is 35
> years
> >
> > > old at most (that is the age of our house), 15 years at best).
> Anything
> >
> > > else I can do to improve signal. I don't mind putting some money
into
> > it
> >
> > > since it is a long term investment. Thanks.
> >
> > >
> >
> > p.s. I am not interested in buying a new antenna.
> >
> >
>
>

5120. Re: SW Receiver - ext. antenna impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 20:34:54 UTC
From: R P Haviland <bobh@iag.net>
Message-ID: <O78xb.22956$Wy4.374@newsread2.news.atl.earthlink.net>
Source record: 103985

Usually, it is best to work for best signal to noise ratio. A way to do this is to use an "antenna tuner" or "match box", and adjusting for best signal. Some type of antenna swr or z-meter will give the impedance the receiver sees- it's usually not a matched condition.
w4mb

5121. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 20:52:57 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <J8OdnSmaq6A1j1iiRVn-vw@comcast.com>
Source record: 103986
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"lbbs" <nonex@nonee.com> wrote in message
news:1069878880.707573@news.vaxxine.com...
> Can a handy man that has never install antennas, install a preamp. Or do
I
> need
> a professional?

The amplifier itself needs to mount at the antenna. That involves a ladder
usually, and some electrical tape for sealing the connections. Obvious
safety concerns apply. The rest is easy.

5122. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 21:06:39 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bq324m$n00$1@news1.kornet.net>
Source record: 103987
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"lbbs" <nonex@nonee.com> wrote in message
news:1069873720.791121@news.vaxxine.com...
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49). I like in a small city of 130,000
> population. We have Toronto aprox 40 miles north and Buffalo 40 miles
> south of us. I would to find a way to improve my TV signal. One of
the
> things I would like to try is put a preamp on the antenna, but not sure
what
> dB rating to use so I don't over amplify my signal (I don't want to
improve
> some channels at the expense of other good channels). Any ideas?
>
>
>
> Also, what about cleaning up the connection at the antenna, by cutting off
> the end
> that is corroded and reconnecting it to the antenna? Or just cleaning
the
> connection with sand paper?
>
>
>
>
> Other pertinent info:
>
> > Basically I looking for ways to improve my signal. I am satisfied with
> the
>
> > 12 channel or so
>
> > that we are presently getting and I don't what to pay for more channel
> with
>
> > cable or dish.
>
> > All I want is to get a 15% improvement or so in my TV signal. I get a
> fair
>
> > TV signal now, but I have a couple of channel like 49 that my parents
> better
>
> > then us. I received a few suggestions like replace my coax with RG6

> wire
>
> > and get an preamplifier at my old tower antenna. The antenna is 35
years
>
> > old at most (that is the age of our house), 15 years at best).
Anything
>
> > else I can do to improve signal. I don't mind putting some money into
> it
>
> > since it is a long term investment. Thanks.
>
> >
>
> p.s. I am not interested in buying a new antenna.
>

If your antenna is 15 years old, it's not even acting as an antenna anymore.. (at least not as it was designed to do). Whether you are interested in buying one or not, you need to. A good antenna is cheaper than a good amplifier, and will likely do a lot more good given that your current antenna is over 10 years beyond it's normal life expectancy.

5123. FA:Terk Model FM2000 Indoor FM Antenna WOW!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 21:29:52 UTC
From: "." <lrosman@cyros.com>
Message-ID: <kX8xb.563$i81.136@nwrdny02.gnilink.net>
Source record: 103988

This just went on auction at Ebay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3061592686&category=15064
&rd=1

Thanks for bidding and have a great day!

5124. Re: Software

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 22:07:08 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <gu9xb.20823$Rk5.19939@newsread1.news.atl.earthlink.net>
Source record: 103989

The Genie wrote:
> Hi,
> Does anyone know of any software I can install with windows XP that
> if I were to input a "point of origin" NGR and a receiving station NGR
> would give the range in Km and bearing wrt to magnetic north.
> UK ONLY
> Cheers,
> Mike
>
>

Hi, Mike,

As Joe recommends get a copy of W6ELProp if you have even
the slightest interest in HF propagation.

W6ELProp does not do magnetic bearings that I can tell.

As far as I know the only program that does magnetic bearings
is my freeware, lat/long/grid-locator,
distance and bearing (true and magnetic), Miles/Watt,
MaxiMUF, DX database... program GCGC
which uses an ellipsoidal earth model
with WGS-84 as the default.
Just give it Lat1/Long1 and Lat2/Long2 (nearly free format),
or with less accuracy due to the nature of grid locators,
grid1 instead of lat1/long1,
and/or grid2 instead of lat2/long2
See the link below.

The offset from true to magnetic (compass) bearings uses
the World Magnetic Model which calculates the local
horizontal magnetic field direction within a degree or less
(local magnetic anomalies excepted).

For Windows XP, use GCGC in a DOS window that is opened
by running "cmd.exe.)

"NGR" = ??

BTW, the best online tutorial on distance and bearing calculations,
with worked examples, is Ed Williams's Aviation Formulary.

http://williams.best.vwh.net/avform.html

Have fun.

Cheers, 73,

Ron McConnell
w2iol@arrl.net

N 40ï¿½ 46' 57.9" W 74ï¿½ 41' 21.9"
FN20ps77GU46 [FN20ps77GV75]
Magnetic Variation = 13.0ï¿½ W in October 2003

* GCGC executable and source at

http://home.earthlink.net/~rcmcc

There are 10 kinds of people:
those who understand binary arithmetic
and those who don't.

5125. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 22:09:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ea8asvk25meemm891ncka3ng4co0jrf61n@4ax.com>
Source record: 103990

On 26 Nov 2003 08:36:52 -0800, emma_hentenna@hotmail.com (emma) wrote:

>Hi Richard,
>
>I found your comments really interesting.
>Firstly, I would like to explain why
>I think that the Hentenna is a narrowband antenna.
>My design results for SWR vs frequency,
>while the antennas dimensions vary,
>are shown at
>
>http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/freq/Hentenna.htm

The traces should be separable in their display. In other words, dot
markers for one Z, box markers for the next Z, delta markers for the
last Z and so on.

Further, since you admit dimensions vary, for GHz designs this could
bring a substantial bias in results.

>The table below could also be usefull

In the future, please observe newsgroup protocol and use "fixed font"
when aligning text columns of data.
>
> BANDWIDTH
>
> 50 Ohm 75 Ohm 300 Ohm
>H = wl/2 W = wl/4 : - - 14.4 %
>
>H = wl/4 W = wl : - 3.6 % -
>
>H = wl W = wl/4 : - 3.6 % -
>
>H = wl/2 W = wl/6 : 2.7 % 3.6 % -
>
>Moreover, IMHO I don't think that the Hentenna
>is a shorted stub .The distance W is
>longer than the distance between two transmission
>lines.
>I would be most grateful if you could make
>any more comments.
>
>Emma

Hi Emma,

A shorted stub it is. A simple look at the geometry is intuitive to this statement. Resonance provides the logical basis for this statement. Obviously distances and wire diameter are chosen on the basis of Z desired. I've done dozens of models of this style, and variations of it, years ago. I observed then that the characteristic of "miracle antenna" applied to it now is overstated.

73's
Richard Clark, KB7QHC

5126. Re: J Pole questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 22:19:48 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <8G9xb.312688$HS4.2768345@attbi_s01>
Source record: 103992

Thanks to all of you for you input. It helped me out a lot.

Best wishes.. Happy Thanksgiving

Mike Burch K8MB

Apache Junction AZ

5127. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 22:32:48 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <c7ydnQr6J_Ewu1iiRVn-gg@ctc.net>
Source record: 103991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

> Ralph Mowery wrote:
> >
> > > Normal people who reside in a nice house isn't going to paint their
> > > house some weird color, park junk vehicles, let their grass turn to
weed
> > > or put up gigantic towers and antennas, etc..
> > >
> >
> > Hams are not normal people, they want gigantic towers and antennas.
>
> Ralph, just what is your ham call???

KU4PT and I have been a ham for over 30 years.

I don't have a gigantic tower beacuse I am on a small lot and also don't have the money to put up one like I would like to have. I do have a 40 foot tower and also a shorter ,maybe about 12 ot 15 feet, with my OSCAR antennas on them. I just installed two more 20 feet towers with a 10 foot pipe on them about 140 feet apart to hold up an 80 meter dipole. No trees so to speak of in the yard.

5128. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 22:40:34 UTC
From: Steve Stone <spfleck@zzcitlinkzz.net>
Message-ID: <CZ9xb.1286$a94.436@news02.roc.ny>
Source record: 103993
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

I have had good luck with an antenna mounted Channel Master Triton III preamp.

Some other thoughts.

New antennas pick up a signal better than an old corroded antenna.

Coax and twin lead wears out due to weather and sunlight. It may be marginal and need to be replaced.

A good ground might help signal reception.

The higher the antenna the better the signal.

Any trees grow up in the way of your antenna over the years ?

A VHF/UHF combo antenna is a compromise. A seperate UHF antenna might do a better job of pulling in the weak signals.

5129. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 23:20:57 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-5FFA03.15205726112003@news.sf.sbcglobal.net>
Source record: 103994
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

In article <J8OdnSmaq6A1j1iiRVn-vw@comcast.com>,
"Dave VanHorn" <dvanhorn@cedar.net> wrote:

> "lbbs" <nonex@nonee.com> wrote in message
> news:1069878880.707573@news.vaxxine.com...
> > Can a handy man that has never install antennas, install a preamp. Or do
> I
> > need
> > a professional?
>
> The amplifier itself needs to mount at the antenna. That involves a ladder
> usually, and some electrical tape for sealing the connections. Obvious
> safety concerns apply. The rest is easy.
>
>

See if you can find an antenna installer or repair shop to perform an
antenna survey at your location. Higher is usually better but not always.

The survey will tell you the strength stations in your area have at your
location. Optimal antenna height will be determined along with the need
for an amplifier. You can keep screwing around with this or do it right.

--
Telamon
Ventura, California

5130. 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-26 23:25:26 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <3fc53490.29195260@nntp>
Source record: 103995

Am trying to build the 80M loop at:

http://w1.859.telia.com/%7Eu85920178/antennas/frameant.htm

...and need a 25 pf air variable cap, but don't have one in the shack
parts bin with a high enough voltage breakdown rating/plate spacing.
The author recommends a plate spacing of 2mm (about .07").

Anyone have one they'd care to part with?

Short of that, a US parts source would be great...Jackson makes 'em,
but they're in the UK, and a bit pricey at that.

Thanks to the group,

Lin/KJ6EF
For email responses, remove "nospam_".

5131. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:18:09 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <lhcxb.237017$ao4.847118@attbi_s51>
Source record: 103997
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Anytime I hear that statement I just right of the person saying it as an
idiot. I haven't been wrong on that one yet.

"WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
news:g14xb.52501$Vs1.36112@twister.austin.rr.com...
> The great American spoof is "home ownership".
> If you ever think you really "own" your home just stop paying money for it
> and see what happens!

5132. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:25:34 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <bncxb.625$s7.202@bignews6.bellsouth.net>
Source record: 103998
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Looking at his Austin, Texas newsgroup header, he's probably making a point about the extremely high property taxes they have there. They don't have a state income tax in Texas, but they really sock it to property owners.

Even when your mortgage is paid off, those taxes will continue (and probably increase).

-- Stinger

"CW" <clinton.magers@comcast.net> wrote in message news:lhcxb.237017$ao4.847118@attbi_s51...
> Anytime I hear that statement I just right of the person saying it as an
> idiot. I haven't been wrong on that one yet.
>
>
> "WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
> news:g14xb.52501$Vs1.36112@twister.austin.rr.com...
> > The great American spoof is "home ownership".
> > If you ever think you really "own" your home just stop paying money for
it
> > and see what happens!
>
>

5133. Re: antenna supports

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:27:50 UTC
From: kc5cqa@yahoo.com
Message-ID: <7jkasvgvu7grbneprvtbqtu0rot0qte0en@4ax.com>
Source record: 103999

On Wed, 26 Nov 2003 08:42:30 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Look, Mike:
>
>I was the initial response with the questions about wall thickness and
>alloy. Because the answers to his simple question are yes and no. Yes, I
>have successfully used 2 7/8" tubing as he suggests, and no, 2 7/8" aluminum
>thin wall tubing won't hardly support itself, nevermind an antenna. Now, I
>suspect he has a particular piece of tubing in sight, or the specific size
>wouldn't have been mentioned. But, diameter alone is not enough information
>to give him a useful answer. And that makes it a less than serious
>question.
>
>See how it works?
The term 2 7/8 tubing is quite familiar around this area,,, and I
suspect he is talking about oilfield tubing,,, which is very stout. I
the wall thickness is in the neighborhood of 1/4". cl.

5134. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:28:05 UTC
From: Jimmy <Gfender@carolina.rr.com>
Message-ID: <Fqcxb.33961$I53.1518734@twister.southeast.rr.com>
Source record: 104000

"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
news:MPG.1a2d4d599e7a22bb9896ab@news.west.earthlink.net...
> In article <Zjuwb.29790$I53.1021574@twister.southeast.rr.com>,
> Gfender@carolina.rr.com says...
> > What usually causes this in an apatment is that someone has their
"rabbit
> > ears" connected in paralell with the input to their TV. I discovered
this
> > when I was in the USAF and they installed cabel in the barracks. By
> > connecting the cable to a set of rabbit ears we were able to broadcast
the
> > signal from the second floor to rooms about 3 or 4 doors each way on
the
> > first second and third floors. No fuzzy pictures either. Later someone
> > connected an antenna directly to the main cable instead of off a
splitter so
> > the whole barracks could get free TV.
>
> I'm willing to bet that only lasted until the base frequency management
> office started getting complaints of interference on some of the
> tactical FM gear, at which point they'd DF it to your barracks building.
> Someone probably received a large boot in the backside as a result....

Nope, Thses were all in the normal 12 VHF channels so no one complained.
Least not for the 3 years I was there.

5135. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:40:16 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <4Ccxb.118957$Dw6.546639@attbi_s02>
Source record: 104001
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FBE7010.3717EB16@usa.net...
> Thank you.... ....
>
> I am moving into a housing plan with such antenna restrictions. But
> what housing plan doesn't have them. There is always someone trying to
> tell some else how to live their lives, or knows what's best for you.

You people amaze me. If you don't like covenants, then don't move into the neighborhood. The whole reason for the rules are to keep everything in check. Something tells me that neither of you would wants someone putting up some rusted out, 1970s RV and using it as a shed if the rules made that 'illegal'

5136. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 01:52:36 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <ENcxb.318690$Fm2.332441@attbi_s04>
Source record: 104002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...
> However, I don't happen to think people should have to move
> miles away from work, schools, or shopping, just to have an antenna.

And why should people who don't want antennas surround their house have to move miles away? Why should people who want to sit 3 cars on blocks have to move miles away? Let's just have a free for all and forget the rules. That way I can see just how tall some wild weeds can grow in my front yard. I hope your not looking to move, interested buyers may not like my 'urban jungle'. But like you say, why should I have to move miles away from everything to have my own little wild growth forest?

5137. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:01:35 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <3Wcxb.119094$Dw6.548240@attbi_s02>
Source record: 104003
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
news:g14xb.52501$Vs1.36112@twister.austin.rr.com...
>
> The great American spoof is "home ownership".
> If you ever think you really "own" your home just stop paying money for it
> and see what happens!

Plenty of homes are affordable, but like someone here said something like:
"Why should people have to live miles from shopping, schools, etc." I have
a cousin who is married and a best friend who is married. Both paid $140K
for their homes. One group purchased a home in the 'elite' northside of
Indy, the others on the eastside. Both live in the burb counties. Both
have great public schools. The eastside doesn't have the restaurants,
shopping, etc. You have to drive 20 miles to get to that. The difference:
One has a very small yard and lives in a vinyl village. The other has
almost an acre and all brick. One lives 5 miles from work, the other lives
10 and 20 (wife and husband distances). One pays less property tax. It's
all about choices. If you just have to live where the stores, restaurants,
super rich, etc live and you buy a home that has a mortgage that makes you
live pay check to pay check...yea, you won't have much. If you make due
with a home built in 1950 or earlier that is in good shape (oh the horror of
not having a 'new' home that some of my friends would fear), you won't be
hurting. I plan on getting a home in 2-3 months. I have seen some decent
homes for $85-$90K. They are 4-6 miles from half million dollar homes. 2
miles from schools and shopping. Their downside: They are 40 some years old
and in good shape. Now in places like California---get out before the great
burn off starts.

5138. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:07:32 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <E%cxb.119142$Dw6.548363@attbi_s02>
Source record: 104004
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bpp8mhomm1@news1.kornet.net...
>
> I can understand where people have a right to not want someone storing a
> dozen rusty cars on their front lawn, or allowing their grass to get 3'
> tall.. but as far as antennas, etc.. they have no business telling a
> homeowner what to do. It's not right that they should be telling people
> what color they can paint their house, what kind of plants or animals they
> can or cannot have, etc..

Then why the hell is it 'right' that they tell your neighbor they can't have
12 rusty cars in their yard? If you want to live without rules, get an
older farm house or something. Don't move into a neighborhood and then
complain about the rules you disagree with.

5139. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:25:03 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <3gdxb.314327$HS4.2785436@attbi_s01>
Source record: 104005
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:uICvb.96113$Ec1.4504381@bgtnsc05-news.ops.worldnet.att.net...
>
> My brother and I practically rebuilt his 64 T-Bird right in the
> driveway. If I was bothering anybody, nobody spoke up.

But if you were selling your home and I had a 1980 rusted Honda on blocks plus a used beer keg as a 'bird bath', do you honestly think that everyone that looked at your home wouldn't mind me as your neighbor? That is the whole point of covenants. Something that protects me when I want to sell. I could careless about my property value going up, as long as I could break even it would be better than renting. However, even if your price is low...having the wrong neighbor could mean 3 people that would have bought will change their mind. Now I am running out of time, dipping into my cash reserve, etc. trying to keep my old home and pay for a 6 month lease in my new city where I work. I personally will not live with covenants. City ordinances are bad enough!!! My goal is to live in the city I work and get a home for $90K. Save, save, and save some more until I can get a home not in a neighborhood that won't be annexed for a while. If it's annexed, I think it will be time to move even further north. I would rather have to buy Hondas that will last 200K miles if it means living free.

5140. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:27:23 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <fidxb.318974$Fm2.332843@attbi_s04>
Source record: 104006
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dee D. Flint" <deehays@qix.net> wrote in message
news:96Ovb.12154$P%1.10546636@newssvr28.news.prodigy.com...
>
> That is not the purpose of eminent domain laws. If the law has been
abused
> in such a manner, then the citizens affected should be filing a class
action
> suit.

"Filing a class action"? Give me a break. More like locking and
loading!!!!! Just kidding ;)

5141. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:28:35 UTC
From: Jack <see.signature@bottom.for.my.email.address>
Message-ID: <f3masvsmhvq398cpaac7tlpenhm5h9u41p@4ax.com>
Source record: 104007
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 01:40:16 GMT, "Midwest Kid" <NoSpamPlease@aol.com>
wrote:

>
><Pappy127@usa.net> wrote in message news:3FBE7010.3717EB16@usa.net...
>> Thank you.... ....
>>
>> I am moving into a housing plan with such antenna restrictions. But
>> what housing plan doesn't have them. There is always someone trying to
>> tell some else how to live their lives, or knows what's best for you.
>
>You people amaze me. If you don't like covenants, then don't move into the
>neighborhood. The whole reason for the rules are to keep everything in
>check. Something tells me that neither of you would wants someone putting
>up some rusted out, 1970s RV and using it as a shed if the rules made that
>'illegal'

As has been pointed out almost innumerable times already. Did you just
discover this thread? <grin>

Oh well, I haven't put my 2 cents in yet, so I might as well do it
now.

While I kind of agree with the "...if you dont think you like it, then
don't sign it" philosophy, I think the restrictions are often carried
beyond the realm of common sense. A fairly inconspicous rooftop
antenna, a window in your grage, or an untattered flag on your porch
is a far cry from putting a rusted out RV on your front lawn for
storage shed, allowing your lawn to grow high enough to hide in, or
painting your house "Shocking Pink with Turquoise Trim." <g> Of
course, I said a fairly inconspicous rooftop antenna, *not* a 50'
backyard tower with an monster multiband Yagi...

Then again, it's not the actual restrictive covenants themselves that
I'm against. The fascist attitudes of many HOA board members alone
makes me refuse to even consider buying a property in such a
community. Not to mention the the "stuck-up" antisocial mentality of
many of the homeowners who would be my neighbors.

I don't need restrictive covenants to keep neighbors from becoming
nuisances, either. There are nearly always local laws and ordinances
dealing with noise, nuisance and safety and health, and agencies that
do enforce them.

You are perfectly welcome to closed-communities, HOA's and
restrictions on what you can do with what you own. I'm satisfied with
democracy and the spirit of *responsible freedom* that makes America
great. Just keep your HOA's out of my *free* neighborhood.

73

jack

--
Spam email harvestbot foiler tactics in use!
Email replies to:

n2hqc
(AT)
earthlink
(DOT)
net

5142. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:32:00 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <Amdxb.119333$Dw6.549079@attbi_s02>
Source record: 104008
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FBF8157.56DE0733@usa.net...
> Some of us are licensed ham
> and enjoy our hobby as you do. Just because we move into a new home in > a new area why should we give up the hobby we so enjoy? We shouldn't > have too.

I collect junk Hondas (to sell parts and repair them at a garage) and need my yard to store them on. I shouldn't have to give that up just because I move into a new home in a new area. Why should I have to give up the hobby I so enjoy? I souldn't have too!!!!!!

5143. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:33:41 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <9odxb.314400$HS4.2786469@attbi_s01>
Source record: 104009
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
news:e_3wb.23842$do1.5349@twister.austin.rr.com...
>
> I would be looking at a rual area where there is lots of trees to hang
wire
> from and lots of ground to plant towers.

How dare anyone be forced to have to drive 20 miles to Wal-mart or nice
restaurants to eat!!

5144. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 02:49:47 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <fDdxb.319135$Fm2.331538@attbi_s04>
Source record: 104010
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Clint" <rattlehead at computron dot net> wrote in message
news:vrvl4qabh56pde@corp.supernews.com...
>
> I recommend more hams doing this if thier home owner
> gods become assholes as well.

So punish your friendly neighbors because some panel of 5 or so people are dicks? When you come to my door after causing your interference to borrow a tool, you'll get a big "FUCK OFF COCK SUCKER!!" Being an asshole to people who didn't have anything to do with some busy body two streets over shouldn't get treated like this. Anyone who does this to me will just mean constant complaints to the FCC. The immediate cessation of my kids being able to even look at your kids. Not helping you in any way shape or form. The list goes on and on. If anyone here has a ham who acts like this, form a "Fuck you!" circle of like neighbors (those of us who didn't complain, etc about the tower) and treat the ham like the ass he/she is. Then in 10 years when the for sale sign goes up, remember to kindly give the finger to anyone stopping by to look at the house. Also it might be time to start the junk car collection. Keep proof that the home owners association allows for rules to be bent. Then pool money for a lawyer saying that since they allow for x, y, and z they damn sure are going to allow for a, b, and c.

5145. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 03:02:49 UTC
From: Jack <see.signature@bottom.for.my.email.address>
Message-ID: <cooasvgdiento9n1dse5miskpr9ct43ab1@4ax.com>
Source record: 104011
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 01:18:09 GMT, "CW" <clinton.magers@comcast.net>
wrote:

>Anytime I hear that statement I just right of the person saying it as an
>idiot. I haven't been wrong on that one yet.

Hehehe... You never truly own a home. Even when the mortgage is
finally paid off, all you've done is paid off the bank. Now that you
officially "own" your home, just try not paying the taxes, insurance
or garbage pickup / snowplowing fees. See how long you own it for...
<g>

BTW, I just love those artificial municipal fees... I was forced to
pay $150 per year for snow plowing fees in a community where it snowed
maybe once or twice a year and usually not more than an inch at most!
Most years they never plowed a single road. My particular street
NEVER saw a snow plow in the 20 years my family lived there.

At least there wasn't an HOA or covenants to deal with. I could have
a rooftop antenna. In fact even after several neighbors put up
antennas (total: 2 CB'ers, several houses with vhf/uhf TV antennas,
and myself with a several vhf/uhf Yagi's and a SWL random-wire running
the length of the roof), our assessments continued to rise, not go
down. My chain-link fence actually made my home more valuable when I
sold it a decade ago, though that was probably just a quirk of the
buyer. <g>

-jack-

>"WilleeCue" <n5wrx@nospam.stx.rr.com> wrote in message
>news:g14xb.52501$Vs1.36112@twister.austin.rr.com...
>> The great American spoof is "home ownership".
>> If you ever think you really "own" your home just stop paying money for it
>> and see what happens!
>

--
Spam email harvestbot foiler tactics in use!
Email replies to:

n2hqc
(AT)
earthlink
(DOT)

net

5146. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 03:22:55 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <j6exb.235561$9E1.1284964@attbi_s52>
Source record: 104012
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jack" <see.signature@bottom.for.my.email.address> wrote in message
news:f3masvsmhvq398cpaac7tlpenhm5h9u41p@4ax.com...
>
> You are perfectly welcome to closed-communities, HOA's and
> restrictions on what you can do with what you own.

I agree with your assessment of HOAs. They are usually worse that the government with all their rules and regulations. However, I also find it sickening that grown adults will enter into a contract and then whine about not being able to violate the contract. With covenants, the rules are not weighted. They are all equal. If someone put up an antenna and I or someone else complained and they made an 'exception', then I would quit cutting my grass and get a lawyer (if I had too) for my exception. I think many of these problems come from areas where housing costs to damn much. I live in the Indy area. Rural homes can be had for $100K for decent to $140K and you can get a lot of that. The only thing is that you will have to drive 10 miles to a mall and restaurants. That is why a lot of people complain because they want to have their cake and eat it too. If every addition in the yuppie suburban county near 'x' city has covenants....DO NOT LIVE THERE!! If ham and short-wave is that important in your life, get a Honda and just put up with the extra 10 miles you have to drive to work. I have been living semi-rural for all my life. This area is getting more and more homes in. In my addition, an antenna would look stupid. I would put cars on bricks just to get back at some idiot who did that (though I might wait until the for sale sign goes up!!!). However, 1/4 mile away on some of the older farm homes...antennas would be bad at all.

5147. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 03:29:07 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <7cexb.314776$HS4.2791222@attbi_s01>
Source record: 104013
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

As I have said before: if you don't want to live in a crappy neiborhood,
don't look for a house in a slum. I have never lived in a house with an HOA
and I have never had the problem. Then again, I have never lived in a slum
either.
"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:ENcxb.318690$Fm2.332441@attbi_s04...
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:uE1xb.22596$Wy4.4653@newsread2.news.atl.earthlink.net...
> > However, I don't happen to think people should have to move
> > miles away from work, schools, or shopping, just to have an antenna.
>
> And why should people who don't want antennas surround their house have to
> move miles away? Why should people who want to sit 3 cars on blocks have
to
> move miles away? Let's just have a free for all and forget the rules.
That
> way I can see just how tall some wild weeds can grow in my front yard. I
> hope your not looking to move, interested buyers may not like my 'urban
> jungle'. But like you say, why should I have to move miles away from
> everything to have my own little wild growth forest?
>
>

5148. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 04:02:21 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <g7tasv81l9q5lc9jlhqga4qiptgj059jro@4ax.com>
Source record: 104015
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Wed, 26 Nov 2003 00:37:35 GMT, m@d.com (Andre) wrote:

>I'd try a new antenna on a rotor. amps just amplify noisey signals.

That all depends.
I have an antenna mounted preamp. I get very good signals.
Without the amp there is barely a signal there let alone one worth
watching. Actually that is preamps. I have two. One on a UHF antenna
pointed NW and one on the other pointed south. They have separate
cables that are switched at the receiver.

And indoor preamp OTOH only creates more noise.

>
>
>In article <1fSwb.11$87.2242@read2.cgocable.net>, lbbs@dadffo.ca says...
>>
>>I am trying to improve my TV signal. right now I have an old (made in
>>1995) amplifier that is connected to an TV antenna (aprox 25feet high)
>>mounted on my house. My amplifier is rated at 2.5w and 0.025amp. I

The old amp might be OK and it might not. Typical amps now run 15 to
20 db gain, but you do need a good antenna. A good antenna alone may
be a lot better than a poor antenna with a preamp. Then again a good
antenna with an antenna mounted preamp *may* be even better.

>>would buy a newer amplifier if I thought it would help my signal. Fist of
>>all I am not sure if you can get a more powerful amplifier and whether it
>>would help my signal. Also, I am having trouble understanding the rating

As has already been explained db is a gain. Higher is better...to a
point and I don't think there are any commercial ones with too much
gain. As was stated each 3db is a doubling of the signal. db is a
ratio between two signals in this case. (input and output) 3 db is
double, 6 db is 4 times and it just works out that 10 db is 10 times.
(They aren't exactly but these are within a few decimal places. so
it's very close)

>>system. I looked at a new amplifier at Radio Shack and the rating system
>>seamed to be different now. It was rated at 10dB and I believe it mention
>>something about frequency. Is it better to have a higher or lower dB
>>number in an amplifier? Can someone clarity these points to me. They
>>could not explain it to me at the store.

That's what you get for minimum wage help.

I've found that distribution amps (the ones that go at the TV end) are
next to useless you are running multiple sets, but you need a good
signal at the input of that amp. The one at the antenna works far,
far better.

>>
>>Second question is about buying one of those omnidirectional TV antennas
>>that look like a flying saucer. I believe they have a built in

Waste of space. I tried one and it didn't even do a good job on local
stations. If you are sticking one on a motor home that might be
different, but I think I'd then go with crossed dipoles.

>>amplifier. If I bought one should I use it in combination with my old
>>indoor amplifier? Thanks a lot for your help.

I brought one home, hooked it up and took it back.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>>
>>

5149. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 04:20:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fc57bb9$1_1@corp.newsgroups.com>
Source record: 104014

Space Charge wrote:
> ...and need a 25 pf air variable cap, but don't have one in the shack
> parts bin with a high enough voltage breakdown rating/plate spacing.
> The author recommends a plate spacing of 2mm (about .07").

Fair Radio Sales might have something like that. 419-223-2196
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5150. WANTED: Schematic Diagram/Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 04:31:27 UTC
From: Tamz 'n' Stew <blah@blah.net>
Message-ID: <3fc57e1d$4@news.comindico.com.au>
Source record: 104016

I am looking for a schematic diagram &/or manual for the
RF Concepts 2m 170w Linear Amplier RFC 2-417.

If anyone has either of these in electronic format,
either .doc, .pdf, .lit or image formats please reply to the
email address below, or send as an attatchment.

Thanks in advance.
Tam & Stew
radio@kgl900.com

5151. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 04:55:42 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <9r0bsvg6c1vm7rr00dge5r7s7c4h8kelkb@4ax.com>
Source record: 104017
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Thu, 27 Nov 2003 02:21:31 GMT, "Steve Stone"
<spfleck@zzcitlinkzz.net> wrote:

> http://www.tvantenna.com/support/tutorials/uhf.html
>
>
>
> A Guide to UHF TV Reception
> Presented by The National Association of Broadcasters, PBS,
> and Stallions Satellite and Antenna
>--
>
> Introduction

Good lord man...turn on the line wrap.
and please use links for large docs rather than posting them.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5152. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 05:35:27 UTC
From: BFriedl <junk-remove-@bfriedl.com>
Message-ID: <z1gxb.13246$o9.2224@fed1read07>
Source record: 104018
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Yukio wrote:
> which is always present in any signal. I would have to assume that you must
> be using a dial-up MODEM because this question doesn't make much sense if
> you are using a Cable MODEM and already have access to a Cable Service
hmm, further investigation shows that his email ends in shaw.ca Going to
www.shaw.ca shows its a cable provider. So you have HSI?
http://www.shaw.ca/narrowband/prod_shsi_speed.html

--
BFriedl
A+ Certified Technician
AIM: UACybercat
** Bear Down Arizona! **
******* Go Cats! *******

5153. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 05:41:19 UTC
From: Jack <see.signature@bottom.for.my.email.address>
Message-ID: <t52bsv4eohf47q32rd70ek3ccr2ppbgt65@4ax.com>
Source record: 103919
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 03:22:55 GMT, "Midwest Kid" <NoSpamPlease@aol.com>
wrote:

<snip>

> I
>have been living semi-rural for all my life. This area is getting more and
>more homes in. In my addition, an antenna would look stupid. I would put
>cars on bricks just to get back at some idiot who did that (though I might
>wait until the for sale sign goes up!!!).

I take it that you don't have anti-antenna covenants in your
neighborhood. Why don't you simply move to a closed-gate community
where the antennas you don't like are restricted instead of being an a
total jerkazoid?

You want *other* people to abide by rules set by their communities but
you don't seem to be able to live even with your own rules. Damn
hypocrite, I say!

-jack-

5154. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 06:03:30 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <q11bsv80n098i3g7jigs3b9vhtij56ebcg@4ax.com>
Source record: 103920
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Wed, 26 Nov 2003 15:52:57 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>
>"lbbs" <nonex@nonee.com> wrote in message
>news:1069878880.707573@news.vaxxine.com...
>> Can a handy man that has never install antennas, install a preamp. Or do
>I
>> need
>> a professional?

It's basically common sense, but connections have to be clean and
water proofed.

>
>The amplifier itself needs to mount at the antenna. That involves a ladder
>usually, and some electrical tape for sealing the connections. Obvious

I use liquid electrical tape. Ace hardware carries it as well as
marine stores. "Coax Seal" is also good and can be covered with
regular electrical tape. Don't try to weather proof connectors just
using electrical tape.

Today's modern coax cables are long lived when installed properly. I
have some 20 years old doing as well as the day they were installed.
Older or inexpensive coax may not age as well. Twin lead, unless it's
of high quality does not usually age well. It also takes some
knowledge on routing and placement rather than put it where it's
convenient as with coax. Coax can be taped to the mast. Twin lead
needs to be held in insulated stand offs about 6 inches long. Never
use metal staples to hold twin lead in place as it's very sensitive to
nearby metallic objects.

I have two RG-6 cables that run underground through conduit for over
75 feet in a bundle of cables carrying control voltages as well as the
output from the ham station which is 1500 watts from 1.8 through 30
MHz, 100 watts on 50 MHz and 50 watts on 144 and 440 MHz. The overall
run is over 200 feet when you count the distance up the tower to the
antennas and from the conduit to the radio station and on to the TV
receivers. (bout 225 feet to the spitters, switches, and TV receivers
)

If water has gotten into the cable, you need to cut it back far enough
to find shiny braid. With older cables it's probably best to just
replace it.

I also find that I have to replace the "Balun" which is the device that goes between the antenna connectors and the coax, about ever 2 to 4 years. It would be nice if some one made a good balun that could stand up to the elements.

Then there are the RV antennas them selves.
Even to-of-the-line TV antennas are flimsy and of relatively cheap construction (even if they are expensive). Most have hardware that rusts out long before the antenna would cease being useful if they used decent hardware (stainless steel). Elements are easily bent and broke. They are made of cheap, thin sheet aluminum that is rolled into a tube. The Aluminum is often anodized a gold color and it stands up to weather quite well, even if the bolts rust off in a few years.

If you look closely there are two UHF TV antennas near the 90 foot level on the tower in
http://www.rogerhalstead.com/ham_files/Tower30.htm
All the other leads run with the RG-6 from the TV antennas.

I did play around with this for a while when I first put up the tower. http://www.rogerhalstead.com/ham_files/tower21.htm The gin pole is still in place.

This http://www.rogerhalstead.com/ham_files/Tower29.htm is installing the current array, but before the TV antennas were reinstalled just below where my feet are anchored.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>safety concerns apply. The rest is easy.
>

5155. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 08:03:20 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0311270003.66fa7304@posting.google.com>
Source record: 103921

Hi Lin,
use a relatively common air-spaced AM capacitor, also one with deformed plates and temporary short-circuits can be used. Rip out two plates of every three, both from stator and rotor, evenly spaced. This way the spacing of plates triples.

BR from Ivan OK1SIP

5156. Re: marthaer, testosterone is oozing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 09:56:30 UTC
From: Bruce Reilly <bruha@uzytqi.com>
Message-ID: <E416E076.DE4D02BF@news.mopfyjyf.com.com>
Source record: 103922

Dear Judges, Lawyers, Policemen, Guards, Counselors, Taxpayers, et. al.,

We are here. Like it or not, for good or bad, we are here. Who are we? We are the downtrodden and dispossesed, the self-torturing, the disenfranchised convicts, drug and alcohol addicts, the unemployed and unemployable. We are the children of poverty, financial and spiritual. We have and will have children of our own, grandchildren too. We are ex-cons, uninsured, homeless, of many colors and speaking many tongues. We are the enemy in what has become a domestic war against ourselves.

And who are you? You who like the tough talk of Tough on Crime? You who watch as budgets are cut in education and health care while you militarize a police force? Bullet-proof vests, automatic weapons, helicopters, tanks, robots ... the testosterone is oozing through the streets, more prisons, longer sentences, tighten the belt, spartan conditions, task forces, gang units, gun courts. And what is there to show for it? Unemployent stays low because half the population oversees those "out of the workforce", the dregs, the rabble, the enemy? Please tell me there is a deeper reason. Do you feel safer? More humane? More like a cohesive society with a shared sense of purpose, who can identify Us and Them? Do you live in a gated community or gentrified neighborhood? By the way, have you read the Declaration of Independence and US Constitution - or do you only know the first phrases?

It's about time we got together. Please know that I have yet to meet a convict who wants their child to be a thief, an addict, a dealer, a prostitute, or a violent individual. Most of us still have hope for ourselves even when stuck in the darkest dilemmas, ruts and catch-22s. Most of us believe in crafting laws and instilling order. Many of us have burrowed beneath the surface to find a spiritual sense of being, an understanding force at least as powerful as those we succumbed to, and many of use wouldn't escape if you opened the front door. Did you know that approximately 10 million Americans are either incarcerated, on probation, on parole or once were in those categories? Each of those 10 million have families, friends, neighbors ... and so closer and closer does the We interface with the You. Don't you think it's time we talked?

Are you ready? Can you accept that the road we are travelling points toward a grim and painful future? Do you have the heart to face monumental failures while bravely struggling beyond where we are now? I know that some of you are, and that some of us are, and this is what gives me hope. You need our insights just as we need your structure. It is never over, especially when a real solution, a real treatment for our sickness, is yet to begin.

In Solidarity,

Bruce Reilly (a.k.a Bruha)
P.O.Box 8274
Cranston, RI 02920 USA

P.S. - I am trying to conceptualize an effective guerilla media campaign to promote this cause. Ideas are welcome. Collaboration is prayed.

Importer, viewer, and converter for multiple picture
types (including JPEG).
Available on the QuickTime 1.0 CD-ROM and via anonymous FTP on
SUMEX:graphutils, or on mac.archive.umich.edu in graphics/quicktime.

PICTURE VIEWERS:
JPEGView Multi-featured JPEG viewer by Aaron Giles
(a-giles@uchicago.edu) - requires both System 7.0 and
QuickTime.
Available via anonymous FTP from SUMEX:/info-mac/app/jpeg-view-*.hqx,
ory, or on mac.archive.umich.edu in mac/graphics/graphics.utilities as
jpeg-view-*.hqx.
PictPixie Multiple format (including GIF and JPEG) viewer.
Requires QuickTime.
Available via anonymous FTP from ftp.apple.com in /dts/mac/quicktime
as pictpixie.hqx.
Picture Decompress Macintosh JPEG viewer by Storm Technology (get version
2.0.1 or later; earlier versions are not compatible
with JFIF file format). Also, you'll need to change
the file type to "JPEG" and the creator to "StPP" -
you can do this by setting the appropriate preferences
in UUTool, or by using the application FileTyper (also
available on SUMEX) or McSink, which is a common DA.
Picture Decompress takes over 4M of free system
memory to run (you may need to uninstall some things).
Available via anonymous FTP from
SUMEX:/info-mac/app/picture-decompress-*.hqx.
QuickGIF Color Macintosh GIF viewer - gives thumbnails.
Available via anonymous FTP from BONGO:mac/quick-gif.hqx.
VisionLab Monochrome Macintosh viewer.
Available via anonymous FTP from BONGO:mac/visionlab.hqx.
][GIF Apple][+/e/c GIF viewer.
Available via anonymous FTP from BONGO:apple/ii/iigif.
GIF3200 Apple][GS GIF viewer.
Available via

5157. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 11:33:22 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <6ilxb.323457$Fm2.335253@attbi_s04>
Source record: 103923
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jack" <see.signature@bottom.for.my.email.address> wrote in message
news:t52bsv4eohf47q32rd70ek3ccr2ppbgt65@4ax.com...
>
> You want *other* people to abide by rules set by their communities but
> you don't seem to be able to live even with your own rules. Damn
> hypocrite, I say!

There are no rules. If someone puts up a huge antenna in our neighborhood....fine. I will then put up something that looks just as stupid. Many of the people in my area who have huge antennas usually live more rural and don't live in an addition. I am also only talking about these super high antennas. A very small antenna wouldn't bother me too much. Thing is that if I decided to make my yard an antenna field and put about 3-4 high antennas on my roof to cover everything, then ham wouldn't care. However, something tells me that if he/she had to sell their home they would take down their antenna first and ask me to do the same if a realtor said my antennas were driving potential buyers away. That's the hypocrisy I don't like.

5158. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 11:56:12 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <kDlxb.22738$m24.5981@fed1read02>
Source record: 103924
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stephen M.H. Lawrence" <7.3steve@earthlink.net> wrote in message
news:ak2xb.20466$Rk5.17647@newsread1.news.atl.earthlink.net...
> I work as a Title Examiner, so this is right up my alley.
> Many, many homeowners take ownership of a property
> in "fee simple, subject to reservations, easements, and
> covenants of record, if any," and don't inform themselves
> about what those reservations (read: Restrictive Covenants)
> really are. They're just words on a piece of paper, and
> these contracturally obligating encumbrances are effectuated
> by conveyance, in other words, they have the power of the
> law, even though they don't appear on the deed.
>
> In other words, you have two pieces of paper: The deed,
> which makes a glancing reference to restrictions "if any," and
> the actual restrictions, which are filed with the County Recorder
> or Registrar of Titles. More people than you can imagine are getting
> hoodwinked, Dennis.

Steve:

When buying a property, there's enough imaginatively named fees to gag Godzilla! So what the heck does a Title Examiner do when he sees a Title that makes "glancing references" to "reservations, easements and covenants of record, if any." Don't you jump up and down, and scream something like "This document ain't complete; take it back and do it over till you can fully describe the property being sold."

From your description, sounds like you think a half-ass, boiler-plate description is acceptable, and you sign on your line and collect your fee. And, from the sales agreements that I've seen, you can never be held liable, since the buyer has usually been forced to buy insurance against the possibility (probability?) that some professional middleman was operating in a haze of indifference.

Could it be that the dark secret is, if every restriction and easement and covenant were fully described, that few buyers would ever go through with a deal? Whew, I'm glad that MY business doesn't depend on hoodwinking MY customers!

Ed
WB6WSN

5159. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 14:03:45 UTC
From: Arthur Harris <n2ah@hotmail.com>
Message-ID: <5vnxb.21396$AA.9158125@news4.srv.hcvlny.cv.net>
Source record: 103925
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

Anonymous wrote:
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49). I like in a small city of 130,000
> population. We have Toronto aprox 40 miles north and Buffalo 40 miles
> south of us. I would to find a way to improve my TV signal. One of
the
> things I would like to try is put a preamp on the antenna, but not sure
what
> dB rating to use so I don't over amplify my signal (I don't want to
improve
> some channels at the expense of other good channels). Any ideas?

TV preamps are mainly intended to overcome feedline losses. They typically have rather high noise figure (6 dB or more). I doubt that a preamp alone will improve your reception significantly.

What type of antenna are you using now and how high is it? Is your house on a hill or in a valley? What is the terrain between you and the stations? TV signals are basically line-of-sight. Antenna height is a huge factor in good reception.

The Radio Shack antennas that have a log-periodic VHF section and a corner-reflector UHF section are pretty good. The bigger the antenna, the better it will work. Don't trust the "range" figures in their catalog. Get the antenna up at least 25-30 feet (a chimney mount works well). Use RG-6 coaxial cable to feed the antenna.

You can probably get a good idea of what you need by looking at your neighbors' roofs!

Since you're trying to receive signals from two different directions, you will need a rotator. There's no way around that (unless you want to install two separate antennas).

Then, there's always cable TV. ;->

Art Harris N2AH

5160. RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 14:19:29 UTC
From: amdx <amdx@att.net>
Message-ID: <RJnxb.342256$0v4.18886385@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103926

I'm looking to purchase 100 ft or 250 ft of RG-174a coax cable.
Anyone have favorite sources for coax?

Thanks
Mike

5161. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 14:43:28 UTC
From: Arthur Harris <n2ah@hotmail.com>
Message-ID: <k4oxb.21548$AA.9295051@news4.srv.hcvlny.cv.net>
Source record: 103927
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"Steve Stone" wrote:
> A good ground might help signal reception.

Not a chance! A ground may be good idea for lightning protection, but it's
not going to improve TV reception.

Art Harris N2AH

5162. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 14:55:36 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fc4bfa2_4@newsfeed.slurp.net>
Source record: 103873
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

So you've pretty much answered your own question. Run some new coax, weatherproof the connections, and put an amplifier in line. Short of a new antenna, that's all you can really do. Most TV amps are broadbanded enough that you won't lose anything, and should see improvement on all your channels.

Finally, if you don't know for sure how old your antenna is, and it MIGHT be 35 years old, replace it anyway. They're not exactly expensive...

KI6PR

"lbbs" wrote
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49). I like in a small city of 130,000
> population. We have Toronto aprox 40 miles north and Buffalo 40 miles
> south of us. I would to find a way to improve my TV signal. One of
the
> things I would like to try is put a preamp on the antenna, but not sure
what
> dB rating to use so I don't over amplify my signal (I don't want to
improve
> some channels at the expense of other good channels). Any ideas?
>
>
>
> Also, what about cleaning up the connection at the antenna, by cutting off
> the end
> that is corroded and reconnecting it to the antenna? Or just cleaning
the
> connection with sand paper?
>
>
>
>
> Other pertinent info:
>
> > Basically I looking for ways to improve my signal. I am satisfied with
> the
>
> > 12 channel or so
>
> > that we are presently getting and I don't what to pay for more channel
> with
>

> > cable or dish.
>
> > All I want is to get a 15% improvement or so in my TV signal. I get a
> fair
>
> > TV signal now, but I have a couple of channel like 49 that my parents
> better
>
> > then us. I received a few suggestions like replace my coax with RG6
> wire
>
> > and get an preamplifier at my old tower antenna. The antenna is 35
years
>
> > old at most (that is the age of our house), 15 years at best).
Anything
>
> > else I can do to improve signal. I don't mind putting some money into
> it
>
> > since it is a long term investment. Thanks.
>
> >
>
> p.s. I am not interested in buying a new antenna.
>
>

5163. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 15:53:13 UTC
From: mark <mark_my_words@nospam.com>
Message-ID: <3FC61DE8.92BF7E45@nospam.com>
Source record: 103928

hi,

http://www.cablexperts.com

http://www.thewireman.com

Both good to deal with.

markus

amdx wrote:

> I'm looking to purchase 100 ft or 250 ft of RG-174a coax cable.
> Anyone have favorite sources for coax?
>
> Thanks
> Mike

5164. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 15:56:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fc61efd$1_6@corp.newsgroups.com>
Source record: 103930

amdx wrote:
> I'm looking to purchase 100 ft or 250 ft of RG-174a coax cable.
> Anyone have favorite sources for coax?

The Wireman, Inc., 261 Pittman Road, Landrum, SC 29356
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5165. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:00:30 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <w8pxb.16223$yM6.1238@lakeread06>
Source record: 103929

"mark" <mark_my_words@nospam.com> wrote in message
news:3FC61DE8.92BF7E45@nospam.com...
> hi,
>
> http://www.cablexperts.com
>
> http://www.thewireman.com
>
>
> Both good to deal with.
>
> markus
>
I've only done two orders with the WireMan, and sad to say
both were entirely screwed up. Both orders caused delays
in tower or antennas erections. Not that they didn't do their
best to correct the problem--but I'll never deal with them again.

Pete

5166. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:06:54 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <yipxb.24191$Wy4.7933@newsread2.news.atl.earthlink.net>
Source record: 103931
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" wrote:
>
> And why should people who don't want
> antennas surround their house have to
> move miles away? (snip)

Never met such a person.

> Why should people who want to sit 3 cars
> on blocks have to move miles away?

City ordanances often cover that situation - no CC&R or Homeowners
Association required.

> (snip) That way I can see just how tall some
> wild weeds can grow in my front yard. (snip)

City ordanances often cover that situation - no CC&R or Homeowners
Association required.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5167. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:17:35 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <zspxb.24202$Wy4.18631@newsread2.news.atl.earthlink.net>
Source record: 103932
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Stephen M.H. Lawrence" wrote:
>
> I work as a Title Examiner, so this is right
> up my alley. Many, many homeowners take
> ownership of a property in "fee simple,
> subject to reservations, easements, and
> covenants of record, if any," and don't inform
> themselves about what those reservations
> (read: Restrictive Covenants) really are.
> They're just words on a piece of paper, and
> these contracturally obligating encumbrances
> are effectuated by conveyance, in other words,
> they have the power of the law, even though
> they don't appear on the deed.
>
> In other words, you have two pieces of paper:
> The deed, which makes a glancing reference
> to restrictions "if any," and the actual restrictions,
> which are filed with the County Recorder or
> Registrar of Titles. More people than you can
> imagine are getting hoodwinked, Dennis. (snip)

You've got that right. A friend was even show a list of restrictions when he purchased a house, only to be handed another list as he was moving in (from the Homeowners Association). Most of the restrictions were the same, but several more had been added. When he talked to his lawyer, he was told the wording of the sale made those restrictions enforceable.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5168. Re: Theological Rant

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:19:49 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FC625D1.3C36D30D@uwe.ac.uk>
Source record: 103934

Ed Price wrote:
>
> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> news:3fba9369$1_1@corp.newsgroups.com...
> > Zoran Brlecic wrote:
> > > If you bothered to investigate the issues in depth, instead of relying
> > > on the simplistic pre-packaged sound bites from that hypocrite clown
> > > Limbaugh radio show, ...
> >
> > If Rush Limbaugh was kidnapped, drugged, and an embryo was surgically
> > implanted in his gut against his will, who thinks he would not have an
> > abortion?
>
> Would that be a human embryo, or......?
>
> Ed
> WB6WSN

Blue whale for preference.

vy 73

Andy

5169. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:24:39 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <bzpxb.24207$Wy4.16894@newsread2.news.atl.earthlink.net>
Source record: 103933
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"WilleeCue" wrote:
> If that is the case then you sir are not doing
> your job representing the public. If you know
> there is someing shady going on you are
> obgliated to speak out in defense of the public
> or let someone else that will have the job.

As far as I know, it's not his job to review the overall business transaction.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5170. Change of frequency of EM signal

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:26:01 UTC
From: Tommaso Parrinello <tommaso.parrinello@virgilio.it>
Message-ID: <3FC62599.785A8F73@virgilio.it>
Source record: 103935

Hello,

I have a question to forward to you
Apart from Doppler, is there any other effects that might change the
frequency of a S-band radio signal (e.g interaction with medium, etc.)

Thanks in advance

Tommaso

5171. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 16:39:49 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <pNpxb.24228$Wy4.1272@newsread2.news.atl.earthlink.net>
Source record: 103936
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jack" wrote:
>
> BTW, I just love those artificial municipal fees...
> I was forced to pay $150 per year for snow
> plowing fees in a community where it snowed
> maybe once or twice a year and usually not
> more than an inch at most! Most years they
> never plowed a single road. My particular street
> NEVER saw a snow plow in the 20 years my
> family lived there.

On a side note, something similar could be said about related city or town taxes. Many years ago, the city here started collecting taxes to subsidize curb-side garbage pick-up. Those taxes were raised many times over the years. A few years ago, the city decided to end that service, requiring residents who want garbage pick-up to pay for it themselves. Of course, as you can guess, the taxes supporting that were never stopped. We're still paying those same taxes today, but the money is simply being used for something else.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5172. Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:02:33 UTC
From: Mike Ekholm <ekholm@ekholm.org>
Message-ID: <3fc62e29$0$41293$a1866201@newsreader.visi.com>
Source record: 103937

I will be puting a intenna mast up on the roof, and I plan on
running a wire from the mast to a grounding rod. My house is grounded
via just the water pipe, as far as I can tell, no grounding rod connects
to my electrial service. Do I need to run a wire from the grounding rod
to my water pipe to prevent a grounding loop?

What size wire should I use from the mast to the rod? and from the rod
to the water pipe, if it is required?

Thanks!

-Mike Ekholm
--
Mike Ekholm, UNIX Sys Admin - ekholm@ekholm.org
web: http://www.ekholm.org ham: kc0mpu irc: Nalez
~~~~~~
UNIX - The Swiss army knife of software.
~~~~~~

5173. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:07:17 UTC
From: garyarnold@aol.com
Message-ID: <fc4afcdc.0311270907.6e8640a7@posting.google.com>
Source record: 103938
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

"lbbs" <nonex@nonee.com> wrote in message news:<1069873720.791121@news.vaxxine.com>...
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49).

Get a Channel Master 8-bay bowtie UHF antenna, model 4228A. Don't waste your money on an amplifier. The 4228A is very directional, so you either have to aim the antenna in one direction, or get a rotor to turn the antenna towards the different stations you want to receive.

The ONLY thing better than the 4228A is a large UHF parabolic antenna which I don't recommend unless it is mounted on a tower with a heavy-duty rotor.

In limited situations a pre-amp will help. But in most cases, a better antenna is the answer. Unfortunately, NO all-channel antenna is good enough for weak UHF signals. IF you are getting a poor to fair picture on channel 49 using a VHF-UHF antenna, chances are you will get a good to excellent picture using the 4228A.

If you want the best reception, STAY AWAY from Radio Shack when it comes to television antenna products.

5174. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:11:41 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <hfqxb.324691$Tr4.998039@attbi_s03>
Source record: 103939
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:yipxb.24191$Wy4.7933@newsread2.news.atl.earthlink.net...
>
> City ordanances often cover that situation - no CC&R or Homeowners
> Association required.

Many additions in my area are not in the city. The only county requirement is to cut your yard one time a year. No county rule about having junk cars in your driveway either. CC&R is what keeps the new neighborhoods have nice yards. We have one trashy family that lived in our addition that would never cut their grass and had junk cars just sitting. That is just as worse as those people who put up their ugly antennas. If I move into a neighborhood where antennas are banned and my neighbor uses a new law to put one up, mine will go up as soon as he takes his down and his 4-sale sign goes up. Hope it doesn't cause some possible buyer to reconsider due to the stupid looking antenna towering above in the neighbors yard. Funny thing is that if a few people said why they didn't buy, I wonder if this die hard ham would have the balls to actually ask me to take it down until he sold the home. I think such a person would...they usually are only out for themselves.

5175. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:13:06 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <Ueqxb.326861$Fm2.336251@attbi_s04>
Source record: 103940
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:yipxb.24191$Wy4.7933@newsread2.news.atl.earthlink.net...
>
> City ordanances often cover that situation - no CC&R or Homeowners
> Association required.

Many additions in my area are not in the city. The only county requirement is to cut your yard one time a year. No county rule about having junk cars in your driveway either. CC&R is what keeps the new neighborhoods have nice yards. We have one trashy family that lived in our addition that would never cut their grass and had junk cars just sitting. That is just as worse as those people who put up their ugly antennas. If I move into a neighborhood where antennas are banned and my neighbor uses a new law to put one up, mine will go up as soon as he takes his down and his 4-sale sign goes up. Hope it doesn't cause some possible buyer to reconsider due to the stupid looking antenna towering above in the neighbors yard. Funny thing is that if a few people said why they didn't buy, I wonder if this die hard ham would have the balls to actually ask me to take it down until he sold the home. I think such a person would...they usually are only out for themselves.

5176. Re: Wind on antennas (was HF LPDA)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:21:11 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311270921.46fb5dd3@posting.google.com>
Source record: 103941

Well Mac the fold over was simple to check, they had just one tube in
tension when using the fold over. I kept that piece of tubing for ages
since the necking shape was so well defined. And why I mentioned it
was that I believe
stress aplied was in the region just below and in the plastisation
area below the Y.P. Either way they quickly beefed up that area with
welded plates.
On the patent area I can really understand your reluctance to seak new
work.
I had a couple of forays into that area and found it most fraustrating
since it now seems to come down to a battle of words and in one case a
throw out because I had used a continental 7 which had a cross on it !
I have one more to write , for my own satisfaction, where even if the
claims are not protectable the completion of the subject will give me
closure plus another area for antenna experts to be derisive of.
I once spoke to a miltary patent attorney from Washington regarding
the direction the patent office was going and he told me that most of
their
patents were hnow being rejected however the 15 minuite appeal
was being used with great success.
So cost cutting aproaches appears to be financially successful in
one section by overloading another section !

Cheers
Art

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:<vs8a9sdg9ub196@corp.supernews.com>...
> Dear Art: Indeed, fishing poles are a main stay of amateur radio - and
> very good value.
> As you have pointed out, I am a patent attorney (who is not looking
> for additional work). I am also a licensed professional engineer in
> Michigan. These two professions facilitate my "day job."
>
> As a follow on to your note about a certain Rohn tower (with an
> aside that their commercial products always conformed to standards - I
> have checked some of their calculations) I note that Heights Tower once
> included in their literature an accurate account of how to calculate
> "strength" and wind effects on their line of welded aluminum towers. It
> was clear from what they presented just what assumptions were being
> made. Such a full disclosure is commendable.
> 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA

> Home: JCM@Power-Net.Net
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0311250757.9c0ed8@posting.google.com...
> > Mac,
> > I understand your line of work is a patent attorney
> > but it easily could have been one as a mechanical engineer.
> > Your description of antenna mechanical design is outstanding.
> <snip>

5177. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:49:32 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC6392C.CCDAEE55@cwis.net>
Source record: 103942

Mike,
Just to satisfy my curiousity, what are you going
to use that much of it for?
'Doc

5178. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:54:20 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC63A4C.20EE8037@cwis.net>
Source record: 103943

Mike,
Putting the mast grounding aside for a minute, I think I'd
have a talk with whoever supplies your electrical power about
the ground that should be there and isn't.
'Doc

5179. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:55:31 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <bldcsvo4eln34cbqdgq42nh7ahg6v1rjgt@4ax.com>
Source record: 103947

On 27 Nov 2003 17:02:33 GMT, Mike Ekholm <ekholm@ekholm.org> wrote:

>I will be puting a intenna mast up on the roof, and I plan on
>running a wire from the mast to a grounding rod. My house is grounded
>via just the water pipe, as far as I can tell, no grounding rod connects
>to my electrial service. Do I need to run a wire from the grounding rod
>to my water pipe to prevent a grounding loop?
>

Based on my personal experience:

I would verify that you don't have a electrical system ground. If you
don't, then add one post haste. The number, size, and spacing vary
according to soil conditions and the size of your electrical service.
It's for your own safety. The water pipes/system should be considered
as a safety backup.

" Check the electrical codes for your area", or get to know an
electrician. Here the code required I have two, 8' ground rods six
feet apart connected with #6 wire for the electrical service for
both the house and the shop. Although fed from the same transformer
they have their own meters and breakers. The TV mast and small
satellite dish required their own 8' ground rod and only a #10 wire
for grounding. BTW we are also required to tie the electrical service
ground to gas pipes and water pipes. Which in our case is strange as
the water system is all plastic except for the water meter.

>What size wire should I use from the mast to the rod? and from the rod
>to the water pipe, if it is required?

You didn't say what type of soil you have in your area, but most
would be using bare, solid (or stranded), #6 or #8. As I noted above,
the TV antenna mast and satellite dish use only a #10. I use #2 and
have everything tied together for the ham station, but I have a large
antenna system that gets struck by lightening fairly often.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>Thanks!
>
>
>
> -Mike Ekholm

5180. Re: Theological Rant

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:58:29 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <8Xqxb.239497$ao4.859745@attbi_s51>
Source record: 103944

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
news:3FC625D1.3C36D30D@uwe.ac.uk...
> Ed Price wrote:
> >
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> > news:3fba9369$1_1@corp.newsgroups.com...
> > > Zoran Brlecic wrote:
> > > > If you bothered to investigate the issues in depth, instead of
relying
> > > > on the simplistic pre-packaged sound bites from that hypocrite clown
> > > > Limbaugh radio show, ...
> > >
> > > If Rush Limbaugh was kidnapped, drugged, and an embryo was surgically
> > > implanted in his gut against his will, who thinks he would not have an
> > > abortion?
> >
> > Would that be a human embryo, or......?
> >
> > Ed
> > WB6WSN
>
> Blue whale for preference.
>
> vy 73
>
> Andy

What do you have against blue whales? <grin>

Paul

5181. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 17:59:30 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <EaWdnVaUqvnnpluiRVn-hg@comcast.com>
Source record: 103945

"'Doc" <w5lz@cwis.net> wrote in message news:3FC6392C.CCDAEE55@cwis.net...
> Mike,
> Just to satisfy my curiousity, what are you going
> to use that much of it for?
> 'Doc

Gutter heating? :)

5182. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 18:00:37 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <EqqdnZc8HdUgplui4p2dnA@comcast.com>
Source record: 103946

> I've only done two orders with the WireMan, and sad to say
> both were entirely screwed up. Both orders caused delays
> in tower or antennas erections. Not that they didn't do their
> best to correct the problem--but I'll never deal with them again.
>
> Pete

Must Resist Delayed Erection Joke .... :)

5183. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 18:16:19 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <onecsvg9el7g29v969aavurumklcaqc01o@4ax.com>
Source record: 103948
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Thu, 27 Nov 2003 14:03:45 GMT, "Arthur Harris" <n2ah@hotmail.com>
wrote:

>

<snip>
>TV preamps are mainly intended to overcome feedline losses. They typically
>have rather high noise figure (6 dB or more). I doubt that a preamp alone
>will improve your reception significantly.
>
I think mine have a nf a bit lower, but regardless of the noise figure
you are correct. The amp is primarily for over coming feed line
losses. It *might* make some difference with the received signal.

>What type of antenna are you using now and how high is it? Is your house on
>a hill or in a valley? What is the terrain between you and the stations? TV
>signals are basically line-of-sight. Antenna height is a huge factor in good
>reception.
>
>The Radio Shack antennas that have a log-periodic VHF section and a
>corner-reflector UHF section are pretty good. The bigger the antenna, the
>better it will work. Don't trust the "range" figures in their catalog. Get
>the antenna up at least 25-30 feet (a chimney mount works well). Use RG-6
>coaxial cable to feed the antenna.

I've seen little difference in the performance between the high priced
and low priced antennas in the same category. The range figures are
pretty much for comparisons only as it's gonna be a rare day and with
a very tall tower that any one comes near the range of their biggest
antennas. I do actually come near the range listed for the big UHF
antennas, but I have them mounted in the neighborhood of 90 feet.

I used to install TV antennas for a business, but that was long ago.
>
>You can probably get a good idea of what you need by looking at your
>neighbors' roofs!
>

Very sensible approach.

>Since you're trying to receive signals from two different directions, you
>will need a rotator. There's no way around that (unless you want to install
>two separate antennas).

At UHF two antennas will probably be cheaper than a rotor, but that is
assuming all channels can be received well with two permanently

mounted antennas.

When using two antennas, *don't* tie them together with a combiner. Use separate feed lines (RG-6) and switch at the TV set. Most sets now days have at least two coax inputs any way.

>
>Then, there's always cable TV. ;->

At one time I had cable, satellite (C-band) and a big outside antenna with the ability to switch instantly between them.

The satellite reception was head and shoulders above the outside antenna. The outside antenna was good for local stations (out to about 60 miles). Of the three the cable had by far the poorest signal and it was a fairly recent system install, not just our home.

After two weeks we called the cable company and canceled.

With cable you are going to receive your local channels. With satellite you won't unless they are one of the *major* metropolitan areas and most stations won't give out waivers to allow you to receive the networks off satellite. I receive the national networks off C-band, but they required a wavier to move to the small dish...Without exception the stations said no even though I already do receive the networks.

So, I no longer watch any of the local stations. My antennas are high enough I can watch the network affiliates out of other areas. and I still receive "Prime time" (national networks) off C-band.

BTW Quality of cable signal varies greatly from one company to another.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>Art Harris N2AH
>

5184. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 18:17:41 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <ttfcsvs09nnr6shnpbiu76ga1rcfcebbrv@4ax.com>
Source record: 103949
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

On Thu, 27 Nov 2003 14:43:28 GMT, "Arthur Harris" <n2ah@hotmail.com>
wrote:

>"Steve Stone" wrote:
>> A good ground might help signal reception.
>
>Not a chance! A ground may be good idea for lightning protection,

And electrical system safety.

Roger (K8RI)

>but it's
>not going to improve TV reception.
>
>Art Harris N2AH
>

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5185. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 19:12:59 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <9eicsv4cv6fuqv865javi4i7dn62pklqdo@4ax.com>
Source record: 103950
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 11:33:22 GMT, "Midwest Kid" <NoSpamPlease@aol.com>
wrote:

>
>"Jack" <see.signature@bottom.for.my.email.address> wrote in message
>news:t52bsv4eohf47q32rd70ek3ccr2ppbgt65@4ax.com...
>>
>> You want *other* people to abide by rules set by their communities but
>> you don't seem to be able to live even with your own rules. Damn
>> hypocrite, I say!
>
>There are no rules. If someone puts up a huge antenna in our
>neighborhood....fine. I will then put up something that looks just as
>stupid. Many of the people in my area who have huge antennas usually live
>more rural and don't live in an addition. I am also only talking about
>these super high antennas. A very small antenna wouldn't bother me too
>much. Thing is that if I decided to make my yard an antenna field and put
>about 3-4 high antennas on my roof to cover everything, then ham wouldn't

I shot this from my neighbor's back yard on the 13th of this month
(Nov 2003)
http://www.rogerhalstead.com/ham_files/Tower30.htm

I had to get a building permit for a tower this size and it had to
conform to the proper engineering standards. (the guy anchors weigh
17,000# each. The lower guys are 4,000# working strength and the top
set are over 6,000).

I'm the only ham in the subdivision and within one and a half to two
miles that has a tower up. I've never received an RFI complaint with
the exception of one neighbor having a foot ball party in their garage
and the TV set had rabbit ears. I gave them a spare antenna for the
set in their garage. It's a good neighborhood except for one guy (5
houses away) who has one of those big mercury vapor lights on the face
of a small shed that serves as a reflector and shines right into out
back yard. So much for the Amateur Astronomy.

>care. However, something tells me that if he/she had to sell their home
>they would take down their antenna first and ask me to do the same if a
>realtor said my antennas were driving potential buyers away. That's the
>hypocrisy I don't like.

It's not likely to happen around here. People are far more worried
about the county wanting to build a *big* jail about 300 yards to the

south. One neighbor directly south of me and east of the spot where I shot the photo had their property appraised to refinance. The realtor dropped their appraised value by $10,000 and specifically stated it was due to the *likely hood* of the jail across the road. So much for the county telling us it won't affect out property values.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>

5186. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 19:23:59 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <jbsxb.12978$P%1.11587394@newssvr28.news.prodigy.com>
Source record: 103951
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Roger Halstead" <mynewsat@rogerhalsteaddot.com> wrote in message
news:9eicsv4cv6fuqv865javi4i7dn62pklqdo@4ax.com...
>
> I shot this from my neighbor's back yard on the 13th of this month
> (Nov 2003)
> http://www.rogerhalstead.com/ham_files/Tower30.htm
>
> I had to get a building permit for a tower this size and it had to
> conform to the proper engineering standards. (the guy anchors weigh
> 17,000# each. The lower guys are 4,000# working strength and the top
> set are over 6,000).
>

Exactly how tall is this big one? I'm green with envy.

Dee D. Flint, N8UZE

5187. help with T-R switch design

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 19:58:44 UTC
From: mike nelson <mike_nelson@acm.org>
Message-ID: <3fc65817$1_1@athena.netset.com>
Source record: 103952

Looking for a way to switch my 100 watt transceiver between separate receive and transmit antennas, perhaps using PIN diodes. Can anyone point me to some design circuits for this application?

thanks

Mike
W8LPR

5188. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 20:05:55 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <3fc658f4.296883@nntp>
Source record: 103953

Most ingenious. Thank you, Ivan!

On 27 Nov 2003 00:03:20 -0800, remove_ok1sip@atlas.cz (OK1SIP) wrote:

>Hi Lin,
>use a relatively common air-spaced AM capacitor, also one with
>deformed plates and temporary short-circuits can be used. Rip out two
>plates of every three, both from stator and rotor, evenly spaced. This
>way the spacing of plates triples.
>
>BR from Ivan OK1SIP

For email responses, remove "nospam_".

5189. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 20:44:36 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <1tCdnbM1IYTW_1uiRVn-jA@comcast.com>
Source record: 103954

I suggest you mark the edges of the plates that you are *not* removing with paint, or something, to make sure you end up with symmetrical spacing. You remove pairs of *adjacent* plates.

Tam/WB2TT
"Space Charge" <nospam_deepsea_77@yahoo.com> wrote in message news:3fc658f4.296883@nntp...
> Most ingenious. Thank you, Ivan!
>
> On 27 Nov 2003 00:03:20 -0800, remove_ok1sip@atlas.cz (OK1SIP) wrote:
>
> >Hi Lin,
> >use a relatively common air-spaced AM capacitor, also one with
> >deformed plates and temporary short-circuits can be used. Rip out two
> >plates of every three, both from stator and rotor, evenly spaced. This
> >way the spacing of plates triples.
> >
> >BR from Ivan OK1SIP
>
> For email responses, remove "nospam_".

5190. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 21:14:13 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <6sWdnZi81ruh9Fui4p2dnA@comcast.com>
Source record: 103955

Don't assume the new capacitor value will be 1/3 of the original. You have to take into account the thickness of the plates you removed. (I pried them off with needle nose pliers). The new value might be more like 1/6 of the original.

Tam/WB2TT

5191. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 21:17:47 UTC
From: amdx <amdx@att.net>
Message-ID: <%Rtxb.344303$0v4.18918084@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103956

> Just to satisfy my curiousity, what are you going
> to use that much of it for?
> 'Doc

I'm replacing the damaged cable on an underwater camera.
It has been a while since I looked at it, It might be 75ft or 125ft.

Thanks to all for the leads

Mike

5192. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 22:19:51 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <kiscsvgk4brnma3b28k055cmkkqtccirhl@4ax.com>
Source record: 103957
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 19:23:59 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"Roger Halstead" <mynewsat@rogerhalsteaddot.com> wrote in message
>news:9eicsv4cv6fuqv865javi4i7dn62pklqdo@4ax.com...
>>
>> I shot this from my neighbor's back yard on the 13th of this month
>> (Nov 2003)
>> http://www.rogerhalstead.com/ham_files/Tower30.htm
>>
>> I had to get a building permit for a tower this size and it had to
>> conform to the proper engineering standards. (the guy anchors weigh
>> 17,000# each. The lower guys are 4,000# working strength and the top
>> set are over 6,000).
>>
>
>Exactly how tall is this big one? I'm green with envy.

Thanks! <:-))

>
Twas all put up by hand too<:-)) Which is why it took me nigh onto
two years to finish. Well, it'll never be finished as long as it's
up, but ...

The Tower is a 97 foot ROHN 45G. The antennas are mounted on steel
tubing which runs through thrust bearings at the top and about 12
feet below the top of the tower to a BogBoy Rotor.

The TH-5 tri-bander is at 100 feet, the 7 element C3i 6-meter beam
(with 28'10" boom) is at 115 feet. The 144 and 440 vertically
polarized arrays are on a cross boom at 130 feet.

If you change that link to tower.htm
(http://www.rogerhalstead.com/ham_files/Tower.htm) it should link
to the whole story or just go to my home page, table of contents, and
click on "My Tower Project". There are also some shots of the
"office" end as well.

There is one photo of installing the TH-5 that will give a good idea
as to the scale of the antennas. Note a lot of that antenna work was
done in the winter with some pretty low wind chills.

"Doing it myself" was an educational and fun project, plus it saved a whale of a lot of money. I have some fears if the county puts a jail within 300 yards we won't be able to coexist and that'd mean moving. I'd pretty much have to resort to having a professional crew come in, take the tower down and then reinstall it where ever we moved which would cost a small fortune which I'm not sure I could afford.

This is a nice quiet, rural subdivision with lots of Deer, Wild Turkeys, and other critters that come right up in the yard.

BTW, IF you have a fast connection there is a panoramic view from the top of the tower at http://www.rogerhalstead.com/ham_files/towerview.htm It's a huge file of roughly 19 Megs so it'd be a lost cause with dial-up. It's not a great image as the images didn't match perfectly and created some artifacts where they are stitched together. (I was standing on the tower top plate with the wind gusting 20 MPH or so when I shot the photos hand held) I'm going to build a bracket and attach the camera to the mast. Then shoot an image about every 15 degrees as the antennas are turned. Unfortunately the landscape is now much less colorful.

73

Roger (K8RI)

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>Dee D. Flint, N8UZE

5193. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 23:08:38 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <voucsv8rqu7doo59imhv33b32qngh0se3b@4ax.com>
Source record: 103958
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 01:40:16 GMT, "Midwest Kid" <NoSpamPlease@aol.com>
wrote:

>
><Pappy127@usa.net> wrote in message news:3FBE7010.3717EB16@usa.net...
>> Thank you.... ....
>>
>> I am moving into a housing plan with such antenna restrictions. But
>> what housing plan doesn't have them. There is always someone trying to
>> tell some else how to live their lives, or knows what's best for you.
>
>You people amaze me. If you don't like covenants, then don't move into the
>neighborhood. The whole reason for the rules are to keep everything in
>check. Something tells me that neither of you would wants someone putting
>up some rusted out, 1970s RV and using it as a shed if the rules made that
>'illegal'

The point: Many times it's not possible to purchase a home any where
near work, or schools, or convenient shopping without finding
restrictive CC&Rs. For instance in California you quite conceivably
might find it necessary to move a 100 miles to find such an area.
It's my understanding that there are a great many restrictions on
antennas in Florida.

Here? These are ordinances, not CC&Rs, I have to keep my grass mowed,
I can not keep cars up on blocks. I can not park a mobile home along
side the house for more than a couple months. I can not leave a motor
home parked in the driveway, or along side the house for more than a
couple of months, but I can build a garage big enough to park it
inside. I can not build a separate garage or shop larger than my
home. Virtually any major repair requires a building permit. There are
restrictions on outside antennas *except* for hams. "In recognition
for the service provided to the community" there are no restrictions
on ham antennas, but there are safety regulations. I have to abide by
the "set back" rules the same as anyone else and towers taller than 80
feet require a building permit and must be properly engineered. Using
the engineering data in the ROHN catalog is permitted.

We (hams) have a very good working relationship with the county. When
they built their new Law Enforcement Center the Emergency Operations
Center in it included a ham station. The mobile EOC van also has a
ham station built in. These are not just 2-meter FM mobiles either.

In addition, we are working on small, limited range portable repeaters for voice, data, and video in conjunction with the EOC.

Some years back I served as the communications for one of the evacuation centers when a train with some really nasty stuff, derailed quite some distance away. That operation took a lot of hams as the evacuation area was quite large. We were fortunate that the wind pretty much favored us, but it changed enough that the shelter where I was located had to be moved *in a hurry*. (I now carry a gas mask in my kit) Moving a whole bunch of people who have just been awakened at 2 AM, through a cloud of *stuff* that makes it difficult to breathe and very limited visibility is an experience.

Where is here? Homer Township, Midland County Michigan.
>
You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5194. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 23:50:25 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <55wxb.102203$86.1224763@twister.tampabay.rr.com>
Source record: 103959

I bought mine surplus from SKYCRAFT in orlando Fl

http://www.skycraftsurplus.com/

Must's been cheap, I left not feeling any pain, might'a been 12 cents a foot

Yodar in O'do

"amdx" <amdx@att.net> wrote in message
news:RJnxb.342256$0v4.18886385@bgtnsc04-news.ops.worldnet.att.net...
> I'm looking to purchase 100 ft or 250 ft of RG-174a coax cable.
> Anyone have favorite sources for coax?
>
> Thanks
> Mike
>
>
>

5195. Re: 25 pf Air Variable Cap Sought

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-27 23:57:22 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <Cbwxb.102278$86.1225256@twister.tampabay.rr.com>
Source record: 103960

Hey !

Thanks for the URL...I need such an antenna for SWL

I dont need the rigid-specification capacitor you do, since I'm not
transmitting.

Accordingly I can get a 25 pf variable at Skycraft for a couple bucks but
their plate spaceing is half your specifications.

Yodar in O'do

==========
"Space Charge" <nospam_deepsea_77@yahoo.com> wrote in message
news:3fc53490.29195260@nntp...
> Am trying to build the 80M loop at:
>
> http://w1.859.telia.com/%7Eu85920178/antennas/frameant.htm
>
> ...and need a 25 pf air variable cap, but don't have one in the shack
> parts bin with a high enough voltage breakdown rating/plate spacing.
> The author recommends a plate spacing of 2mm (about .07").
>
> Anyone have one they'd care to part with?
>
> Short of that, a US parts source would be great...Jackson makes 'em,
> but they're in the UK, and a bit pricey at that.
>
> Thanks to the group,
>
> Lin/KJ6EF
> For email responses, remove "nospam_".
>

5196. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:00:31 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <fo1dsvciagamrck2ekr1dnu0861gduen1c@4ax.com>
Source record: 103961
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Thu, 27 Nov 2003 02:07:32 GMT, "Midwest Kid" <NoSpamPlease@aol.com>
wrote:

>
>"Brenda Ann" <brendad@shinbiro.com> wrote in message
>news:bpp8mhomm1@news1.kornet.net...
>>
>> I can understand where people have a right to not want someone storing a
>> dozen rusty cars on their front lawn, or allowing their grass to get 3'
>> tall.. but as far as antennas, etc.. they have no business telling a
>> homeowner what to do. It's not right that they should be telling people
>> what color they can paint their house, what kind of plants or animals they
>> can or cannot have, etc..
>
>Then why the hell is it 'right' that they tell your neighbor they can't have
>12 rusty cars in their yard? If you want to live without rules, get an
>older farm house or something. Don't move into a neighborhood and then
>complain about the rules you disagree with.

And that would solve what <LOL>
The majority of the land around here is zoned although the zoning
varies from township to township and county to county.

Here, even if you own the biggest farm in the region you still can't
have a pile of rusty cars in your yard. Now you could get your area
rezoned commercial and then get a license and then create a junk yard,
but it's more difficult to get farm land rezoned than to put a junk
yard near a residential area. You'd probably stand a better chance of
trying for the center of main street down town.

>
I attended a township meeting in another county and high on their list
was going after some guy who kept hauling junk into his yard against
zoning. (they figured most of it was stolen but old iron pipe and
tanks are difficult to trace).Another was some one with a bunch of old
tires laying out back. Besides being unsightly they are a health
hazard (mosquitoes and West Nile Virus) along with being a fire
hazard. One pile in a neighboring county caught fire. Now there was
a fire. There were over a million tires in that pile and it was a
legal storage.

Zoning tends to be along the lines of common sense. Safety for one
thing. CC&Rs OTOH are what some one wants to see, or not see, done or

not done, conformity. The ham tower serves a function whether of the greatest aesthetic appeal or not. The rusty cars benefit no one except possibly the owner.

So to when it comes to CC&Rs Vs ordinances. CC&Rs are open to interpretation by the HOAs and they can change those interpretations.

Say you move into a nice subdivision and like many the CC&Rs are so vague you need to get a legal opinion. Not satisfied you have the head of the HOA give you his/her opinion. As far as they are concerned you can put up that 100 foot tower on your 4 acre million dollar lot with the two million dollar home. You purchase, move in, put up the tower and get a visit from the members of the HOA who tell you the tower must come down. You point out the discussion with the head of the HOA and they simply state they must work in unison and he/she does not speak for the entire HOA.

Say you had the foresight to get the contract in writing. The same as above applies. Or they can downright change their minds as to the interpretation. Now with a lengthy legal battle and I assume any one owning a house and lot worth three million could afford to do that, there is no guarantee you'd win. Also due to being the outsider you would open yourself up for harassment which you might have a difficult time proving.

So back up to the zoning and regulations. Say you don't have to worry about CC&Rs, but discover the township has a prohibition against any structure over 25 feet. Typically, with a tactful approach pointing out that they are superseding a federal law when it comes to amateur radio towers might get you that variance. We had just such a case in a township north of Midland. Several hams had tried for years to put up towers, but to no avail. A new guy moved in and several months later had a 60 foot tower. He took the proper approach and was prepared.

OTOH if the township is immovable, you most likely will win a court battle and lawsuit, but it takes money to do that. Most often a *lot* of money. Normally a lot more than you'd get back. Vindictive township officials can be a royal pain, but nothing like vindictive HOAs.

OTOH you might discover there are no homes available without overly restrictive CC&Rs within 50 miles of your new job that pays $50,000 a year. What HOA are you going to fight on that much?.

Having said all that, I fully expect to see passage of a bill that will void any CC&R restriction on ham antennas deemed unreasonable within the next decade IF government continues in its current direction of recognizing the amateur service as an asset. Particularly in the light of Homeland Security.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S/N CD-2 Worlds oldest Debonair?)

www.rogerhalstead.com

5197. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:03:56 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bq60suhsu1@news1.kornet.net>
Source record: 103962
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Roger Halstead" <mynewsat@rogerhalsteaddot.com> wrote in message
news:voucsv8rqu7doo59imhv33b32qngh0se3b@4ax.com...
> We (hams) have a very good working relationship with the county. When
> they built their new Law Enforcement Center the Emergency Operations
> Center in it included a ham station. The mobile EOC van also has a
> ham station built in. These are not just 2-meter FM mobiles either.
>
> In addition, we are working on small, limited range portable repeaters
> for voice, data, and video in conjunction with the EOC.
>
> Some years back I served as the communications for one of the
> evacuation centers when a train with some really nasty stuff, derailed
> quite some distance away. That operation took a lot of hams as the
> evacuation area was quite large. We were fortunate that the wind
> pretty much favored us, but it changed enough that the shelter where I
> was located had to be moved *in a hurry*. (I now carry a gas mask
> in my kit) Moving a whole bunch of people who have just been awakened
> at 2 AM, through a cloud of *stuff* that makes it difficult to breathe
> and very limited visibility is an experience.

And therein lies the major difference. Whereas it is not a 'mandate' in the true sense of the word, it has long been a standing relationship between amateur radio ops and the local, state and federal authorities that hams perform essential communications and other assistance during times of emergency. (this is why, among other things, ham plates are not considered vanity plates in most, if not all, states). And these towers and arrays are important to the facilitation of those emergency communications.

5198. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:06:44 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <q44dsv0revke8d42ce4h28t1iommba8nur@4ax.com>
Source record: 103963
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 Nov 2003 16:31:45 -0500, Dave Holford
<mylastname@.deletethis.sympatico.ca> wrote:

>
>
>Frank Dresser wrote:
>>
>> "A.Pismo Clam" <Alaininvc@'86DASPAMnetscape.net> wrote in message
>> news:1069439807.747164@news-1.nethere.net...
>> > Hello All!
<snip>
>
>The thought occurs to me that in the "good old days" aircraft used to
>have wire antennas, either strung around the airframe or trailing below
>and behind.

Some still do

>
>Modern, high speed, aircraft can't do this so they have various
>solutions including HF probes and conformal antennas (I have seen
>unpainted panels on some large military aircraft which were identified
>as HF antennas) and it is not difficult to receive their signals over
>distances of several thousand miles. I wonder why no one has, at least
>as far as I am aware, attempted to adapt these solutions to Ham Radio?

The aircraft has a height above Terrain (HAT) advantage that few homes
are ever going to obtain. <:-))

>
>I have personal experience, some 40 years ago, with an HF antenna which
>consisted of the top half of the tail (about a 15 to 20 foot square
>metal surface) which was tuned by a remote ATU (Collins CU-351 ISTR) and
>performed at least as well as a fixed wire over the range of 2.5 to 30
>MHz. I had considered at one time covering one end of the house with
>foil and trying the idea against ground, but for some reason I
>encountered some opposition from another member of my household. I think
>she figured 15 antennas was enough!

Then there is the problem of electrical wiring on the inside of the
wall too. <:-))

The plane I'm building (335 MPH hot rod) is all advanced composite.
The plans call for the antennas to all be inside. Unfortunately the

VOR antenna is supposed to be in the horizontal stabilizer. They
changed the material so the horizontal stab is all carbon fiber.
Wellll...maybe it'd be good for deicing.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>
>Dave
>VE3HLU

5199. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:22:17 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <cf4dsvgj4vdgb8teh2authvr594gg61bcb@4ax.com>
Source record: 103964
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Sat, 22 Nov 2003 18:27:04 GMT, "Dee D. Flint" <deehays@qix.net>
wrote:

>
>"Stinger" <contact@newsserveronly.com> wrote in message
>news:uIwvb.21653$ow5.14641@bignews2.bellsouth.net...
>> Homeowners associations are a good thing! They are basically an agreement
>> that you and your neighbors will follow some clearly defined rules for the
>> specific purpose of maintining optimum property values for everyone. In
>> other words, you won't have to worry about buying an expensive house and
>> having your next-door neighbor decide to use his yard to store a dozen
>> wrecked automobiles while he builds a hot-rod or runs a car-repair
>business.
>> Common sense should tell anyone that their rights end when they start to
>> infringe on anyone else's, but sometimes you need it in writing. ;^)
>>
>
>Don't need a homeowner's association to prevent those kinds of violations.
>Cities have ordinances against them. If someone violates the ordinance you
>can file a complaint.
>
>> Receiving antennas are easily concealed. If you can find mine from the
>> street, you were born on Krypton. I think this is an overly-hyped
>problem.

And as Dee says, these are the kinds of installations that are more
likely to cause interference.

>>
>> Broadcasting antennas are another animal, though. For instance, nobody
>> wants to live next to some clown running a bunch of linear amps through a
>CB
>> "base station." It will literally be "seen" on well-shielded cable
>> television connections, and is a nuisance. I think that's a lot of what

That is a fault of the cable or someone using the cable even if the
amps are illegal and covered by some rather strict laws.
.
All it takes is one poorly shielded device hooked to the cable near a
transmitter. The device can create harmonics and mixing products that
will wipe out a channel, or even the entier service to an area. A
good example would be an attic antenna next door to some one who
hooked their rabbit ears to their TV set with the cable still

connected. The lower antenna is closer to the set and more likely
to cause interference. It is also more likely to couple RF into the
house electrical wiring causing all sorts of problems due to RF in
radios, TVs, stereos, CD players and computers.

I once took out an entier city's cable system with a 2-meter HT as a
demonstration. (a very brief demonstration at the cable office).
Two days later you couldn't find a leak in the system any where in
town.
>the
>> "external antenna" rules are meant to curb.
>>
>> -- Stinger
>>
>
>Again such CB operation is illegal and they can be just as big or bigger a
>nuisance with a mobile operation. Some of these guys have multikilowatt
>amps in their vehicles.
>
>Such association rules force the LEGALLY LICENSED operator to use low height
>indoor and hidden antennas. Theses types of antennas are far more prone to
>generate interference than something well up on a tower.

And it exposes the user to RF fields far greater than normal.
There is a reason I have my 2-meter antennas at 130 feet. Even there
I am limited to 380 watts into the antennas due to exposure limits.
At 30 feet I'd not even be able to stay with in limits using my 50
watt mobile on those antennas. Considering there is 228 feet of coax
from the rig to the antennas I could probably run a KW output and not
exceed the limits.

Actually...when it comes to exposure limits: My TH-5 is at 100 feet.
With 1500 watts into the antenna the RF limits for controlled access
are 6 feet above the ground at the base of the tower. I guess I
should paint a red strip around the tower at 6 feet. As that is slant
distance the height goes up rapidly as you move away from the base of
the tower

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com.

>
>Dee D. Flint, N8UZE

5200. Re: Excellent working 6 meter gain antenna...at a great price!

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:40:52 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <2Nwxb.7554$W7.725@bignews1.bellsouth.net>
Source record: 103965

I've checked their site. Nothing there like a secret-six, but there do have other interesting stuff..

thanks

Lloyd KD4HTw

"qrt" <qrt@qrtspam.net> wrote in message news:n2p9svk8janeo4qmr7e85cigg3bnmm31r8@4ax.com...
> I have a wire antenna from KMA Antennas called a Secret-Six. It's
> similar to a hentenna, but fed differently. Has 4 dB gain over a
> dipole and is bi-directional. I've been amazed how well it works. I
> don't know if they still make it or not.
> Jas
>
> On Tue, 25 Nov 2003 18:40:23 -0500, "Lloyd Mitchell"
> <lloydm75@hotmail.com> wrote:
>
> >How much power can it handle?
> >
> >
> >"Super Antennas For Less!" <superskyhooks@juno.com> wrote in message
> >news:aff1d4b5.0311230527.7d5f7b92@posting.google.com...
> >> Check it out! You wont be sorry.
> >>
> >> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3060793681
> >
>

5201. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 00:45:02 UTC
From: eawckyegcy@yahoo.com
Message-ID: <d3c57e81.0311271645.2de66035@posting.google.com>
Source record: 103966
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote:

> But if you were selling your home and I had a 1980 rusted Honda on blocks
> plus a used beer keg as a 'bird bath', do you honestly think that everyone
> that looked at your home wouldn't mind me as your neighbor?

Ah yes, the "but if he paints his house orange and puts a giant unicorn on the front lawn, the resale value of the properties in the area will drop!" nonsense. Let us suppose this would in fact occur. The neighbours gang together and nail an invoice to his door, and this is the "right" thing to do. What about the converse? Suppose someone instead made their property into a gorgeous work of art that _raised_ the value of the neighbouring properties? Surely this means he can issue invoices to all the neighbours he has "helped", right?

> That is the whole point of covenants. Something that protects me
> when I want to sell.

YOU protect your own property. It is why it is yours and not someone elses. These HOA's and similar entities are the analog of labour unions for property owners. Complete idiocy, with _ALL_ of the hideous bad effects of such things. Why have two bosses when one is bad enough? The protection you refer to is as illusory as the thousands of unionized workers who lose their jobs every year: "It's in the contract. So sorry."

5202. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 01:26:38 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <f09dsv0d8hho0sth48uln57084u9jaaprr@4ax.com>
Source record: 103967
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Oops!
>
>If you change that link to tower.htm
>(http://www.rogerhalstead.com/ham_files/Tower.htm) it should link

I should type what I say...
http://www.rogerhalstead.com/ham_files/tower.htm

Roger (K8RI)
You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5203. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 04:25:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC6CE31.27E34EA6@cwis.net>
Source record: 103968

Thanks...
'Doc

5204. Re: help with T-R switch design

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 05:44:57 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <pcn6qb-7rb.ln@p400bob.lse.com.au>
Source record: 103872

Hi Mike

I saw an article I think somewhere on the Linrad site about PIN switching.
Dont quote me though! (http://www.nitehawk.com/sm5bsz/linuxdsp/linrad.htm)

Cheers Bob VK2YQA

> Looking for a way to switch my 100 watt transceiver between separate
> receive
> and transmit antennas, perhaps using PIN diodes. Can anyone point me to
> some design circuits for this application?
>
> thanks
>
> Mike
> W8LPR

--

(The reply address is broken. Put bcnoop in front of the at!)

5205. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 05:58:38 UTC
From: dplatt@radagast.org
Message-ID: <vsdp0ej22e1l3e@corp.supernews.com>
Source record: 103869

>>I will be puting a intenna mast up on the roof, and I plan on
>>running a wire from the mast to a grounding rod. My house is grounded
>>via just the water pipe, as far as I can tell, no grounding rod connects
>>to my electrial service. Do I need to run a wire from the grounding rod
>>to my water pipe to prevent a grounding loop?
>
> No, Earth ground is earth ground is earth ground,

That's true, _if_ you happen to be living on a solid sheet of copper,
or a superconductor.

The actual DC resistance of "earth ground" across the width of a house
can be quite substantial. This can lead to a significant voltage
potential developing across "ground" under certain circumstances.

For this reason, the U.S. National Electric Code states that each
building may have only a single "grounding system". If you have two
or more ground points (ground rods, grounded water pipes, etc.) the
NEC says that you must "bond" them together with heavy-gauge wire,
precisely to overcome this resistance. 8-gauge is usually required,
and I believe that some municipalities require even heavier wire such
as 6-gauge.

If you don't do this, then under certain circumstances, an electrical
fault can have some very unfortunate effect. Let's say you have a
grounded antenna mast, with its own ground rod, but that you haven't
bonded it to your electrical service-panel ground. Let's also assume
that:

- You've got a DC-grounded antenna (e.g. a copper-pipe J-pole)
attached to the mast

- Your rig is plugged into an outlet, whose ground wire happens to
come loose, and

- Your rig develops an internal hot-to-chassis electrical short.

At this point, you're probably going to be in a world of hurt. The
"hot" current is going to flow into the rig's chassis, through the
coax braid to the antenna, down the mast to the ground rod, and
through the soil to the service panel. The soil resistance is going
to have two very bad effects:

- It can limit the current flow through ground to below the circuit
breaker's trip limit.

- It'll allow the rig chassis, and the antenna and mast, to remain at a fairly high voltage above neutral.

As a result, you can end up with both a shock hazard, and a risk of severe heating and fire. 10 amps through your coax could spoil your whole day.

> You only need to ground the antenna to the grounding rod, the water >pipe and antenna ground rod are both on the same circuit. Just think >of the earth ground as a very large negative terminal on a car >battery.

Nope. The two ground points could very well have tens to hundreds of ohms of soil resistance between them. For purposes of electrical safety, bond 'em together!

As Bob Pease of National Semiconductor said (in a different context, also having to do with ground impedance): "You may be able to trust your friends. If you're very fortunate, you may be able to trust your government. You cannot trust your ground."

I'd strongly encourage the OP to check the his local electrical codes to find out what the ground-bonding requirements are in his area.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

5206. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 07:02:16 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <b7-dnQBKzqp2b1uiRVn-sw@comcast.com>
Source record: 103870

> As Bob Pease of National Semiconductor said (in a different context,
> also having to do with ground impedance): "You may be able to trust
> your friends. If you're very fortunate, you may be able to trust your
> government. You cannot trust your ground."

A very smart guy.

My rule for current: "Always put it back where you got it from."
If you let it find it's own way home, it will usually make a mess.

5207. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 07:14:29 UTC
From: James Sweet <jamessweet@hotmail.com>
Message-ID: <pBCxb.243199$275.901285@attbi_s53>
Source record: 103871
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

"BFriedl" <junk-remove-@bfriedl.com> wrote in message
news:z1gxb.13246$o9.2224@fed1read07...
> Yukio wrote:
> > which is always present in any signal. I would have to assume that you
must
> > be using a dial-up MODEM because this question doesn't make much sense
if
> > you are using a Cable MODEM and already have access to a Cable Service
> hmm, further investigation shows that his email ends in shaw.ca Going to
> www.shaw.ca shows its a cable provider. So you have HSI?
> http://www.shaw.ca/narrowband/prod_shsi_speed.html
>

It's understandable, we had cable internet for years without cable TV until
my roommate got a gf who nagged him about it. Personally though I think TV
is a waste of time, I only use mine for watching DVD's.

5208. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 14:22:10 UTC
From: Mike Blake <k9jri@hotmail.com>
Message-ID: <mSIxb.13047$P%1.11716436@newssvr28.news.prodigy.com>
Source record: 103874

"Keith" <kilo_watt_radio2@yahoo.com> wrote in message
news:dBCxb.20079$sb4.2602@newsread2.news.pas.earthlink.net...
> On Fri, 28 Nov 2003 05:58:38 -0000, dplatt@radagast.org (Dave Platt)
> wrote:
>
> >Nope. The two ground points could very well have tens to hundreds of
> >ohms of soil resistance between them. For purposes of electrical
> >safety, bond 'em together!
>
> They are bonded together by earth ground. The antenna is not going to
> carry any AC load if your station is grounded. Who knows maybe a 747
> will clip the guys antenna at the same time as lightening hits the 747
> knocking the ground wire from the antenna and creating a huge fireball
> above his house.
>
Keith, In this case you are not providing helpfull advice as it is very
important that a wire bond exist between grounding systems. It is
impossible to predict the direction that the fault will eventually come from
there fore it is important to project from an many senarios as possible.
Lightning hitting a nearby object, like a tree, will raise the ground
potential around the tree by many thousands of volts and this voltage may
vary greatly a few feet away. One ground rod many be at a 5,000 volt
potential while the other rod is at a 3,000 volt ground potential. In this
case the 2,000 volts will look for the easiest path to equalize themselves.
It could be the bonding wire or, without the bond, the radio equipment.

73 - Mike - K9JRI

5209. Cell phone antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 14:48:18 UTC
From: Dan <rxi@worldnet.att.net>
Message-ID: <SeJxb.348980$0v4.18986656@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103875

Any suggestions on building a homebrew antenna for a cell phone.I live at the extreme edge of coverage and drop out often.It would be for the 800mhz band.Thanks in advance. Dan

5210. FS: 750 ft. 5/8" 50 OHM Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 16:14:00 UTC
From: jonweiner@aol.com
Message-ID: <20031128111400.01998.00000864@mb-m27.aol.com>
Source record: 103876

For Sale: 750 foot spool new, unused, Times Fiber Communications T10 series 625 50 OHM 5/8" semiflex hardline. Solid copper center conductor - handles over 10 KW - jacketed - foam polyethylene dielectric - very low attenuation. I can e-mail specification sheet. Price for complete spool: $500., for pick up only at Greenville, SC.

5211. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 18:00:34 UTC
From: Mike Ekholm <ekholm@ekholm.org>
Message-ID: <3fc78d42$0$21570$a1866201@newsreader.visi.com>
Source record: 103877

On 27 Nov 2003 17:02:33 GMT, Mike Ekholm just had to say:
: I will be puting a intenna mast up on the roof, and I plan on
: running a wire from the mast to a grounding rod. My house is grounded
: via just the water pipe, as far as I can tell, no grounding rod connects
: to my electrial service. Do I need to run a wire from the grounding rod
: to my water pipe to prevent a grounding loop?

Thanks for the responses folks. I will run 10ga from the mast to the ground
rod, and I will also run a wire from my house ground system to the ground rod
to prevent a ground loop. I will need to do some code reading to find
what size wire I need to run from the house gound system to the rod.

Thanks!

-Mike Ekholm
--
Mike Ekholm, UNIX Sys Admin - ekholm@ekholm.org
web: http://www.ekholm.org ham: kc0mpu irc: Nalez
~~~~~~
UNIX - The Swiss army knife of software.
~~~~~~

5212. WANTED: comments on the Elk Antenna 2m/70cm log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 19:14:25 UTC
From: jason_hsu@my-deja.com
Message-ID: <f7d9a152.0311281114.167243ff@posting.google.com>
Source record: 103878

I'm seeking a directional 2m/70cm antenna with substantial gain over efficient omnidirectional antennas, such as my roll-up J-pole and my mobile antenna. I considered the MFJ 1768, but I hear that MFJ antennas aren't that well made. I considered the Cushcraft A2706S Dual Band Yagi, but I hear that Cushcraft is notorious for inflated dB claims. The Arrow II Satellite has rave reviews from everyone, but I haven't worked satellites, though I might sometime in the future. I'm not too crazy about the BNC connectors. I know that there are adaptors, but I'd prefer the convenience of sticking to SO-239s and PL-259s. Most coax jumpers you can buy have PL-259s on them, most of the good antennas have SO-239s on them, and one of my pet peeves in ham radio is the use of oddball connectors.

I'm considering the dual band directional antenna from Elk Antennas (http://www.elkantennas.com/2m4405element.htm). It would come in handy for emergencies (like Hurricane Isabel), as I could point the antenna towards the repeater/net control, and if I don't need the extra gain, I can just cut back on my power output and conserve battery power.

I haven't heard much about the Elk Antenna 2m/70cm log periodic, so I would appreciate comments from anyone who has used this antenna. Elk Antennas also claims that you can use this log periodic for satellite communications without a duplexer.

Jason Hsu, AG4DG
http://www.jasonhsu.com/ee.html
http://groups.yahoo.com/group/eeham

5213. Re: WANTED: comments on the Elk Antenna 2m/70cm log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 20:14:26 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <B0Oxb.11460$ML6.5029@fed1read01>
Source record: 103879

Below URL didn't work -- try this one -- copied from the address box

http://www.elkantennas.com/index.htm

More antenna manufacturers at URL:
http://ac6v.com/antdealer.htm

Homebrew antennas including stealth at URL:
http://ac6v.com/antprojects.htm

Antenna Reviews at URL:
http://www.eham.net/reviews/
--
73 From The Wilderness Keyboard

"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0311281114.167243ff@posting.google.com...
> I'm seeking a directional 2m/70cm antenna with substantial gain over
> efficient omnidirectional antennas, such as my roll-up J-pole and my
> mobile antenna. I considered the MFJ 1768, but I hear that MFJ
> antennas aren't that well made. I considered the Cushcraft A2706S Dual
> Band Yagi, but I hear that Cushcraft is notorious for inflated dB
> claims. The Arrow II Satellite has rave reviews from everyone, but I
> haven't worked satellites, though I might sometime in the future. I'm
> not too crazy about the BNC connectors. I know that there are
> adaptors, but I'd prefer the convenience of sticking to SO-239s and
> PL-259s. Most coax jumpers you can buy have PL-259s on them, most of
> the good antennas have SO-239s on them, and one of my pet peeves in
> ham radio is the use of oddball connectors.
>
> I'm considering the dual band directional antenna from Elk Antennas
> (http://www.elkantennas.com/2m4405element.htm). It would come in handy
> for emergencies (like Hurricane Isabel), as I could point the antenna
> towards the repeater/net control, and if I don't need the extra gain,
> I can just cut back on my power output and conserve battery power.
>
> I haven't heard much about the Elk Antenna 2m/70cm log periodic, so I
> would appreciate comments from anyone who has used this antenna. Elk
> Antennas also claims that you can use this log periodic for satellite
> communications without a duplexer.
>
> Jason Hsu, AG4DG
> http://www.jasonhsu.com/ee.html
> http://groups.yahoo.com/group/eeham

5214. 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 20:42:49 UTC
From: Scott Hill <scottnet@ntlworld.com>
Message-ID: <BrOxb.174$JZ6.72@newsfep1-gui.server.ntli.net>
Source record: 103880

I live just over 300m away from a house i need to make WiFi comms. with. It is almost LOS but there are a few trees in the way. Ive been looking at a few directional antennas on the net, but most are made from bean cans and pringle tins. On principle, the bean cans look like they should work, but could anyone please make any suggestions as to their credibility or liklehood of working!

Any other (affordable!) means to make the comms. using an off the shelf 802.11 card?

thanks!
scott :)

5215. Re: Crossed Yagi polarisation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 22:43:43 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <bq8qb4$20lbho$1@ID-52642.news.uni-berlin.de>
Source record: 103884

It won't matter, as the polarization from ISS is pretty random.

Either right or left hand circular should be superior to either horizontal or vertical, and that was my experience when I was playing around with ISS a lot. I used an Egg Beater from M2 and aside from acting very strangely in the wet weather, it worked rather nicely (right hand circular). Since then I have been using a simple vertically polarized J-pole and it also works very well. The RHC antenna was better more often than the J-pole, of course...but the J-pole didn't quit working every time it rained <vbg>.

What it amounts to is with a right hand circularly polarized antenna, I rarely saw a complete reversal of the signal to left hand. On the other hand, I frequently saw linear polarization fades to 0, using either horizontal or vertical polarization. At least that is my experience.
73,

...hasan, N0AN

"G�ry Duyck" <gery@duyck-co.be> wrote in message
news:3fc3bdab$0$3238$ba620e4c@reader0.news.skynet.be...
> Which polarisation should I best use on my 10 element crossed Yagi,
> to work ISS ???
> Left Circular or Right circular ?
>
> I can't easy switch between the both right now, so for now on
> a receive on one, and transmit on another won't work.
> I don't have the right relais boxes...
>
> But I was just curios about what I could best use, just in case ...
>
> Thanks for help,
>
> 73's
> ON4GDK, Gery D.
>
>

5216. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-28 23:18:49 UTC
From: dplatt@radagast.org
Message-ID: <vsfluplb4knf05@corp.supernews.com>
Source record: 103881

>>Nope. The two ground points could very well have tens to hundreds of
>>ohms of soil resistance between them. For purposes of electrical
>>safety, bond 'em together!
>
> They are bonded together by earth ground.

The National Electric Code says otherwise. Earth ground is *not*
considered adequate bonding for the purposes of electrical safety.

> The antenna is not going to
>carry any AC load if your station is grounded. Who knows maybe a 747
>will clip the guys antenna at the same time as lightening hits the 747
>knocking the ground wire from the antenna and creating a huge fireball
>above his house.

The whole purpose of proper electrical *safety* grounding is to ensure
that when things go wrong (short circuits, open neutrals, etc.), they
go as *little* wrong as possible.

Failing to bond ground rods together would be one of those things
which would make no difference *normally* (in the absense of faults in
the building wiring). If a wiring fault, short circuit, etc. were to
occur, proper ground-rod bonding could make the difference between a
tripped circuit breaker (if you're run a heavy-gauge bonding wire),
and a burned-down building (if you didn't bond 'em, and the current
flow through the soil wasn't enough to trip the breaker).

The bonding rule is there for a very good reason... safety.

As a very practical matter: if you fail to follow the Electrical Code
(or your own local rules, if different), then your home may fail
inspection if you try to sell it, and (if a fire occurs) your
insurance company may refuse to pay your claims if they find a
not-to-code electrical installation/modification.

Bonding the grounds together will cost maybe $10 worth of wire. It's
cheap insurance.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5217. Re: WANTED: comments on the Elk Antenna 2m/70cm log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 00:05:48 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <XJOdnfx7X_mFfFqi4p2dnA@ctc.net>
Source record: 103882

> I'm seeking a directional 2m/70cm antenna with substantial gain over
> efficient omnidirectional antennas, such as my roll-up J-pole and my
> mobile antenna. I considered the MFJ 1768, but I hear that MFJ
> antennas aren't that well made. I considered the Cushcraft A2706S Dual
> Band Yagi, but I hear that Cushcraft is notorious for inflated dB

If the key word is substantial then you need to be looking at another antenna. YOu can not get gain with out boom length. I would not think of getting an antenna for 2 meters without a boom length of atleast 5 feet. I would really go to 10 feet or longer if I was going to mount the antenna outside. Just looking at the Elk antenna I would say that it may have the close to the gain of a 3 element beam.

5218. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 00:34:26 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <n5ofsvs9217kdek50f6n3hl6cu4uf7sk6q@4ax.com>
Source record: 103883

On Fri, 28 Nov 2003 05:33:33 GMT, Keith <kilo_watt_radio2@yahoo.com>
wrote:

>On 27 Nov 2003 17:02:33 GMT, Mike Ekholm <ekholm@ekholm.org> wrote:
>
Couple of points here:

>>I will be puting a intenna mast up on the roof, and I plan on
>>running a wire from the mast to a grounding rod. My house is grounded
>>via just the water pipe, as far as I can tell, no grounding rod connects
>>to my electrial service. Do I need to run a wire from the grounding rod

You need an electrical ground for safety and compliance with the
national electric code.

>>to my water pipe to prevent a grounding loop?
>
> No, Earth ground is earth ground is earth ground, if your electricity

Earth ground is earth ground at that point and that point only.
"Earth" has a resistivity (measured in Ohms per cubic centimeter)

>wasn't properly grounded then you would not be receiving electricity.

A good ground has absolutely noting to do with receiving power from
the mains. They return via a neutral, not ground. Ground in this
instance is for safety, and not required for operability.

>Basically you are earth grounding the antenna to help with nearby
>strikes of lightening or static discharge. One of the key items you
>will also need is a lightening arrestor in line with your coax. The
>only exception to the earth ground for electricity & phone lines is on
>coral reefs. If it makes you feel better then you can run a ground rod
>to earth for your electricity, but it will have no effect either way.
>
>>
>>What size wire should I use from the mast to the rod?
>
>The bigger the better, I usually use 10 or 12 gauge.
>
>>and from the rod
>>to the water pipe, if it is required?
>
> You only need to ground the antenna to the grounding rod, the water
>pipe and antenna ground rod are both on the same circuit. Just think
>of the earth ground as a very large negative terminal on a car
>battery.

At this point I'd like to share a story. It's a story I know well as it happened to me and it is directly applicable to this situation.

Back in 1966 I build a good size Ranch Style home out in the country. The soil was a sand, clay mix and was usually damp. The house was about 75 feet long.

My ham shack was in the SE corner of the basement in a finished (and insulated) 13 X 21 foot room. The station I was using was along the south side of that room. The transceiver was a Yaesu FT-101B. Unbeknownst to me the solder joint on the inside of the power socket in the rig was oversize and could contact the chassis. The rig was grounded to an 8' copper plated ground rod just outside the wall. The electrical service came in near the other end of the house and had its own ground rod.

Now I had a quarter wave 40 meter vertical in the west yard about 150 feet from the rig. The antenna had its own ground rod at the base and a bunch of bare copper radials laid out on the ground.

It was spring, the ground was wet, and I noticed one of the radials had come loose and coiled up. so...I walked over, picked up the radial, pulled it straight, bent the hook at the end and knelt down to stick the end back in the ground.

As soon as my knees touched the wet soil that sucker grabbed me and it hung on with quite a grip. How I managed to roll backwards, I'm really not sure, but when my knees broke contact with the ground I threw that radial!

Once I got my breath back, I went inside, got my Simpson multimeter, and proceeded to check out the system. The first thing I did was check the antenna. It was nearly 120 volts AC to ground. I stuck one probe in the dirt about 3 inches from the ground rod and the other as far out as I could reach. I was measuring over 90 volts between the two points. (connected only by damp soil)

The current was not enough to trip the breaker, it was not enough to over heat the coax, but it was far more than enough to tie me in knots. Had my knees not broken contact I have no doubt it would have been fatal. The current was flowing through my hands, up my arms, down through my chest and upper legs and out my knees. I could not breathe and I seriously doubt my heart was beating during that time.

It didn't take a lot of trouble shooting to find the guilty solder joint (from the factory). The chassis was hot and tied to a ground rod right outside, or within 8 feet. It was almost 75 feet to the system ground and 75 feet the other side of the system ground the coax ground was tied to a ground rod. The two parallel grounds did not provide enough current to trip the breakers or damage any equipment. (today's ground fault breakers and/or outlets are a great thing).

I do not have a photo of that particular station, but the following is of the same operating position. The yaesu was in the same location as

the KWM-2. http://www.rogerhalstead.com/ham_files/boat2.htm The photo is from the late 70s.
I'm reorganizing my pages so not all links are operable at present and the return will not take you back to my ham history although the one to the home page works and my ham history is accessible from the table of contents.

The point is that "ground is not ground" in the strict sense of the word. It's a good idea to tie all grounds back to a common point for safety.

When the electrical inspector checked out my last upgrades he made mention of some one in his area (some years back) that only had a connection to the water pipes. They had to change the water meter. Every thing went fine until they went to place the new meter in the line. When the guy took a holed of the water pipe with one hand and the meter with the other, it had him. The way the inspector told the story I understood it was fatal.

As to lightening, it gets complicated. The rise time of a strike is so fast that it can induce voltages of several thousand per meter in a nearby piece of wire. Grounds are good, but they may not prevent damage. Everyone should be sure to adhere strictly to the electrical code for their area. Those ordinances and regulations are there for a very important reason.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com.

5219. Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 01:39:15 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <7NSxb.4416$zL1.117578@news1.news.adelphia.net>
Source record: 103885

I'm getting ready to install some sort of vertical for my station, so I'm not warming the clouds on 80 meters.

What will be the results of only having radials on one side of the antenna? I have a choice of three places to put the thing, and in each place the radials can only go one way.

- Mike KB3EIA -

5220. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 02:25:58 UTC
From: k9sqg@aol.com
Message-ID: <20031128212558.28460.00001073@mb-m14.aol.com>
Source record: 103886

That is not a wise idea. If your mast takes a direct hit, or if there is one nearby, there is a possibility that some of the energy will go into the house via that ground rod. Antenna grounds should always be isolated from housewiring grounds.

5221. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 03:00:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bq925a$2p8$1@hercules.btinternet.com>
Source record: 103887

Antenna grounds should always be isolated from
> housewiring grounds.

==========

Unless your antenna is under another distant thundercloud you must have
suicidal tendencies. ;o)

5222. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 03:22:17 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fc8132b_1@news1.prserv.net>
Source record: 103888

Mike:

I would sure look at Teflon for that application. RG-400 or something like that. Look at Times Fiber or Pasternack web sites for identification. I've used a lot of RG-174, and it invariably breaks before I am through with it, while the same size Teflon is much stronger.

--
Crazy George
Remove N O and S P A M imbedded in return address

5223. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 05:23:05 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <g1bgsvs2g4fa9trpjfdhb1u49cnt78dshs@4ax.com>
Source record: 103889

On 29 Nov 2003 02:25:58 GMT, k9sqg@aol.com (K9SQG) wrote:

>That is not a wise idea. If your mast takes a direct hit, or if there is one
>nearby, there is a possibility that some of the energy will go into the house
>via that ground rod. Antenna grounds should always be isolated from
>housewiring grounds.

Here I have everything tied together, but it's not a normal
installation. There are 30 ground rods connected by over 600 feet of
bare #2 copper. All ground rods are bonded (CadWelded) together
forming a network which should keep any particular ground and
equipment at the same potential no mater where which tower would be
hit. Although the likely hood of anything other than the main tower
getting hit is unlikely. It's 130 feet, the top of the multi band
vertical on the shop is 60 feet and the mast at the other end of the
house is only 25 feet.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5224. Re: Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 05:45:57 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <poWxb.148460$Dw6.614281@attbi_s02>
Source record: 103890

It will skew your pattern a bit. If you can elevate your radials, you will needed fewer of them. Take a look at http://force12inc.com/F12-SE-Yagi-tuning-Elev-Radials-1-2.htm.

Paul

"Mike Coslo" <mcoslo@adelphia.net> wrote in message news:7NSxb.4416$zL1.117578@news1.news.adelphia.net...
> I'm getting ready to install some sort of vertical for my station, so
> I'm not warming the clouds on 80 meters.
>
> What will be the results of only having radials on one side of the
> antenna? I have a choice of three places to put the thing, and in each
> place the radials can only go one way.
>
> - Mike KB3EIA -
>

5225. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 07:09:12 UTC
From: Pappy127@usa.net
Message-ID: <3FC84618.506D99AD@usa.net>
Source record: 103891
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

WHO are you to tell me or someone else what you consider is "in check" or not? You deal with your property and the rest of us shall deal with ours. Your starting to sound like your on the board of some HOA who enjoys telling their neighbors what they can and cannot do on THEIR property.

People that purchase a nice house for let's say 200,000+ are not going to have some junk vehicle sitting in their yard, paint the house bright pink, etc.. Most HOA's require you to hook up to (how is getting the kick back)cable, they don't want even the 18" dishes. Well they finally have lost out on that one. That's only the start.

Trespassers will be dealt with according to the law. That includes HOA COPS.

Midwest Kid wrote:
>
> <Pappy127@usa.net> wrote in message news:3FBE7010.3717EB16@usa.net...
> > Thank you.... ....
> >
> > I am moving into a housing plan with such antenna restrictions. But
> > what housing plan doesn't have them. There is always someone trying to
> > tell some else how to live their lives, or knows what's best for you.
>
> You people amaze me. If you don't like covenants, then don't move into the
> neighborhood. The whole reason for the rules are to keep everything in
> check. Something tells me that neither of you would wants someone putting
> up some rusted out, 1970s RV and using it as a shed if the rules made that
> 'illegal'

5226. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 10:35:22 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311290235.2d2c93e5@posting.google.com>
Source record: 103892

k9sqg@aol.com (K9SQG) wrote in message
news:<20031128212558.28460.00001073@mb-m14.aol.com>...
> That is not a wise idea. If your mast takes a direct hit, or if there is one
> nearby, there is a possibility that some of the energy will go into the house
> via that ground rod. Antenna grounds should always be isolated from
> housewiring grounds.

If all grounds are at the same potential, no current can flow between them.
Not to mention the NEC requires it in the U.S. MK

5227. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 13:55:02 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <Zx1yb.253283$275.924957@attbi_s53>
Source record: 103893
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FC84618.506D99AD@usa.net...
> WHO are you to tell me or someone else what you consider is "in check"
> or not? You deal with your property and the rest of us shall deal with
> ours.

Fuck that. If I move into an CC&R addition, I expect people to follow the rules. I would hope my neighbors would be smart enough to read important real estate documents. I don't care if my home is $300K. If some ham puts up a huge antenna and they make an exception, I will be documenting everything. As soon as that ham puts up a 4-sale sign, my huge ugly tower will go up. You wouldn't be against _my_ right to do this, right? If the ham had the balls to even say something about it I would laugh. In other words the ham would want his tower when it suits _him_, however if he takes it down to sell the home and a neighbor puts one up...that's just not right.

5228. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 14:28:00 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <Q12yb.26224$Rk5.11967@newsread1.news.atl.earthlink.net>
Source record: 103894
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote:
> Midwest Kid wrote:
> >
> > You people amaze me. If you don't like
> > covenants, then don't move into the
> > neighborhood. The reason for the rules
> > are to keep everything in check. (snip)
>
> WHO are you to tell me or someone else
> what you consider is "in check" or not? You
> deal with your property and the rest of us
> shall deal with ours. Your starting to sound
> like your on the board of some HOA who
> enjoys telling their neighbors what they can
> and cannot do on THEIR property. (snip)

It does amaze me, Pappy, how many are so willing to accept, and even defend, additional restrictions on people's lives and property in this supposedly free country of ours. These homeowners associations, which are, in effect, a new layer of government, don't act in a democratic manner and neither respect, nor even clearly recognize, people's rights.

Instead, these homeowners associations remind me of the communist party committees found in neighborhoods throughout the former Soviet Union before it's collapse. Like these homeowners associations, those committees made neighborhood rules and insured area residents complied with those rules. The Soviet people gained freedoms after the fall of the Soviet Union and it's many committees. The American people are losing freedoms as these homeowners associations, and their CC&Rs, spread.

Some here have advocated just avoiding these homeowners associations, and their CC&Rs, by moving elsewhere. While that may be a temporary fix (serves their own self-interests at the moment), I'm sure many in the Soviet Union thought the same when they first saw the spread of those communist party committees. But, without open resistence by all, there was no place left to avoid those committees within just a few years. I sincerely hope the same cannot be said by young people about these homeowners associations in the not so distant future. However, everything I've seen suggests that is a clear possibility.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5229. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 14:41:55 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <Te2yb.347328$HS4.2932778@attbi_s01>
Source record: 103895
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote in message news:3FC84618.506D99AD@usa.net...
> WHO are you to tell me or someone else what you consider is "in check"
> or not? You deal with your property and the rest of us shall deal with
> ours.

Fuck that. If I move into an CC&R addition, I expect people to follow the rules. I would hope my neighbors would be smart enough to read important real estate documents. I don't care if my home is $300K. If some ham puts up a huge antenna and they make an exception, I will be documenting everything. As soon as that ham puts up a 4-sale sign, my huge ugly tower will go up. You wouldn't be against _my_ right to do this, right? If the ham had the balls to even say something about it I would laugh. In other words the ham would want his tower when it suits _him_, however if he takes it down to sell the home and a neighbor puts one up...that's just not right.

5230. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 15:03:31 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <9ochsvsgag4ibopg1u5kmb7pl2afhcmsdd@4ax.com>
Source record: 103896

On 29 Nov 2003 02:25:58 GMT, k9sqg@aol.com (K9SQG) wrote:

>That is not a wise idea. If your mast takes a direct hit, or if there is one
>nearby, there is a possibility that some of the energy will go into the house
>via that ground rod. Antenna grounds should always be isolated from
>housewiring grounds.

Well, you are certainly spouting bullshit! According to my 1996 copy
of the National Elecrtic Code, all grounds are to be bonded together.
Safety grounds, lightning grounds and antenna grounds. This is laid
out in sections 260, 800 and 820. I may have section 260 off a little
but I'm sure about 800 and 820. My NEC is at work on my desk where is
sees daily use resolving grounding issues concerning LAN, WAN and
telecom equipment. Talk to a telco central office construction
engineer (I work with them every day) about lightning, equipment and
safety grounds. Ask them what happens when one or another gets
isolated from the others.

Stop thinking with your ass and start using your head. Believe me, if
your insurance company found out that you wired things up contrary to
the NEC, they would have excellent grounds (pun intended) not to pay.

Russ

5231. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 15:05:07 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <nbdhsvk3iv7hdoq2efdm4ishpnmomcc3ha@4ax.com>
Source record: 103897

On Sat, 29 Nov 2003 05:23:05 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:

>On 29 Nov 2003 02:25:58 GMT, k9sqg@aol.com (K9SQG) wrote:
>
>>That is not a wise idea. If your mast takes a direct hit, or if there is one
>>nearby, there is a possibility that some of the energy will go into the house
>>via that ground rod. Antenna grounds should always be isolated from
>>housewiring grounds.
>
>Here I have everything tied together, but it's not a normal
>installation. There are 30 ground rods connected by over 600 feet of
>bare #2 copper. All ground rods are bonded (CadWelded) together
>forming a network which should keep any particular ground and
>equipment at the same potential no mater where which tower would be
>hit. Although the likely hood of anything other than the main tower
>getting hit is unlikely. It's 130 feet, the top of the multi band
>vertical on the shop is 60 feet and the mast at the other end of the
>house is only 25 feet.
>

Nice work Roger, ever work for the telephone company?

Russ

5232. Re: Benjamin Franklin On Outwitting Home Owner Associations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 15:10:39 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <1H2yb.4$yf.2@fed1read01>
Source record: 103898
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"They that can give up essential liberty to obtain a little temporary
safety deserve neither liberty nor safety."

Benjamin Franklins retort to the PHOA
Philadelphia HomeOwners Ass

They told old Ben to go fly a kite !!

From The Antenna In The Wilderness

5233. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 15:19:49 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <pO2yb.127812$Ec1.5340339@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103899
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:Q12yb.26224$Rk5.11967@newsread1.news.atl.earthlink.net...
>
>
> It does amaze me, Pappy, how many are so willing to accept, and even
> defend, additional restrictions on people's lives and property in this
> supposedly free country of ours. These homeowners associations, which
are,
> in effect, a new layer of government, don't act in a democratic manner
and
> neither respect, nor even clearly recognize, people's rights.
>

[snip]

If respecting people's rights was entirely consistant with human nature,
nobody would have considered writing a few of them down in the various
governmental Constitutions.

So, have many Homeowner's Associations dissolved themselves and handed
their responsibilities to a municipal government?

Frank Dresser

5234. Re: Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 16:02:24 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <kq3yb.4548$zL1.357446@news1.news.adelphia.net>
Source record: 103900

paulfriedman@comcast.net wrote:

> It will skew your pattern a bit. If you can elevate your radials, you will
> needed fewer of them. Take a look at
> http://force12inc.com/F12-SE-Yagi-tuning-Elev-Radials-1-2.htm.

I used an elevated radial antenna once. It worked pretty darn well. My problem is that I'm trying to sneak in burying the radials by "redoing" my back yard - or front if that is where I'm going to put the antenna. One of those xyl things, you know. I'll just tell her "The landscapers tell me we have to put in these wires so they can monitor the growth of the lawn". 8^)

- Mike KB3EIA -

>
> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:7NSxb.4416$zL1.117578@news1.news.adelphia.net...
>
>>I'm getting ready to install some sort of vertical for my station, so
>>I'm not warming the clouds on 80 meters.
>>
>>What will be the results of only having radials on one side of the
>>antenna? I have a choice of three places to put the thing, and in each
>>place the radials can only go one way.
>>
>>- Mike KB3EIA -
>>
>
>
>

5235. Re: WANTED: comments on the Elk Antenna 2m/70cm log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 16:45:35 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <Q24yb.19486$Ac3.11889@lakeread01>
Source record: 103901

For about the same price you can get a nice quad from Lightning Bolt.
Better gain and F/B.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Jason Hsu" <jason_hsu@my-deja.com> wrote in message
news:f7d9a152.0311281114.167243ff@posting.google.com...
> I'm seeking a directional 2m/70cm antenna with substantial gain over
> efficient omnidirectional antennas, such as my roll-up J-pole and my
> mobile antenna. I considered the MFJ 1768, but I hear that MFJ
> antennas aren't that well made. I considered the Cushcraft A2706S Dual
> Band Yagi, but I hear that Cushcraft is notorious for inflated dB
> claims. The Arrow II Satellite has rave reviews from everyone, but I
> haven't worked satellites, though I might sometime in the future. I'm
> not too crazy about the BNC connectors. I know that there are
> adaptors, but I'd prefer the convenience of sticking to SO-239s and
> PL-259s. Most coax jumpers you can buy have PL-259s on them, most of
> the good antennas have SO-239s on them, and one of my pet peeves in
> ham radio is the use of oddball connectors.
>
> I'm considering the dual band directional antenna from Elk Antennas
> (http://www.elkantennas.com/2m4405element.htm). It would come in handy
> for emergencies (like Hurricane Isabel), as I could point the antenna
> towards the repeater/net control, and if I don't need the extra gain,
> I can just cut back on my power output and conserve battery power.
>
> I haven't heard much about the Elk Antenna 2m/70cm log periodic, so I
> would appreciate comments from anyone who has used this antenna. Elk
> Antennas also claims that you can use this log periodic for satellite
> communications without a duplexer.
>
> Jason Hsu, AG4DG
> http://www.jasonhsu.com/ee.html
> http://groups.yahoo.com/group/eeham

5236. Coax Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 16:55:49 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <uLqdndAqTMDfUlWi4p2dnA@comcast.com>
Source record: 103902

Hello:

Question on Coax.

I am presently using a 50 foot run of 50 ohm coax to my scanner.

It's the 0.4 inch low-loss diameter stuff (I think LMR 400), and I wanted to add a short length of
a coax between this cable and the scanner to remove the strain on the radio's connector due to the stiffness of
the LMR 400.

All I can find pre-assembled with BNC's is 75 ohm RG59.

It's about a 3 ft length.

a. Think the 3 ft radio-to-75 ohm patch cable, then to the 50 ohm main cable will cause any "meaningful" loss
due to the Z mismatch ?

b. Would I have been better off using a 3 foot RG58 (50 ohm) patch cable, even though the RG58 is really lossy around 1 GHz ?

Thanks,
Bob

5237. Re: Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 17:13:16 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <Ls4yb.354622$Fm2.354776@attbi_s04>
Source record: 103903

Right... that's not an elevated radial, dear... It's for the climbing roses
I'm going to plant sometime in the next 27 years. :)

Paul AB0SI

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:kq3yb.4548$zL1.357446@news1.news.adelphia.net...
> paulfriedman@comcast.net wrote:
>
> > It will skew your pattern a bit. If you can elevate your radials, you
will
> > needed fewer of them. Take a look at
> > http://force12inc.com/F12-SE-Yagi-tuning-Elev-Radials-1-2.htm.
>
> I used an elevated radial antenna once. It worked pretty darn well. My
> problem is that I'm trying to sneak in burying the radials by "redoing"
> my back yard - or front if that is where I'm going to put the antenna.
> One of those xyl things, you know. I'll just tell her "The landscapers
> tell me we have to put in these wires so they can monitor the growth of
> the lawn". 8^)
>
> - Mike KB3EIA -
>
>
>
>
>
> >
> > "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> > news:7NSxb.4416$zL1.117578@news1.news.adelphia.net...
> >
> > >>I'm getting ready to install some sort of vertical for my station, so
> > >>I'm not warming the clouds on 80 meters.
> > >>
> > >>What will be the results of only having radials on one side of the
> > >>antenna? I have a choice of three places to put the thing, and in each
> > >>place the radials can only go one way.
> > >>
> > >>- Mike KB3EIA -
> > >>
> > >
> > >
> > >
>

5238. Re: Coax Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 17:27:56 UTC
From: Howard <#mensch90249#@yahoo.com>
Message-ID: <tklhsvs2eroi2m3e668jr8opi08ujp9oem@4ax.com>
Source record: 103904

On Sat, 29 Nov 2003 11:55:49 -0500, "Robert11" <rgsxrose@comcast.net>
wrote:

>Hello:
>
>Question on Coax.
>
>I am presently using a 50 foot run of 50 ohm coax to my scanner.
>
>It's the 0.4 inch low-loss diameter stuff (I think LMR 400), and I wanted to
>add a short length of
>a coax between this cable and the scanner to remove the strain on the
>radio's connector due to the stiffness of
>the LMR 400.
>
>All I can find pre-assembled with BNC's is 75 ohm RG59.
>
>It's about a 3 ft length.
>
>a. Think the 3 ft radio-to-75 ohm patch cable, then to the 50 ohm main
>cable will cause any "meaningful" loss
> due to the Z mismatch ?
>
>b. Would I have been better off using a 3 foot RG58 (50 ohm) patch cable,
>even though the RG58 is really lossy around 1 GHz ?
>
>Thanks,
>Bob

Bob,
I wouldn't sweat either issue; the loss in 3 feet or the impedance.

Howard

5239. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 17:46:04 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <lrlhsv08mg41ibfriis61v8huts6rmnqbj@4ax.com>
Source record: 103905
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

I spent five years on the board of, and two years as the president of, a 721 home development board of directors. We had a few blowhards who, like many in here, told us to go to hell and parked cars on blocks and the like.

It wasn't rocket science. We voted a 30 day "take it away or go to court." We were impolitely told to go to hell. We didn't go to hell, we went to court. Not a big deal. Between the court costs and our lawyer's fees, the blowhard had a thousand dollar junk car project to remove. Three or four cases like that in the first couple of years and things got remarkably quiet, and we all got along like neighbors respecting the wishes of each other.

I took perverse satisfaction in stringing copper tape under the eaves of the house, strangely just long enough to make a quarter wave dipole for forty meters. But it was painted with exactly the same shade that the eaves were painted, run with a quarter-gallon with adequate filtering, matched to the n'th degree, and worked the world on everything from forty on up. You could walk right up to it and not detect that there was an antenna of any sort.

Not to mention the 2-meter groundplane disguised as a chimney strap. Painted wrought-iron black and strangely so, 19 inches long. Coax? Run down a mortar seam and painted mortar grey. From five feet away, it was indistinguishable from the mortar.

I laugh at you blowhards telling us how you will do what you damn well please when and where you damn well please to do it. I note that none of you have tried it.

Clever works. Big mouths don't. And, if you don't like the rules, either don't move in or once you move in then try to change them. If a majority of your neighbors agree, it is changed. That's the way I learned that this country works.

Jim

"Midwest Kid" <NoSpamPlease@aol.com>
shared these priceless pearls of wisdom:

->
-><Pappy127@usa.net> wrote in message news:3FC84618.506D99AD@usa.net...
->> WHO are you to tell me or someone else what you consider is "in check"
->> or not? You deal with your property and the rest of us shall deal with
->> ours.
->
If I move into an CC&R addition, I expect people to follow the

->rules. I would hope my neighbors would be smart enough to read important
->real estate documents. I don't care if my home is $300K. If some ham puts
->up a huge antenna and they make an exception, I will be documenting
->everything.
Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

5240. Re: Coax Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 18:18:53 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC8E30D.3B4DA763@cwis.net>
Source record: 103906

Bob,
A. No.
B. No.
'Doc

5241. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 18:31:18 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <VB5yb.253822$9E1.1355805@attbi_s52>
Source record: 103907
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Got the kid part right.

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:Zx1yb.253283$275.924957@attbi_s53...
>
> <Pappy127@usa.net> wrote in message news:3FC84618.506D99AD@usa.net...
> > WHO are you to tell me or someone else what you consider is "in check"
> > or not? You deal with your property and the rest of us shall deal with
> > ours.
>
> Fuck that. If I move into an CC&R addition, I expect people to follow the
> rules. I would hope my neighbors would be smart enough to read important
> real estate documents. I don't care if my home is $300K. If some ham
puts
> up a huge antenna and they make an exception, I will be documenting
> everything. As soon as that ham puts up a 4-sale sign, my huge ugly tower
> will go up. You wouldn't be against _my_ right to do this, right? If the
> ham had the balls to even say something about it I would laugh. In other
> words the ham would want his tower when it suits _him_, however if he
takes
> it down to sell the home and a neighbor puts one up...that's just not
right.
>
>

5242. Newbie question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 18:32:36 UTC
From: new2radio
Message-ID: <vshpi4jco5ut8d@corp.supernews.com>
Source record: 103908

Does broadcasting in amateur radio interfer with AM/FM or other boardcasting wavelength signals? Neighbours are concerned that if I put up a 45 foot radio antenna in may backyard that this could interfer with everyone's elses TV/radio receptions. Any information out there that can be offered would be much appreciated.

5243. Re: Newbie question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 18:51:50 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <aV5yb.156552$Dw6.625534@attbi_s02>
Source record: 103909

<new2radio> wrote in message news:vshpi4jco5ut8d@corp.supernews.com...
> Does broadcasting in amateur radio interfer with AM/FM or other
> boardcasting wavelength signals? Neighbours are concerned that if I
> put up a 45 foot radio antenna in may backyard that this could
> interfer with everyone's elses TV/radio receptions. Any information
> out there that can be offered would be much appreciated.
>

It can interfere. However, it doesn't ahve to. A properly grounded set-up helps quie a bit. If there is some interference you can help to nuke it by installing low and/or high pass filters. Unless you are running an amplifier, I won't worry about it too much (when running my amp on HF, I frequently get into one neighbor's cordless phone no matter what I do). The ARRL (and others) have a good book on RFI. I suggest you grab a copy.

Take care

73

AB0SI Paul

5244. Re: Coax Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 18:54:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqaq0q$jj8$1@sparta.btinternet.com>
Source record: 103910

> Question on Coax.
>
> I am presently using a 50 foot run of 50 ohm coax to my scanner.
>
> It's the 0.4 inch low-loss diameter stuff (I think LMR 400), and I wanted
to
> add a short length of
> a coax between this cable and the scanner to remove the strain on the
> radio's connector due to the stiffness of
> the LMR 400.
>
> All I can find pre-assembled with BNC's is 75 ohm RG59.
>
> It's about a 3 ft length.
>
> a. Think the 3 ft radio-to-75 ohm patch cable, then to the 50 ohm main
> cable will cause any "meaningful" loss
> due to the Z mismatch ?
>
> b. Would I have been better off using a 3 foot RG58 (50 ohm) patch cable,
> even though the RG58 is really lossy around 1 GHz ?
>

An impedance match to the antenna over the whole frequency range is no more
likely with 50 ohm line than with 75 ohm.

Just use the shortest length of greatest diameter coax you happen to have
available.

I doubt if swapping 3 feet of one type of line with another would be
detectable.

It's the loss in the 50-feet of 'low-loss' coax you may need to worry about.

Reg, G4FGQ

5245. Re: Coax Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:00:14 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <zuudnedIv5Q4dlWiRVn-uw@ctc.net>
Source record: 103911

> >
> >a. Think the 3 ft radio-to-75 ohm patch cable, then to the 50 ohm main
> >cable will cause any "meaningful" loss
> > due to the Z mismatch ?
> >
> >b. Would I have been better off using a 3 foot RG58 (50 ohm) patch
cable,
> >even though the RG58 is really lossy around 1 GHz ?
> >
> >Thanks,
> >Bob
>
> Bob,
> I wouldn't sweat either issue; the loss in 3 feet or the impedance.
>
> Howard

I agree, either way the loss of 3 feet of coax is not worth worring about.
Use whatever you can find.
Even replacing the entire 50 feet of coax with something like the rg-6 that
is in big supply now will probably not be noticed.

5246. Re: Newbie question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:07:00 UTC
From: dplatt@radagast.org
Message-ID: <vshrika61bnp59@corp.supernews.com>
Source record: 103912

>Does broadcasting in amateur radio interfer with AM/FM or other
>boardcasting wavelength signals? Neighbours are concerned that if I
>put up a 45 foot radio antenna in may backyard that this could
>interfer with everyone's elses TV/radio receptions. Any information
>out there that can be offered would be much appreciated.

In theory, if everything's working right, the answer is "No". You'd be transmitting a signal falling entirely inside the amateur band, there'd be no significant out-of-band radiation (harmonics or intermodulation) falling into the TV or AM/FM bands, and everybody's TV sets and radios would "ignore" the signals outside of their operating bands.

Unfortunately, things often don't work right, and interference can happen. There are a number of possible causes:

- A lot of consumer-electronic equipment is very poorly designed, with regard to its ability to reject/ignore out-of-band signals. A strong (but perfectly legal) amateur radio signal can result in "fundamental overload" of a TV set or radio's RF front end due to the high RF voltages present, and this can result in visible or audible interference. Devices which aren't supposed to act as radio receivers (e.g. intercoms, telephones) often do, and can pick up your transmissions. Signals can get into such devices throught their antenna/cable inputs, through the power line, through speaker wiring, etc.

According to law, you (the amateur) are _not_ responsible for this sort of problem, or for correcting it... it's a design problem in the susceptible device. It can, however, be very helpful to understand the cause of the problem, and some of the means for curing it (e.g. adding filters) so that you can advise your neighbors on how to fix their appliances... and if you happen to have a boxful of filters and ferrite cores and etc. that you're willing to hand out on request, that'll often soothe peoples' feelings. [It's generally recommended that you _not_ actually work on other peoples' TVs etc. to try to fix the interference, as that might make you liable for any problems which occur with them... give people advice and perhaps some filters, and let them do the installations themselves.]

- Direct interference can occur if your station radiates out-of-band signals - either harmonics of the frequency you're transmitting, or intermodulation products. Corroded metal-to-metal junctions (e.g. fence wires, rusty gutters, etc.) can act as rectifiers, picking up your transmitted signal and then radiating harmonics or

intermodulation products.

You _are_ responsible for making sure that your rig's output
doesn't contain more out-of-band energy than the FCC rules allow...
if it does, fix it, or add an additional low-pass filter.

- Direct interference can also occur if your transmitted signal
bleeds into a cable-TV system. Cable channel 18 falls right into
the amateur 2-meter band, channel 16 is in the 70 cm amateur band.
If somebody's got a "leaky" cable-TV setup (inadequately shielded
cable or amplifier, or unterminated taps), outbound leakage can
cause QRM on the amateur bands, and inbound leakage of amateur
transmissions can hash up the picture.

You are not responsible for fixing this sort of problem.

As far as the tower goes - you can legitimately point out to your
neighbors that a tall tower is likely to *reduce* any interference
problems, compared with a lower-height antenna (assuming equal
transmission power). The higher up the antenna is, the further it'll
be from your neighbor's TVs, wires, etc., and the lower the induced RF
voltage and current is likely to be. Also, a higher antenna may give
you a better takeoff angle, allowing you to make your QSOs at a lower
power setting.

The ARRL sells a good book on the causes and cures of RFI problems...
it's worth having a copy around.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5247. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:24:03 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <nn6yb.356725$0v4.19126337@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103913
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jim Weir" <jim@rst-engr.com> wrote in message
news:lrlhsv08mg41ibfriis61v8huts6rmnqbj@4ax.com...
> I spent five years on the board of, and two years as the president of,
a 721
> home development board of directors. We had a few blowhards who, like
many in
> here, told us to go to hell and parked cars on blocks and the like.
>
> It wasn't rocket science. We voted a 30 day "take it away or go to
court." We
> were impolitely told to go to hell. We didn't go to hell, we went to
court.
> Not a big deal. Between the court costs and our lawyer's fees, the
blowhard had
> a thousand dollar junk car project to remove.

"take it away or go to court."? This looks a bit like a small minded battle of the wills between Mr. BH and the Homeowner's Association. But I could easily be wrong. Did the Homeowner's Association give the car owners the option of fixing the cars? Did the Homeowner's Association ask for volenteers to help make the cars safe and reliable? A few guys who know what they are doing can get alot done in 30 day's spare time. It would be a neighborly offer to make.

> Three or four cases like that in
> the first couple of years and things got remarkably quiet, and we all
got along
> like neighbors respecting the wishes of each other.

>
> I took perverse satisfaction in stringing copper tape under the eaves
of the
> house, strangely just long enough to make a quarter wave dipole for
forty
> meters. But it was painted with exactly the same shade that the eaves
were
> painted, run with a quarter-gallon with adequate filtering, matched to
the n'th
> degree, and worked the world on everything from forty on up. You
could walk
> right up to it and not detect that there was an antenna of any sort.
>
> Not to mention the 2-meter groundplane disguised as a chimney strap.

Painted
> wrought-iron black and strangely so, 19 inches long. Coax? Run down
a mortar
> seam and painted mortar grey. From five feet away, it was
indistinguishable
> from the mortar.

I'm curious. How much do antennas reduce property values? Is there a formula for such things?

>
> I laugh at you blowhards telling us how you will do what you damn well
please
> when and where you damn well please to do it. I note that none of you
have
> tried it.

No sir. Not me. I'd much rather discuss things politely rather than start telling people what to do.

>
> Clever works. Big mouths don't. And, if you don't like the rules,
either don't
> move in or once you move in then try to change them. If a majority of
your
> neighbors agree, it is changed. That's the way I learned that this
country
> works.
>
> Jim
>
>

Sometimes those meddlesome courts think the country works differently. They said the CC&Rs which prohibit a seller from selling his property to Blacks or Jews or Mexicans or any group in particular can't be enforced. I suppose it had something or other to do with civil rights. The Homeowner's Association can still regulate the color of the neighbor's house, if not the color of the neighbors.

Frank Dresser

5248. Re: Newbie question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:32:27 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <fv6yb.13189$P%1.11965338@newssvr28.news.prodigy.com>
Source record: 103914

<new2radio> wrote in message news:vshpi4jco5ut8d@corp.supernews.com...
> Does broadcasting in amateur radio interfer with AM/FM or other
> boardcasting wavelength signals? Neighbours are concerned that if I
> put up a 45 foot radio antenna in may backyard that this could
> interfer with everyone's elses TV/radio receptions. Any information
> out there that can be offered would be much appreciated.
>

If their equipment is correctly designed and your station and system is correctly installed, no it will not interfere with their TV or radio reception.

Unfortunately, manufacturers of televisions like to cut costs so some TVs are subject to interference even though it is not your fault. Having a 45 foot tower will actually REDUCE the interference potential compared to say a ground mounted antenna or low dipole. or other compromise antenna setup.

One thing that helps is a lot of people are on cable for TV and so long as the cable system is in good condition it is relatively immune to interference.

Dee D. Flint, N8UZE

Dee D. Flint,

5249. Re: Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:36:14 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <Oy6yb.4644$zL1.404471@news1.news.adelphia.net>
Source record: 103915

paulfriedman@comcast.net wrote:
> Right... that's not an elevated radial, dear... It's for the climbing roses
> I'm going to plant sometime in the next 27 years. :)

Let me write that down..... 8^)

- Mike KB3EIA -

5250. Re: Newbie question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:43:37 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <xM6dnbWAu7JNaFWi4p2dnA@ctc.net>
Source record: 103916

> Does broadcasting in amateur radio interfer with AM/FM or other
> boardcasting wavelength signals? Neighbours are concerned that if I
> put up a 45 foot radio antenna in may backyard that this could
> interfer with everyone's elses TV/radio receptions. Any information
> out there that can be offered would be much appreciated.

A well designed ham radio station will not interfer with well designed equipment of other services. Too bad that most comsumer grade radio and tv receivers are not well designed. One RCA TVin my house would pick up my transmissions tuil I wrapped the AC power wire around a core of material to supress the ling cord picking up the signal. The CATV is suspose to be shielded but as they use the same frequencies as some ham transmitters you can wipe out their signal. It is up to the catv people to resolve that problem.

5251. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 19:50:54 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fc8f8d9$1_3@corp.newsgroups.com>
Source record: 103917

Jim Kelley wrote:
> Onward through the fog.

I've added some information concerning this subject to my web page.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5252. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 20:12:24 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <imuhsvsh56bffefnba345jv2kgadq1h6vp@4ax.com>
Source record: 103918
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Frank Dresser" <analogdial@worldnet.att.net>
shared these priceless pearls of wisdom:

->"take it away or go to court."? This looks a bit like a small minded
->battle of the wills between Mr. BH and the Homeowner's Association. But
->I could easily be wrong. Did the Homeowner's Association give the car
->owners the option of fixing the cars? Did the Homeowner's Association
->ask for volenteers to help make the cars safe and reliable? A few guys
->who know what they are doing can get alot done in 30 day's spare time.
->It would be a neighborly offer to make.

The automobile could stay in the open carport for 30 days while being repaired (and there was no prohibition against working outside) or 30 days out of license. After that, the vehicle was in violation of the nuisance/eyesore part of the regs. There were also loopholes that allowed vehicles of obvious historical or antique interest more time while in the process of restoration. There was no contest of wills; the feller had the mindset of a few in this conversation who had absolutely no intention of abiding by what he signed. And we DID, by the way, require any real estate agent peddling property in the project to give the prospective owner a copy of the current regulations PRIOR to signing any binding contract.

We also had the local 8th grade students read the regulations and any proposed amendments. If half of the students couldn't tell us exactly what the regulation said, it went back to the lawyer for rewrite at the lawyer's expense.

->
->
->> Three or four cases like that in
->> the first couple of years and things got remarkably quiet, and we all
->got along
->> like neighbors respecting the wishes of each other.
->
-
->
->I'm curious. How much do antennas reduce property values? Is there a
->formula for such things?

Nope. And the primary purpose in my mind was NOT a reduction in property values. After having been a ham, elmer, and examiner for damn near 50 years, I still find a huge tower with beam in a small-lot residential neighborhood ugly.

->
->

->No sir. Not me. I'd much rather discuss things politely rather than
->start telling people what to do.

We discussed politely but firmly. We didn't tell anybody what to do. We simply explained what the man already knew and said what we intended to do about it. There was no telling anybody anything.

-
->
->Sometimes those meddlesome courts think the country works differently.
->They said the CC&Rs which prohibit a seller from selling his property to
->Blacks or Jews or Mexicans or any group in particular can't be enforced.
->I suppose it had something or other to do with civil rights. The
->Homeowner's Association can still regulate the color of the neighbor's
->house, if not the color of the neighbors.

Jesus. Can we spell b i g o t ?????

Jim

Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

5253. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 21:13:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqb26n$dp9$1@hercules.btinternet.com>
Source record: 103819

> I've added some information concerning this subject to my web page.
> --
> 73, Cecil http://www.qsl.net/w5dxp

==========

What's new Cec?
It's fairly obvious stuff.
Of what use is it?
Can you describe it in numbers?

5254. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 22:01:40 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <8H8yb.13210$P%1.11989181@newssvr28.news.prodigy.com>
Source record: 103820
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

> "Frank Dresser" <analogdial@worldnet.att.net>
> ->
> ->I'm curious. How much do antennas reduce property values? Is there a
> ->formula for such things?
>

Contact the ARRL. They have data that shows that antennas have NO impact on property values. They also have data showing that, in general, property values are rising faster in areas without CCRs & HOAs than in areas with them.

Dee D. Flint, N8UZE

5255. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-29 22:22:11 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <8X8yb.22590$W7.13886@bignews1.bellsouth.net>
Source record: 103821
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Well said, Jim.

-- Stinger

"Jim Weir" <jim@rst-engr.com> wrote in message
news:lrlhsv08mg41ibfriis61v8huts6rmnqbj@4ax.com...
> I spent five years on the board of, and two years as the president of, a
721
> home development board of directors. We had a few blowhards who, like
many in
> here, told us to go to hell and parked cars on blocks and the like.
>
> It wasn't rocket science. We voted a 30 day "take it away or go to
court." We
> were impolitely told to go to hell. We didn't go to hell, we went to
court.
> Not a big deal. Between the court costs and our lawyer's fees, the
blowhard had
> a thousand dollar junk car project to remove. Three or four cases like
that in
> the first couple of years and things got remarkably quiet, and we all got
along
> like neighbors respecting the wishes of each other.
>
> I took perverse satisfaction in stringing copper tape under the eaves of
the
> house, strangely just long enough to make a quarter wave dipole for forty
> meters. But it was painted with exactly the same shade that the eaves
were
> painted, run with a quarter-gallon with adequate filtering, matched to the
n'th
> degree, and worked the world on everything from forty on up. You could
walk
> right up to it and not detect that there was an antenna of any sort.
>
> Not to mention the 2-meter groundplane disguised as a chimney strap.
Painted
> wrought-iron black and strangely so, 19 inches long. Coax? Run down a
mortar
> seam and painted mortar grey. From five feet away, it was
indistinguishable
> from the mortar.
>

> I laugh at you blowhards telling us how you will do what you damn well
please
> when and where you damn well please to do it. I note that none of you
have
> tried it.
>
> Clever works. Big mouths don't. And, if you don't like the rules, either
don't
> move in or once you move in then try to change them. If a majority of
your
> neighbors agree, it is changed. That's the way I learned that this
country
> works.
>
> Jim
>
>
>
>
>
> "Midwest Kid" <NoSpamPlease@aol.com>
> shared these priceless pearls of wisdom:
>
> ->
> -><Pappy127@usa.net> wrote in message news:3FC84618.506D99AD@usa.net...
> ->> WHO are you to tell me or someone else what you consider is "in check"
> ->> or not? You deal with your property and the rest of us shall deal with
> ->> ours.
> ->
> If I move into an CC&R addition, I expect people to follow the
> ->rules. I would hope my neighbors would be smart enough to read
important
> ->real estate documents. I don't care if my home is $300K. If some ham
puts
> ->up a huge antenna and they make an exception, I will be documenting
> ->everything.
> Jim Weir, VP Eng. RST Eng. WX6RST
> A&P, CFI, and other good alphabet soup

5256. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 00:13:53 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <5Dayb.252403$mZ5.1876750@attbi_s54>
Source record: 103822
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:nn6yb.356725$0v4.19126337@bgtnsc04-news.ops.worldnet.att.net...
>
> I'm curious. How much do antennas reduce property values? Is there a
> formula for such things?

Why does it have to be about damn property values? I think CC&Rs are more of a way to help make sure that when I sell my home, my neighbors have not gotten 'lazy' or 'crazy' over the last 5-30 years and done stupid crap. Be it 'get into ham' and erect a stupid looking tower, put cars on blocks, or paint their house 5 different colors. Everyone thinks that just because property values have almost doubled (and in some cases went up 10 fold or more) that the same thing will have in the next 20 years. Again, CC&Rs are to protect your investment in your home. You don't gain anything in a home sale if you don't sell your home. Would you offer to buy your neighbors home if they had documented proof your antenna was scaring away buyers?

>
> >
> > I laugh at you blowhards telling us how you will do what you damn well
> please
> > when and where you damn well please to do it. I note that none of you
> have
> > tried it.
>
>
> No sir. Not me. I'd much rather discuss things politely rather than
> start telling people what to do.
>
>
> >
> > Clever works. Big mouths don't. And, if you don't like the rules,
> either don't
> > move in or once you move in then try to change them. If a majority of
> your
> > neighbors agree, it is changed. That's the way I learned that this
> country
> > works.
> >
> > Jim
> >
> >
>

> Sometimes those meddlesome courts think the country works differently.
> They said the CC&Rs which prohibit a seller from selling his property to
> Blacks or Jews or Mexicans or any group in particular can't be enforced.
> I suppose it had something or other to do with civil rights. The
> Homeowner's Association can still regulate the color of the neighbor's
> house, if not the color of the neighbors.
>
> Frank Dresser
>
>

5257. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 00:16:39 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <HFayb.256443$9E1.1368062@attbi_s52>
Source record: 103823
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dee D. Flint" <deehays@qix.net> wrote in message
news:8H8yb.13210$P%1.11989181@newssvr28.news.prodigy.com...
>
>
> Contact the ARRL. They have data that shows that antennas have NO >
impact on property values.

That is the whole damn point of CC&R. Your property value doesn't mean jack
if you cannot SELL your home. There are more people willing to look
elsewhere if my damn neighbor has some 20+ foot tower in his/her back yard.
Again, towers can't hurt 'values' when you can't even get a person to make
an offer.

5258. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 00:20:23 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bqbajj$hn5$1@news1.kornet.net>
Source record: 103824
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:5Dayb.252403$mZ5.1876750@attbi_s54...
>
> "Frank Dresser" <analogdial@worldnet.att.net> wrote in message
> news:nn6yb.356725$0v4.19126337@bgtnsc04-news.ops.worldnet.att.net...
> >
> > I'm curious. How much do antennas reduce property values? Is there a
> > formula for such things?
>
> Why does it have to be about damn property values? I think CC&Rs are more
> of a way to help make sure that when I sell my home, my neighbors have not
> gotten 'lazy' or 'crazy' over the last 5-30 years and done stupid crap.
Be
> it 'get into ham' and erect a stupid looking tower, put cars on blocks, or
> paint their house 5 different colors. Everyone thinks that just because
> property values have almost doubled (and in some cases went up 10 fold or
> more) that the same thing will have in the next 20 years. Again, CC&Rs
are
> to protect your investment in your home. You don't gain anything in a
home
> sale if you don't sell your home. Would you offer to buy your neighbors
> home if they had documented proof your antenna was scaring away buyers?
>

For starters, most hams that put up towers with elaborate antenna systems would take them down when they moved (unless they became a silent key), because these things are not petty investments, they cost a lot of money. Some installations cost more than a new mid-sized car. The installation of the tower itself is held to much higher standard by law than the house itself is.

And again, unlike someone who puts up an old car on blocks, or paints their home in rainbow glow paint, hams perform a public service. There currently exists a rule within the FCC that disallows municipalities preventing amateur operators from erecting antennas, and a similar rule for CC&R's is in the works.

5259. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 00:21:19 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <3Kayb.257436$275.935020@attbi_s53>
Source record: 103825
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:Q12yb.26224$Rk5.11967@newsread1.news.atl.earthlink.net...
>
> It does amaze me, Pappy, how many are so willing to accept, and even
> defend, additional restrictions on people's lives and property in this
> supposedly free country of ours.

Please show us one case where someone was force (with a gun, knife, etc) to
buy a home in a CC&R neighborhood. No one is forced to buy a home in CC&R.
If you don't want CC&R, move.

5260. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 00:28:07 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <rQayb.257513$275.934642@attbi_s53>
Source record: 103826
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:Q12yb.26224$Rk5.11967@newsread1.news.atl.earthlink.net...
>
> there was no place left to avoid those committees within just a few years.

My county just east of Indy has plenty of non CC&R neighborhoods. Oh wait, how horrible it is to think people would want to live in a 25-30 year old addition. Everyone wants to live in the 'perfect' place with no strings attached. That is living in a fantasy world. Like I said, the Indy area is nice. Plenty of 20-30 year old additions with good homes and no CC&R. Though you might have to compromise on various issues (almost all these additions have great school systems).

5261. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 01:11:31 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <7tbyb.13225$P%1.12017380@newssvr28.news.prodigy.com>
Source record: 103827
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:HFayb.256443$9E1.1368062@attbi_s52...
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:8H8yb.13210$P%1.11989181@newssvr28.news.prodigy.com...
> >
> >
> > Contact the ARRL. They have data that shows that antennas have NO >
> impact on property values.
>
> That is the whole damn point of CC&R. Your property value doesn't mean
jack
> if you cannot SELL your home. There are more people willing to look
> elsewhere if my damn neighbor has some 20+ foot tower in his/her back
yard.
> Again, towers can't hurt 'values' when you can't even get a person to make
> an offer.

Same organization has data showing it doesn't affect the sale of homes
either.

Dee D. Flint, N8UZE

5262. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 01:13:57 UTC
From: "Dee D. Flint" <deehays@qix.net>
Message-ID: <pvbyb.13227$P%1.12017655@newssvr28.news.prodigy.com>
Source record: 103828
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:rQayb.257513$275.934642@attbi_s53...
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:Q12yb.26224$Rk5.11967@newsread1.news.atl.earthlink.net...
> >
> > there was no place left to avoid those committees within just a few
years.
>
> My county just east of Indy has plenty of non CC&R neighborhoods. Oh
wait,
> how horrible it is to think people would want to live in a 25-30 year old
> addition. Everyone wants to live in the 'perfect' place with no strings
> attached. That is living in a fantasy world. Like I said, the Indy area
is
> nice. Plenty of 20-30 year old additions with good homes and no CC&R.
> Though you might have to compromise on various issues (almost all these
> additions have great school systems).
>
>

Actually many people prefer the 20 to 30 year old suburb as these finally
have trees of decent size. The problem is that in some places in this
country finding an area without CCRs that will mean an unreasonably long
communte to work.

Dee D. Flint, N8UZE

5263. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 01:40:23 UTC
From: Jimmy <Gfender@carolina.rr.com>
Message-ID: <bUbyb.46374$I53.2094407@twister.southeast.rr.com>
Source record: 103829

A coil change current distibution in an antenna but then again so does the length of antenna that the coil replaces.
lumped inductance = lumped change in current. distributed inductance = distributed change in current. Is there more to it than that?

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message news:3fc8f8d9$1_3@corp.newsgroups.com...
> Jim Kelley wrote:
> > Onward through the fog.
>
> I've added some information concerning this subject to my web page.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5264. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 01:48:52 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <%Xbyb.22095$yM6.1695@lakeread06>
Source record: 103830
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:5Dayb.252403$mZ5.1876750@attbi_s54...
>
> "Frank Dresser" <analogdial@worldnet.att.net> wrote in message
> news:nn6yb.356725$0v4.19126337@bgtnsc04-news.ops.worldnet.att.net...
> >
> > I'm curious. How much do antennas reduce property values? Is there a
> > formula for such things?
>
> Why does it have to be about damn property values? I think CC&Rs are more
> of a way to help make sure that when I sell my home, my neighbors have not
> gotten 'lazy' or 'crazy' over the last 5-30 years and done stupid crap.
Be
> it 'get into ham' and erect a stupid looking tower, put cars on blocks, or
> paint their house 5 different colors. Everyone thinks that just because
> property values have almost doubled (and in some cases went up 10 fold or
> more) that the same thing will have in the next 20 years. Again, CC&Rs
are
> to protect your investment in your home. You don't gain anything in a
home
> sale if you don't sell your home. Would you offer to buy your neighbors
> home if they had documented proof your antenna was scaring away buyers?
>
>

I don't know where you live, but here we have zoning laws that control
much of the issues you are concerned about; and most towns have
enacted nusiance ordinances to handle less severe problems, such
as uncut grass, etc. BTW, I live in a AAA zoned area, and the ham
tower was not an issue. I kept in at the tree line, in the middle of
the property. Out of sight. Also, at one time I had three towers near
the house. The house next door was sold before it hit the market for
the full asking price.

Pete

5265. Re: Grounding for Vertical Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 02:14:11 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <Tncyb.46378$I53.2101249@twister.southeast.rr.com>
Source record: 103831

Improvise! Radials don't have to be straight, and they don't have to be on the ground. If you can get them 12 feet off the ground, you may have more space to work with. On the ground, position radials all around the antenna, and wrap the ones with no space around into the area where you a have space.

Good luck and Good DX.

Bill, W4WNT
"Mike Coslo" <mcoslo@adelphia.net> wrote in message news:7NSxb.4416$zL1.117578@news1.news.adelphia.net...
> I'm getting ready to install some sort of vertical for my station, so
> I'm not warming the clouds on 80 meters.
>
> What will be the results of only having radials on one side of the
> antenna? I have a choice of three places to put the thing, and in each
> place the radials can only go one way.
>
> - Mike KB3EIA -
>

5266. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 03:04:27 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <%6dyb.129948$Ec1.5402037@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103832
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jim Weir" <jim@rst-engr.com> wrote in message
news:imuhsvsh56bffefnba345jv2kgadq1h6vp@4ax.com...

>
> The automobile could stay in the open carport for 30 days while being
repaired
> (and there was no prohibition against working outside) or 30 days out
of
> license. After that, the vehicle was in violation of the
nuisance/eyesore part
> of the regs. There were also loopholes that allowed vehicles of
obvious
> historical or antique interest more time while in the process of
restoration.
> There was no contest of wills; the feller had the mindset of a few in
this
> conversation who had absolutely no intention of abiding by what he
signed. And
> we DID, by the way, require any real estate agent peddling property in
the
> project to give the prospective owner a copy of the current
regulations PRIOR to
> signing any binding contract.
>
> We also had the local 8th grade students read the regulations and any
proposed
> amendments. If half of the students couldn't tell us exactly what the
> regulation said, it went back to the lawyer for rewrite at the
lawyer's expense.
>
>

OK, that's more reasonable than "take it away or go to court.".

>
> Nope. And the primary purpose in my mind was NOT a reduction in
property
> values. After having been a ham, elmer, and examiner for damn near 50
years, I
> still find a huge tower with beam in a small-lot residential
neighborhood ugly.
>
>

I think they're cool. But I really like the Eiffel-like towers the
power company uses.

>
>
> We discussed politely but firmly. We didn't tell anybody what to do.
We simply
> explained what the man already knew and said what we intended to do
about it.
> There was no telling anybody anything.
>
>
>
>
> Jesus. Can we spell b i g o t ?????
>
>
> Jim
>
Oh sure. And bigotry itself is still legal in the US, as it should be
in a nation which allows freedom of thought. But bigoted actions are
limited. As I understand, the courts will do nothing to enforce a race
related restrictive covanant, even if the buyer and the seller and the
local community support such restrictions. And that comes to my real
problem with Homeowner's Associations. It's not really about antennas
or old cars or knee high grass. That stuff is dealt with every day with
codes and municipal ordinances.

A Homeowner's Association is an extraconstitutional government. I have
no doubt that nearly all Homeowner's Associations are run by decent
people, including yours. But not always:

http://www.freerepublic.com/forum/a3b5efc12221e.htm#38

http://www.ccfj.net/HOAartflag.html

As far as I'm concerned, any attempt to restrict such fundamental rights
as a respectful religious display or display of the US Flag ought to get
laughed out of court, just as an attempt to enforce a racial restrictive
covanant.

Frank Dresser

5267. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 03:19:04 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <lkdyb.129994$Ec1.5402964@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103833
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:5Dayb.252403$mZ5.1876750@attbi_s54...
>
>
> Why does it have to be about damn property values? I think CC&Rs are
more
> of a way to help make sure that when I sell my home, my neighbors have
not
> gotten 'lazy' or 'crazy' over the last 5-30 years and done stupid
crap. Be
> it 'get into ham' and erect a stupid looking tower, put cars on
blocks, or
> paint their house 5 different colors. Everyone thinks that just
because
> property values have almost doubled (and in some cases went up 10 fold
or
> more) that the same thing will have in the next 20 years. Again,
CC&Rs are
> to protect your investment in your home. You don't gain anything in a
home
> sale if you don't sell your home. Would you offer to buy your
neighbors
> home if they had documented proof your antenna was scaring away
buyers?
>
>
OK, I'm missing something here. First I read:

"Why does it have to be about damn property values?"

Then:

"Again, CC&Rs are to protect your investment in your home."

I'm trying to see the important distinction between "property values"
and "your investment in your home".

Frank Dresser

5268. Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 03:21:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqbnoe$r46$1@titan.btinternet.com>
Source record: 103834

Suppose there's a fairly isolated well grounded antenna mast. Or a power pylon in the middle of a field. There may be people or animals wandering in the vicinity. Sooner or later lightning will strike a high mast.

The question arises at what distance from the base of the mast should a safety fence be erected to protect people and animals from electrocution. Or to provide some other greater degree of protection.

The situation can be translated into your back yard. There are then subsidiary questions such as at what distance should the mast-grounding system be bonded to the domestic house ground? Or to another mast?

It's obvious that risks, probabilities, choice of safety factors, soil resistivity, strength of lighting strokes are involved. It's entirely up to YOU what you do about it.

There are ball-parks within ball-parks. Nevertheless, to keep you in the right set of ball parks a few simple calculations can be made. Without numbers bafflegab will prevail.

The local ground system at the base of the mast can be represented or modelled by a hemispherical electrode impressed into the ground surface. The electrical characteristics of this simple electrode are very easily calculated from its radius and soil resistivity.

Suppose the antenna mast with its buried legs and set of ground rods extends out to a radius Rh metres from the centre of the small system. Even if the mast consists only of a 2" diameter aluminium tube buried to a depth of 2 feet without any rods you will now have a number Rh. For this exceptional simple case of a single fat rod call Rh = 1/2 depth. It turns out to be very non-critical anyway.

A hemispherical bowl of low-resistivity concrete is very well represented by the mathematical model of course. The concrete becomes the ground electrode. The resistivity of the material forming the ground electrode does not enter into the argument because the lightning stroke is assumed to be a current source.

It is not difficult to show that the voltage at the edge of the electrode, at a distance Rh from the mast itself, relative to the voltage of the mass of the Earth at a great distance is given by -

V = S * I / 2 / Pi / Rh volts

where S is soil resistivity in ohm/metres,

I = current in lightning stroke in amps,

and Rh is the hemispherical radius.

However, we are not greatly interested in the volts at the electrode. What matters is the VOLTAGE GRADIENT along the surface of the soil as the current streams away from the base of the antenna in all radial directions uniformly.

It should be noted, and is intuitively fairly obvious, that at a short distance beyond Rh the current flows away from the antenna mast in radial directions through the soil regardless of the actual shape and construction of the ground electrode system.

Suppose a cow is facing the antenna and the distance between the animal's front and rear legs is 1.5 metres. Insofar as the cow is concerned what really matters is the voltage gradient along the soil surface. With a little integration it can be shown the voltage difference Vd between two points on the soil surface at distances R1 and R2 from the mast is given by -

Vd = S * I / 2 / Pi * (R1 - R2) / R1 / R2 volts,

If soil resistivity S = 100 ohm.metres,

(Soil conductivity = 10 mS)

Stroke current = 50,000 amps,

Rear legs distance from mast, R1 = 6 metres,

Front legs distance from mast = 4.5 metres,

Neglecting the resistance of a cow, the potential difference between the poor animal's front and rear legs would rise in a matter of milli-seconds to Vd = 44,000 volts without time being allowed even to say "Moo". Current and voltage then subside more slowly.

Whereas the radio station owner, at the same location, standing on one leg wearing a rubber boot would very likely survive unscathed.

As a matter of interest the voltage gradient G at a distance of R metres from the mast is given by -

G = S * I / 2 / Pi / Square(R) volts-per-metre.

The foregoing calculations are exact when the ground electrode is a true hemisphere. There are other applications.

Reg, G4FGQ

--
....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

5269. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 03:27:53 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <Zsdyb.4775$zL1.505155@news1.news.adelphia.net>
Source record: 103835
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Midwest Kid wrote:

> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:8H8yb.13210$P%1.11989181@newssvr28.news.prodigy.com...
>
>>
>>Contact the ARRL. They have data that shows that antennas have NO >
>
> impact on property values.
>
> That is the whole damn point of CC&R. Your property value doesn't mean jack
> if you cannot SELL your home. There are more people willing to look
> elsewhere if my damn neighbor has some 20+ foot tower in his/her back yard.
> Again, towers can't hurt 'values' when you can't even get a person to make
> an offer.

There are people that won't take a second look at your home if it isn't
the right shade of beige that would like.

You need to be living in a development where every thing is spelled
out. Others do not.

- Mike KB3EIA -

5270. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 04:09:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fc96da6$1_1@corp.newsgroups.com>
Source record: 103836

Reg Edwards wrote:
> It's fairly obvious stuff.

Not to everyone, Reg.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5271. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 04:12:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fc96e5e_1@corp.newsgroups.com>
Source record: 103837

Jimmy wrote:
> lumped inductance = lumped change in current.

Actually, I think the assertion was that
lumped inductance = no change in current.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5272. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 04:46:51 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <ectisv453vahce4c8o4rq240knfb1o1o5j@4ax.com>
Source record: 103838

On Sat, 29 Nov 2003 15:05:07 GMT, Russ <carlzomer@hotmail.com> wrote:

>On Sat, 29 Nov 2003 05:23:05 GMT, Roger Halstead
><mynewsat@rogerhalsteaddot.com> wrote:
>
>>On 29 Nov 2003 02:25:58 GMT, k9sqg@aol.com (K9SQG) wrote:
>>
>>>That is not a wise idea. If your mast takes a direct hit, or if there is one
>>>nearby, there is a possibility that some of the energy will go into the house
>>>via that ground rod. Antenna grounds should always be isolated from
>>>housewiring grounds.
>>
>>Here I have everything tied together, but it's not a normal
>>installation. There are 30 ground rods connected by over 600 feet of
>>bare #2 copper. All ground rods are bonded (CadWelded) together
>>forming a network which should keep any particular ground and
>>equipment at the same potential no mater where which tower would be
>>hit. Although the likely hood of anything other than the main tower
>>getting hit is unlikely. It's 130 feet, the top of the multi band
>>vertical on the shop is 60 feet and the mast at the other end of the
>>house is only 25 feet.
>>
>
>Nice work Roger, ever work for the telephone company?

Nope! I had to purchase everything. Hence the reason for me doing all
the work<:-))
Welll...come to think of it, way back in the early 50s my dad was a
lineman on one of the old privately owned rural lines. I got to do a
lot of pole climbing. I still have the old portable test set... and
memories of splinters.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>Russ

5273. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 04:52:49 UTC
From: Marylou@city.net
Message-ID: <3FC977A1.BB533551@city.net>
Source record: 103841
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

What I read into this thread is there are people in our FREE country
that have a serious need to control other people. Those people like
another poster said are classified as HOA Cops.

When it comes to controlling them they revolt.

What is an AAA zoned area?

I live in a community where the county put in zoning laws many years ago
so the members of the HOA decided to turn over our roads to the county
for maintenance, dissolve the HOA entirely. We figured why pay dues for
road upkeep and some over zealous HOA officer/member who wants to take
his/our neighbor to court for stupid things. We already pay taxes for
road up keep but the county would not enter our plan because it was
considered private property. The only county services we had where
police, fire, ambulance. Now things are going much better. We have all
the services we where paying for but didn't receive before, the HOA Cops
are gone forever and the home owners seem to getting along much better.
There are no junk cars sitting around, no one painted their house bright
pink or any other crazy color, the grass in the yards are trimmed nice,
in fact nothing has changed in that respect. There are two 25 foot
towers now, one with a small beam the other a vertical in the plan, one
is mine. Both are hams and both are involved in emergency communications
during major storms. The neighbors call or stop and get weather updates
so they can make the necessary plans. Not one person has complained
about either of the towers, not one.

By the way, the HOA ex-official moved out about 6 months after the
county took over. He found out this is America, the land of the free.
Factually speaking, his neighbors refused to have anything to do with
him because of his over powering attitude. His friends soon followed him
down the road.

God Bless our "FREE" America.

Uncle Peter wrote:
>
> I don't know where you live, but here we have zoning laws that control
> much of the issues you are concerned about; and most towns have
> enacted nusiance ordinances to handle less severe problems, such
> as uncut grass, etc. BTW, I live in a AAA zoned area, and the ham
> tower was not an issue. I kept in at the tree line, in the middle of
> the property. Out of sight. Also, at one time I had three towers near
> the house. The house next door was sold before it hit the market for

> the full asking price.
>
> Pete

5274. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 04:54:32 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <sitisvggfnbh7hqp3rgpr0mprditl1qkuu@4ax.com>
Source record: 103839

On 29 Nov 2003 02:35:22 -0800, nm5k@wt.net (Mark Keith) wrote:

>k9sqg@aol.com (K9SQG) wrote in message
news:<20031128212558.28460.00001073@mb-m14.aol.com>...
>> That is not a wise idea. If your mast takes a direct hit, or if there is one
>> nearby, there is a possibility that some of the energy will go into the house
>> via that ground rod. Antenna grounds should always be isolated from
>> housewiring grounds.
>
>
>If all grounds are at the same potential, no current can flow between them.
>Not to mention the NEC requires it in the U.S. MK

When you figure the rise time there can easily be several thousand
volts between the base of the antenna mast and the electrical system
ground. IE the voltage could be 50,000 at the tower and not even have
started to rise at the electrical ground.

It's not just a simple CD circuit.
I've seen tower strikes where there was such a strong current and fast
rise time, the magnetic field quenched the current flow and the
lightening got off part way down and jumped sideways to something
else.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5275. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 05:51:18 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FC98556.F5A1F54@cwis.net>
Source record: 103840

Reg,
Please don't spread this around! Here in the 'states', the
EPA has advocated diapers for horses and methane collectors for
cattle. Next they, along with the S.P.C.A., will want to put
grounding electrodes and shorting straps on them too. The
straps
may not be too bad, but how would you like the job of placing
the
electrodes? And where?
'Doc

5276. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 10:19:58 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0311300219.24d10ea7@posting.google.com>
Source record: 103842
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

JW,

"Clever works. Big mouths don't. And, if you don't like the
rules, either don't move in or once you move in then try to
change them. If a majority of your neighbors agree, it is
changed. That's the way I learned that this country works."

DITTO THAT "JW" !

suyb... ~ RHF
- - - Simply Use Your Brain... Before Using Your Mouth !
.
.
= = = "Stinger" <contact@newsserveronly.com>
= = = Wrote in message news:<8X8yb.22590$W7.13886@bignews1.bellsouth.net>...
>
> Well said, Jim.
>
> -- Stinger
>
> "Jim Weir" <jim@rst-engr.com> wrote in message
> news:lrlhsv08mg41ibfriis61v8huts6rmnqbj@4ax.com...
> > I spent five years on the board of, and two years as the president of, a
> 721
> > home development board of directors. We had a few blowhards who, like
> many in
> > here, told us to go to hell and parked cars on blocks and the like.
> >
> > It wasn't rocket science. We voted a 30 day "take it away or go to
> court." We
> > were impolitely told to go to hell. We didn't go to hell, we went to
> court.
> > Not a big deal. Between the court costs and our lawyer's fees, the
> blowhard had
> > a thousand dollar junk car project to remove. Three or four cases like
> that in
> > the first couple of years and things got remarkably quiet, and we all got
> along
> > like neighbors respecting the wishes of each other.
> >
> > I took perverse satisfaction in stringing copper tape under the eaves of
> the
> > house, strangely just long enough to make a quarter wave dipole for forty

> > meters. But it was painted with exactly the same shade that the eaves
> were
> > painted, run with a quarter-gallon with adequate filtering, matched to the
> n'th
> > degree, and worked the world on everything from forty on up. You could
> walk
> > right up to it and not detect that there was an antenna of any sort.
> >
> > Not to mention the 2-meter groundplane disguised as a chimney strap.
> Painted
> > wrought-iron black and strangely so, 19 inches long. Coax? Run down a
> mortar
> > seam and painted mortar grey. From five feet away, it was
> indistinguishable
> > from the mortar.
> >
> > I laugh at you blowhards telling us how you will do what you damn well
> please
> > when and where you damn well please to do it. I note that none of you
> have
> > tried it.
> >
> > Clever works. Big mouths don't. And, if you don't like the rules, either
> don't
> > move in or once you move in then try to change them. If a majority of
> your
> > neighbors agree, it is changed. That's the way I learned that this
> country
> > works.
> >
> > Jim
> >
>
>

.

5277. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 11:24:34 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <yrkyb.35918$m24.29526@fed1read02>
Source record: 103843
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:HFayb.256443$9E1.1368062@attbi_s52...
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:8H8yb.13210$P%1.11989181@newssvr28.news.prodigy.com...
> >
> >
> > Contact the ARRL. They have data that shows that antennas have NO >
> impact on property values.
>
> That is the whole damn point of CC&R. Your property value doesn't mean
jack
> if you cannot SELL your home. There are more people willing to look
> elsewhere if my damn neighbor has some 20+ foot tower in his/her back
yard.
> Again, towers can't hurt 'values' when you can't even get a person to make
> an offer.
>
>

A buyer is not always a rational person. They may walk away because they don't like the landscaping or the paint job or whatever. Can you see HV powerlines from the back yard? Want to bet how many people are certain those cause cancer? Can you see a cellular tower nearby? Buyers don't want "radiation". What about a next-door ham antenna? Why not be afraid of that too? What if that big antenna blew off in a storm? It could hit your house! And when hams transmit, they make radiation! Who wants to move in next to some guy who makes radiation for fun?!

You can't talk power levels and ionizing versus non-ionizing, because the buyer walks before you get that chance. Your neighbors know this, and this makes them fearful of what might happen to them if they wanted to sell. They don't care about your right to squirt RF into the world, all they care about is safeguarding their own families' (perceived) health and protecting the viability of their one big investment in life.

Some people will give up some of their personal freedom to buy into an area that has CC&R's, so they can have some assurance that bizarre (by their perception) things won't happen near their family and investment. And if they enter this kind of society, they have the right to expect their HOA to enforce the CC&R's fairly and without exception.

And, just like the USA, a HOA is not a democracy; it is much more like a constitutional republic. Once again, the homeowner doesn't vote on each and every issue (democracy). Rather, a board (acting for the homeowners; i.e., a republic) is elected, and they enforce the CC&R's (the constitution). So let's not have any more babbling about how a HOA isn't fair because it's not a democracy.

Ed
WB6WSN

5278. Re: WANTED: Schematic Diagram/Manual

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 11:45:51 UTC
From: Atlas <shf@pandora.eb>
Message-ID: <PLkyb.213$wD6.97387853@hestia.telenet-ops.be>
Source record: 103844

I don't have the diagram/manual for the 2-417 but for the 2-317.
This is the 30w input version.
I'm not sure if the difference is big.Maybe just some attenuator in the
input or other final transistors.
The difference between the 2-117 and the 2-317 is one extra amplifire at the
input.But the pcb is the same for the two.

Tamz 'n' Stew heeft geschreven in bericht
<3fc57e1d$4@news.comindico.com.au>...
>I am looking for a schematic diagram &/or manual for the
>RF Concepts 2m 170w Linear Amplier RFC 2-417.
>
>If anyone has either of these in electronic format,
>either .doc, .pdf, .lit or image formats please reply to the
>email address below, or send as an attatchment.
>
>Thanks in advance.
>Tam & Stew
>radio@kgl900.com
>
>
>

5279. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 14:50:21 UTC
From: Herbert Khaury <Herbert@tiptoe.tp>
Message-ID: <2smdnRaXGO4znleiRVn-sw@comcast.com>
Source record: 103845

Just teach your cows to stand on one foot. And if they have horns, don't
forget to put those corona-discharge balls on the tips.

--

"'Doc" <w5lz@cwis.net> wrote in message news:3FC98556.F5A1F54@cwis.net...
>
>
> Reg,
> Please don't spread this around! Here in the 'states', the
> EPA has advocated diapers for horses and methane collectors for
> cattle. Next they, along with the S.P.C.A., will want to put
> grounding electrodes and shorting straps on them too. The
> straps
> may not be too bad, but how would you like the job of placing
> the
> electrodes? And where?
> 'Doc

5280. Re: RG-174a source

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 18:33:23 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vskdunc3as453d@corp.supernews.com>
Source record: 103846

I have found the Davis company to be another good source for coax and
wire:
http://www.davisrf.com/ham1/coax.htm
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

5281. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 19:29:10 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <7yryb.294$yf.196@fed1read01>
Source record: 103847
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

```
Outwitting -- use Stealth Antennas URL:
http://ac6v.com/antprojects.htm#STANT
AND
http://www.arrl.org/catalog/?item=7571

Outsmarting -- Don't buy into an HOA Community
Think Ahead --- An HOA can adapt a no antenna rule anytime they want
Have Big Bucks to fight it in court -- Most HOA's have deep pockets

--
73 From The Wilderness Keyboard
"
```

5282. 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 20:14:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311301214.314dc4db@posting.google.com>
Source record: 103848

I was wondering if anybody out there is using two mobile whip antennas
on top band.
The antenna would have max gain at 90 degrees but it should provide
good local contacts if placed at a height of 70 feet.
If one draws a circle as a radiation fields one could see where
the maximum gain is i.e. 90 degrees.
Now if you draw an antenna field with less than half the gain the
max would still be at 90 degrees but the gain loss at say 15 degrees
is minimul at best.
In my case when modeling my particular dipole I can make tremendous
strides
in efficiency if I attach wires at the end of the dipole that hang
to the ground
But when comparing gain say at 15 degrees horizontal there is no
worthwhile increase in gain ie less than 10% of the difference !
It would appear to me that if you are unable to put in a large area of
a ground system one would do better with shortened dipoles but well
away from ground
Comments
Art

5283. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 20:15:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fca5033_4@corp.newsgroups.com>
Source record: 103849

Reg Edwards wrote:
> What's new Cec?
> It's fairly obvious stuff.

Reg, just for you, I have added some background information to that
web page. The underlying physics are obviously not so obvious to
the other side of the argument.
--
73, Cecil http://www.qsl.net/w5dxp/current.htm

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5284. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 20:19:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fca5124_4@corp.newsgroups.com>
Source record: 103850

Art Unwin KB9MZ wrote:
> In my case when modeling my particular dipole I can make tremendous
> strides in efficiency if I attach wires at the end of the dipole that hang
> to the ground
> But when comparing gain say at 15 degrees horizontal there is no
> worthwhile increase in gain ie less than 10% of the difference !

Art, a *gain* in efficiency is as good as an increase in gain. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5285. Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 20:50:55 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <PKsyb.6049$zL1.728683@news1.news.adelphia.net>
Source record: 103851

Possible dum question alert!

I've been thinking about verticals lately, and am curious about a vertical for 80 meters.

Specifically, I am wondering about putting a vertical in one of my trees in the yard. I have *big* trees, 80-90 feet tall, and could put a full 1/4 wave vertical in one of the huge oak trees just outside the shack.

What is more, it is one place in the yard that I can get radials in more than one direction.

I've looked on the web to see if anyone else has done this, and I've seen some references to other types, but the lack of 1/4 wave verticals for this makes me suspicious.

Anyone done this, or is there a reason why it won't work?

- Mike KB3EIA -

5286. 160 Meter Mobile Whip Question?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 21:40:27 UTC
From: Marvin Rosen <puns@verizon.net>
Message-ID: <fttyb.13910$a54.6397@nwrddc03.gnilink.net>
Source record: 103852

Would it be practical to use two 160 mtr mobile whips
in a horizontal configuration with 450 ohm ladder line
for 160-10 mtrs? Placement of antenna would be 70
feet up from the ground. I realize the efficiency would be
poor but better than nothing. Any alternative suggestions
relating to the above?

5287. Hy-Gain Hy-Tower 2" Mast Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 21:46:15 UTC
From: "Richard W. Solomon, W1KSZ" <w1ksz@earthlink.net>
Message-ID: <d4pksv4dsjbpq12gqm597uhcd0tf5emd60@4ax.com>
Source record: 103853

The wind snapped off my 2" mast on the HyTower.
Anyone know where I can get a small length (1-2' foot)
of 1 7/8" OD Tubing to use as a sleeve ? (or a 2" ID
piece would work).

Thanks, Dick, W1KSZ

5288. DK3 mounting question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 22:00:05 UTC
From: theplanters95@aol.comnospam
Message-ID: <20031130170005.19987.00001346@mb-m02.aol.com>
Source record: 103854

I have a DK3 screwdriver from hamradiotoys.com and was wondering the best way to mount it on a ford explorer. It has a 3/8-24 bolt on the bottom, but the coax connects another way.

Randy ka4nma

5289. Re: Hy-Gain Hy-Tower 2" Mast Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 22:33:03 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <zeuyb.138975$86.1610384@twister.tampabay.rr.com>
Source record: 103855

hey richard
check with www.texastowers.com they stock a wide range of tubing and masts

5290. Re: 160 Meter Mobile Whip Question?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 22:36:19 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <Dhuyb.138976$86.1613151@twister.tampabay.rr.com>
Source record: 103856

the company that makes the hamsticks makes a dipole mount so you could
do just thar
how well it will work is beyond me
i am soon to be putting up an Inverted L 1/4wave for 160 meters and hope
i can get 160-10 with it i hope the autotuner in the 756Pro can handle it
good luck

5291. Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-11-30 23:13:01 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311301513.426b01a0@posting.google.com>
Source record: 103857

Seems like the patronage on this group is going down.
I know that the Google updates are extremely slow,
which is irritable and doesn't encourage posting.
Shouldn't we change the site of antenna conversations
before it goes downhill all together ?
There must be a place to post that is updated more
quickly than once or twice a day (snail mail equivalent)
to keep interest going.
Just a thought
Art

5292. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:21:24 UTC
From: Richard G Amirault <amirault@shell01.TheWorld.com>
Message-ID: <bqe1i4smo4@pcls4.std.com>
Source record: 103858
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In rec.radio.scanner Dee D. Flint <deehays@qix.net> wrote:

: Contact the ARRL. They have data that shows that antennas have NO impact on
: property values. They also have data showing that, in general, property
: values are rising faster in areas without CCRs & HOAs than in areas with
: them.

I find that hard to believe. Do you really mean to say that a ham with 15
or 20 different antennas and two towers does *nothing* to the property
values of the houses next door?

Richard in Boston, MA, USA
N1JDU

5293. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:42:10 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0311301642.327ab860@posting.google.com>
Source record: 103859

Roger Halstead <mynewsat@rogerhalsteaddot.com> wrote in message
news:<sitisvggfnbh7hqp3rgpr0mprditl1qkuu@4ax.com>...
> On 29 Nov 2003 02:35:22 -0800, nm5k@wt.net (Mark Keith) wrote:
>
> >k9sqg@aol.com (K9SQG) wrote in message
news:<20031128212558.28460.00001073@mb-m14.aol.com>...
> >> That is not a wise idea. If your mast takes a direct hit, or if there is one
> >> nearby, there is a possibility that some of the energy will go into the house
> >> via that ground rod. Antenna grounds should always be isolated from
> >> housewiring grounds.
> >
> >
> >If all grounds are at the same potential, no current can flow between them.
> >Not to mention the NEC requires it in the U.S. MK
>
> When you figure the rise time there can easily be several thousand
> volts between the base of the antenna mast and the electrical system
> ground. IE the voltage could be 50,000 at the tower and not even have
> started to rise at the electrical ground.

In my case, those are pretty much the same place. All my grounds tend
to rise in potential at the same time, being they are all tied
together at the base of the mast. Nothing is perfect of course, but
you sure don't want any large potential differences between grounds.
>
> It's not just a simple CD circuit.
> I've seen tower strikes where there was such a strong current and fast
> rise time, the magnetic field quenched the current flow and the
> lightening got off part way down and jumped sideways to something
> else.

If I remember right, the original poster was going to mount an antenna
on a roof. That has the potential for even more serious problems if
the antenna acts as a lightning rod. He'd want as few turns or sharp
bends in the ground wire to earth. This is why I much prefer using a
metal mast on the side of the house to support verticals or other high
risk antennas, rather than a mast attached to the roof of the house.
And then hoping a ground wire will safely direct the charge to
earth...It usually will, at least much better than the house itself,
but it's kind of scary if it has turns or bends.
The important part at the house is making sure that everything rises
together so there's no lower resistance path for the charge to take
through the shack or house. At the mast, I always tape all coaxes or
wires to the mast, and run them all the way down to earth to try to
avoid flashing problems. So far in two strikes to the mast, I haven't

noticed any, and I have a breaker box, elevated power lead in, phone lines, cable lines, all within 5 ft of that mast. MK

5294. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:44:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <m9wyb.372045$Tr4.1101837@attbi_s03>
Source record: 103860
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Richard G Amirault wrote:

SNIP

> I find that hard to believe. Do you really mean to say that a ham with 15
> or 20 different antennas and two towers does *nothing* to the property
> values of the houses next door?
>
> Richard in Boston, MA, USA
> N1JDU

Yep! He's right!

Go to city hall and ask Mayor Menino if you can get an abatement based on depeciated value caused by your neighbor's ham antennas. After he stops laughing ... [you fill in the rest].

I sold my home in Danvers [a Boston suburb for non Bostonians] for $20K above real estate appraised market evaluation/value of $270K while I had a Tennadyne T8 [8 element log periodic --- 13 to 33 MHz], a center fed doublet with open wire feeders, and a 2 meter vertical on top of a 45 foot tower in the back yard. The house sold on first day on market. [The Danvers Ham community, W1ZH, K1LQX and others, will gladly confirm the antenna farm].

The buyer's requested assurance that the antenna and tower would be removed prior to passing papers. My response "Of course!"

Deacon Dave, W1MCE

5295. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:51:01 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Vfwyb.368997$HS4.3079160@attbi_s01>
Source record: 103862

Should work fine! There was a section in one of the ARRL books that
showed tree supported 1/4 wave verticals just like you are describing.

W1MCE

Mike Coslo wrote:

> Possible dum question alert!
>
> I've been thinking about verticals lately, and am curious about a
> vertical for 80 meters.
>
> Specifically, I am wondering about putting a vertical in one of my trees
> in the yard. I have *big* trees, 80-90 feet tall, and could put a full
> 1/4 wave vertical in one of the huge oak trees just outside the shack.
>
> What is more, it is one place in the yard that I can get radials in more
> than one direction.
>
> I've looked on the web to see if anyone else has done this, and I've
> seen some references to other types, but the lack of 1/4 wave verticals
> for this makes me suspicious.
>
> Anyone done this, or is there a reason why it won't work?
>
> - Mike KB3EIA -
>

5296. Re: Hy-Gain Hy-Tower 2" Mast Needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:53:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Ohwyb.374830$Fm2.389055@attbi_s04>
Source record: 103863

Maybe if you got off that hill the wind would drop enough so that your
antennas won't break :-)

Let's do lunch soon. Dave
+ + +

Richard W. Solomon, W1KSZ wrote:

> The wind snapped off my 2" mast on the HyTower.
> Anyone know where I can get a small length (1-2' foot)
> of 1 7/8" OD Tubing to use as a sleeve ? (or a 2" ID
> piece would work).
>
> Thanks, Dick, W1KSZ

5297. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:56:00 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Akwyb.372136$Tr4.1101544@attbi_s03>
Source record: 103864

Art, teach me something. I subscribed to the NG r.r.a.a directly.

How does Google get into the act? What does Google do to contribute to
the NG files or distribution? What am I missing?

Deacon Dave, W1MCE

Art Unwin KB9MZ wrote:

> Seems like the patronage on this group is going down.
> I know that the Google updates are extremely slow,
> which is irritable and doesn't encourage posting.
> Shouldn't we change the site of antenna conversations
> before it goes downhill all together ?
> There must be a place to post that is updated more
> quickly than once or twice a day (snail mail equivalent)
> to keep interest going.
> Just a thought
> Art

5298. Re: 160 Meter Mobile Whip Question?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 00:56:19 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <Qd-dndtu74bWDVeiRVn-gQ@ctc.net>
Source record: 103861

> Would it be practical to use two 160 mtr mobile whips
> in a horizontal configuration with 450 ohm ladder line
> for 160-10 mtrs? Placement of antenna would be 70
> feet up from the ground. I realize the efficiency would be
> poor but better than nothing. Any alternative suggestions
> relating to the above?
>
Most of the time it is not too efficiant to try and use loaded whips outside
of the band they are made for.

5299. RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 01:19:09 UTC
From: harshit <hsuri@usc.edu>
Message-ID: <bqe4tvokl1@gist.usc.edu>
Source record: 103865

I remember during my undergraduate years i took a course on antennas. During our labs . Our lab assistant used this device. A thin cylindrical tube. Which glowed when it sensed RF radiation. Our professor used this device to show various polarizations of various antennas.

My question:
What is this device called. I wish to buy it from ebay or any other source. Any other suggestions shall be appreciated

5300. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 01:31:54 UTC
From: dplatt@radagast.org
Message-ID: <vsl6gaah4pbmd2@corp.supernews.com>
Source record: 103866

>Seems like the patronage on this group is going down.
>I know that the Google updates are extremely slow,
>which is irritable and doesn't encourage posting.

Don't confuse Google with the underlying newsgroup. The actual
net-news propagation is quite rapid.

>Shouldn't we change the site of antenna conversations
>before it goes downhill all together ?

Why bother? The slowness you are observing is almost certainly an
artifact of the specific site/service you're using to post and read,
and doesn't indicate problems with the underlying (distributed,
world-wide, and very functional) USENET news distribution system itself.

>There must be a place to post that is updated more
>quickly than once or twice a day (snail mail equivalent)
>to keep interest going.

I see new articles pop up in this newsgroup several times per hour.

You can get higher-quality access to this newsgroup by signing up for
an account with a site which provides direct NNTP-based access. The
one my employer uses is SuperNews (www.supernews.com) - they have both
personal, and corporate accounts. You can download suitable
reading/posting software (e.g. Free Agent) from their site.

There are also some sites which offer no-cost NNTP access to USENET -
try www.teranews.com, www.eastbaytech.com,
http://www.free-newsservers.com, or try a Google search for "free NNTP
accounts"

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5301. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 01:33:03 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <iTwyb.268418$275.959715@attbi_s53>
Source record: 103867

Nothing except that some people don't know that there is a way here other than Google. I have used Google groups. It's better than nothing but not much.

"Dave Shrader" <david.shrader@comcast.net> wrote in message news:Akwyb.372136$Tr4.1101544@attbi_s03...
> Art, teach me something. I subscribed to the NG r.r.a.a directly.
>
> How does Google get into the act? What does Google do to contribute to
> the NG files or distribution? What am I missing?
>
> Deacon Dave, W1MCE
>
>
> Art Unwin KB9MZ wrote:
>
> > Seems like the patronage on this group is going down.
> > I know that the Google updates are extremely slow,
> > which is irritable and doesn't encourage posting.
> > Shouldn't we change the site of antenna conversations
> > before it goes downhill all together ?
> > There must be a place to post that is updated more
> > quickly than once or twice a day (snail mail equivalent)
> > to keep interest going.
> > Just a thought
> > Art
>

5302. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 01:35:35 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <176lsvkkrpr49ioolsamb0og00jq4vljrj@4ax.com>
Source record: 103868

On 30 Nov 2003 15:13:01 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Seems like the patronage on this group is going down.
>I know that the Google updates are extremely slow,
>which is irritable and doesn't encourage posting.
>Shouldn't we change the site of antenna conversations
>before it goes downhill all together ?
>There must be a place to post that is updated more
>quickly than once or twice a day (snail mail equivalent)
>to keep interest going.
>Just a thought
>Art

My ISP, which charges all of $20 monthly, has its own newsgroup
computers, and I access them directly with my newsreader, Forte Agent,
which, by the way, is an excellent reader (see the Forte web site). I
get updates all day & night long.

We're posting our stuff in the right place -- you might consider an
alternative to getting your newsgroup stuff off of the Web-based
Google, which, from what you say, is ponderous.

Look in your locality for an ISP with its own newsgroup computer(s).

Bob
k5qwg

5303. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 02:24:07 UTC
From: richardharrison@webtv.net
Message-ID: <9147-3FCAA647-119@storefull-2314.public.lawson.webtv.net>
Source record: 103770

hsuri wrote:
"A thin cylindrical tube which glowed when it sensed radiation."

An ordinary fluorescent tube fits the description and hsuri may already have one.

A neon tube also readily glows in the presence of r-f.

At a radio station where I worked in 1949, I used to grab any old fluorescent tube at night to serve as a flashlight when making checks outdoors. It worked well when the envelope was held near one end and reguired no antenna nor hand contact with any terminal. Frequency of the station was and still is 790 KHz.

Best regards, Richard Harrison, KB5WZI

5304. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 02:38:53 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <-KCdnXBT4rzCOleiRVn-uw@ctc.net>
Source record: 103769

> I remember during my undergraduate years i took a course on antennas.
During
> our labs . Our lab assistant used this device. A thin cylindrical tube.
> Which glowed when it sensed RF radiation. Our professor used this device
to
> show various polarizations of various antennas.
>
> My question:
> What is this device called. I wish to buy it from ebay or any other
source.
> Any other suggestions shall be appreciated
>
I don't know what his device was , but a florescence light bulb (tube) will
glow around RF. If you excite it with a voltage just below the firing point
it will be very sensitive.

5305. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 03:26:31 UTC
From: Alex Batson <batsona@comcast.net>
Message-ID: <V9qdnWaMYo17KVeiRVn-vw@comcast.com>
Source record: 103771

Consider:

> The National Electric Code says otherwise. Earth ground is *not*
> considered adequate bonding for the purposes of electrical safety.
>
> The bonding rule is there for a very good reason... safety.
>
>
> Bonding the grounds together will cost maybe $10 worth of wire. It's
> cheap insurance.

My main pannel's nutral bar is attached to a stranded 2AWG wire attached to the cold water pipe (from 1963). Other work done in 2001 by a contractor has a solid 6AWG wire on the nutral bar, going out to a stake in the back yard. He tied the gas line in the house, to the cold water pipe, and also, in another area of the basement, tied the copper sewer line to the cold water line. Am I good-as-gold with this setup?

alex
batsona<at>comcast<dot>net

5306. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 03:41:07 UTC
From: dplatt@radagast.org
Message-ID: <vsle2jh3nj79f7@corp.supernews.com>
Source record: 103772

>> The National Electric Code says otherwise. Earth ground is *not*
>> considered adequate bonding for the purposes of electrical safety.
>>
>> The bonding rule is there for a very good reason... safety.
>>
>>
>> Bonding the grounds together will cost maybe $10 worth of wire. It's
>> cheap insurance.

>My main pannel's nutral bar is attached to a stranded 2AWG wire attached to
>the cold water pipe (from 1963). Other work done in 2001 by a contractor
>has a solid 6AWG wire on the nutral bar, going out to a stake in the back
>yard. He tied the gas line in the house, to the cold water pipe, and also,
>in another area of the basement, tied the copper sewer line to the cold
>water line. Am I good-as-gold with this setup?

I can't speak for the legalities of the situation (only your local
code inspector can), but it sure sounds good to me! Keep up this
approach with any new grounding points/rods you add, and I think
you'll be in very good shape.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5307. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 03:45:48 UTC
From: Alex Batson <batsona@comcast.net>
Message-ID: <utednUs_g9DxJFei4p2dnA@comcast.com>
Source record: 103773
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Consider:

> However, before that, make sure you have
> 1. good, clean connections at ALL connections EVERYWHERE;
> 2. the antenna pointed in the right direction (turn it 360 degrees,
> you might be surprised the signal comes from a direction you didn't
> think would work).

I think echos are doing me in. I have plenty of signal stregnth but it's quite difficult getting my HDTV receiver to think it has enough signal to build a picture. Let say I point to station "X", which is UHF. It's analog signal is OK (some snow, but viewable, but with a few ghosts or echos..) The same station X broadcasts HDTV from the same mast, but I can't get it.

I have found that I can pick up channels by NOT pointing the antenna directly at the broadcast point; I can get the signal by being 90degrees to it.

Do ghosts (echos) on a strong signal kill HDTV reception? If so, I need a highly directional antenna (ChannelMaster 4228 8-bay)?

Alex
batsona<at>comcast<dot>net

5308. Re: 160 Meter Mobile Whip Question?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:05:57 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FCABE25.80E88C16@cwis.net>
Source record: 103774

Marvin,
To make it short-n-sweet, no, it wouldn't be practical. The
'better than nothing' route sometimes isn't very much better
than nothing, and I think that's what you would have. If you've
got that 70 feet of tower/tree/whatever, why not hang an
inverted
'L' off of it? Ought to work much better, and depending on the
tuner, on all bands too.
'Doc

5309. Re: 1.2Ghz antenna that can be cut for 160mtrs...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:08:14 UTC
From: Mike Burch <mburch46@mchsi.com>
Message-ID: <O8zyb.376703$Fm2.392960@attbi_s04>
Source record: 103775
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

It isn't anything. You had the courage to ask a question. It's all
part of the big learning curve. Keep asking questions and never give up.

Mike Burch K8MB

Apache Junction AZ

5310. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:09:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcabf1e$1_7@corp.newsgroups.com>
Source record: 103776

Mike Coslo wrote:
> Anyone done this, or is there a reason why it won't work?

The reason that you haven't seen such described is that not many
people have 90 ft. trees close to the shack. It should work pretty
well. Do you really have 90 ft. Oak trees? What species of Oak?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5311. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:15:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqef8r$17h$1@sparta.btinternet.com>
Source record: 103777

> Reg,
> Please don't spread this around!
.....
Doc, I wouldn't even dream of it.
.....
> Here in the 'States',
.....
Over here we do sympathise with your Stateside predicament. Here we have the House of Lords at loggerheads with the House of Commons about making fox-hunting illegal. It's a matter of balancing the pain experienced by an exhausted reynard against the warming satisfaction felt by a pack of hounds (and the gloating human observers) as the fox is torn to shreds and a few minutes later his blood is ceremoniously smeared over the forehead of a junior members of our Royal Family.

There are those amongst us who feel more time should be allocated it what's left of the Empire, on which the sun never set, in Westminster to discussion of the prospects of asking Mr Saddam please to return to his own choice of one of his palaces and use his authority and know-how to secure a reasonable measure of law and order in his ancient, 8,000 year old country. The land of Ur - the land of two rivers - the Tigris and the Euphrates - on the banks of which the now much-vaunted democratic ideas first germinated as if by magic, by the Gods, from nothing.

By the way - as a matter of geological interest - how did American oil manage to find it's way underneath Iraqi, Middle-east and Central Asian sand? Thats's 10,000 miles! Two billion years of percolation?

However, sorry for the geographical diversion.

Bloody fox-tails are far more likely to result in abolition of the Royal family and the House of Lords than the price of petrol in your car tank. In the age of Ur, and the later Babylonian age, the internal combustion engine had not been invented. Whatever the outcome the eventual beneficiaries, of course, will be the Threadneedle Street and Wall Street bankers when they are released from their prison sentences.

Cheers, Reg

5312. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:24:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcac2bb$1_7@corp.newsgroups.com>
Source record: 103779

Art Unwin KB9MZ wrote:

> Seems like the patronage on this group is going down.
> I know that the Google updates are extremely slow,
> which is irritable and doesn't encourage posting.
> Shouldn't we change the site of antenna conversations
> before it goes downhill all together ?
> There must be a place to post that is updated more
> quickly than once or twice a day (snail mail equivalent)
> to keep interest going.
> Just a thought
> Art

Art, my ISP subscribes to newsfeeds.com so I have internet and
newsgroup access for $8/mo. For an additional $6/mo, I have access
to the newsgroups through the GED computer where I work. Google
is good for archives but not so good for real-time newsgroup access.
Take a look at http://www.newsfeeds.com and see what you think.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5313. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:25:15 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0311302025.1c40a8f8@posting.google.com>
Source record: 103778

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fca5124_4@corp.newsgroups.com>...
> Art Unwin KB9MZ wrote:
> > In my case when modeling my particular dipole I can make tremendous
> > strides in efficiency if I attach wires at the end of the dipole that hang
> > to the ground
> > But when comparing gain say at 15 degrees horizontal there is no
> > worthwhile increase in gain ie less than 10% of the difference !
>
> Art, a *gain* in efficiency is as good as an increase in gain. :-)

Cecil I believe you are missing the point.Either that or you have a
motive for such an answer.
An increase in efficiency will provide an equivalent gain at its 'max
directivity point' but the gain at a low angle has increased by a very
small amount. With my dipole antenna say at 40 % efficiency would be
equivalent to a beverage antenna at 15 degrees.
If I upped the efficiency of my antenna say to 80% then yes, you would
see
the gain at 90 degrees increase in a worth while manner but when you
examine an overlay with the beverage at 15 degrees you would be hard
put to see any difference. Draw the radiation patterns with both
circles meeting at the ground level and you will see what I am getting
at.(I am looking at horisontal polarisation now that provides
different ground losses for polarisation antenna forms , the beverage
being very close to ground)
Art

5314. Re: 160 Meter Mobile Whip Question?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:29:20 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcac3df_7@corp.newsgroups.com>
Source record: 103780

Marvin Rosen wrote:
> Would it be practical to use two 160 mtr mobile whips
> in a horizontal configuration with 450 ohm ladder line
> for 160-10 mtrs? Placement of antenna would be 70
> feet up from the ground. I realize the efficiency would be
> poor but better than nothing. Any alternative suggestions
> relating to the above?

Such a configuration would result in very poor performance on all
bands. Why not just install an elevated multi-band vertical?
--
73, Cecil http://www.qsl.net/w5dxp

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5315. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 04:46:27 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcac7e1$1_7@corp.newsgroups.com>
Source record: 103781

Cecil Moore wrote:
> Take a look at http://www.newsfeeds.com and see what you think.

The $6/mo service is at http://www.usenet-access.com/
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5316. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 05:52:14 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <iGAyb.269889$9E1.1417007@attbi_s52>
Source record: 103782
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dee D. Flint" <deehays@qix.net> wrote in message
news:7tbyb.13225$P%1.12017380@newssvr28.news.prodigy.com...
>
> Same organization has data showing it doesn't affect the sale of homes
> either.

How about an organization that has a little less bias toward allowing
antennas.

5317. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 05:56:07 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <XJAyb.270855$275.965396@attbi_s53>
Source record: 103783
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Richard G Amirault" <amirault@shell01.TheWorld.com> wrote in message
news:bqe1i4smo4@pcls4.std.com...
>
> I find that hard to believe. Do you really mean to say that a ham with 15
> or 20 different antennas and two towers does *nothing* to the property
> values of the houses next door?

That's what hams want you to believe. They are right of course. Lets say your home is worth $175K before the tower. Then you try to sell your home. You get no _offers_ because of that antenna field next door. Therefore you cannot _prove_ that the value of your home went down. Hams are an elite group of people like others. I find it hard to believe that a ham selling their home would leave the antennas up while showing the home. Even if they are going to toss them, any realtor is going to tell the person to take them down.

5318. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 05:57:36 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <kLAyb.270866$275.965766@attbi_s53>
Source record: 103784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:m9wyb.372045$Tr4.1101837@attbi_s03...
>
> The buyer's requested assurance that the antenna and tower would be
> removed prior to passing papers. My response "Of course!"

So here we have:

1: The people did not want the antennas.

2: It's more like "Fuck my neighbor. If he is selling his home and can't
get a buyer due to my antennas, that's his problem."

5319. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:01:42 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <aPAyb.269971$9E1.1417090@attbi_s52>
Source record: 103785
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bqbajj$hn5$1@news1.kornet.net...
> There currently exists a rule within the FCC that disallows municipalities
> preventing amateur operators from erecting antennas, and a similar rule
for > CC&R's is in the works.

If my neighbors use this unjust law to put up an antenna, I hope they don't plan on selling their home anytime soon. As soon as I see a 4-sale sign in the neighbors yard, that's when I get into ham myself and erect my big, bad antenna. Like you hams say, this wouldn't affect the property value or the sale of the home so my ham neighbor wouldn't say anything to me....right?

5320. Re: TV antenna gets cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:02:58 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a3442f2c6b0879a989687@news-server.socal.rr.com>
Source record: 103786

In article <Fqcxb.33961$I53.1518734@twister.southeast.rr.com>,
Gfender@carolina.rr.com says...
> > I'm willing to bet that only lasted until the base frequency management
> > office started getting complaints of interference on some of the
> > tactical FM gear, at which point they'd DF it to your barracks building.
> > Someone probably received a large boot in the backside as a result....
>
> Nope, Thses were all in the normal 12 VHF channels so no one complained.
> Least not for the 3 years I was there.

Cool! Remind me to take you with me next time I go to Vegas -- you're
obviously a good luck charm! :-)

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

5321. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:03:28 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <QQAyb.270914$275.965111@attbi_s53>
Source record: 103787
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:%Xbyb.22095$yM6.1695@lakeread06...
> I kept in at the tree line, in the middle of
> the property. Out of sight.

I think how tall the antennas are is what dictates if they are a problems.
Antennas that are as tall as the home and in the back yard really wouldn't
be a a problem for me. Huge big, bad antennas would.

5322. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:13:22 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <6_Ayb.270995$275.965769@attbi_s53>
Source record: 103788
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Frank Dresser" <analogdial@worldnet.att.net> wrote in message
news:Ikdyb.129994$Ec1.5402964@bgtnsc05-news.ops.worldnet.att.net...
>
> I'm trying to see the important distinction between "property values"
> and "your investment in your home".

Investment in your home, to me, means what you paid for your home. Property value is what someone is supposedly willing to pay for your land and home. It doesn't necessary mean your actual investment in the home. If a chemical spill is discovered near the area, your property value might be $50K while your investment could be $100K (what you paid for your home). People want to equate property values with an investment that will _always_ go up, mostly due to the real estate boom over the last 3 decades or so. I don't see many people like that. Out of all my family, only a cousin actually rents a home. No many people buy a home, let it sit empty and hope that they can sell it for 30% more in a year. That is the main problem with CC&R. People think they are a way to help your property value increase. That's stupid logic. They should be more worried about just making sure they get what they put into the home. I believe CC&Rs do that. They make it so people can sell their home. I personally wouldn't have a problem with a ham antenna as long as it didn't interfere with anything in my home. If it did, I would ask the person to take it down. Chances are I would be a good friend to my neighbors since I am pretty easy to get along with. It's when hams get this attitude (like I am seeing here) spouting off: "Well, I got a new law supporting me so not much you or anyone else can do." That's when the gloves come off. Screw them. They thought they had a friend....I hope the person never needs something or tries to make small talk.

5323. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:23:48 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <U7Byb.271075$275.966105@attbi_s53>
Source record: 103789
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dee D. Flint" <deehays@qix.net> wrote in message
news:pvbyb.13227$P%1.12017655@newssvr28.news.prodigy.com...
> The problem is that in some places in this country finding an area without
> CCRs that will mean an unreasonably long communte to work.

That's my point. It seems more and more, no one is willing to compromise. Hams want no CC&R and have everything want. Scanner people want what they want. Short-wave people want what they want. My commute is 20 miles. I would be fine with driving 30. Some people can't stand that, so they live in vinyl villages and in urban areas. Some people think 10 miles or more of a drive to work is horrible. I don't see how these people would survive if they had not found their little niche a few decades ago. Would they just be bitter? I know that if I want to live rural, I have to look at almost a 30 mile drive. So? I save my money and take care of my car. If it's that big of deal, buy a Honda. Of course then there are the rich folks who can never been seen in a Honda. Those are the people I tell to go buy an Acura!!

I have seen this attitude more and more with the younger generation. No home less than 5 years old. Fancy SUVs, etc etc. Live paycheck to paycheck. These are actually the CC&R cops you people talk about. Always bitching about so and so violating this and that.....only because they think their home is going to double in value in 10 years. Me, I hope to live as rural as possible. Even if that means my ham can put up 500 towers. Depending on what it does/doesn't do to my electronics and his/her attitude after I let them know about it, will determine if I see them as friend or foe. Hams serve a purpose, a good one....but this doesn't mean they should use some law to skirt the rules of a contract they were never forced into.

5324. i am inadvertently noisy, so I waste you

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 06:55:06 UTC
From: "I. Z. Billings" <cowvulyn@hoknuwu.mp.us>
Message-ID: <41d2fff7.48788126@news.hoknuwu.mp.us>
Source record: 103790

Dear Judges, Lawyers, Policemen, Guards, Counselors, Taxpayers, et. al.,

We are here. Like it or not, for good or bad, we are here. Who are we? We are the downtrodden and dispossesed, the self-torturing, the disenfranchised convicts, drug and alcohol addicts, the unemployed and unemployable. We are the children of poverty, financial and spiritual. We have and will have children of our own, grandchildren too. We are ex-cons, uninsured, homeless, of many colors and speaking many tongues. We are the enemy in what has become a domestic war against ourselves.

And who are you? You who like the tough talk of Tough on Crime? You who watch as budgets are cut in education and health care while you militarize a police force? Bullet-proof vests, automatic weapons, helicopters, tanks, robots ... the testosterone is oozing through the streets, more prisons, longer sentences, tighten the belt, spartan conditions, task forces, gang units, gun courts. And what is there to show for it? Unemployent stays low because half the population oversees those "out of the workforce", the dregs, the rabble, the enemy? Please tell me there is a deeper reason. Do you feel safer? More humane? More like a cohesive society with a shared sense of purpose, who can identify Us and Them? Do you live in a gated community or gentrified neighborhood? By the way, have you read the Declaration of Independence and US Constitution - or do you only know the first phrases?

It's about time we got together. Please know that I have yet to meet a convict who wants their child to be a thief, an addict, a dealer, a prostitute, or a violent individual. Most of us still have hope for ourselves even when stuck in the darkest dilemmas, ruts and catch-22s. Most of us believe in crafting laws and instilling order. Many of us have burrowed beneath the surface to find a spiritual sense of being, an understanding force at least as powerful as those we succumbed to, and many of use wouldn't escape if you opened the front door. Did you know that approximately 10 million Americans are either incarcerated, on probation, on parole or once were in those categories? Each of those 10 million have families, friends, neighbors ... and so closer and closer does the We interface with the You. Don't you think it's time we talked?

Are you ready? Can you accept that the road we are travelling points toward a grim and painful future? Do you have the heart to face monumental failures while bravely struggling beyond where we are now? I know that some of you are, and that some of us are, and this is what gives me hope. You need our insights just as we need your structure. It is never over, especially when a real solution, a real treatment for our sickness, is yet to begin.

In Solidarity,

Bruce Reilly (a.k.a Bruha)
P.O.Box 8274
Cranston, RI 02920 USA

BRUHA@hoknuwu.mp.us

P.S. - I am trying to conceptualize an effective guerilla media campaign to promote this cause. Ideas are welcome. Collaboration is prayed.

numerous to mention all
followed. HASA started in (what is now) talk.religion.misc and
also turns up in soc.singles, talk.bizarre, et al. because members
post there too.

Subject: sci.space.shuttle: Shouldn't this group be merged with sci.space?

No. sci.space.shuttle is for timely news bulletins. sci.space is for
discussions.

Subject: How do I use the "Distribution" feature?

When your posting software (e.g., Pnews or postnews) prompts you
for a distribution, it's asking how widely distributed you want
your article. The set of possible replies is different,
depending on where you are, but at Bell Labs in Murray Hill, New
Jersey, possibilities include (for example):
local local to this machine
mh Bell Labs, Murray Hill Branch
nj all sites in New Jersey
btl All Bell Labs machines
att All AT&T machines
usa Everywhere in the USA
na Everywhere in North America
world Everywhere on Usenet in the world
Many of the posting programs will provide a list of
distributions, if your site admin has kept the files up-to-date.

If you hit return, you'll get the default, which is usually
"world.". This default is often not appropriate -- PLEASE take a
moment to think about how far away people are likely to be
interested in what you have to say. Used car ads, housing wanted
ads, and things for sale other than specialized equipment like
computers certainly shouldn't be distributed to Europe and Korea,

5325. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 07:13:34 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <omplsv8v3rg4hkdjdg3ijdv1osr3mejuu2@4ax.com>
Source record: 103791
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Mon, 1 Dec 2003 00:21:24 +0000 (UTC), Richard G Amirault
<amirault@shell01.TheWorld.com> wrote:

>In rec.radio.scanner Dee D. Flint <deehays@qix.net> wrote:
>
>: Contact the ARRL. They have data that shows that antennas have NO impact on
>: property values. They also have data showing that, in general, property
>: values are rising faster in areas without CCRs & HOAs than in areas with
>: them.
>
>I find that hard to believe. Do you really mean to say that a ham with 15
>or 20 different antennas and two towers does *nothing* to the property
>values of the houses next door?

Now that is one of those open ended questions and gets an "it all
depends" for an answer.

If you mean an installation such as
http://www.rogerhalstead.com/ham_files/Tower30.htm
The answer is no. In the photo there are beams for 20, 15, 10(1),
6(1), 2(2), and 440(2) for a total of 6. plus two verticals for 144
and 440 and a multi band vertical on a 32 foot tower for 9. Then
wire antennas for 75 (2) and 40 (1) for 12. Then three dishes for
satellite and microwave for 15 and two UHF TV antennas for a total of
17. It's not figured in the evaluation of our property as either a
plus or minus.

It's a rural subdivision that is heavily wooded. Except for a couple
of back yards and a corner lot the system is not readily visible. Yet
from half a mile away it stands out readily, being well above the tree
line. The house to the south just sold with nary a question as to the
antennas.

When I first installed the top mast one neighbor asked about it
falling over. We measured the distance and he was well outside the
radius. Plus they now call it the neighbor hood lightening rod as they
have seen it get hit at least twice while they were sitting in their
family room watching a storm. They also watch to see what we do when
the weather gets bad and have the local repeater on their scanner.

Nothing else in the neighborhood has been struck since I put it up.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)

(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>Richard in Boston, MA, USA
>N1JDU

5326. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 07:25:07 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <srqlsvg8qk004uqtp11u3o9l12h7l6erb5@4ax.com>
Source record: 103792

On Sun, 30 Nov 2003 20:50:55 GMT, Mike Coslo <mcoslo@adelphia.net>
wrote:

>Possible dum question alert!
>
>I've been thinking about verticals lately, and am curious about a
>vertical for 80 meters.
>
>Specifically, I am wondering about putting a vertical in one of my trees
>in the yard. I have *big* trees, 80-90 feet tall, and could put a full
>1/4 wave vertical in one of the huge oak trees just outside the shack.
>

Go for it.
Yes the tree will affect the antenna some, and it's effect will vary
with the seasons so you *might* have to change the tuning, or matching
between Summer and Winter. OTOH, I have 75 meter slopers that hear
(and work) Europe on a regular basis. They run through trees and the
tuning does change a bit. There is a difference in tuning between the
one through trees and the one near trees. They both work great.

>What is more, it is one place in the yard that I can get radials in more
>than one direction.

As was already mentioned, keep the wire well away from the tree
itself. The end of the wire will have some very high voltages,
particularly if you run the legal limit, but I'd not worry much about
starting a fire in an Oak, except in the Fall.

>
>I've looked on the web to see if anyone else has done this, and I've
>seen some references to other types, but the lack of 1/4 wave verticals
>for this makes me suspicious.

I'd guess it's more a lack of 90 foot trees to support the antennas
rather than antenna performance. <:-))

>
>Anyone done this, or is there a reason why it won't work?

Been done, worked fine in the cases I've read.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>
> - Mike KB3EIA -

5327. what is this type of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 10:28:28 UTC
From: myliux <mylinux@earth.com>
Message-ID: <bqf58u$7bq13@imsp212.netvigator.com>
Source record: 103793

http://dtusat.dtu.dk/group.php?c_gid=21

5328. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 10:45:04 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <QYEyb.1$Oe5.0@newsread2.news.atl.earthlink.net>
Source record: 103794
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" wrote:
>
> "Dwight Stewart" wrote:
> > It does amaze me, Pappy, how many are
> > so willing to accept, and even defend,
> > additional restrictions on people's lives and
> > property in this supposedly free country of
> > ours.
>
> Please show us one case where someone was
> force (with a gun, knife, etc) to buy a home in
> a CC&R neighborhood. No one is forced to
> buy a home in CC&R. If you don't want
> CC&R, move.

Nobody today was forced with a gun, knife, or whatever, to be born in this country either, but we still have restrictions on the government's ability to interfere with our lives (without having to move to get it). The same cannot be said for CC&R's. These homeowners associations, and their CC&R's, restrict our lives in ways our federal government would not even consider. The only way to escape those restrictions is to move - in a country where homeowners associations, and their CC&R's, are spreading to the point where there may someday be no free place left to move to.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5329. Re: 1.2Ghz antenna that can be cut for 160mtrs...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 10:46:11 UTC
From: Larry Gadbois <lgadbois@earthlink.net>
Message-ID: <TZEyb.23346$sb4.19238@newsread2.news.pas.earthlink.net>
Source record: 103795
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

I cut it again and it's still too short!

"Mike Burch" <mburch46@mchsi.com> wrote in message
news:O8zyb.376703$Fm2.392960@attbi_s04...
>
>
> It isn't anything. You had the courage to ask a question. It's all
> part of the big learning curve. Keep asking questions and never give up.
>
> Mike Burch K8MB
>
> Apache Junction AZ
>

5330. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 10:55:41 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <N6Fyb.4$Oe5.2@newsread2.news.atl.earthlink.net>
Source record: 103796
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" wrote:
>
> (snip) Your property value doesn't mean
> jack if you cannot SELL your home. There
> are more people willing to look elsewhere
> if my damn neighbor has some 20+ foot
> tower in his/her back yard. (snip)

Do you have any reliable evidence of this? I've seen nothing that suggests
people aren't willing to purchase homes with antennas in the neighborhood.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5331. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 11:03:32 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <8eFyb.8$Oe5.7@newsread2.news.atl.earthlink.net>
Source record: 103797
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" wrote:
>
> "Dee D. Flint" wrote:
> > Same organization has data showing it
> > doesn't affect the sale of homes either.
>
> How about an organization that has a little
> less bias toward allowing antennas.

Okay, how about that organization? Which organization has data showing antennas in a neighborhood have a negative affect on the sale of homes?

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5332. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 11:50:48 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <sWFyb.19$Oe5.0@newsread2.news.atl.earthlink.net>
Source record: 103798
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" wrote:
>
> My county just east of Indy has plenty of
> non CC&R neighborhoods. (snip)

I worked in Indianapolis several years ago (as a security specialist for DFAS in what was once Ft. Ben Harrision). Since the DoD supplied our residence, we were not personally affected by CC&R's. However, we did casually look into purchasing a house with the idea of possibly making that area our home. During that process, we ran into several houses with CC&R's (especially in the north-eastern part of town). But, on the south side of town, none of the houses had a CC&R. That has probably changed today. But I don't doubt the mostly open, mostly country, areas east of Indy are still relatively free of CC&R's.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5333. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 12:59:57 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <hXGyb.181676$Dw6.700995@attbi_s02>
Source record: 103799
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:sWFyb.19$Oe5.0@newsread2.news.atl.earthlink.net...
> However, we did
> casually look into purchasing a house with the idea of possibly making
that
> area our home. During that process, we ran into several houses with >
CC&R's (especially in the north-eastern part of town). But, on the south >
side of town, none of the houses had a CC&R. But I don't doubt the mostly >
open, mostly country, areas east of Indy are still relatively free of
CC&R's.

I do not know of _any_ single addition that was built in the 70s/80s without CC&Rs actually vote to have them. In my area alone, there are 4 older neighborhoods....none of them have CC&Rs. CC&Rs were rare and usually for the high end neighborhoods. Now all the newer neighborhoods have CC&Rs. The whole point is that besides the northside, Hamilton Co., and newer additions...Indy provides plenty of neighborhoods on all sides that do not have CC&Rs. I guess that is why I like it here and decided against moving to see other parts of the country. I can only imagine how horrible mega cities are. Still, fact is that Indy does offer plenty in terms of jobs in almost all fields...especially bio-technology tied in with pharmaceuticals. If I ever moved it would be to a like size city, and Montana, Idaho area would be my first choice.

5334. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 13:30:01 UTC
From: craigm <none@domain.invalid>
Message-ID: <vsmg0mdnal110b@corp.supernews.com>
Source record: 103800
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:hXGyb.181676$Dw6.700995@attbi_s02...
>
> "Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
> news:sWFyb.19$Oe5.0@newsread2.news.atl.earthlink.net...
> > However, we did
> > casually look into purchasing a house with the idea of possibly making
> that
> > area our home. During that process, we ran into several houses with >
> CC&R's (especially in the north-eastern part of town). But, on the south >
> side of town, none of the houses had a CC&R. But I don't doubt the mostly
>
> open, mostly country, areas east of Indy are still relatively free of
> CC&R's.
>
> I do not know of _any_ single addition that was built in the 70s/80s
without
> CC&Rs actually vote to have them. In my area alone, there are 4 older
> neighborhoods....none of them have CC&Rs. CC&Rs were rare and usually for
> the high end neighborhoods. Now all the newer neighborhoods have CC&Rs.
> The whole point is that besides the northside, Hamilton Co., and newer
> additions...Indy provides plenty of neighborhoods on all sides that do not
> have CC&Rs. I guess that is why I like it here and decided against moving
> to see other parts of the country. I can only imagine how horrible mega
> cities are. Still, fact is that Indy does offer plenty in terms of jobs
in
> almost all fields...especially bio-technology tied in with
pharmaceuticals.
> If I ever moved it would be to a like size city, and Montana, Idaho area
> would be my first choice.
>
>

Which cities in Montana and Idaho are the same size as Indianpolis?

5335. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 13:50:30 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312010550.2e4c6a83@posting.google.com>
Source record: 103801

You are quite correct. Some years ago I was given to
understand that Google took over the old set up.
My server said there was nothing he could do for me.
Is their a way for me to get the postings quicker
other than paying for it ?
I would appreciate any help
Art

"CW" <clinton.magers@comcast.net> wrote in message
news:<iTwyb.268418$275.959715@attbi_s53>...
> Nothing except that some people don't know that there is a way here other
> than Google. I have used Google groups. It's better than nothing but not
> much.
>
>
> "Dave Shrader" <david.shrader@comcast.net> wrote in message
> news:Akwyb.372136$Tr4.1101544@attbi_s03...
> > Art, teach me something. I subscribed to the NG r.r.a.a directly.
> >
> > How does Google get into the act? What does Google do to contribute to
> > the NG files or distribution? What am I missing?
> >
> > Deacon Dave, W1MCE
> >
> >
> > Art Unwin KB9MZ wrote:
> >
> > > Seems like the patronage on this group is going down.
> > > I know that the Google updates are extremely slow,
> > > which is irritable and doesn't encourage posting.
> > > Shouldn't we change the site of antenna conversations
> > > before it goes downhill all together ?
> > > There must be a place to post that is updated more
> > > quickly than once or twice a day (snail mail equivalent)
> > > to keep interest going.
> > > Just a thought
> > > Art
> >

5336. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 13:59:14 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bqfeum$eu8$1@news1.kornet.net>
Source record: 103802
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"craigm" <none@domain.invalid> wrote in message
news:vsmg0mdnal110b@corp.supernews.com...
> Which cities in Montana and Idaho are the same size as Indianpolis?

Largest cities...

Billings, MT 131,622
Boise, ID 185,787

Indianapolis, IN 1,607,486

There were 3 times more people in Indy in 1910 than there are in Boise
today..

5337. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 14:11:24 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <a7imsvofts54b6q6gcvrsfr30484mrt5bu@4ax.com>
Source record: 103803

On 1 Dec 2003 05:50:30 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>You are quite correct. Some years ago I was given to
>understand that Google took over the old set up.
>My server said there was nothing he could do for me.
>Is their a way for me to get the postings quicker
>other than paying for it ?

My ISP includes the news group feeds at no additional cost. You might
check to see if your ISP has its own news group server. If it does,
you're all set. Start accessing that news server instead of Google.

If not, you could check some of the other ISPs in your area of the
country.

You could also go to http://www.forteinc.com and download their news
group reader. There's a free version called Free Agent. It's a much
better handler of newsgroup postings than what you might be using in
your browser. Once Free Agent is installed, go into User Options and
give the name of the news server at your ISP. Then go under Groups,
and download the list of all the news groups handled by your ISP
(there should be 40- or 50-thousand). Then subscribe to the ones you
want, such as this one.

Bob
k5qwg

>I would appreciate any help
>Art
>
>
>
>
>"CW" <clinton.magers@comcast.net> wrote in message
news:<iTwyb.268418$275.959715@attbi_s53>...
>> Nothing except that some people don't know that there is a way here other
>> than Google. I have used Google groups. It's better than nothing but not
>> much.
>>
>>
>> "Dave Shrader" <david.shrader@comcast.net> wrote in message
>> news:Akwyb.372136$Tr4.1101544@attbi_s03...
>> > Art, teach me something. I subscribed to the NG r.r.a.a directly.
>> >
>> > How does Google get into the act? What does Google do to contribute to

>> > the NG files or distribution? What am I missing?
>> >
>> > Deacon Dave, W1MCE
>> >
>> >
>> > Art Unwin KB9MZ wrote:
>> >
>> > > Seems like the patronage on this group is going down.
>> > > I know that the Google updates are extremely slow,
>> > > which is irritable and doesn't encourage posting.
>> > > Shouldn't we change the site of antenna conversations
>> > > before it goes downhill all together ?
>> > > There must be a place to post that is updated more
>> > > quickly than once or twice a day (snail mail equivalent)
>> > > to keep interest going.
>> > > Just a thought
>> > > Art
>> >

5338. Re: what is this type of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 14:28:39 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FCB51C1.BA5315B8@uwe.ac.uk>
Source record: 103804

myliux wrote:
>
> http://dtusat.dtu.dk/group.php?c_gid=21

Bayed ?70cms? yagis with an altitude-azimuth
rotator. The yagis look to be 20 or so elements.
The rotator can swing the antennas around 360
degrees but also tilt it up and down so it can
aim anywhere in the sky. Two antennas are used
to get an extra ~3dB gain, double the signal.
Very high gain, but narrow beamwidth so the aiming
software has to be good to track the 'bird'.
Looks like some kind of portable mast being used
as support.

vy 73

Andy, M1EBV

5339. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 14:47:59 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <vwlyb.439$yf.15@fed1read01>
Source record: 103805
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Strange thing about home values, investment, etc -- In Silicon Valley aka San Francisco Bay Area - homes are in the high 100,000+ -- many a Million+ and many with no HOA and old TV/FM antennas left on the roof -- as well as more than the average number of Ham antennas.

--
73 From The Wilderness Keyboard

5340. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 15:25:56 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <WqGdna8zy_sDwFaiRVn-hg@comcast.com>
Source record: 103806

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:PKsyb.6049$zL1.728683@news1.news.adelphia.net...
> Possible dum question alert!
>
> I've been thinking about verticals lately, and am curious about a
> vertical for 80 meters.
>
> Specifically, I am wondering about putting a vertical in one of my trees
> in the yard. I have *big* trees, 80-90 feet tall, and could put a full

Mike,

I did that on 40 meters. Hung a vertical from the branch of a 90 foot tulip tree. Since the antenna was short enough, I had elevated radials. My suggestion is that once you get a rope over a branch, put up both the vertical and an inverted V. My guess is that most of the time the inverted V will blow away the vertical.

Tam/WB2TT

5341. Re: what is this type of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 16:09:33 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <w6adnbNN3P9J-FaiRVn-gw@ctc.net>
Source record: 103807

"myliux" <mylinux@earth.com> wrote in message
news:bqf58u$7bq13@imsp212.netvigator.com...
> http://dtusat.dtu.dk/group.php?c_gid=21
>
It looks like a pair of KLM 440 mhz antennas or equivilent for circular
polorization. The rotator is an AZEL probably by Yeasu.

5342. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 16:54:01 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <JmKyb.136719$Ec1.5599489@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103808
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:6_Ayb.270995$275.965769@attbi_s53...
>
>
> Investment in your home, to me, means what you paid for your home.
Property
> value is what someone is supposedly willing to pay for your land and
home.
> It doesn't necessary mean your actual investment in the home. If a
chemical
> spill is discovered near the area, your property value might be $50K
while
> your investment could be $100K (what you paid for your home). People
want to
> equate property values with an investment that will _always_ go up,
mostly
> due to the real estate boom over the last 3 decades or so. I don't
see many
> people like that. Out of all my family, only a cousin actually rents
a
> home. No many people buy a home, let it sit empty and hope that they
can
> sell it for 30% more in a year. That is the main problem with CC&R.
People
> think they are a way to help your property value increase. That's
stupid
> logic. They should be more worried about just making sure they get
what
> they put into the home. I believe CC&Rs do that. They make it so
people can
> sell their home.

I don't know if CC&Rs help home sales. People buy and sell homes
without CC&Rs just fine. CC&Rs may be a negitive factor, if you
consider the large number of potential buyers who don't like CC&Rs.

>I personally wouldn't have a problem with a ham antenna as
> long as it didn't interfere with anything in my home. If it did, I
would
> ask the person to take it down. Chances are I would be a good friend
to my
> neighbors since I am pretty easy to get along with. It's when hams
get this

> attitude (like I am seeing here) spouting off: "Well, I got a new law
> supporting me so not much you or anyone else can do." That's when the
> gloves come off. Screw them. They thought they had a friend....I
hope the
> person never needs something or tries to make small talk.
>
>

Well, people do have rights, although the right to put up an antenna may not be among the rights the Constitutional government was formed to protect.

As far as the value of a Homeowner's Association is concerned, I guess it comes down to which of your neighbors deserve the most distrust. Will it be the new neighbor who inexplicably paints his new, expensive house pink and black like a box of Ju-Ju Bees? Or will it be the new age neighbors who replace the previous reasonable board members with a bunch of Feng Shui loonies?

They'll come and do a walkaround with their compasses and tape measures and notebooks.

"Pull up those pink flamingoes and put wind chimes here."

"You must plant a tree. I marked the correct location with a stake."

"Move that doorway to here. No, not there -- HERE!!"

"Bad Feng Shui is bad for property values!!"

Can't happen? Of course not! Not in anyplace that can't stop a respectful flag display or religious monument.

Frank Dresser

5343. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 16:55:10 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FCB726E.8060706@psu.edu>
Source record: 103809

Cecil Moore wrote:
> Mike Coslo wrote:
>
>> Anyone done this, or is there a reason why it won't work?
>
>
> The reason that you haven't seen such described is that not many
> people have 90 ft. trees close to the shack. It should work pretty
> well. Do you really have 90 ft. Oak trees? What species of Oak?

I'm not sure of the species, but they are huge! They would have been eagerly sought out in the days of wooden ships. Note I haven't actually measured the height, but am estimating from the height of my dipole in the tree. It's about 60 feet up, and there looks to be another 30 above where it connects.

- Mike KB3EIA -

5344. G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 17:33:44 UTC
From: Willy <wilynospam@vt4.net>
Message-ID: <YXKyb.54773$0L4.1901664@phobos.telenet-ops.be>
Source record: 103810

I just started on hf bands and i usiing now a FD4 from Fritzel and I hear
all goods things about the G5RV.
Is that so, works it's also great on 10 and 15m?
I have not to much space for a full size beam but a mini beam works also
good I think. But most of beginners started with a wire like a G5RV???
If I buy a G5RV is that with a Balun or without a balun what's the best??

73's Dave on4dsq

on4dsq@pandora.be

5345. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 17:38:40 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <A0Lyb.381456$Tr4.1117821@attbi_s03>
Source record: 103811
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"craigm" <none@domain.invalid> wrote in message
news:vsmg0mdnal110b@corp.supernews.com..
>
> Which cities in Montana and Idaho are the same size as Indianpolis?

I should have said the size of Indy or smaller.
>

5346. HAM RADIO STUFF WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 18:22:49 UTC
From: n2ion@aol.com
Message-ID: <20031201132249.09973.00001340@mb-m01.aol.com>
Source record: 103812

NOT USING YOUR ANTENNA ANYMORE?
IS YOUR RIG COLLECTING DUST?

LONG ISLAND MOBILE AMATEUR RADIO CLUB IS

LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR

EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW

BAND YAGIS AND VERTICALS, RADIOS, TOWERS TO USE

FOR EMERGENCY COMMUNICATION AND FIELD DAY.

IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL

GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A

WORTHY CAUSE.

EMAIL AND LET US KNOW WHAT YOU HAVE!

5347. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 18:43:16 UTC
From: Jim9124@com.net
Message-ID: <3FCB8BC4.6F3A0969@com.net>
Source record: 103817
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Frank I have been reading the various posting in this thread. And some of the posting here disgust me. Why do some of these people call themselves American's? America is supposed to be the land of the FREE.

By far, this posting by you is the best.

I have read most of the articles in the second web site you listed.

It's about time America wakes up. The world doesn't revolve around HOA's or there darn rules.

As a veteran I have flown the Stars and Strips at our home since I returned from the military (35+ years ago) and will do until I expire. I, unlike some in this thread are proud of my country. I am proud to fly the Stars & Strips over our home. I am proud to have served in the military of these United States of America.

I am also proud to have served in the military only to protect the rights of HOA's and their over baring officials, to forbid Americans from flying there FLAG on a poll erected for this purpose only. And they call themselves patriotic Americans.....ya.

Frank Dresser wrote:
>
> http://www.freerepublic.com/forum/a3b5efc12221e.htm#38
>
> http://www.ccfj.net/HOAartflag.html
>
> As far as I'm concerned, any attempt to restrict such fundamental rights
> as a respectful religious display or display of the US Flag ought to get
> laughed out of court, just as an attempt to enforce a racial restrictive
> covanant.
>
> Frank Dresser

5348. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 18:53:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcb8e66$1_1@corp.newsgroups.com>
Source record: 103813

Mike Coslo wrote:
> Cecil Moore wrote:
>> Do you really have 90 ft. Oak trees? What species of Oak?
>
> I'm not sure of the species, but they are huge!

They sure beat the tallest Post Oaks here in East Texas
that are about half that height.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5349. Re: DK3 mounting question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 18:55:25 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FCB8E9D.1DC8F869@cwis.net>
Source record: 103814

Randy,
It's only limited by your imagination. Any method
you come up with is going to affect the utility and/or
'looks' of the truck, though. Ranges from some type
of temporary mount in the bed of the truck to a ball
mount on the side of the bed, to a custom mount off
the bumper, to whatever. I think the one thing that's
common to all types of screw driver antennas is that
they will need some bracing or guying to stay up-right.
With that and routing the feed line, you're off to the
races...
'Doc

5350. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 18:58:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcb8f8d_1@corp.newsgroups.com>
Source record: 103815

Willy wrote:
> I just started on hf bands and i usiing now a FD4 from Fritzel and I hear
> all goods things about the G5RV.
> Is that so, works it's also great on 10 and 15m?

Nope, it's not very good on 10m and 15m. It is especially bad on 30m.
It works well on 80m, 40m, and 20m with a tuner. EZNEC says it also
works well on 12m. A G5RV is not an all-HF-band antenna but I have
an all-HF-band antenna on my web page.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5351. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 19:00:10 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FCB8FBA.2090305@psu.edu>
Source record: 103816

Tarmo Tammaru wrote:
> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:PKsyb.6049$zL1.728683@news1.news.adelphia.net...
>
>>Possible dum question alert!
>>
>>I've been thinking about verticals lately, and am curious about a
>>vertical for 80 meters.
>>
>>Specifically, I am wondering about putting a vertical in one of my trees
>>in the yard. I have *big* trees, 80-90 feet tall, and could put a full
>
>
> Mike,
>
> I did that on 40 meters. Hung a vertical from the branch of a 90 foot tulip
> tree. Since the antenna was short enough, I had elevated radials. My
> suggestion is that once you get a rope over a branch, put up both the
> vertical and an inverted V. My guess is that most of the time the inverted V
> will blow away the vertical.

Thanks everyone for the helpful tips. I guess not many people do have
big trees! I'll give it a shot here, and may even get to lay in the
radials before the ground freezes. My main reasons for doing a vertical
in the first place is to attempt some 80 meter dx now that the upper
bands are closing in.

- Mike KB3EIA -

5352. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 19:17:54 UTC
From: Jim9124@com.net
Message-ID: <3FCB93E2.7EADD886@com.net>
Source record: 103818
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

I see that no one wants to respond your post Marylou.

It's my opinion that you must be on tract.

America will only be FREE as long as real Americans allow it to be. And presently that doesn't seem to include HOA's or their officials.

Yes, what are AAA zoned areas? I haven't come across that term before.

Marylou@city.net wrote:
>
> What I read into this thread is there are people in our FREE country
> that have a serious need to control other people. Those people like
> another poster said are classified as HOA Cops.
>
> When it comes to controlling them they revolt.
>
> What is an AAA zoned area?
>
> I live in a community where the county put in zoning laws many years ago
> so the members of the HOA decided to turn over our roads to the county
> for maintenance, dissolve the HOA entirely. We figured why pay dues for
> road upkeep and some over zealous HOA officer/member who wants to take
> his/our neighbor to court for stupid things. We already pay taxes for
> road up keep but the county would not enter our plan because it was
> considered private property. The only county services we had where
> police, fire, ambulance. Now things are going much better. We have all
> the services we where paying for but didn't receive before, the HOA Cops
> are gone forever and the home owners seem to getting along much better.
> There are no junk cars sitting around, no one painted their house bright
> pink or any other crazy color, the grass in the yards are trimmed nice,
> in fact nothing has changed in that respect. There are two 25 foot
> towers now, one with a small beam the other a vertical in the plan, one
> is mine. Both are hams and both are involved in emergency communications
> during major storms. The neighbors call or stop and get weather updates
> so they can make the necessary plans. Not one person has complained
> about either of the towers, not one.
>
> By the way, the HOA ex-official moved out about 6 months after the
> county took over. He found out this is America, the land of the free.
> Factually speaking, his neighbors refused to have anything to do with
> him because of his over powering attitude. His friends soon followed him
> down the road.

>
> God Bless our "FREE" America.
>

5353. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 19:59:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h47nsvgb024o5ki35f9krqgihe26pe2arv@4ax.com>
Source record: 103719

On Mon, 01 Dec 2003 08:11:24 -0600, Bob Miller
<bxmiller@texas.netNOSPAM> wrote:

>On 1 Dec 2003 05:50:30 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
>wrote:
>
>>You are quite correct. Some years ago I was given to
>>understand that Google took over the old set up.
>>My server said there was nothing he could do for me.
>>Is their a way for me to get the postings quicker
>>other than paying for it ?
>
>My ISP includes the news group feeds at no additional cost. You might
>check to see if your ISP has its own news group server. If it does,
>you're all set. Start accessing that news server instead of Google.
>
>If not, you could check some of the other ISPs in your area of the
>country.
>
>You could also go to http://www.forteinc.com and download their news
>group reader. There's a free version called Free Agent. It's a much
>better handler of newsgroup postings than what you might be using in
>your browser. Once Free Agent is installed, go into User Options and
>give the name of the news server at your ISP. Then go under Groups,
>and download the list of all the news groups handled by your ISP
>(there should be 40- or 50-thousand). Then subscribe to the ones you
>want, such as this one.
>
>Bob
>k5qwg

Hi All,

This is exactly how it's done. Buy the commercial version and get
extras (like spam filtering and email handling, if I am not mistaken).
I've had the store-bought version for years and they are about to
upgrade with big additions. Your purchase should allow for a free
upgrade - maybe, consult the link already offered above.

73's
Richard Clark, KB7QHC

5354. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 20:07:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mf7nsvsvkc960mc9rpah6c0g6b7hbgpsa8@4ax.com>
Source record: 103720

On Mon, 01 Dec 2003 14:00:10 -0500, Mike Coslo <mjc5@psu.edu> wrote:

> Thanks everyone for the helpful tips. I guess not many people do have
>big trees! I'll give it a shot here, and may even get to lay in the
>radials before the ground freezes. My main reasons for doing a vertical
>in the first place is to attempt some 80 meter dx now that the upper
>bands are closing in.
>
> - Mike KB3EIA -

Hi Mike,

My Maples have leaves that put the Canadians to shame.

Anyway, what I have had done is installed pullies above, and at
roughly the 4 foot level with a continuous loop feeding through them
both. On the loop I have rings to attach anything (like another
pulley) and I can hoist projects like a flag and never worry about the
rope's bitter end flopping out from above, or being irretrievable.

My longwire was launched by bow to go over the crown of more than
several to stretch out more than 300 feet (at about 60 to 90 feet
height).

73's
Richard Clark, KB7QHC

5355. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 20:38:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcba717_8@corp.newsgroups.com>
Source record: 103721
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Jim9124@com.net wrote:
> America will only be FREE as long as real Americans allow it to be. And
> presently that doesn't seem to include HOA's or their officials.

Question is, If HOA's object to the, "Land of the Free, and the Home of
the Brave", why don't they simply move to another country (like Cuba)?
I've had a long life and careers in TX, CA, and AZ. I have *NEVER* signed
on to an HOA agreement, and I never will. If one freely chooses to compromise
one's principles, then one gets exactly what one deserves.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5356. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 20:56:11 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bqg7cf$5f3$1@news1.kornet.net>
Source record: 103722
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fcba717_8@corp.newsgroups.com...
> Jim9124@com.net wrote:
> > America will only be FREE as long as real Americans allow it to be. And
> > presently that doesn't seem to include HOA's or their officials.
>
> Question is, If HOA's object to the, "Land of the Free, and the Home of
> the Brave", why don't they simply move to another country (like Cuba)?
> I've had a long life and careers in TX, CA, and AZ. I have *NEVER* signed
> on to an HOA agreement, and I never will. If one freely chooses to
compromise
> one's principles, then one gets exactly what one deserves.

It floors me how some Americans can defend the loss of the principles upon which the country was founded, and for which our troops are supposed to be fighting. As a country, we do great dishonor to those who have died to protect our freedom by giving up that freedom voluntarily under the guise of personal or financial security.

5357. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 21:19:26 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <j0cnsv88622cpdutq7tb0o3eqj6p47pbd2@4ax.com>
Source record: 103723

On Mon, 1 Dec 2003 10:25:56 -0500, "Tarmo Tammaru"
<t-tammaru@home.com> wrote:

>
>"Mike Coslo" <mcoslo@adelphia.net> wrote in message
>news:PKsyb.6049$zL1.728683@news1.news.adelphia.net...
>> Possible dum question alert!
>>
>> I've been thinking about verticals lately, and am curious about a
>> vertical for 80 meters.
>>
>> Specifically, I am wondering about putting a vertical in one of my trees
>> in the yard. I have *big* trees, 80-90 feet tall, and could put a full
>
>Mike,
>
>I did that on 40 meters. Hung a vertical from the branch of a 90 foot tulip
>tree. Since the antenna was short enough, I had elevated radials. My
>suggestion is that once you get a rope over a branch, put up both the
>vertical and an inverted V. My guess is that most of the time the inverted V
>will blow away the vertical.
>

It depends on a number of things.
The verticals I've had up were better at the longer distances and the
QRM was lower. QRN was higher at times. That's with three different
installations, one of which was a phased array.

>Tam/WB2TT
>

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5358. Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 22:09:48 UTC
From: Ronald Bilodeau <va3sgr@vianet.ca>
Message-ID: <vsnf1a70skho2a@corp.supernews.com>
Source record: 103724

Hi, Where can I get a coax chart. Thank you very mutch.
Ron. VA3*SGR

5359. Re: what is this type of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 22:36:16 UTC
From: myliux <mylinux@earth.com>
Message-ID: <bqgfuv$k771@imsp212.netvigator.com>
Source record: 103725

Ralph Mowery <rmowery@ctc.net> wrote in message
news:w6adnbNN3P9J-FaiRVn-gw@ctc.net...
>
> "myliux" <mylinux@earth.com> wrote in message
> news:bqf58u$7bq13@imsp212.netvigator.com...
> > http://dtusat.dtu.dk/group.php?c_gid=21
> >
> It looks like a pair of KLM 440 mhz antennas or equivilent for circular
> polorization. The rotator is an AZEL probably by Yeasu.

what is the function of the box below?

>
>
>

5360. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 22:42:18 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bqgg7iiik1@newshost.mot.com>
Source record: 103699

Though in practice you are correct to express concern, your reason is
not properly stated. You further the lighting rod myth.

Actually, "if the antenna acts as a lightning rod." He'll have little
problem. The purpose of a true lightning rod is to blead off the charge,
defeating a strike, not to attract it. A lightning srtike will blow any
lightning rod system to smithereenes.
When a charged object has a sharp corner or point, the charge tends to
collect there. Because there is more charge at that p[oint it will have a
higher concentration and therefore a higher voltage. It builds to the point
of forming a corona/plasma and will discharge it. That's why the van De
Graf (sp) generators have the round ball on the top. They WANT to build up
the charge and not loose any more than necessary..
I all fairness, I do not know if lightning rod systems work in
practice.They do wear out due to the discharge corona and should be
sharpened periodically. Apparently the points of the typical beam are
not sufficient or they wouldn't get struck, no?

73, Steve K,9.D;C;I

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0311301642.327ab860@posting.google.com...
> Roger Halstead <mynewsat@rogerhalsteaddot.com> wrote in message
news:<sitisvggfnbh7hqp3rgpr0mprditl1qkuu@4ax.com>...
> > On 29 Nov 2003 02:35:22 -0800, nm5k@wt.net (Mark Keith) wrote:
> >
> > >k9sqg@aol.com (K9SQG) wrote in message
news:<20031128212558.28460.00001073@mb-m14.aol.com>...
> > >> That is not a wise idea. If your mast takes a direct hit, or if
there is one
> > >> nearby, there is a possibility that some of the energy will go into
the house
> > >> via that ground rod. Antenna grounds should always be isolated from
> > >> housewiring grounds.
> > >
> > >
> > >If all grounds are at the same potential, no current can flow between
them.
> > >Not to mention the NEC requires it in the U.S. MK
> >
> > When you figure the rise time there can easily be several thousand
> > volts between the base of the antenna mast and the electrical system
> > ground. IE the voltage could be 50,000 at the tower and not even have
> > started to rise at the electrical ground.
>

> In my case, those are pretty much the same place. All my grounds tend
> to rise in potential at the same time, being they are all tied
> together at the base of the mast. Nothing is perfect of course, but
> you sure don't want any large potential differences between grounds.
> >
> > It's not just a simple CD circuit.
> > I've seen tower strikes where there was such a strong current and fast
> > rise time, the magnetic field quenched the current flow and the
> > lightening got off part way down and jumped sideways to something
> > else.
>
> If I remember right, the original poster was going to mount an antenna
> on a roof. That has the potential for even more serious problems if
> the antenna acts as a lightning rod. He'd want as few turns or sharp
> bends in the ground wire to earth. This is why I much prefer using a
> metal mast on the side of the house to support verticals or other high
> risk antennas, rather than a mast attached to the roof of the house.
> And then hoping a ground wire will safely direct the charge to
> earth...It usually will, at least much better than the house itself,
> but it's kind of scary if it has turns or bends.
> The important part at the house is making sure that everything rises
> together so there's no lower resistance path for the charge to take
> through the shack or house. At the mast, I always tape all coaxes or
> wires to the mast, and run them all the way down to earth to try to
> avoid flashing problems. So far in two strikes to the mast, I haven't
> noticed any, and I have a breaker box, elevated power lead in, phone
> lines, cable lines, all within 5 ft of that mast. MK

5361. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 22:46:13 UTC
From: spamproof@nospam.com
Message-ID: <MPG.1a3564851edccdbf9896b1@netnews.comcast.net>
Source record: 103726

In article <vsnf1a70skho2a@corp.supernews.com>, va3sgr@vianet.ca says...
> Hi, Where can I get a coax chart. Thank you very mutch.
> Ron. VA3*SGR
>
>
>
A "Google" Search reveals quite a few resources. This one might be what
you want.

http://www.eweb-planet.com/kk6ss/coax.html

KA7RGO

5362. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 22:59:51 UTC
From: dplatt@radagast.org
Message-ID: <vsnhv7hvf61mf0@corp.supernews.com>
Source record: 103727

>Hi, Where can I get a coax chart. Thank you very mutch.

http://www.therfc.com/coax.htm has links to quite a bit of useful
information. It's not all in the form of a single chart, but you may
find what you need.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5363. Re: Vertical in a tree

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-01 23:16:53 UTC
From: garigue <garigue@comcast.net>
Message-ID: <FZPyb.387063$Fm2.398126@attbi_s04>
Source record: 103728

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:PKsyb.6049$zL1.728683@news1.news.adelphia.net...
> Possible dum question alert!
>
> I've been thinking about verticals lately, and am curious about a
> vertical for 80 meters.
>
> Specifically, I am wondering about putting a vertical in one of my trees
> in the yard. I have *big* trees, 80-90 feet tall, and could put a full
> 1/4 wave vertical in one of the huge oak trees just outside the shack.
>
> What is more, it is one place in the yard that I can get radials in more
> than one direction.
>

Hello Mike ...I did just that with a clandestined operation on 40 while I was at Thiel College. I used insulated wire and some old standoff TV insulators. The radial system consisted of 4 lengths of bailing wire. Most effecient ...no but it did get me on the air and into the TV at the Hilltop Bar next to my location. Never admitted it was me.

73 God Bless Tom KI3R Belle Vernon Pa

5364. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 00:23:44 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3FCBD6EE.1040400@comcast.net>
Source record: 103729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Midwest Kid wrote:
> "Dave Shrader" <david.shrader@comcast.net> wrote in message
> news:m9wyb.372045$Tr4.1101837@attbi_s03...
>
>>The buyer's requested assurance that the antenna and tower would be
>>removed prior to passing papers. My response "Of course!"
>
>
> So here we have:
>
> 1: The people did not want the antennas.

Stop taking a position OUT of Context. The new owners were/are not hams.
But the tower and antennas are in my new backyard.

Restated, the tower had NO IMPACT on the selling price of the property!
The property sold based on LOCATION. I had lived there for 38+ years
prior to sale. BTW, the home across the street and the home next door
also sold for above market value.

>
> 2: It's more like "Fuck my neighbor.

Your vulgarisms are not appreciated in my house and hopefully other
homes. Get the emotion out of your argument and please present your case
on facts using civil language. Remember this group is read by men,
women, and possibly children.

Deacon Dave [Reverend], W1MCE

SNIP

5365. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 00:28:12 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3FCBD7FA.9050103@comcast.net>
Source record: 103730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

NO the realtor did not make any recommendation regarding the antennas at my home. [See previous posts same subject]. The antennas were up and operating until 1 week before the movers came and bank closing.

You are still making generalizations that are not factual. Please give the name, city and circumstances of those realtors who say 'take them down prior to sale'.

You persist in making generalizations that are not supported by facts.

W1MCE

Midwest Kid wrote:

> "Richard G Amirault" <amirault@shell01.TheWorld.com> wrote in message
> news:bqe1i4smo4@pcls4.std.com...
>
>>I find that hard to believe. Do you really mean to say that a ham with 15
>>or 20 different antennas and two towers does *nothing* to the property
>>values of the houses next door?
>
>
> That's what hams want you to believe. They are right of course. Lets say
> your home is worth $175K before the tower. Then you try to sell your home.
> You get no _offers_ because of that antenna field next door. Therefore you
> cannot _prove_ that the value of your home went down. Hams are an elite
> group of people like others. I find it hard to believe that a ham selling
> their home would leave the antennas up while showing the home. Even if they
> are going to toss them, any realtor is going to tell the person to take them
> down.
>
>

5366. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 00:33:16 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <f5Ryb.382145$HS4.3139656@attbi_s01>
Source record: 103731
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In Florida, USA, last month, the national news [Good Morning America,
ABC TV] reported that a military veteran could not fly the USA flag
because the pole violated HOA rules.

What's more the Florida courts supported the HOA!!!!

W1MCE

Jim9124@com.net wrote:

SNIP
>
> As a veteran I have flown the Stars and Strips at our home since I
> returned from the military (35+ years ago) and will do until I expire.
> I, unlike some in this thread are proud of my country. I am proud to fly
> the Stars & Strips over our home. I am proud to have served in the
> military of these United States of America.
>
> I am also proud to have served in the military only to protect the
> rights of HOA's and their over baring officials, to forbid Americans
> from flying there FLAG on a poll erected for this purpose only. And they
> call themselves patriotic Americans........ya.
>
SNIP

5367. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 00:36:24 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <77Ryb.11261$5d.1389@bignews4.bellsouth.net>
Source record: 103732
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Exactly!

Looking through this thread, I see (time and again) that the people that are either mistrustful of HOA's or outright hostile to the idea of them don't live in an area with covenants and HOA's.

Good!

Having read some earlier posts by some of the people posting that are the most dead-set against the idea, I know of two that actually live in mobile homes. (Great post on how to get good AM signal inside the metal shell, BTW). I have nothing against house trailers -- I rented one for two years when I was in college. However, I do think SOME of these posters are hardly authorities on keeping up property values in upscale neighborhoods.

In this case, one size doesn't fit all -- HOA's are most definitely NOT for everybody -- particularly people that think that rules should apply to everyone but themselves. However, just because they're not a good fit for you, doesn't mean they're not a good thing for others. Don't like 'em -- don't move here -- that simple.

I chose to build in my particular neighborhood precisely because of the covenants. We built the third house in our neighborhood, and we needed to be sure that the rest of our subdivision would be comparable homes. Six years later, we've got a great neighborhood and our house has increased in value substantially.

Your mileage may vary.

-- Stinger

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message news:sWFyb.19$Oe5.0@newsread2.news.atl.earthlink.net...
>
> "Midwest Kid" wrote:
> >
> > My county just east of Indy has plenty of
> > non CC&R neighborhoods. (snip)
>
>
> I worked in Indianapolis several years ago (as a security specialist for
> DFAS in what was once Ft. Ben Harrision). Since the DoD supplied our
> residence, we were not personally affected by CC&R's. However, we did
> casually look into purchasing a house with the idea of possibly making

that
> area our home. During that process, we ran into several houses with CC&R's
> (especially in the north-eastern part of town). But, on the south side of
> town, none of the houses had a CC&R. That has probably changed today. But
I
> don't doubt the mostly open, mostly country, areas east of Indy are still
> relatively free of CC&R's.
>
>
> Dwight Stewart (W5NET)
>
> http://www.qsl.net/w5net/
>

5368. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 00:57:07 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <DrRyb.382457$HS4.3139400@attbi_s01>
Source record: 103733

In the Olden days, 1955 - 1960, I would startle [shock] the patrons at the local Ice Cream Parlor by pulling into the parking lot at sundown and load up my AM mobile on 75 meter phone with 60 watts into an 8 foot whip and have a friend, also a ham, walk around the parking lot with an 8 foot fluorescent bulb being held in just one hand asking 'HELP, HELP, Please someone HELP'. The owner of the Ice Cream Parlor, K1III, would just chuckle as patrons came in asking for the phone. <grin>

Well, boys will be boys!

Deacon Dave, W1MCE

Richard Harrison wrote:

> hsuri wrote:
> "A thin cylindrical tube which glowed when it sensed radiation."

5369. Re: what is this type of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 01:03:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <AxRyb.188333$Dw6.714827@attbi_s02>
Source record: 103734

myliux wrote:

SNIP

>
> what is the function of the box below?
>

I presume it is the transmit/receive electronics with the computer interface.

Radio signals at these frequencies are weak and losses in wires can become excessive. So, use short wires/cables and get the data into the comupter where it can be handled much more efficiently.

Deacon Dave, W1MCE

5370. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 01:08:44 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vsnpm28c8m6d4a@corp.supernews.com>
Source record: 103736

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:DrRyb.382457$HS4.3139400@attbi_s01...
> In the Olden days, 1955 - 1960, I would startle [shock] the patrons at
> the local Ice Cream Parlor by pulling into the parking lot at sundown
> and load up my AM mobile on 75 meter phone with 60 watts into an 8 foot
> whip and have a friend, also a ham, walk around the parking lot with an
> 8 foot fluorescent bulb being held in just one hand asking 'HELP, HELP,
> Please someone HELP'. The owner of the Ice Cream Parlor, K1III, would
> just chuckle as patrons came in asking for the phone. <grin>
>
> Well, boys will be boys!
>
> Deacon Dave, W1MCE
>
> Richard Harrison wrote:
>
> > hsuri wrote:
> > "A thin cylindrical tube which glowed when it sensed radiation."
>

Ahh Dave, just tape it to the whip and go DRIVE!!
;^)))))
73
H.

5371. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 01:09:03 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312011709.57a64233@posting.google.com>
Source record: 103735

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fcac7e1$1_7@corp.newsgroups.com>...
> Cecil Moore wrote:
> > Take a look at http://www.newsfeeds.com and see what you think.
>
> The $6/mo service is at http://www.usenet-access.com/

Well thanks everybody, I obviously have to get away from Google
so I can be up to date. I now have something to follow up with the
sites suggested as well as a check with my server to see what they
have to offer
(I assume that my server is the isp referred to by posters)
Regards
Art

5372. Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 01:35:49 UTC
From: ariexyz@hotmail.com
Message-ID: <995b9343.0312011735.10c9611a@posting.google.com>
Source record: 103737

Maybe not quite appropriate for this news-group..

Does anybody know a pointer to a program or the methods
of calculations so I can determine the losses occuring
in a PI-filter output for a high-power tube amplifiers.

I can calculate the required C1, L and C2 values given a
certain anode voltage and current and a certain output
impedance for a loaded Q of 10, 12 or other values, but
what about losses depending on selected loaded-Q values
related to harmonics suppression...

Thanks in advance,
Arie.

5373. Kite antenna with ocean ground -- charge buildup?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 02:06:37 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <6dsnsv8c1n20nnbvcc6rejnvon1jq341gp@4ax.com>
Source record: 103738

I will be running 28 ga. magnet wire along (& around) a 350 ft. kite line tied to a windborne kite -- for 160M work.

The other leg will be bare copper wire that runs 50 ft to the ocean.

I am not sure if this is a longwire antenna with counterpoise or a tilted vertical with ground plane.

Anyhow, I have been told that the wind will cause static charge to build on the magnet wire and that a path to ground must be provided.

1) Is this true?

2) If it is true, would the problem be solved with, say, a 1,000 ohm resistor between the longwire and and saltwater ground leads at my tuner?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

5374. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 02:29:51 UTC
From: harshit <hsuri@usc.edu>
Message-ID: <bqgtetggq1@gist.usc.edu>
Source record: 103739

thats funny Dave,
must have been quite a sight seeing their expressions LOL
:-)
"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:DrRyb.382457$HS4.3139400@attbi_s01...
> In the Olden days, 1955 - 1960, I would startle [shock] the patrons at
> the local Ice Cream Parlor by pulling into the parking lot at sundown
> and load up my AM mobile on 75 meter phone with 60 watts into an 8 foot
> whip and have a friend, also a ham, walk around the parking lot with an
> 8 foot fluorescent bulb being held in just one hand asking 'HELP, HELP,
> Please someone HELP'. The owner of the Ice Cream Parlor, K1III, would
> just chuckle as patrons came in asking for the phone. <grin>
>
> Well, boys will be boys!
>
> Deacon Dave, W1MCE
>
> Richard Harrison wrote:
>
> > hsuri wrote:
> > "A thin cylindrical tube which glowed when it sensed radiation."
>

5375. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 03:57:55 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <14Uyb.25583$P7.7714@bignews6.bellsouth.net>
Source record: 103740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:7yryb.294$yf.196@fed1read01...
> Outwitting -- use Stealth Antennas URL:
> http://ac6v.com/antprojects.htm#STANT
> AND
> http://www.arrl.org/catalog/?item=7571
>
> Outsmarting -- Don't buy into an HOA Community
> Think Ahead --- An HOA can adapt a no antenna rule anytime they want
> Have Big Bucks to fight it in court -- Most HOA's have deep pockets
>
> --
> 73 From The Wilderness Keyboard

Um, not exactly. If a neighborhood were to suddenly enact some sort of HOA,
I believe any pre-existing antennas would have to be "grandfathered" in.
Hey, I
moved in next to a cow pasture that was in the city limits.
Now some 4-eyed wimps would want to try to make the
farmer get rid of his cows. Couldn't! When the city
annexed the neighborhood, they had to take the cows too
.....they refused to MOOOOOOOOOOOVE! (Sorry, I had to do that). The
cows stayed. Good neigh-
bors, too. Remained until the farmer died and his sons decided to sell
them. Now, they just can't put them back, tho.

Of course, the solution is NOT to move into one of those
HOAs with the blue-haired lady telling what color to paint
your shutters. Once you do, you are stuck. Kinda like those folks that
move in next to an AIRPORT and then
expect to get PAID because of the noise. I have no sympathy for them. I
choose NOT to live in such a place. And I get all the convenience of city
living and the
atmosphere of the country: a grassy meadow (former pasture), lots of woods,
dead end street, close in, yet
very quiet, deer, owls, geese, foxes, and raccoons--which I could do
without, BTW. AND all the antennas I
want!

Jerry
K4KWH
> "
>

>
>

5376. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 04:00:45 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <H6Uyb.25598$P7.21662@bignews6.bellsouth.net>
Source record: 103741
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:XJAyb.270855$275.965396@attbi_s53...
>
> "Richard G Amirault" <amirault@shell01.TheWorld.com> wrote in message
> news:bqe1i4smo4@pcls4.std.com...
> >
> > I find that hard to believe. Do you really mean to say that a ham with
15
> > or 20 different antennas and two towers does *nothing* to the property
> > values of the houses next door?
>
> That's what hams want you to believe. They are right of course. Lets say
> your home is worth $175K before the tower. Then you try to sell your
home.
> You get no _offers_ because of that antenna field next door. Therefore
you
> cannot _prove_ that the value of your home went down. Hams are an elite
> group of people like others. I find it hard to believe that a ham selling
> their home would leave the antennas up while showing the home. Even if
they
> are going to toss them, any realtor is going to tell the person to take
them
> down.

He didn't when I showed my other house prior to buying
this one.

Jerry
>
>

5377. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 04:25:56 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <bsUyb.926$R7.681@bignews1.bellsouth.net>
Source record: 103742
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Marylou@city.net> wrote in message news:3FC977A1.BB533551@city.net...
> What I read into this thread is there are people in our FREE country
> that have a serious need to control other people. Those people like
> another poster said are classified as HOA Cops.
>
> When it comes to controlling them they revolt.
>
> What is an AAA zoned area?
>
> I live in a community where the county put in zoning laws many years ago
> so the members of the HOA decided to turn over our roads to the county
> for maintenance, dissolve the HOA entirely. We figured why pay dues for
> road upkeep and some over zealous HOA officer/member who wants to take
> his/our neighbor to court for stupid things. We already pay taxes for
> road up keep but the county would not enter our plan because it was
> considered private property. The only county services we had where
> police, fire, ambulance. Now things are going much better. We have all
> the services we where paying for but didn't receive before, the HOA Cops
> are gone forever and the home owners seem to getting along much better.
> There are no junk cars sitting around, no one painted their house bright
> pink or any other crazy color, the grass in the yards are trimmed nice,
> in fact nothing has changed in that respect. There are two 25 foot
> towers now, one with a small beam the other a vertical in the plan, one
> is mine. Both are hams and both are involved in emergency communications
> during major storms. The neighbors call or stop and get weather updates
> so they can make the necessary plans. Not one person has complained
> about either of the towers, not one.
>
> By the way, the HOA ex-official moved out about 6 months after the
> county took over. He found out this is America, the land of the free.
> Factually speaking, his neighbors refused to have anything to do with
> him because of his over powering attitude. His friends soon followed him
> down the road.
>
> God Bless our "FREE" America.
>
>
>
>
> Uncle Peter wrote:
> >
> > I don't know where you live, but here we have zoning laws that control

> > much of the issues you are concerned about; and most towns have
> > enacted nusiance ordinances to handle less severe problems, such
> > as uncut grass, etc. BTW, I live in a AAA zoned area, and the ham
> > tower was not an issue. I kept in at the tree line, in the middle of
> > the property. Out of sight. Also, at one time I had three towers near
> > the house. The house next door was sold before it hit the market for
> > the full asking price.
> >
> > Pete

Basically speaking, it is the true reason I live where I do. I have a problem being told what I can do or when I can do it on my own property. It doesn't mean I am disagreeable, it just means that I do believe in freedom and the right to have and hold property as one sees fit--
within reason, of course. I believe that most people will
take care of their property without coaxing. I also believe one must choose the neighborhood carefully and that can
be judged by the surrounding houses. In better neighbor-
hoods, one simply doesn't see pink/black houses or bright
red houses. I do NOT believe in covenants, and I avoid them. It's not a problem since I have lived in the same house for 17 years and I mow the grass, paint (well I
put on siding some time ago) and recently paved the driveway. Yes, I have a 70 foot tower and a VHF beam.
The dipoles have long blended in with the trees so you have to be looking for them. I get along with the neighbors as well.

Now, if a new neighbor comes along after all these 17 years telling me I "gotta move them antennas", I would have to reply "By whom and whose army".

Jerry

5378. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 04:39:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcc17b1$1_5@corp.newsgroups.com>
Source record: 103743

Ronald Bilodeau wrote:
> Hi, Where can I get a coax chart. Thank you very mutch.

The "Wirebook IV" from http://www.thewireman.com contains
a wealth of information including a coax chart.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5379. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 06:00:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqh9qk$5db$1@titan.btinternet.com>
Source record: 103744

Efficiency of a tank circuit or a Pi-tank circuit is given by -

Efficiency = Qi / (Qi + QL) * 100 percent,

where Qi is the intrinsic Q of the coil and QL is the loaded Q of the tank circuit.

PROGRAMS AVAILABLE .

The following calculate L and C values for given load values and/or tube operating voltages.

Pi_L_NET and Pi_TANK also calculate harmonic suppression.

TRIODE1 and TETRODE1 compute grid drive, tank circuit conditions and efficiency for Class A, B & C operating conditions and angles.

Download progs in a few seconds from website below and run immediately.
.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

"arie" <ariexyz@hotmail.com> wrote in message
news:995b9343.0312011735.10c9611a@posting.google.com...
> Maybe not quite appropriate for this news-group..
>
> Does anybody know a pointer to a program or the methods
> of calculations so I can determine the losses occuring
> in a PI-filter output for a high-power tube amplifiers.
>
> I can calculate the required C1, L and C2 values given a
> certain anode voltage and current and a certain output
> impedance for a loaded Q of 10, 12 or other values, but
> what about losses depending on selected loaded-Q values
> related to harmonics suppression...
>
> Thanks in advance,
> Arie.

5380. Re: Kite antenna with ocean ground -- charge buildup?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 06:40:42 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <KtWyb.393249$Fm2.408792@attbi_s04>
Source record: 103745

Ken wrote:

> I will be running 28 ga. magnet wire along (& around) a 350 ft. kite
> line tied to a windborne kite -- for 160M work.
>
> The other leg will be bare copper wire that runs 50 ft to the ocean.
>
> I am not sure if this is a longwire antenna with counterpoise or a
> tilted vertical with ground plane.
>
> Anyhow, I have been told that the wind will cause static charge to
> build on the magnet wire and that a path to ground must be provided.
>
> 1) Is this true?
>
> 2) If it is true, would the problem be solved with, say, a 1,000 ohm
> resistor between the longwire and and saltwater ground leads at my
> tuner?

Ken: In answer to 1 Yes. It will happen and there is nothing that can be done about stopping it.

In answer to 2, that would work as one way to make the charge bleed to ground. Another way to bleed the charge off to ground is to put a high value inductor between the two wires. At RF frequencies it will like as a high impedance. At DC it is almost a dead short.

Personally I think the inductor would be the better choice.

Al Butler ka0ies

5381. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 06:42:39 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <av8osvkeh5j8abs2rb9ec6u3f7q123ajmo@4ax.com>
Source record: 103746

On 1 Dec 2003 17:35:49 -0800, ariexyz@hotmail.com (arie) wrote:

|Maybe not quite appropriate for this news-group..
|
|Does anybody know a pointer to a program or the methods
|of calculations so I can determine the losses occuring
|in a PI-filter output for a high-power tube amplifiers.
|
|I can calculate the required C1, L and C2 values given a
|certain anode voltage and current and a certain output
|impedance for a loaded Q of 10, 12 or other values, but
|what about losses depending on selected loaded-Q values
|related to harmonics suppression...

Assuming decent capacitors, the losses will be almost entirely due to
the Q of the inductor.

eff ~ Qind / (Qind + Qnetwork)

5382. Re: Kite antenna with ocean ground -- charge buildup?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 06:50:53 UTC
From: John <my-callsign@qsl.net>
Message-ID: <eDWyb.25$vJ1.33394@newsfep2-gui.server.ntli.net>
Source record: 103747

Ken

Check out this very useful site:

http://www.qsl.net/g4vgo/

"Ken" <cprstn54zz@att.net> wrote in message
news:6dsnsv8c1n20nnbvcc6rejnvon1jq341gp@4ax.com...
> I will be running 28 ga. magnet wire along (& around) a 350 ft. kite
> line tied to a windborne kite -- for 160M work.
>
> The other leg will be bare copper wire that runs 50 ft to the ocean.
>
> I am not sure if this is a longwire antenna with counterpoise or a
> tilted vertical with ground plane.
>
> Anyhow, I have been told that the wind will cause static charge to
> build on the magnet wire and that a path to ground must be provided.
>
> 1) Is this true?
>
> 2) If it is true, would the problem be solved with, say, a 1,000 ohm
> resistor between the longwire and and saltwater ground leads at my
> tuner?
>
> Ken KC2JDY
>
>
>
>
> Ken
> (to reply via email
> remove "zz" from address)

5383. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 06:56:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mgdosvcp7lnhl8pk2oms262o2q31pad271@4ax.com>
Source record: 103748

On 1 Dec 2003 17:09:03 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>(I assume that my server is the isp referred to by posters)
>Regards
>Art

Hi Art,

That's what the s in isp stands for.

Go to:
http://help.insightbb.com/general/settings.html
or, if you really want to take your life in your hands:
http://help.insightbb.com/outlook/newsgroup_accounts.html
because using Outlook Express without knowing the security issues is
like inviting the world to #$&% you.

73's
Richard Clark, KB7QHC

5384. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 07:46:39 UTC
From: Michael Tope <W4EF@dellroy.com>
Message-ID: <zrXyb.387930$HS4.3194526@attbi_s01>
Source record: 103749

Cecil, et al:

I think the real key to this mystery is to consider the
wave velocity in the loading coil. Admittedly at the
beginning of this debate (I have been following the
debate since the big W8JI / K3BU shootout on the
Topband email reflector) I was squarely in the lumped
element camp, but Cecil Moore's thought provoking
arguments have begun to give me reason for pause.
Here's why:

Under the lumped circuit view of things, there is no
delay between current going into the inductor and the
current coming out the other terminal. There is a 90
deg phase shift between the inductor current
and its terminal voltage, but there is no need to introduce
the notion of a delay between the input and output currents
in order to account for an inductor doing inductor like
things. All one needs to get inductor like behavior is a
two-terminal black box whose terminal voltage is equal
to L times the derivative of the current passing thru it
(e.g. L = di/dt). If one could build such a black box
(unfortunately, I am afraid it is akin to building an isotropic
radiator), it could be used in place of a real inductor in all
manner of tuned circuits and impedance matching
applications. In fact, we routinely use such a black box to
simulate real inductors in programs like Spice, EZNEC,
Touchstone, etc. And in many of these applications, the
ideal inductor is a reliable proxy for a real inductor.

Now let's consider a parallel two-wire transmission line.
If I have such a line with a Zo of say 450 ohms, and I
open circuit one end of the line and drive the other
end with an RF generator, I will get a nice sinusoidal
standing wave pattern along the length of the line that
bears a striking resemblance to the current distribution
on a linear antenna element. At 1/4 wavelength from the
open end of this line, I will be at a current maximum where
the input impedance is very close to a short circuit (
I am assuming a low-loss line with minimal radiation).
If I now break this 1/4 wavelength long line in the middle
and remove a section of line and replace it with a pair
of my black box ideal inductors (one ideal inductor
in series with each leg of the transmission line), I should
be able to adjust the value of the inductors such that I

can replace the missing section of line and achieve a current maximum/short circuit condition at the input of the line (e.g. resonance).

At this point, I should look at the knobs on my two black box ideal inductors, read off the inductance values, and note the readings for future reference. Now, given that my inductors are ideal, there will be no current taper across them as there was in the transmission line section that they replaced. You can verify this with a circuit simulator, like Serenade, Touchstone, or Superstar. This derives from the fact that there is no propagation delay through an ideal inductor. The current going into an ideal inductor is always in-phase (and of equal magnitude) with the current leaving it.

Okay now that we have dealt with the ideal case, let's remove the black boxes and replace them with a pair of parallel ganged roller inductors (actual real parts you can buy on Ebay!). As with the black box case, I should be able to adjust the inductance values of the ganged inductors until I achieve resonance (maximum current/minimum impedance) at the input to the parallel wire transmission line. Again, I will note and record the readings on the calibrated turns counters for future reference. Now let's take a close look at the setup. I now have two roller inductors with their axis parallel to the longitudinal axis of the transmission line. The centerlines of the two roller inductors are some distance "d" apart from each other. If I just consider the 4 terminal network formed by these two inductors, it begins to look an awful lot like a parallel two-wire delay line of length, L and some unknown characteristic impedance, Zd and unknown velocity of propagation, Vp.

Uh oh!! now we have some delay associated with our "loading coils". A TEM mode wave impinging on the input to this 4 terminal "delay line" network will propagate at some finite Vp. Thus if I terminate the output of the real inductor network with the proper Zo, the input current will be equal to the output current, but with some finite delay between the input current and the output current.

Now if I reinsert this delay contraption back into my 450 ohm two-wire line, it will still produce the same resonant condition as before (I didn't change the inductance settings), but now that I know it has some delay associated with it, I should expect to see some taper in the current along its length. Of course, the fact that the Zd of the "delay line" doesn't necessarily match the Zo of the 450 ohm line probably complicates

matters. I'll most likely generate reflections at the
input to the inductor assembly, and re-reflections at
the output (reward traveling wave). Still, I have satisfied
the condition for generating a taper across these real
inductors. After all, borrowing from Cecil Moore's
argument, the delay along a linear mismatched
transmission line is what is responsible for the
observed taper in the current (e.g. standing wave).

Now for the $64,000 dollar question. What is the Zd
and Vp of the ganged roller inductor assembly. Will
the Vp necessarily bear some fixed relationship to
the inductive reactance of the inductors, or will this
depend on the form factor of the inductor assembly.
Will the length of the inductor assembly divided by
the wave velocity, Vp be equal to the delay of the line
section that it replaced, or will this delay depend on
the form factor of the inductor assembly (using ferrites
versus air core inductors, I can easily envision two
pairs of parallel inductors with the same inductive
reactance, but very different form factors). Will the
value of inductive reactance needed to "resonate" my
loaded transmission line vary with the delay and or
form factor of the parallel loading inductors, or will
this value be fixed and equal to the value of inductive
reactance required when I was using the ideal "black
box" inductors?

Hopefully you alll see where I am going with
this. What say, Gents?

73 de Mike, W4EF.....................................

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message

> Jimmy wrote:
> > lumped inductance = lumped change in current.
>
> Actually, I think the assertion was that
> lumped inductance = no change in current.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>

5385. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 08:22:12 UTC
From: Ronald Bilodeau <va3sgr@vianet.ca>
Message-ID: <vsoiu1dil2hbf3@corp.supernews.com>
Source record: 103750

Thank you all for the info. Ron
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fcc17b1$1_5@corp.newsgroups.com...
> Ronald Bilodeau wrote:
> > Hi, Where can I get a coax chart. Thank you very mutch.
>
> The "Wirebook IV" from http://www.thewireman.com contains
> a wealth of information including a coax chart.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5386. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 10:13:16 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <bqhm38$603$1@news1.kornet.net>
Source record: 103751
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:14Uyb.25583$P7.7714@bignews6.bellsouth.net...
<snippage>

>Of course, the solution is NOT to move into one of those
> HOAs with the blue-haired lady telling what color to paint
> your shutters. Once you do, you are stuck. Kinda like those folks that
> move in next to an AIRPORT and then
> expect to get PAID because of the noise. I have no sympathy for them. I
> choose NOT to live in such a place.

When I lived in Coeur d' Alene a few years ago, there were the beginnings of a fight between homeowners (not aware of whether or not it was an HOA or not) and radio station KGA in Spokane.

When KGA went on the air something close to 70 years ago, it's transmitter site was miles from town, and in the middle of a very rural area. Well, now the area has built up, and the homeowners there are trying to force KGA to move it's transmitter site and towers. This is not a small undertaking, since broadcast stations are very restricted as to the areas that they can place these complicated multi-tower systems, and very strict directional patterns.

For me, I don't feel a bit sorry for those people, they knew there was a 50,000 watt radio station there when they started moving in. So did the developers. KGA should not be forced to move because of some people's ignorance or short-sightedness.

5387. Extra Coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 12:23:35 UTC
From: Bob <rljames@hotmail.com>
Message-ID: <Xns94454B42AB9ECrljameshotmailcom@208.34.105.14>
Source record: 103752

Just curious... Seems to me I read somewhere that extra coax between antenna and radio should not be managed in a coil. Any truth to this? If so, what's the issue?

I've got an attic antenna about 20 feet or so from an ICOM R8500 connected with 50 feet of RG6-U. This leaves about 30 I keep coiled and wire tied on the floor.

Thanx,
Bob

5388. Re: Kite antenna with ocean ground -- charge buildup?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 12:40:34 UTC
From: richardharrison@webtv.net
Message-ID: <12104-3FCC8842-396@storefull-2318.public.lawson.webtv.net>
Source record: 103753

Ken wrote:
"I have been told that wind will cause static charge to build on the magnet wire and that a path to ground must be provided."

I`ve seen wind sweeping broadcast tower guy wires charge them until they flashed across their insulators again and again. That means the guy wire insulators were very good. a very small leakage is usually sufficient to discharge a conductor, but the guy wire is broken in several places with insulators. The voltage between segments was in kilovolts to produce corona and flashover. A resistance so low as 1000 ohms is usually much lower than required to drain charge.

An ungriunded conductor in air will accumulate charge from rain drops, snow flakes, dust particles, and charged air which strikes it.

Static drain can be accomplished by a connection to ground through a choke or transformer coil. A resistor so high in value as to not affect operation of the "magnet wire" also is effective. Operation may be compared with the grid resistor in a vacuum tube circuit which leaks the charge from a grid. In the case of an elevated conductor, megohms of resistance may be low enough to drain the charge, depending upon the charge accumulation rate and the kilovolts required to produce corona and flashover at some sharp projection on the charged surface.

Best regards, Richard Harrison, KB5WZI

5389. Re: Extra Coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 13:00:55 UTC
From: richardharrison@webtv.net
Message-ID: <4182-3FCC8D07-390@storefull-2316.public.lawson.webtv.net>
Source record: 103754

Bob wrote:
"This leaves about 30 I keep coiled and wire tied on the floor."

RG-6 has a loss of 0.8 dB per 100 feet at 10 MHz. At h-f, you will be hard pressed to measure the loss in 30 feet of RG-6.

A coil of surplus coax only deters r-f current on the outside of the coax which helps avoid surges and radiation on the coax.

Use non-conducting ties on the coil.

Best regards, Richard Harrison, KB5WZI

5390. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:05:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fccaa7b_5@corp.newsgroups.com>
Source record: 103755

Michael Tope wrote:
> Will the
> value of inductive reactance needed to "resonate" my
> loaded transmission line vary with the delay and or
> form factor of the parallel loading inductors, or will
> this value be fixed and equal to the value of inductive
> reactance required when I was using the ideal "black
> box" inductors?
>
> Hopefully you alll see where I am going with
> this. What say, Gents?

Hi Mike, good posting. I admire open, questioning minds. I just added some information on this subject to my web page. Although there is some relationship between inductance and delay, I hardly had to mention inductance at all. The phases of the forward current and reflected current are changing in opposite directions. Given any delay at all, the magnitude of the net current will change through the coil (given a typical mobile antenna coil). The electrical length of a mobile antenna loading coil can be approximated by finding the angle whose cosine is (net top current)/(net bottom current). Note that this estimate works for loading coils installed in electrical 1/4WL monopoles or electrical 1/2WL dipoles, not for the general case.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5391. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:07:43 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fccab01_5@corp.newsgroups.com>
Source record: 103756
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Brenda Ann wrote:
> For me, I don't feel a bit sorry for those people, they knew there was a
> 50,000 watt radio station there when they started moving in. So did the
> developers. KGA should not be forced to move because of some people's
> ignorance or short-sightedness.

How about the "greatest good for the greatest number"? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5392. Re: Extra Coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:11:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fccabf2$1_5@corp.newsgroups.com>
Source record: 103758

Bob wrote:
> Just curious... Seems to me I read somewhere that extra coax between
> antenna and radio should not be managed in a coil. Any truth to this? If
> so, what's the issue?

Extra *ladder-line* should not be coiled up. For coax, coiling
actually reduces the common mode current which is a good thing.
There is some attenuation in the length of coax used for the
coil but if the proper coax is chosen and the SWR is low, those
extra losses will probably be negligible.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5393. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:15:27 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <f02zb.640$yf.222@fed1read01>
Source record: 103759
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Au Contraire -- a ham here who had an antenna up for years was told that the HOA voted it an eyesore and he was to take it down --He pleaded "Grandfathering" and a long legal battle ensued and he lost. The CC&R was not on antennas -- but on an "obnoxious structure"

--
73 From The Wilderness Keyboard
"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message news:14Uyb.25583$P7.7714@bignews6.bellsouth.net...
>
> "Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
> news:7yryb.294$yf.196@fed1read01...
> > Outwitting -- use Stealth Antennas URL:
> > http://ac6v.com/antprojects.htm#STANT
> > AND
> > http://www.arrl.org/catalog/?item=7571
> >
> > Outsmarting -- Don't buy into an HOA Community
> > Think Ahead --- An HOA can adapt a no antenna rule anytime they want
> > Have Big Bucks to fight it in court -- Most HOA's have deep pockets
> >
> > --
> > 73 From The Wilderness Keyboard
>
> Um, not exactly. If a neighborhood were to suddenly enact some sort of HOA,
> I believe any pre-existing antennas would have to be "grandfathered" in.
> Hey, I
> moved in next to a cow pasture that was in the city limits.
> Now some 4-eyed wimps would want to try to make the
> farmer get rid of his cows. Couldn't! When the city
> annexed the neighborhood, they had to take the cows too
> ....they refused to MOOOOOOOOOOOVE! (Sorry, I had to do that). The
> cows stayed. Good neigh-
> bors, too. Remained until the farmer died and his sons decided to sell
> them. Now, they just can't put them back, tho.
>
> Of course, the solution is NOT to move into one of those
> HOAs with the blue-haired lady telling what color to paint
> your shutters. Once you do, you are stuck. Kinda like those folks that
> move in next to an AIRPORT and then
> expect to get PAID because of the noise. I have no sympathy for them. I

> choose NOT to live in such a place. And I get all the convenience of city
> living and the
> atmosphere of the country: a grassy meadow (former pasture), lots of wood
s,
> dead end street, close in, yet
> very quiet, deer, owls, geese, foxes, and raccoons--which I could do
> without, BTW. AND all the antennas I
> want!
>
>
> Jerry
> K4KWH
> > "
> >
> >
> >
>
>

5394. Gotham Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:24:04 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <k82zb.641$yf.196@fed1read01>
Source record: 103760

Received the following from a Ham who came into possession of the "famous"
Gotham antenna and would like to resurrect it.

Please e-mail Bruce N3XUK direct (NOT ME)

Hello Name hr is Bruce N3xuk I have a gotham vertical that my father left me
when he passed.. I been looking for some info on the antenna but no luck as
of yet. I was going to use it for 80m but I think I need a coil. Also would
like to know how this antenna was feed because the info I did get there was
a coil on it some where .

thank you for your time ..
Bruce N3XUK
<gilsonbruce@hotmail.com>

--
73 From The Wilderness Keyboard

5395. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:24:17 UTC
From: richardharrison@webtv.net
Message-ID: <13188-3FCCAEA1-391@storefull-2315.public.lawson.webtv.net>
Source record: 103761

Michael, W4EF wrote:
"Cecil Moore`s thought provoking arguments have begun to give me reasonn for pause."

It`s been said the key to enlightnent is repetition, repetition, and repetition.. It must be so.

A series resonant circuit is the usual form of a standing-wave antenna. Inductance, capacitance, and resistances due to radiation and heat conversion are unevenly distributed along the antenna. As King, Mimno, and Wing say in "Transmission Lines, Antennas, and Wave Guides" on page 86:

"Inductance and capacitance as used for near-zone circuits with uniform current cannot be defined, and ordinary circuit analysis does not apply."

Best regards, Richard Harrison, KB5WZI

5396. Re: Extra Coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 15:33:32 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <HoOdnUU2AfGKNlGiRVn-iQ@ctc.net>
Source record: 103757

> Just curious... Seems to me I read somewhere that extra coax between
> antenna and radio should not be managed in a coil. Any truth to this? If
> so, what's the issue?
>
> I've got an attic antenna about 20 feet or so from an ICOM R8500 connected
> with 50 feet of RG6-U. This leaves about 30 I keep coiled and wire tied on
> the floor.

The only issue is that if the diameter of the coil is too small the
interconductor will cut through the insulation and short to the shield over
a period of time. If you coil it with an inside diameter of a foot or more
then you will be fine.

5397. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 16:13:39 UTC
From: richardharrison@webtv.net
Message-ID: <13188-3FCCBA33-395@storefull-2315.public.lawson.webtv.net>
Source record: 103762

Cecil, W5DXP wrote:
"I hardly had to mention inductance at all."

Imductance equals delay. That`s why inductors are called retardation coils.

In a resistor, current varies exactly in the same way and at the same time as the applied voltage. Volts and amps are in-phase.

In an inductor, current is delayed and builds from the time that voltage appears across the inductor. In a lossless (pure) inductance, current lags the applied a-c voltage by 90-degrees. When the voltage is maximum, current is zero, and when the voltage is zero, current is maximum.

90-degrees represents some fraction of a second, depending on cycles per second as 90-degrees is the time required for 1/4-cycle. The higher the frequency, the shorter the time represented by 90-degrees.

Loss in an inductance makes an impedance composed of inductive reactance and resistance. As current is delayed in reactance by 90-degrees, but is in-synch in a resistance,
Pythagoras gives us the total impedance, and the phase angle of the resultant impedance is an "operational vector", not a "field vector". The angle of current in the impure inductance which is made with the applied voltage is easily determined with trigonometry or graphical methods. An operational vector is also called a phasor. Delay can vary from 0 in a pure resistance to 90-degrees in a purely reactive circuit.

Inductance makes current lag by 90-degrees. Capacitance makes current lead by 90-degrees.

Broadcasters use a T-network called a 90-degree phase shifter. All three reactances have the same impedance as the input and output impedance.

For example, two 50-ohm reactance coils are connected in series in the signal path. A 50-ohm capacitive reactance is connected between the junction of the two coils and the other side of the circuit (ground).

One of the coils cancels the capacitive reactance, leaving a pure inductive reactance of 50-ohms in series with the circuit to cause a 90-degree phase lag. Often ganged variable inductors are used in the 90-degree phase shifter to produce the exact delay required and this has almost no effect, less than 1%, on output current magnitude from the phase shifter over a plus or minus 15-degree phase adjustment range. It`s simple trigonometry.

Best regards, Richard Harrison, KB5WZI

5398. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 17:09:51 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <hD3zb.2873$Y6.2762@bignews2.bellsouth.net>
Source record: 103763
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fccab01_5@corp.newsgroups.com...
> Brenda Ann wrote:
> > For me, I don't feel a bit sorry for those people, they knew there was a
> > 50,000 watt radio station there when they started moving in. So did the
> > developers. KGA should not be forced to move because of some people's
> > ignorance or short-sightedness.
>
> How about the "greatest good for the greatest number"? :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp

NOPE!!

They had the choice to move there or not. Just like idiots
that move in right off the end of an airport runway, then
howl about the noise. They want to be PAID because of
the jet noise. They KNEW what they were getting into
before they moved there. As far as I am concerned, they
ought NOT get one thin dime from it.

If I move into an HOA, then I should shut up about it and
let the old buzzard power-trippers tell me what to do. But I STILL have a
choice to not move into such a place.
I am too feisty and independent to accept domination. I
believe property rights must remain dominant; i.e., your
rights end at your property line and mine end at mine.
Of course, there has to be some reasonable limits, but
what color I *must* paint my shutters? Horsefeathers!
Most neighborhoods "conform" simply by osmosis, or
peer pressure. Most people are likely to keep their property clean and
clutter-free. Most people tend to
flock to what they can afford and you will find that neighborhoods tend to
catagorize themselves; affuent,
middle class, lower middle class, fair, poor, poor-ER.
I think HOAs are unnecessary and I will NOT accept them; those puffed up
self-important busybodys will have
to kick my **** first! So the obvious thing is to just stay
away. I am perfectly content in my 1956 ranch w/basement with the
fireplaces/inserts, garage and double
carport/deck, real plaster walls and knotty pine kitchen.
The geese that reside down at a woods nearby are an extra. OH, my house is
built FAR better than most of the

houses today. During Hurricane Hugo (1989) many of those "fine" houses in my area were blown down like the
big, bad wolf. I lost shingles. Nothing more. 96 MPH
winds.

So, with this unintended rant, I say that I have no sympathy for those "neighbors" that moved next to a pre-
existing condition and----well, TOUGH! They shouldna
been stupid enough to move there to start with!! LOL!
Then to have the arrogance to demand that the tower
that had been there for decades(?) have to move, HA!
Again, HORSEFEATHERS! (and a few other things).

73

Jerry
K4KWH

5399. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 17:33:56 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <c14zb.13204$5d.3699@bignews4.bellsouth.net>
Source record: 103764
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:f02zb.640$yf.222@fed1read01...
> Au Contraire -- a ham here who had an antenna up for years was told that
the
> HOA voted it an eyesore and he was to take it down --He pleaded
> "Grandfathering" and a long legal battle ensued and he lost. The CC&R was
> not on antennas -- but on an "obnoxious structure"
>
> --
> 73 From The Wilderness Keyboard

Then it would have gone to Federal court where I would've used PRB-1. This
is a federal statute that requires that communities (municipal, county, etc)
make
reasonable accomodation for amateur antennas. I would
bet neither you or I have all the facts you are relating because IF that
antenna had been in place for "years"
as you say, I still believe it would have to be grand-fathered. But because
some muckety mucks move in
after *I* have had a tower for years (17) I must now remove it? Well,
they'll have to show me the hard way.

Eventually, the comformity crowd just may have to stick out their lips and
bear it, because there is an antenna bill
before Congress that *may* cause the blue-hairs heart failure! It will mean
that HOAs will have to make the same *reasonable* accomodations as local
governments.
Why? Because Amateur Radio is considered a part of America's communications
infrastructure and has been proven a valuable asset. While it is, foremost,
a hobby,
many people never consider will happen when towers fall,
a tornado strikes, or even a forest fire strikes. Those yuppy cell phones
aren't worth a tinker's dam (no, not 'damn'), your computer doesn't work
without power or
phone lines, and what's left? Ham Radio, *some* ES
comms, Civil Air Patrol, et al. And who will cry "foul" first? The same
air-headed HOA people so hell-bent
to get rid of "ugly" antennas. The same ones that will
scream "I WANT MY PHONE AND TV BACK ON"!
"How can I find out if my mother in the next town is OK"? And you,
likely, won't find out! Because you
ran off the neighbor that *could've* helped. You embarked on this power
trip. Das Shutzstassen (SS)und Dummkopten. Ya, Idioten!

And your pleas will be met with exactly what you wanted:

.....Silence

J

> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:14Uyb.25583$P7.7714@bignews6.bellsouth.net...
> >
> > "Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
> > news:7yryb.294$yf.196@fed1read01...
> > > Outwitting -- use Stealth Antennas URL:
> > > http://ac6v.com/antprojects.htm#STANT
> > > AND
> > > http://www.arrl.org/catalog/?item=7571
> > >
> > > Outsmarting -- Don't buy into an HOA Community
> > > Think Ahead --- An HOA can adapt a no antenna rule anytime they want
> > > Have Big Bucks to fight it in court -- Most HOA's have deep pockets
> > >
> > > --
> > > 73 From The Wilderness Keyboard
> >
> > Um, not exactly. If a neighborhood were to suddenly enact some sort of
> HOA,
> > I believe any pre-existing antennas would have to be "grandfathered" in.
> > Hey, I
> > moved in next to a cow pasture that was in the city limits.
> > Now some 4-eyed wimps would want to try to make the
> > farmer get rid of his cows. Couldn't! When the city
> > annexed the neighborhood, they had to take the cows too
> > ....they refused to MOOOOOOOOOOOVE! (Sorry, I had to do that). The
> > cows stayed. Good neigh-
> > bors, too. Remained until the farmer died and his sons decided to sell
> > them. Now, they just can't put them back, tho.
> >
> > Of course, the solution is NOT to move into one of those
> > HOAs with the blue-haired lady telling what color to paint
> > your shutters. Once you do, you are stuck. Kinda like those folks that
> > move in next to an AIRPORT and then
> > expect to get PAID because of the noise. I have no sympathy for them. I
> > choose NOT to live in such a place. And I get all the convenience of
city
> > living and the
> > atmosphere of the country: a grassy meadow (former pasture), lots of
wood
> s,
> > dead end street, close in, yet
> > very quiet, deer, owls, geese, foxes, and raccoons--which I could do
> > without, BTW. AND all the antennas I
> > want!

> >
> >
> > Jerry
> > K4KWH
> > > "
> > >
> > >
> > >
> >
> >
>
>

5400. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 17:38:39 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <C54zb.13226$5d.9130@bignews4.bellsouth.net>
Source record: 103765
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in message
news:U7Byb.271075$275.966105@attbi_s53...
>
> "Dee D. Flint" <deehays@qix.net> wrote in message
> news:pvbyb.13227$P%1.12017655@newssvr28.news.prodigy.com...
> > The problem is that in some places in this country finding an area
without
> > CCRs that will mean an unreasonably long commute to work.
>
> That's my point. It seems more and more, no one is willing to compromise.
> Hams want no CC&R and have everything want. Scanner people want what they
> want. Short-wave people want what they want. My commute is 20 miles. I
> would be fine with driving 30. Some people can't stand that, so they live
> in vinyl villages and in urban areas. Some people think 10 miles or more
of
> a drive to work is horrible. I don't see how these people would survive
if
> they had not found their little niche a few decades ago. Would they just
be
> bitter? I know that if I want to live rural, I have to look at almost a
30
> mile drive. So? I save my money and take care of my car. If it's that
big
> of deal, buy a Honda. Of course then there are the rich folks who can
never
> been seen in a Honda. Those are the people I tell to go buy an Acura!!
>
> I have seen this attitude more and more with the younger generation. No
> home less than 5 years old. Fancy SUVs, etc etc. Live paycheck to
> paycheck. These are actually the CC&R cops you people talk about. Always
> bitching about so and so violating this and that.....only because they
think
> their home is going to double in value in 10 years. Me, I hope to live as
> rural as possible. Even if that means my ham can put up 500 towers.
> Depending on what it does/doesn't do to my electronics and his/her
attitude
> after I let them know about it, will determine if I see them as friend or
> foe. Hams serve a purpose, a good one....but this doesn't mean they
should
> use some law to skirt the rules of a contract they were never forced into.

And they shouldn't have to put up with people moving in
long before the ham did and using "some" idiot CCR crap
to make him take down his tower(s).

Jerry
>
>

5401. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 17:48:39 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <Tf4zb.652$yf.146@fed1read01>
Source record: 103766
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

```
Well if I am not mistaken --- PRB-1 is NOT applicable to HOA's
Only municipal, county, etc

--
73 From The Wilderness Keyboard
"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:c14zb.13204$5d.3699@bignews4.bellsouth.net...
>
> "Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
> news:f02zb.640$yf.222@fed1read01...
> > Au Contraire -- a ham here who had an antenna up for years was told that
> the
> > HOA voted it an eyesore and he was to take it down --He pleaded
> > "Grandfathering" and a long legal battle ensued and he lost. The CC&R
was
> > not on antennas -- but on an "obnoxious structure"
> >
> > --
> > 73 From The Wilderness Keyboard
>
> Then it would have gone to Federal court where I would've used PRB-1.
This
> is a federal statute that requires that communities (municipal, county,
etc)
> make
> reasonable accomodation for amateur antennas. I would
> bet neither you or I have all the facts you are relating because IF that
> antenna had been in place for "years"
> as you say, I still believe it would have to be grand-fathered. But
because
> some muckety mucks move in
> after *I* have had a tower for years (17) I must now remove it? Well,
> they'll have to show me the hard way.
>
> Eventually, the comformity crowd just may have to stick out their lips and
> bear it, because there is an antenna bill
> before Congress that *may* cause the blue-hairs heart failure! It will
mean
> that HOAs will have to make the same *reasonable* accomodations as local
> governments.
> Why? Because Amateur Radio is considered a part of America's
communications
```

> infrastructure and has been proven a valuable asset. While it is,
foremost,
> a hobby,
> many people never consider will happen when towers fall,
> a tornado strikes, or even a forest fire strikes. Those yuppy cell phones
> aren't worth a tinker's dam (no, not 'damn'), your computer doesn't work
> without power or
> phone lines, and what's left? Ham Radio, *some* ES
> comms, Civil Air Patrol, et al. And who will cry "foul" first? The same
> air-headed HOA people so hell-bent
> to get rid of "ugly" antennas. The same ones that will
> scream "I WANT MY PHONE AND TV BACK ON"!
> "How can I find out if my mother in the next town is OK"? And you,
> likely, won't find out! Because you
> ran off the neighbor that *could've* helped. You embarked on this power
> trip. Das Shutzstassen (SS)und Dummkopten. Ya, Idioten!
> And your pleas will be met with exactly what you wanted:
>
>
> .....Silence
>
>
> J
>
> > "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> > news:14Uyb.25583$P7.7714@bignews6.bellsouth.net...
> > >
> > > "Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
> > > news:7yryb.294$yf.196@fed1read01...
> > > > Outwitting -- use Stealth Antennas URL:
> > > > http://ac6v.com/antprojects.htm#STANT
> > > > AND
> > > > http://www.arrl.org/catalog/?item=7571
> > > >
> > > > Outsmarting -- Don't buy into an HOA Community
> > > > Think Ahead --- An HOA can adapt a no antenna rule anytime they want
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> > > >
> > > > --
> > > > 73 From The Wilderness Keyboard
> > >
> > > Um, not exactly. If a neighborhood were to suddenly enact some sort
of
> > HOA,
> > > I believe any pre-existing antennas would have to be "grandfathered"
in.
> > > Hey, I
> > > moved in next to a cow pasture that was in the city limits.
> > > Now some 4-eyed wimps would want to try to make the
> > > farmer get rid of his cows. Couldn't! When the city

> > > annexed the neighborhood, they had to take the cows too
> > > .....they refused to MOOOOOOOOOOOVE! (Sorry, I had to do that).
The
> > > cows stayed. Good neigh-
> > > bors, too. Remained until the farmer died and his sons decided to
sell
> > > them. Now, they just can't put them back, tho.
> > >
> > > Of course, the solution is NOT to move into one of those
> > > HOAs with the blue-haired lady telling what color to paint
> > > your shutters. Once you do, you are stuck. Kinda like those folks
that
> > > move in next to an AIRPORT and then
> > > expect to get PAID because of the noise. I have no sympathy for them.
I
> > > choose NOT to live in such a place. And I get all the convenience of
> city
> > > living and the
> > > atmosphere of the country: a grassy meadow (former pasture), lots of
> wood
> > s,
> > > dead end street, close in, yet
> > > very quiet, deer, owls, geese, foxes, and raccoons--which I could do
> > > without, BTW. AND all the antennas I
> > > want!
> > >
> > >
> > > Jerry
> > > K4KWH
> > > > "
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5402. WTD: Small tower in DFW area

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 17:53:31 UTC
From: W5GT <xyzabc11@hotmail.net>
Message-ID: <vspkctjp2r9d0b@corp.supernews.com>
Source record: 103767

I'm looking for an inexpensive smaller used tower (32' - 45') in the Dallas / Fort Worth area.

Dave - W5GT
North Richland Hills, TX.
w5gt@arrl.net

5403. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 18:01:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bjkpsv4v5otr00okrbp0vkqajo4qlba351@4ax.com>
Source record: 103768

On Tue, 2 Dec 2003 09:24:17 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:
>"Inductance and capacitance as used for near-zone circuits with uniform
>current cannot be defined, and ordinary circuit analysis does not
>apply."

Hi Richard,

I thought this was dead long ago. Your statement is true of course,
but it seems - like the custom of putting a coin in the mouth of the
recently deceased - arguments have to be invented to push us all on
across the Styx.

73's
Richard Clark, KB7QHC

5404. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 18:16:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fccd733_2@corp.newsgroups.com>
Source record: 103669
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Jerry Oxendine wrote:
> I am too feisty and independent to accept domination.

So Jerry, what are you going to do when 51% of the citizens are on welfare and vote that the other 49% (including you and me) must support them. Don't you believe in democracy?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5405. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 18:35:55 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <bqim5bssj1@newshost.mot.com>
Source record: 103698

What kind of a "chart" are you after?
I made an Excel spreadsheet plotting the loss for a few common types
RG 8, 58 213 9913 LMR400
Steve,
--
Steve N, K,9,d, c. i email via the arrl net. or remove the q's from the
following
sqteqveq.nqoqsqkqoqwiqczq.@mqoqtoqroqla.com

<spamproof@nospam.com> wrote in message
news:MPG.1a3564851edccdbf9896b1@netnews.comcast.net...
> In article <vsnf1a70skho2a@corp.supernews.com>, va3sgr@vianet.ca says...
> > Hi, Where can I get a coax chart. Thank you very mutch.
> > Ron. VA3*SGR
> >
> >
> >
> A "Google" Search reveals quite a few resources. This one might be what
> you want.
>
> http://www.eweb-planet.com/kk6ss/coax.html
>
> KA7RGO

5406. Re: Gotham Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 18:49:58 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <9cnpsv0ao7k0nprc1bnfnf4134npjfmu22@4ax.com>
Source record: 103670

On Tue, 2 Dec 2003 07:24:04 -0800, "Keyboard In The Wilderness"
<KIYW@zilch.net> wrote:

>Received the following from a Ham who came into possession of the "famous"
>Gotham antenna and would like to resurrect it.
>
>Please e-mail Bruce N3XUK direct (NOT ME)
>-------------------------
>
>Hello Name hr is Bruce N3xuk I have a gotham vertical that my father left me
>when he passed.. I been looking for some info on the antenna but no luck as
>of yet. I was going to use it for 80m but I think I need a coil. Also would
>like to know how this antenna was feed because the info I did get there was
>a coil on it some where .
>
>thank you for your time ..
>Bruce N3XUK

Hi Bruce ,

Gotham antennas were popular in the 1960 maybe into the early 70's..
They went out of business so your not likely to find any info on
them.. But basically the vertical you have was the same as the Hy-
gain 18 V.. which uses a base loading coil to present a half decent
match to 50 ohm line. I've long since lost the coil I had with the
Gotham vertical I used as a novice .. I would guess you would want a
coil of about 2.5 inches Dia. and about 40 turns.. A btter way to put
that antenna on 80m would be to top load it somehow. In any event
you'll need a good ground radial system.

73 Dave kc1di

5407. Seeking Butternut HF6V manual

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 19:11:52 UTC
From: Dave Pascoe KM3T <km3t@km3t.org>
Message-ID: <bqio5o$6q2$1@rocky.tcnc.com>
Source record: 103671
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap

Looking for a Butternut HF6V manual? Will gladly pay for you to copy
it and mail it to me.

Please email.

Thanks es 73,
Dave KM3T

5408. Re: Seeking Butternut HF6V manual

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 19:16:06 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <Wx5zb.201460$Dw6.745503@attbi_s02>
Source record: 103672

Dave:

Bencher has a PDF of the manual on their website:
http://www.bencher.com/pdfs/00366IZV.pdf

73

Paul AB0SI

"Dave Pascoe KM3T" <km3t@km3t.org> wrote in message
news:bqio5o$6q2$1@rocky.tcnc.com...
>
> Looking for a Butternut HF6V manual? Will gladly pay for you to copy
> it and mail it to me.
>
> Please email.
>
> Thanks es 73,
> Dave KM3T

5409. Re: Gotham Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 19:20:52 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FCCE614.1D011CF5@cwis.net>
Source record: 103673

Keyboard or Bruce,
The 'infamous' Gotham vertical was base loaded with a coil about the size a typical 'BugCatcher's, something in the 50 - 90 uH range. The usual advertisement showed a grounding stake used for a ground, maybe the water pipes. The Gotham company started in New Jersey, later moved to Florida where it branched out into other things, then folded. It was a fairly 'cheap' antenna for the time.
If you plan to use one don't expect any more performance than you would get with a 'BugCatcher', which isn't much on 80 meters when compared to many other antennas (non-mobile), but certainly better than 'nuth'n'. Also expect to have to use more than a single ground rod or the water lines for a ground. I wouldn't go so far as to say it was junk, but it sure came close... Good luck!
'Doc

5410. Re: Seeking Butternut HF6V manual

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 19:37:16 UTC
From: Dave Pascoe KM3T <km3t@km3t.org>
Message-ID: <bqiplc$8m3$1@rocky.tcnc.com>
Source record: 103674

Got it...thanks everyone.

5411. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 20:37:56 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <EK6zb.141814$Ec1.5737278@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103675
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Jim9124@com.net> wrote in message news:3FCB8BC4.6F3A0969@com.net...
> Frank I have been reading the various posting in this thread. And
some
> of the posting here disgust me. Why do some of these people call
> themselves American's? America is supposed to be the land of the
FREE.
>
> By far, this posting by you is the best.
>
> I have read most of the articles in the second web site you listed.
>
> It's about time America wakes up. The world doesn't revolve around
HOA's
> or there darn rules.
>
> As a veteran I have flown the Stars and Strips at our home since I
> returned from the military (35+ years ago) and will do until I expire.
> I, unlike some in this thread are proud of my country. I am proud to
fly
> the Stars & Strips over our home. I am proud to have served in the
> military of these United States of America.
>
> I am also proud to have served in the military only to protect the
> rights of HOA's and their over baring officials, to forbid Americans
> from flying there FLAG on a poll erected for this purpose only. And
they
> call themselves patriotic Americans........ya.
>
>
>
Democracy is no more perfect than the human race. The guys who wrote and approved the Constitution and Bill of Rights knew individual rights could get voted away.

I'm not sure why some Homeowner's Associations have a problem with religious monuments, flags or flagpoles, or the First Amendment rights most of take for granted. The people who advocate such positions seem remarkably shy in public, especially around reporters.

When I first heard of the George Andres case, I thought there must be some mistake. Maybe the reporters didn't get the story quite right and the whole misunderstanding would be cleared up quickly. I was surprised to learn how long this damn thing has been dragged out, despite the

support Mr. Andres has received from the public and the Florida politicians. I was just as surprised to learn that there's several similiar cases out there. Telling any American he can't raise a flag or put up a religious monument on his own property is an abuse of power. Telling it to a man who has served his country compounds the injustice.

I suppose we should remember that a small percentage of us are real SOBs. A small percentage of governments are, or will be, run by SOBs. That's democracy.

That's why I want my government to limited by some sort of respect for individual rights.

Frank Dresser

5412. TH7/TH6 and other amateur gear for sale:

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 21:23:06 UTC
From: yardleyite@aol.com
Message-ID: <20031202162306.12131.00000049@mb-m05.aol.com>
Source record: 103676

Hello, I'm posting this list of for sale items for a emailess friend of mine
Bob KD2I in Toms River, N.J.
All items are for pickup only, he will not ship. Please do not ask him to do so
as it cannot be done.
Bob can be reached at: 732-929-4264 from 5PM to 9PM. Please contact him via
telephone for more information.

Hammarlund HQ-170 RX with matching Hammarlund speaker, VGC $200

Heathkit DX-100 Transmitter, VGC
$175

National NC-183 rx. Clean but repainted
$100

Hallicrafters SX-101A RX. 10-80M, product detector, Very Clean!
$250

Heathkit Apache TX-1 TX and matching Mohawk RX-1 rx working
$425.00 (sold as a pair only)

Kenwod TS-700A all mode 2M base station. 6-10W output, clean
$150

KLM "Echo 70" SSB/CW 432/435 MHZ mobile. 10W output, clean $75

TH7 7 element tri-bander beam, EC (10/15/20M)
$250

TH6 6 element tri-bander beam, EC (10/15/20M)
$100

Microwave Modules 2M transverter. 26-30 in, 144-148 out. 25W
$100

Clegg Zeus hi-power AM/CW TX (4CX150 mod by 2 811's)clean $300

Swan MK I amp (2X3-400A's) weak tubes otherwise oK
$300

All items listed are for pickup only. Bob cannot ship due to health reasons.
If you would like additional information please call Bob at 732-929-4264, or
email me directly at yardleyite@aol.com. I don't have the items at my house but
I do have a knowledge of the condition of them.

Thanks for the bandwidth,
Joe Cro N3IBX

5413. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 21:50:24 UTC
From: richardharrison@webtv.net
Message-ID: <2680-3FCD0920-16@storefull-2317.public.lawson.webtv.net>
Source record: 103677

Richard Clark wrote:
"I thought this was dead long ago."

So did I. This recent posting is a repetition for me, but sometimes repetition is needed for those who weren`t there in whole or in part for the earlier postings.

I don`t expect anyone to accept a statement without proof from me that ordinary circuit analysis does not apply to antennas, but from 3 E.E. Sc. D.`s who were at the time they made the statement giving their very best for victory in WW-2, I would expect some serious consideration and at least a first assumption that the opinion is correct.

Best regards, Richard Harrison, KB5WZI

5414. Re: Gotham Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 22:20:45 UTC
From: Irv Finkleman <finkirv@NOSPAMshaw.ca>
Message-ID: <3FCD0FE2.CEBBF2DE@NOSPAMshaw.ca>
Source record: 103678

Keyboard In The Wilderness wrote:
>
> Received the following from a Ham who came into possession of the "famous"
> Gotham antenna and would like to resurrect it.
>
Try a search for Gotham Antenna on Google -- there's lots of info there.

Irv VE6BP

-

5415. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 22:45:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcd1652_4@corp.newsgroups.com>
Source record: 103679

Richard Harrison wrote:
> It`s been said the key to enlightnent is repetition, repetition, and
> repetition.. It must be so.

Drops of water can wear away a rock.
Drops of truth can wear away sacred cows,
even when embedded in granite brains.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5416. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 22:55:37 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <JL8zb.7008$_M.27952@attbi_s54>
Source record: 103680

There a new thought for this thread that has not been discussed and I'd like to open the subject.

Bill and Mary, in their mid 50s, buy a home in a CC&R community and are quite happy with the community and the CC&Rs.

Ten years later, Bill retires and a friend introduces him to Ham Radio. Bill finds it fascinating and after several months passes his exam and becomes W9BILL. By this time he has forgotten many details of the CC&Rs.

He proceeds to erect a simple dipole antenna in the back of his property using trees along the property line for antenna support.

The HOA police show up! What are Bill's options: He is retired and his income is lower than when employed so moving is a very difficult option?

5417. Re: Outwitting Home Owner Associations/Condo Associations Regarding

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 22:58:47 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031202175847.14218.00000041@mb-m28.aol.com>
Source record: 103681

>
>So Jerry, what are you going to do when 51% of the citizens are on
>welfare and vote that the other 49% (including you and me) must
>support them. Don't you believe in democracy?
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

That would be ideal - socialism, everybody living in paradise. Just one small problem, it doesn't work on people.

Or you put 2% of welfare people on no fat, no cholesterol vegetarian diet and soon the balance would tip back to sanity.

Yuri

5418. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 23:02:31 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <3FCD19CD.80303@comcast.net>
Source record: 103682
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Frank Dresser wrote:

SNIP
...
> Democracy is no more perfect than the human race. The guys who wrote
> and approved the Constitution and Bill of Rights knew individual rights
> could get voted away.
>
> I'm not sure why some Homeowner's Associations have a problem with
> religious monuments, flags or flagpoles, or the First Amendment rights
> most of take for granted. The people who advocate such positions seem
> remarkably shy in public, especially around reporters.
>
> When I first heard of the George Andres case, ...

SNIP

Frank, regarding your comments on a Democracy I'd like to make a simple observation.

We in the USA do NOT live in a Democracy, thank God! Contrary to what the newspapers say, TV moguls say, the Democratic Political Party says, and numerous candidates for political office say ... We live in a Representative Republic!

A Democracy is the most tyrannical form of government!!!

Deacon Dave, W1MCE

5419. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 23:40:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jj8qsvkvjrt8m6juf6tlv4sl45pvi283hu@4ax.com>
Source record: 103683

On Tue, 02 Dec 2003 16:45:34 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Harrison wrote:
>> It`s been said the key to enlightnent is repetition, repetition, and
>> repetition.. It must be so.
>
>Drops of water can wear away a rock.
>Drops of truth can wear away sacred cows,
>even when embedded in granite brains.

And there are some who piss on your leg and try to convince you its
the rain - Judge Judy

5420. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-02 23:49:04 UTC
From: Bob McConnell <rmcconne@NOSPAM.lightlink.com>
Message-ID: <7t8qsv4kp2t8medoa48f5iuuiig8e4mu3k@4ax.com>
Source record: 103684

On Sun, 30 Nov 2003 17:19:09 -0800, "harshit" <hsuri@usc.edu> wrote:

>I remember during my undergraduate years i took a course on antennas. During
>our labs . Our lab assistant used this device. A thin cylindrical tube.
>Which glowed when it sensed RF radiation. Our professor used this device to
>show various polarizations of various antennas.
>
>My question:
>What is this device called. I wish to buy it from ebay or any other source.
>Any other suggestions shall be appreciated
>

An NE2 neon bulb and a three inch steel coil spring about the same
diameter. Connect each end of the spring to one of the bulb contacts.
Don't know how sensitive it is, but the Navy provided one on the end
of a broomstick to reach into the transmitter room to detect HF before
entering. We never got hit, so I don't know how well it worked.

Bob McConnell (Ex-NFIT)
N2SPP

5421. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 00:37:57 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <h7eosvcstu8si0ka4qo6tcjrp7omeehr96@4ax.com>
Source record: 103685

On Sun, 30 Nov 2003 22:26:31 -0500, "Alex Batson"
<batsona@comcast.net> wrote:

>Consider:
>
>> The National Electric Code says otherwise. Earth ground is *not*
>> considered adequate bonding for the purposes of electrical safety.
>>
>> The bonding rule is there for a very good reason... safety.
>>
>>
>> Bonding the grounds together will cost maybe $10 worth of wire. It's
>> cheap insurance.
>
>My main pannel's nutral bar is attached to a stranded 2AWG wire attached to
>the cold water pipe (from 1963). Other work done in 2001 by a contractor
>has a solid 6AWG wire on the nutral bar, going out to a stake in the back
>yard. He tied the gas line in the house, to the cold water pipe, and also,
>in another area of the basement, tied the copper sewer line to the cold
>water line. Am I good-as-gold with this setup?

Here the answer would be no, but YMMV depending on location (local
codes)

Although tied together the Neutral and ground are not considered the
same. Neutral is the return to the power transformer on the pole and
is normally the same size at the hot wires. (220 VAC). There should
be a ground at the pole and one (or two) within 6 to 12 feet of the
service entrance.

Here and I emphasize here, that ground varies with the size of the
service, but for a 200 amp service I believe it was #6. It had to be
"Green" and tie to the ground clamp in the breaker box. In the breaker
box is a jumper that ties the neutral and ground together. My
electrical service for the house has two 8 foot ground rods, one with
in 6 feet of the entrance and the other at 12 feet. The shop with the
same size service (200 amp) only has one ground rod.

BTW, although the ground wire is #6 the feed wires are 2 ought, or
(#00) for both the house and shop. It takes pipe benders to get that
stuff around the bends in the meter sockets and panels. Both the
house and shop are fed with underground runs of about 130 feet. Some
where I have some photos of me running the "trencher" across the
driveway to install the PVC conduit.

The gas line should have another Green wire (insulated except at the connectors) of the same size tieing back to the ground in the breaker box. Each of the other lines should also have it's own green wire going back to the breaker box ground. Only one ground wire from the box to the ground rod(s). This puts all of those metallic systems tied to the same potential. We were not allowed to "daisy chain" grounds. Each had to be a separate run and all tie to the buss where the green from the ground rods ties in.

Again, I emphasize *here* is quite likely different than *there* although I'd assume they'd be close. Everyone has to meet the national electric code, but some areas are more strict. (I make no claim to being an expert on the national code, but having just rewired our home including installing a transfer switch to a 9 KW generator I am up on the local requirements) Part of this is still under way.
Here being, Homer Township, in Midland County, Michigan.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S♯ CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>alex
>batsona<at>comcast<dot>net
>

5422. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 00:46:57 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <5oazb.7813$_M.30532@attbi_s54>
Source record: 103686
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

No, they shouldn't. It's just like the people that build houses at the end
of a runway then complain about the noise.
"Brenda Ann" <brendad@shinbiro.com> wrote in message
news:bqhm38$603$1@news1.kornet.net...
>
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:14Uyb.25583$P7.7714@bignews6.bellsouth.net...
> <snippage>
>
KGA should not be forced to move because of some people's
> ignorance or short-sightedness.
>
>
>

5423. FS: Yaesu ATAS-120

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 00:49:53 UTC
From: 007 <nospam.but@thank.you.anyway>
Message-ID: <%nazb.16134$Qc.10551@bignews5.bellsouth.net>
Source record: 103687
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.swap

http://www.eham.net/classifieds/detail/115811

5424. Re: Slow Google Sight

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 01:20:04 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312021720.55fa5bde@posting.google.com>
Source record: 103688

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<h47nsvgb024o5ki35f9krqgihe26pe2arv@4ax.com>...
> On Mon, 01 Dec 2003 08:11:24 -0600, Bob Miller
> <bxmiller@texas.netNOSPAM> wrote:
>
> >On 1 Dec 2003 05:50:30 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> >wrote:
> >
> >>You are quite correct. Some years ago I was given to
> >>understand that Google took over the old set up.
> >>My server said there was nothing he could do for me.
> >>Is their a way for me to get the postings quicker
> >>other than paying for it ?
> >
> >My ISP includes the news group feeds at no additional cost. You might
> >check to see if your ISP has its own news group server. If it does,
> >you're all set. Start accessing that news server instead of Google.
> >
> >If not, you could check some of the other ISPs in your area of the
> >country.
> >
> >You could also go to http://www.forteinc.com and download their news
> >group reader. There's a free version called Free Agent. It's a much
> >better handler of newsgroup postings than what you might be using in
> >your browser. Once Free Agent is installed, go into User Options and
> >give the name of the news server at your ISP. Then go under Groups,
> >and download the list of all the news groups handled by your ISP
> >(there should be 40- or 50-thousand). Then subscribe to the ones you
> >want, such as this one.
> >
> >Bob
> >k5qwg
>
> Hi All,
>
> This is exactly how it's done. Buy the commercial version and get
> extras (like spam filtering and email handling, if I am not mistaken).
> I've had the store-bought version for years and they are about to
> upgrade with big additions. Your purchase should allow for a free
> upgrade - maybe, consult the link already offered above.
>
> 73's
> Richard Clark, KB7QHC

Thanks for that Richard.
My server does have that news thing as has been pointed out and then there is your suggestion. I am now going to consult my son showing him all the links that have been presented here and go from there.
Thanks everybody, now I see that it is Google that is giving me fits and I must get away from them.
Art

5425. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 01:44:35 UTC
From: Sid <kerb@netscape.org>
Message-ID: <7ebzb.2437$tu1.2381@fe3.columbus.rr.com>
Source record: 103689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

IMHO...a tyrannical form of government would be something from the
Hitler regime, not the Democracy we are blessed with!

Dave Shrader wrote:
>
>
> Frank Dresser wrote:
>
> SNIP
> ...
> > Democracy is no more perfect than the human race. The guys who wrote
>
>> and approved the Constitution and Bill of Rights knew individual rights
>> could get voted away.
>>
>> I'm not sure why some Homeowner's Associations have a problem with
>> religious monuments, flags or flagpoles, or the First Amendment rights
>> most of take for granted. The people who advocate such positions seem
>> remarkably shy in public, especially around reporters.
>>
>> When I first heard of the George Andres case, ...
>
>
> SNIP
>
> Frank, regarding your comments on a Democracy I'd like to make a simple
> observation.
>
> We in the USA do NOT live in a Democracy, thank God! Contrary to what
> the newspapers say, TV moguls say, the Democratic Political Party says,
> and numerous candidates for political office say ... We live in a
> Representative Republic!
>
> A Democracy is the most tyrannical form of government!!!
>
> Deacon Dave, W1MCE
>

5426. current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 02:22:13 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312021822.1996d499@posting.google.com>
Source record: 103690

Gentlemen
I am not a electrical engineer or antenna expert e.t.c.
The above controversy is purely about the term 'lumped' items such as resistance, capacitance and inductances, all of which are mythical. Each of these three items contain parts of the others and the label assigned to each of these is that which DOMINATE. So an inductance has resistance and capacitance as well as the inductance but the latter is what predominates.
Since all these have three items are part of its label they are obviously circuits. When you read the handbook they show an equivalent circuit for an antenna as a circuit with the mythical lumped inductance, resistance and capacitance which can be used for advantage in solving circuits in a mathematical aproach only in the same way mathematics use the mythical
sq root of -1 .
Now I know educated people in the field are aware of this but for some reason they want to make it look dificult.
Let me give an example of how lumped loads can be used to advantage. We have a tuner with two variable capacitances and a variable inductance,
this assembly does not radiate.(NOT INTENDED TO)
If we change the capacitances to circuits that contains resistance, inductance as well as the predominating variable capacitance and use another circuit that has all of these but with the predominant inductance we can connect the two capacitive circuits by the connecting inductive circuit by common inductive coupling.
Now have an equivalent circuit to the tuner that we started with, It not only radiates but preserves the function of a tuner REGARDLESS of the size of the radiators
Thus by changing the format backwards from the so called lumped constants of the tuner we now have a radiating coupled assembly that is the basis for small antennas without relationship to wave length.
This is the exact antenna I have
driven by my rotator on the top of my tower for top band use. It radiates but
also retains all the original functions for direct connection to a transmitter or feedline without the original separate matching system or tuner.
It is time for people to get back to basics, that resistance, inductance and capacitances are all electrical CIRCUITS and NOT a lumped spot.
Accepting these facts forces one to consider what a current reaction is when meeting ANY of the constituents of the so called lumped circuit i.e. capacitance generates a phase change, period. Only the

amount of phase change
can be up for discussion.
A long posting but not as long as the thread started by Roy in
response to my last posting on this discussion which apparently ticked
him off..

Have at it guys
Regards
Art.
A nobody with no credabilty !

5427. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 02:51:15 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <tqjqsvs0bu14ad8n3uehdpr4td1ptcv2k1@4ax.com>
Source record: 103691
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Wed, 03 Dec 2003 01:44:35 GMT, Sid <kerb@netscape.org> wrote:

>IMHO...a tyrannical form of government would be something from the
>Hitler regime, not the Democracy we are blessed with!

Of course, we here in the US do not live in a democracy. Rather, our
form of government is a representational republic.

Russ

>
>Dave Shrader wrote:
>>
>>
>> Frank Dresser wrote:
>>
>> SNIP
>> ...
>> > Democracy is no more perfect than the human race. The guys who wrote
>>
>>> and approved the Constitution and Bill of Rights knew individual rights
>>> could get voted away.
>>>
>>> I'm not sure why some Homeowner's Associations have a problem with
>>> religious monuments, flags or flagpoles, or the First Amendment rights
>>> most of take for granted. The people who advocate such positions seem
>>> remarkably shy in public, especially around reporters.
>>>
>>> When I first heard of the George Andres case, ...
>>
>>
>> SNIP
>>
>> Frank, regarding your comments on a Democracy I'd like to make a simple
>> observation.
>>
>> We in the USA do NOT live in a Democracy, thank God! Contrary to what
>> the newspapers say, TV moguls say, the Democratic Political Party says,
>> and numerous candidates for political office say ... We live in a
>> Representative Republic!
>>
>> A Democracy is the most tyrannical form of government!!!
>>

>> Deacon Dave, W1MCE
>>

5428. Re: Outwitting Home Owner Associations/Condo Associations RegardingAntennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 04:31:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcd6770$1_7@corp.newsgroups.com>
Source record: 103692
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Sid wrote:
> IMHO...a tyrannical form of government would be something from the
> Hitler regime, not the Democracy we are blessed with!

The democracy that voted to end the life of Socrates was
pretty tyrannical. How would you like a democracy voting
to end your life?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5429. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 05:02:19 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <v7ezb.207213$Dw6.758908@attbi_s02>
Source record: 103693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fccd733_2@corp.newsgroups.com...
> Jerry Oxendine wrote:
> > I am too feisty and independent to accept domination.
>
> So Jerry, what are you going to do when 51% of the citizens are on
> welfare and vote that the other 49% (including you and me) must
> support them. Don't you believe in democracy?

Don't work so hard, get a job that is easier and pays less. Get a good
survival location, some guns, some food, etc.. Sit back and watch the
burnoff of useless eaters as it unfolds. It will be glorious.

5430. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 05:05:10 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <aaezb.407407$Fm2.415567@attbi_s04>
Source record: 103694
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:3FCD19CD.80303@comcast.net...
>
> We in the USA do NOT live in a Democracy, thank God! Contrary to what
> the newspapers say, TV moguls say, the Democratic Political Party says,
> and numerous candidates for political office say ... We live in a
> Representative Republic!

No. We live in a Democracy that once _was_ a Representative Republic. Name
any admentment and I can post a law that violates it that the courts have
upheld (ok, with the exception of the quartering of soildiers!!).

5431. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 05:12:34 UTC
From: Midwest Kid <NoSpamPlease@aol.com>
Message-ID: <6hezb.404210$Tr4.1164670@attbi_s03>
Source record: 103695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
news:C54zb.13226$5d.9130@bignews4.bellsouth.net...
>
> And they shouldn't have to put up with people moving in
> long before the ham did and using "some" idiot CCR crap
> to make him take down his tower(s).

It all depends on the contract. Only a fool would sign acknowledging CC&Rs and think "no big deal' because some Realtor is spouting shit about them not being enforced or dissolved. If that is said, that needs to be signed and in writing. CC&Rs are not a violation of anyone's rights (those who knew what they were getting into). It's funny watching people decry that they are. It's a damn contract between a person and an association. No one is forced to buy a home with CC&Rs. If that's all that is available in your area, move to a new city or state. If you want to stay, but a Honda and move further away. Everything we have in life is a choice. Some people (hams in this case) make a choice then go whine to their big brother government to 'make it so I don't have to suffer the consequences of my choice!!!" If your not willing to leave and more to a new part of the country then I don't feel for you. You have a choice: Ham radio tower set-up or no ham radio tower set-up. Make your choice, do what you need to do to get it done, and live with it.

5432. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 05:48:45 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <1Pezb.143550$Ec1.5785292@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103696
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:3FCD19CD.80303@comcast.net...
>
>
> Frank, regarding your comments on a Democracy I'd like to make a
simple
> observation.
>
> We in the USA do NOT live in a Democracy, thank God! Contrary to what
> the newspapers say, TV moguls say, the Democratic Political Party
says,
> and numerous candidates for political office say ... We live in a
> Representative Republic!
>
> A Democracy is the most tyrannical form of government!!!
>
> Deacon Dave, W1MCE
>

I dunno. Democracy usually works out as well as can be expected. It works out well enough that Americans sometimes forget about the potential tyranny of the majority. Having some of our rights written down is a useful reminder.

Frank Dresser

5433. Ham Equipment for trade

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 06:46:09 UTC
From: theplanters95@aol.comnospam
Message-ID: <20031203014609.26022.00000087@mb-m06.aol.com>
Source record: 103697

I have the following that I would like to trade:

1. FT-50 with couple battery packs, speaker mike, 12v car adapter and charger.
2. MFJ 1278B Multimode TNC
3. Rigblaster with rj45 mike connector
4. MFJ 1116 power strip.

All are in great working condition, with a few scratches...

Will trade as lot or individually. I am looking for 2m mobile radio, auto antenna tuner, screwdriver antenna controller, qrp ssb radio (like the MFJ radio's), GPS for APRS or make an offer.

I am also looking for a 50 foot coax cable assembly for my Dk3 screwdriver antenna. One end of the coax needs a pl-259, and the other end need's spade lugs on the center conductor and ground. The power cable need's spade lugs on the side where the pl259 is, and the other end unconnected. Can somebody help me out by making this cable? Check out hamradiotoys.com for an explanation of the z-match feed method. I am looking for a good quality, low loss and low price cable. I am open to suggestions.

Please email me at theplanters95 at aol.com (after corrections).

Randy ka4nma

5434. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 08:38:14 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Khhzb.55890$m24.14331@fed1read02>
Source record: 103700
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:3FCD19CD.80303@comcast.net...
>
>
> Frank Dresser wrote:
>
> SNIP
> ...
> > Democracy is no more perfect than the human race. The guys who wrote
> > and approved the Constitution and Bill of Rights knew individual rights
> > could get voted away.
> >
> > I'm not sure why some Homeowner's Associations have a problem with
> > religious monuments, flags or flagpoles, or the First Amendment rights
> > most of take for granted. The people who advocate such positions seem
> > remarkably shy in public, especially around reporters.
> >
> > When I first heard of the George Andres case, ...
>
> SNIP
>
> Frank, regarding your comments on a Democracy I'd like to make a simple
> observation.
>
> We in the USA do NOT live in a Democracy, thank God! Contrary to what
> the newspapers say, TV moguls say, the Democratic Political Party says,
> and numerous candidates for political office say ... We live in a
> Representative Republic!

Getting closer to the truth, but exactly what, besides redundant, is a
"representative republic"? Perhaps you meant to say "constitutional
republic".

Ed
wb6wsn

5435. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 08:52:53 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <tvhzb.55930$m24.6589@fed1read02>
Source record: 103701

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:JL8zb.7008$_M.27952@attbi_s54...
> There a new thought for this thread that has not been discussed and I'd
> like to open the subject.
>
> Bill and Mary, in their mid 50s, buy a home in a CC&R community and are
> quite happy with the community and the CC&Rs.
>
> Ten years later, Bill retires and a friend introduces him to Ham Radio.
> Bill finds it fascinating and after several months passes his exam and
> becomes W9BILL. By this time he has forgotten many details of the CC&Rs.
>
> He proceeds to erect a simple dipole antenna in the back of his property
> using trees along the property line for antenna support.
>
> The HOA police show up! What are Bill's options: He is retired and his
> income is lower than when employed so moving is a very difficult option?
>

OK, just what justifies Bill's actions? His age? His loss of memory? He's a retiree? His simple antenna design? Or, to put it simpler, after a few years go by, is it OK to ignore parts of a contract that may complicate your life?

His current options? Take down that simple antenna, and all is now in compliance with the HOA CC&R's. That shouldn't stretch his budget too far.

Ed
wb6wsn

5436. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 10:13:57 UTC
From: ariexyz@hotmail.com
Message-ID: <995b9343.0312030213.315f069b@posting.google.com>
Source record: 103702

Reg, thanks for your fine program,

but.., I get strange values.

When considering the below input-values I get 'strange' results:

- Frequency = 1.8 Mhz
- RF power = 1400 W
- RF peak amplitude = 5400 Volts
- External load res = 50 ohms
- Phase shift = 90 degrees (to get a Q of around 12)
- intrinsic Coil Q = 100

I get:

C1 = 122.5 pF
L = 63.80
C2 = 122.6 pF

Is sounds very strange to me that both C1 and C2 have the same value whereas the Load resistance at anode is around 10414 ohms or at least much higher than 50 ohms and an external resistance of 50 Ohms

What about the Load resistance at anode, I would think this should be somewhere aound 2800 ohms, considering the Power output and anode voltage swing.

Arie.

5437. Re: RF radiation detector

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 12:59:57 UTC
From: Pappy127@usa.net
Message-ID: <3FCDDE4D.E12D508@usa.net>
Source record: 103703

You can take a 40 watt fluorescent bulb and walk under high power lines
and it will light up bright.
That's RF.

Bob McConnell wrote:
>
> An NE2 neon bulb and a three inch steel coil spring about the same
> diameter. Connect each end of the spring to one of the bulb contacts.
> Don't know how sensitive it is, but the Navy provided one on the end
> of a broomstick to reach into the transmitter room to detect HF before
> entering. We never got hit, so I don't know how well it worked.
>
> Bob McConnell (Ex-NFIT)
> N2SPP

5438. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 14:53:59 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <7Omzb.1056$yf.215@fed1read01>
Source record: 103704

See stealth antennas at URL:
http://ac6v.com/antprojects.htm#STANT

--
73 From The Wilderness Keyboard
"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:JL8zb.7008$_M.27952@attbi_s54...
> There a new thought for this thread that has not been discussed and I'd
> like to open the subject.
>
> Bill and Mary, in their mid 50s, buy a home in a CC&R community and are
> quite happy with the community and the CC&Rs.
>
> Ten years later, Bill retires and a friend introduces him to Ham Radio.
> Bill finds it fascinating and after several months passes his exam and
> becomes W9BILL. By this time he has forgotten many details of the CC&Rs.
>
> He proceeds to erect a simple dipole antenna in the back of his property
> using trees along the property line for antenna support.
>
> The HOA police show up! What are Bill's options: He is retired and his
> income is lower than when employed so moving is a very difficult option?
>

5439. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:11:30 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <SWnzb.289798$9E1.1488386@attbi_s52>
Source record: 103705

Ed Price wrote:

SNIPPED
>
> OK, just what justifies Bill's actions? His age? His loss of memory? He's a
> retiree? His simple antenna design? Or, to put it simpler, after a few years
> go by, is it OK to ignore parts of a contract that may complicate your life?
>
> His current options? Take down that simple antenna, and all is now in
> compliance with the HOA CC&R's. That shouldn't stretch his budget too far.
>
> Ed
> wb6wsn

Ed, when he signed his contract the CC&Rs on antennas were not the issue as has been the premise in previous posts on this topic. If a ham moves INTO a CC&R community he has contracted to comply with the CC&Rs. [Note: my sister lives in a CC&R community and her antenna structure provision has the adjective 'permanent' in the statement of terms. So, a 'temporary' antenna structure is allowed!]

However, at a later time Bill develops a new interest, ham radio, and that includes an activity that is prohibited. Does that mean that the VEC/VE should advise potential applicants that if you live in a CC&R community 'Forget it!!'??

As the thread was/is developing anyone who currently lives in a CC&R community should be discouraged from becoming a ham!

Deacon Dave

5440. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:11:50 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fce0b8b_7@corp.newsgroups.com>
Source record: 103706
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Midwest Kid wrote:
> We live in a Democracy that once _was_ a Representative Republic.

If we live in a Democracy, Al Gore, who got the majority of the popular
vote, would be President. The Electorial College is certainly not
democratic. The fact that we vote for representatives rather than
voting on laws directly is certainly not democratic.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5441. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:14:43 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <SZnzb.292288$ao4.1011331@attbi_s51>
Source record: 103707

ARRL Amateur RAdio Handbook

Ronald Bilodeau wrote:

> Hi, Where can I get a coax chart. Thank you very mutch.
> Ron. VA3*SGR
>
>

5442. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:17:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fce0cd7_7@corp.newsgroups.com>
Source record: 103708
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Ed Price wrote:
> Getting closer to the truth, but exactly what, besides redundant, is a
> "representative republic"? Perhaps you meant to say "constitutional
> republic".

In a pure democracy, the voters vote directly on the laws. In a
representative republic, the voters vote on a representative who
votes directly on the laws. In a constitutional republic, some laws
are off limits both to the voters and to the representatives, i.e.
inalienable rights (at least until the constitution is ammended).
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5443. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:23:14 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fce0e37_7@corp.newsgroups.com>
Source record: 103709

Ed Price wrote:

> "Dave Shrader" <david.shrader@comcast.net> wrote:
>>The HOA police show up! What are Bill's options: He is retired and his
>>income is lower than when employed so moving is a very difficult option?
>>
> His current options? Take down that simple antenna, and all is now in
> compliance with the HOA CC&R's. That shouldn't stretch his budget too far.

But Bill has bigger problems. His car broke down and he can't afford to
fix it. His electricity has been turned off. His shoes have holes in them.
He's three months late on his taxes. What should be done?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5444. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 16:54:47 UTC
From: richardharrison@webtv.net
Message-ID: <15538-3FCE1557-4@storefull-2316.public.lawson.webtv.net>
Source record: 103710

Art, KB9MZ wrote:
"---it should provide good local contacts if placed at a height of 70 feet."

If back to back mobile antennas are used as a dipole at 70 feet, the question is: why not use the vertical distance for a radiating conductor, and the horizontal space to load the too-short vertical?

1/4-wave at 160-meters is about 131 feet.

A vertical mobile antenna is likely limited to about 4 meters and a dipole made from two is only about 8 meters long. That`s only 10% of 1/2-wavelength. Radiation resistance of such a short dipole will be very low and capacitive reactance will be very high requiring much reactance to tune out. This is inherently lossy.

Another disadvantage if the dipole is only about 1/8-wavelength high and horizontal, will be concentration of most radiation directly overhead. For local and DX coverage, energy concentration near the horizon is important. Vertical antennas provide low angle radiation even when they are short. They have a null directly overhead.

70 feet is 53% of the height required for 1/4-wave resonance at 160 meters, and some of the missing length can be made up by horizontal loading at the top of the vertical height.

ON4UN`s "Low Band DXing" Chapter 9, "Vertical Antennas" can be very helpful in choosing a configuration that will work well.

Best regards, Richard Harrison, KB5WZI

5445. Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 17:26:38 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vss83is0er8h3a@corp.supernews.com>
Source record: 103711

I just got the Xmas Radio Shack catalog and on page 3 there's an electric corkscrew powered by 4 AA batteries. I havent seen one yet but I wonder if it could be the basis of a "Corkscrew Antenna" to compete with the screwdriver antenna?
hank wd5jfr

Someone once said ; "I love to cook with wine, somtimes I even use it in the recipe."

5446. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 18:17:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bql9cmfdi1@hercules.btinternet.com>
Source record: 103712

"arie" wrote >
> - Frequency = 1.8 Mhz
> - RF power = 1400 W
> - RF peak amplitude = 5400 Volts
> - External load res = 50 ohms
> - Phase shift = 90 degrees (to get a Q of around 12)
> - intrinsic Coil Q = 100
>
> I get:
>
> C1 = 122.5 pF
> L = 63.80
> C2 = 122.6 pF
>
> Is sounds very strange to me that both C1 and C2 have the same
> value whereas the Load resistance at anode is around 10414 ohms
> or at least much higher than 50 ohms and an external resistance
> of 50 Ohms
>
> What about the Load resistance at anode, I would think this
> should be somewhere aound 2800 ohms, considering the Power
> output and anode voltage swing.

==========
Hi Arie,

Circuit-Q is a dependent variable. It depends on nearly all program input parameters. It's value cannot be entered in the program because you don't know it. You know only what you would like it to be. It can be calculated accurately only AFTER parameters such as efficiency have been calculated. You may not be directly interested in phase shift but by entering it in the program it does allow you INDIRECTLY to control circuit-Q.

To design an amplifier starting with values of Circuit-Q, DC Plate volts, Plate current operating angle, etc., there is no alternative to using the program to produce a multi-dimensional table of results. And even then they would be approximations.

A phase shift of 90 degrees through a symetrical Pi-Network should set bells ringing. With all 3 reactance magnitudes being identical the network behaves as a 1/4-wave transmission line transformer. Terminating impedances can be anything you like provided Line Zo = Sqrt(Z1*Z2).

You will notice you are not allowed to enter a phase shift as high as 180 degrees. That would correspond to 1/2-wave length of line which matches any impedance Z only to itself. It then makes itself redundent. The program

would object to being asked to do something silly and would abort into the operating system. The program user would then blame the long-suffering author and not himself. ;o)

Reg, G4FGQ

5447. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 18:42:00 UTC
From: J Aurelio <n@aurelio-usa.com>
Message-ID: <n-ECFDF1.12420003122003@news.verizon.net>
Source record: 103713
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <3fce0cd7_7@corp.newsgroups.com>,
Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:

> Ed Price wrote:
> > Getting closer to the truth, but exactly what, besides redundant, is a
> > "representative republic"? Perhaps you meant to say "constitutional
> > republic".
>
> In a pure democracy, the voters vote directly on the laws. In a
> representative republic, the voters vote on a representative who
> votes directly on the laws. In a constitutional republic, some laws
> are off limits both to the voters and to the representatives, i.e.
> inalienable rights (at least until the constitution is ammended).

No, inalienable rights are not subject to constitutional gerrymandering.
--
messages to this account go into the bit bucket

5448. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 19:08:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqlcaj$7p3$1@sparta.btinternet.com>
Source record: 103714

A little more on a symetrical C-L-C Pi-network having all reactances of the same magnitude.

Short-circuit one end and the input impedance at the other end is infinite.

Open circuit one end and the input impedance at the other end is zero.

Which is the same behaviour as a 1/4-wave line.

L-C-L and C-L-C T-networks behave in exactly the same way.

If the L's and C's are interchanged, ie., series C's and shunt-L's, the same behaviour accurs again. But in these cases there are no corresponding lengths of transmission line.

Reg, G4FGQ

5449. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 19:56:06 UTC
From: Gene Fuller <W4SZzzzzz@att.net>
Message-ID: <qdrzb.383233$0v4.19617527@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103715

Steve,

Sorry, you are the one who is furthering the lightning rod myth. There is no way a "true lightning rod" bleeds off enough charge to avoid a strike. That idea is about 99% urban legend.

I suggest perusal of the Polyphaser web site. There is a lot of good information there. One relevant comment is:

"The real solution for lightning protection is to have control of the strike energy. To do this, a well-designed ground system will be a better investment than cluttering up the top of the tower."

The cluttering refers to a bottlebrush arrangement of multiple sharp points, but the same idea applies to a single sharp point.

As usual, Mark is right on target.

73,
Gene, W4SZ

Steve Nosko wrote:
> Though in practice you are correct to express concern, your reason is
> not properly stated. You further the lighting rod myth.
>
> Actually, "if the antenna acts as a lightning rod." He'll have little
> problem. The purpose of a true lightning rod is to blead off the charge,
> defeating a strike, not to attract it. A lightning srtike will blow any
> lightning rod system to smithereenes.
> When a charged object has a sharp corner or point, the charge tends to
> collect there. Because there is more charge at that p[oint it will have a
> higher concentration and therefore a higher voltage. It builds to the point
> of forming a corona/plasma and will discharge it. That's why the van De
> Graf (sp) generators have the round ball on the top. They WANT to build up
> the charge and not loose any more than necessary..
> I all fairness, I do not know if lightning rod systems work in
> practice.They do wear out due to the discharge corona and should be
> sharpened periodically. Apparently the points of the typical beam are
> not sufficient or they wouldn't get struck, no?
>
> 73, Steve K,9.D;C;I
>
>
> "Mark Keith" <nm5k@wt.net> wrote in message
>>
>>In my case, those are pretty much the same place. All my grounds tend

>>to rise in potential at the same time, being they are all tied
>>together at the base of the mast. Nothing is perfect of course, but
>>you sure don't want any large potential differences between grounds.
>>
>>>It's not just a simple CD circuit.
>>>I've seen tower strikes where there was such a strong current and fast
>>>rise time, the magnetic field quenched the current flow and the
>>>lightening got off part way down and jumped sideways to something
>>>else.
>>
>>If I remember right, the original poster was going to mount an antenna
>>on a roof. That has the potential for even more serious problems if
>>the antenna acts as a lightning rod. He'd want as few turns or sharp
>>bends in the ground wire to earth. This is why I much prefer using a
>>metal mast on the side of the house to support verticals or other high
>>risk antennas, rather than a mast attached to the roof of the house.
>>And then hoping a ground wire will safely direct the charge to
>>earth...It usually will, at least much better than the house itself,
>>but it's kind of scary if it has turns or bends.
>>The important part at the house is making sure that everything rises
>>together so there's no lower resistance path for the charge to take
>>through the shack or house. At the mast, I always tape all coaxes or
>>wires to the mast, and run them all the way down to earth to try to
>>avoid flashing problems. So far in two strikes to the mast, I haven't
>>noticed any, and I have a breaker box, elevated power lead in, phone
>>lines, cable lines, all within 5 ft of that mast. MK
>
>
>

5450. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 20:21:27 UTC
From: richardharrison@webtv.net
Message-ID: <19832-3FCE45C7-108@storefull-2312.public.lawson.webtv.net>
Source record: 103718

Art, KB9MZ wrote:
"---resistance, inductance and capacitance are all electrical CIRCUITS and NOT a lumped spot."

I`m guessing Art`s point was that all circuit elements are impure. A resistor has lead inductance and is shunted by self-capacitance, etc. That is not the only cause of anomaly. Size in terms of wavelength means that radiation becomes significant in some cases, especially in structures designed to radiate.

If there is radiation from a circuit, ordinary circuit analysis does not apply say King, Mimno, and Wing, all Ph.D.`s at Harvard teaching U.S. Army and Navy officers in the Graduate School of Engineering during WW-2.

Best regards, Richard Harrison, KB5WZI

5451. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 20:30:06 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FCE47CE.29512A3E@cwis.net>
Source record: 103716

Henry Kolesnik wrote:
>
> I just got the Xmas Radio Shack catalog and on page 3 there's an electric
> corkscrew powered by 4 AA batteries. I havent seen one yet but I wonder if
> it could be the basis of a "Corkscrew Antenna" to compete with the
> screwdriver antenna?
> hank wd5jfr
>
> Someone once said ; "I love to cook with wine, somtimes I even use it in the
> recipe."

YEAH! for 1.2 Gig? Maybe phase a couple?
Mind boggling!
'Doc

5452. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 20:33:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fce48d0$1_5@corp.newsgroups.com>
Source record: 103717
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

J Aurelio wrote:
> No, inalienable rights are not subject to constitutional gerrymandering.

On the contrary, I have an inalienable right to consume wine.
God gave us grapes and yeast and granted us dominion over all the
plants. Jesus turned water into wine. The US government saw fit
to suspend that inalienable right during the 20's & 30's. Thank
God I was born in 1938.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5453. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 20:35:12 UTC
From: richardharrison@webtv.net
Message-ID: <19832-3FCE4900-110@storefull-2312.public.lawson.webtv.net>
Source record: 103619

Henry Kolesnik wrote:
"---I wonder if it (battery-powered corkscrew) could be the basis of a "Corkscrew Antenna" to compete with the screwdriver antenna?"

We should consult Kraus, the developer of most of those helical antennas.

Best regards, Richard Harrison, KB5WZI

5454. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 21:04:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <edszb.17769$_M.59415@attbi_s54>
Source record: 103620

Take his bank account and become a permanent new DX entity, maybe P5!!

Cecil Moore wrote:
> Ed Price wrote:
>
>> "Dave Shrader" <david.shrader@comcast.net> wrote:
>>
>>> The HOA police show up! What are Bill's options: He is retired and his
>>> income is lower than when employed so moving is a very difficult option?
>>>
>> His current options? Take down that simple antenna, and all is now in
>> compliance with the HOA CC&R's. That shouldn't stretch his budget too
>> far.
>
>
> But Bill has bigger problems. His car broke down and he can't afford to
> fix it. His electricity has been turned off. His shoes have holes in them.
> He's three months late on his taxes. What should be done?

5455. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-03 21:30:43 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <y-udnVIWO4aAy1Oi4p2dnA@comcast.com>
Source record: 103621

Arie,

Your intrinsic coil Q of 100 seems wimpy. You should be able to get at least 200. You messed up on calculating the anode load impedance - do you really have a 5400 VDC supply? Or did you mean the peak - peak RF was 5400V? At any rate,. you ignored the plate saturation voltage, which will be around 300 -400 V. For 2700 VDC supply, and 300Vsat, the anode load should be about (2700 - 300)^2/(2 x 1400) = 2057 Ohms. You should be able to find tables for Pi network values. The output capacitor will come out a lot bigger than the plate capacitor.

Tam/WB2TT
"arie" <ariexyz@hotmail.com> wrote in message
news:995b9343.0312030213.315f069b@posting.google.com...
> Reg, thanks for your fine program,
>
> but.., I get strange values.
>
> When considering the below input-values I get 'strange' results:
>
> - Frequency = 1.8 Mhz
> - RF power = 1400 W
> - RF peak amplitude = 5400 Volts
> - External load res = 50 ohms
> - Phase shift = 90 degrees (to get a Q of around 12)
> - intrinsic Coil Q = 100
>
> I get:
>
> C1 = 122.5 pF
> L = 63.80
> C2 = 122.6 pF
>
> Is sounds very strange to me that both C1 and C2 have the same
> value whereas the Load resistance at anode is around 10414 ohms
> or at least much higher than 50 ohms and an external resistance
> of 50 Ohms
>
> What about the Load resistance at anode, I would think this
> should be somewhere aound 2800 ohms, considering the Power
> output and anode voltage swing.
>
> Arie.

5456. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 00:42:52 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <qYidnW2jbaW4HlOiRVn-uA@comcast.com>
Source record: 103622

Arie,
First, I should not have said you ignored Vsat. I got confused. Anyhow, using standard tables, the Pi network values for a 2100 Ohm to 50 Ohm network at 160 meters are:

C plate = 427 PF
C load = 2213 PF
L = 18.4 uH

These are rather huge capacitor values, and might explain why the only two amps that I saw schematics for, that covered 160 m, used either a Pi-L, or some kind of transformer coupled output.

Tam/WB2TT

5457. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 00:59:01 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <pFvzb.2973$Qd6.2824@newsread1.news.atl.earthlink.net>
Source record: 103623

Art:

[snip]
> A nobody with no credabilty !
[snip]

Cry baby!

[snip]
> It is time for people to get back to basics, that resistance,
> inductance and capacitances are all electrical CIRCUITS and NOT a
> lumped spot.
> Accepting these facts forces one to consider what a current reaction
> is when meeting ANY of the constituents of the so called lumped
> circuit
[snip]

Heh, heh... Electrodynamics...

Circuit Electrodynamics:

In the beginning there was Circuit Theory [Ohm, Kirchoff] which was
found wanting....

Field Electrodynamics:

Then there came Field Theory [Maxwell, Heaviside], which was found
wanting...

Quantum Electrodynamics:

Then there came Quantum Electrodynamics [Einstein, Pauli, Schrodinger,
Dirac, Feynman] and to date... nothing is found wanting...

What, exactly is your problem?

Circuit Theory, Field Theory and finally Quantum Theory are all evermore
exact
models of the real world. For many problems Circuit Theory suffices, but...

For those knowledgeable... they move from Circuit-Theoretic models to
Field-Theoretic models when the situation warrants, and they move from
Field-Theoretic models to Quantum-Theoretic models [QED] when the
situation warrants...

Don't use QED as the infrastructure of a Spice program and don't
use Circuit Theory as the infrastructure of an NEC program!

An Engineer is... a person who knows how to model efficiently and...

When to change models...

What?

--
Peter K1PO
Indialantic By-the-Sea, FL

5458. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 02:26:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqm61ihpj1@titan.btinternet.com>
Source record: 103624

```
Tam, did you miss the programs I recommended?
---
............................................................
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
............................................................
```

5459. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 03:15:02 UTC
From: Michael Grenier <mwgrenier@yahoo.com>
Message-ID: <vst9ln55jked83@corp.supernews.com>
Source record: 103625

I suppose it depends on how much the inductor radiates like an antenna.
There is no perfect coil out there.
-Mike KC0IOC

Roy Lewallen wrote:
> Can I conclude from this that if I were to make a coil with more or less
> inductance, then I would see a current difference between the ends of
> the coil?
>
> So tell you what. If you'll pull out your equations and calculate the
> expected current difference, I'll replace the coil with one of 100 ohms
> reactance and remeasure. How much current difference (magnitude andd
> phase, of course) between the ends of a 100 ohm inductor at the base of
> that same antenna?
>
> Roy Lewallen, W7EL
>
> Cecil Moore wrote:
>
>> Yuri Blanarovich wrote:
>>
>>> Judging by description, I would guess that there wasn't much difference.
>>
>>
>>
>> The feedpoint of the radiator alone is 35-j185. The impedance of the
>> loading
>> toroid is 0.6+j193. Assuming perfect predictability, that gives the
>> antenna
>> system a feedpoint impedance of 35.6+j8, i.e. it is *longer* than
>> resonant.
>> That moves the current maximum point inside the toroid making the current
>> in and out even closer to equal. If a coil is installed at a current
>> maximum
>> point or a current minimum point, the current in and out will be the
>> same.
>> If a coil is installed at a place where the slope of the current envelope
>> is positive, the current will actually increase through the coil.
>
>

5460. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 03:28:15 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <vcatsvkeqrhvnddtu3ths8skpvka27s00l@4ax.com>
Source record: 103626

On Wed, 03 Dec 2003 10:23:14 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Ed Price wrote:
>
>> "Dave Shrader" <david.shrader@comcast.net> wrote:
>>>The HOA police show up! What are Bill's options: He is retired and his
>>>income is lower than when employed so moving is a very difficult option?
>>>
>> His current options? Take down that simple antenna, and all is now in
>> compliance with the HOA CC&R's. That shouldn't stretch his budget too far.
>
>But Bill has bigger problems. His car broke down and he can't afford to
>fix it. His electricity has been turned off. His shoes have holes in them.
>He's three months late on his taxes. What should be done?

Go on welfare and let his neighbors support him. Then when they
complain he can claim class discrimination. It just might work.

Roger (K8RI)

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5461. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 04:08:34 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <Tnyzb.2883$YI.354@bignews1.bellsouth.net>
Source record: 103627
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:Tf4zb.652$yf.146@fed1read01...
> Well if I am not mistaken --- PRB-1 is NOT applicable to HOA's
> Only municipal, county, etc

But you must've not read the entire post. I said that there are moves in
Congress to make those HOAs null and void, and those stuffed shirted old
buzzards will have to
make reasonable accomodations as is the case now under PRB-1. I am all for
it. The control freaks will just have to get a case of the "poochy lip" and
bear it.

For me, I have been here for 17 years--same house, same 70 ft antenna
tower. And a few dipoles to boot. I
doubt that that anyone is going to come along and make me move them. I'd
fight liked a cornered tiger! Then I'd
shoot 'em the bird and move far out into the country on
enough land to have those "Posted" signs on it and de-double dog dare anyone
to come messin' round. LOL!

Jerry
> > > >
> > > >
> > > > Jerry
> > > > K4KWH
> > > > > "
> > > > >
> > > > >
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>

5462. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 04:21:04 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <ryyzb.429$ej.150@bignews2.bellsouth.net>
Source record: 103628

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fce0e37_7@corp.newsgroups.com...
> Ed Price wrote:
>
> > "Dave Shrader" <david.shrader@comcast.net> wrote:
> >>The HOA police show up! What are Bill's options: He is retired and his
> >>income is lower than when employed so moving is a very difficult option?
> >>
> > His current options? Take down that simple antenna, and all is now in
> > compliance with the HOA CC&R's. That shouldn't stretch his budget too
far.
>
> But Bill has bigger problems. His car broke down and he can't afford to
> fix it. His electricity has been turned off. His shoes have holes in them.
> He's three months late on his taxes. What should be done?
> --
> 73, Cecil http://www.qsl.net/w5dxp

I am not following your premise. What does this have with Bill being "poor"
and his ability, or restictions from,
putting up antennas? Heck, Cecil, I'm pretty "poor" myself! LOL! All that
does is keep me looking at HRO
catalogues and wishing I could buy more radios. It doesn't prevent me from
erecting antennas as my budget allows.

Jerry

>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> ------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5463. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 04:31:33 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <a0btsvkrpnl7v5uc78ku84p4os3tfj40en@4ax.com>
Source record: 103629

On Wed, 03 Dec 2003 19:56:06 GMT, Gene Fuller <W4SZzzzzz@att.net>
wrote:

>Steve,
>
>Sorry, you are the one who is furthering the lightning rod myth. There is no way
> a "true lightning rod" bleeds off enough charge to avoid a strike. That idea
>is about 99% urban legend.
>
>I suggest perusal of the Polyphaser web site. There is a lot of good information
>there. One relevant comment is:
>
>"The real solution for lightning protection is to have control of the strike
>energy. To do this, a well-designed ground system will be a better investment
>than cluttering up the top of the tower."
>

I'd be a bit careful about that statement on a site for a company who
makes their money from attempting to control the energy when
lightening strikes, rather than preventing the strike. There are two
distinct camps. The one that says the solution is to control the
strike and the other says to prevent the strike. Lightening strikes
are unpredictable in most cases, but if you have the tallest structure
around the odds are that it will get hit before lower nearby
structures.

>The cluttering refers to a bottlebrush arrangement of multiple sharp points, but
>the same idea applies to a single sharp point.

According to our electrical inspector it's not a myth, but I don't
know one way or another. However I do know that it would take little
to bleed a charge and a lot to control a strike. I also know that
every tall structure at the chemical company where I used to work had
lightening rods

Bleeding supposedly does just that. I prevents the charge from
building up to a potential that will help bridge the gap to the
feeders. The last class I had at work on electrical safety was pro
lightening rods AND ground systems. (as was the one for skywarn from
the NWS)

I do use polyphasers and end up replacing one every now and then. My
tower gets hit on average of three times per year. Since the tower
went up there have been no strikes to any home within about 5 lots
from me.

There haven't been any really close strikes that didn't hit the tower. (of which I am aware). The neighbors are quick to tell me, "Man you shouldda been home this afternoon when the lightening hit your tower". That happened in August this year. They were really impressed and more so in that we had no damage even to the radios which do not get disconnected.

My antenna ground system has over 600 feet of bare #2 copper wire with 30 grounding rods, not counting the two ground rods for the house electrical system and the one for the shop. They have separate feeds, but as my computer network ties it all together, I'm thinking of bonding the grounds for both services together and to the system ground. I have visions of a lightening strike to one system and reaching ground in the other by going through the 130 feet of cat-5 cable. There's a reason I back up everything on CDs and DVDs.

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
<snip>

5464. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 05:41:38 UTC
From: Michael Tope <W4EF@dellroy.com>
Message-ID: <mOzzb.414567$Tr4.1193130@attbi_s03>
Source record: 103630

Gentleman,

The point of my post was not to point out the obvious
fact that lumped circuit analysis has some limitations
when used in the context of antenna loading coils. The
debate (at least the one I am familiar with), was whether
or not the current magnitude across an antenna loading
coil varied as the current would vary in a linear section
of antenna having same physical length as the loading
coil, or whether the current magnitude would vary as the
current would vary in a linear section of antenna have
the same physical length as the section of antenna that
the loading coil replaced.

In either case, distributed effects not accounted for
in simple lumped element models are recognized to be
at work. For the former scenario to be true, the current
retardation through the loading coil is presumed to be
roughly equal to that observed in a linear section having
the same physical length as the loading coil. In this case
the retardation would be Tau = length physical/Vp. This
scenario recognizes that distributed effects are at work
(hence the small, but finite current taper), but suggests
that the dominant factor responsible for the loading of
the antenna is the phase shift between the inductor
current and the voltage across it.

The latter case also suggests that distributed effects are
at work, but to a much greater degree than in the former.
In this case, the loading of the antenna is presumed to
be the result of the large current retardation introduced by
the loading coil. In this case, the retardation is presumed
to be Tau = length effective/Vp or Tau = length replaced/Vp.
In this scenario, the effect of the phase shift between the
loading coil current and the voltage across its terminals
seems to be considered incidental and is largely ignored.

The point of my loaded transmission line example was
to show that under either set of assumptions, the
loading coil will produce the desired result. That is to
say that it will load the physically short structure (in the
case of my example, a transmission line) thus bringing
it into so-called resonance. Thus the fact that the loading
coil produces the desired result (e.g. input impedance
match) can't be pointed to as proof that one physical

mechanism is dominate and the other is not. The
transmission line stub loading network doesn't have to
behave the same way as the lumped inductor loading
coil to produce the same desired result (e.g. input
impedance match, resonance, or whatever you want to
call it).

What I am getting at, is that both camps may be
wrong. The answer may lie somewhere in between
these two extremes (e.g. taper equivalent to physical
length vs taper equivalent to electrical length), but this
isn't attractive because its ambiguous and doesn't make
for nice diagrams that can be placed on websites, in
textbooks, or in antenna handbooks (not to mention
all of the accompanying self-righteous chest beating).

73 de Mike, W4EF.....

P.S. for those of you who have already heard all this
please accept my apologies as I missed out on last
months debate.

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:2680-3FCD0920-16@storefull-2317.public.lawson.webtv.net...
> Richard Clark wrote:
> "I thought this was dead long ago."
>
> So did I. This recent posting is a repetition for me, but sometimes
> repetition is needed for those who weren`t there in whole or in part for
> the earlier postings.
>
> I don`t expect anyone to accept a statement without proof from me that
> ordinary circuit analysis does not apply to antennas, but from 3 E.E.
> Sc. D.`s who were at the time they made the statement giving their very
> best for victory in WW-2, I would expect some serious consideration and
> at least a first assumption that the opinion is correct.
>
> Best regards, Richard Harrison, KB5WZI
>

5465. UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 06:09:26 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <3jjtsvchi0h8uc2r75t4nio363oif3unrc@4ax.com>
Source record: 103631

My question

What is the simplest method for me to measure the antenna resonant frequency (X=0) and antenna resistance (at resonance) of a small 70 cm yagi, to a reasonable level of accuracy.

I have a counter and GDO which work at 70 cm, and can homebrew anything else required.

Thanks in anticipation

MikeN ZL1BNB

5466. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 06:18:03 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <rkAzb.9091$Yt4.7803@lakeread05>
Source record: 103632

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote>
(following a most interesting discussion of lightning strikes)

> By the way - as a matter of geological interest - how did American oil
> manage to find it's way underneath Iraqi, Middle-east and Central Asian
> sand? Thats's 10,000 miles! Two billion years of percolation?

No Reg, it only took a little over two hundred years following the design of the best system of government ever created by man, and the resulting successes of a free people that discovered petroleum, uses for it, and the ability of that most free and powerful nation to secure and protect it's interests worldwide that "put" that oil there. Propping up puppet kingdoms, dictators, or any other part of the monopoly game is bloody tough luck for the rest of the world that in spite of all reasonable assistance, still do not understand, or are perhaps genetically incapable, of living as free men.

Jack

5467. Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 07:41:41 UTC
From: account70@yahoo.com
Message-ID: <7a1414d9.0312032341.4843608f@posting.google.com>
Source record: 103633

Hi,

There are no coax inputs or cables involved with 2 older TVs and 1 VHF/UHF roof TV antenna - so I tried looking for something to split the antenna's 300 ohm flat wire to two TV sets, each near a different window. I couldn't find an online source, and younger local RadioShack and "TV" store people are unfamiliar with them, and the older ones laugh at a request for such ancient technology. I can't even find a back of the TV splitter with 300 ohm combined input to 1 300 ohm VHF output and 1 300 ohm UHF output...

Thanks for any suggestions rec.radio.amateur.antenna folks can give me.

Steve

5468. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 09:45:04 UTC
From: emma <emma_babli@hotmail.com>
Message-ID: <bqusr2kon1@nic.grnet.gr>
Source record: 103510

I just want to make sure that everything is crystal clear to you:
The things I have just mentioned,are valid for the vertical to the plane
direction.
Therefore, my Hentenna is considered horizontally polarized.

"emma" <emma_hentenna@hotmail.com> wrote in message
news:7d290799.0312061227.26b0bb33@posting.google.com...
> Hi Richard,
>
> I tried it. I considered my Hentenna as a transmission line and I
> applied the standing wave theory according to "THE ARRL ANTENNA BOOK
> 18th Ed 1997, Fig 65".
> The currents flow the antenna as shown below:
>
>
http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/standingwavew/st
andingwaves.htm
>
>
> Obviously, the currents of the 3 parallel horizontal branches are
> flowing in the same direction. Their sum gives the total field. On the
> other hand, we have 3 antiparallel pairs of currents flowing through
> the vertical branches. Therefore the field becomes equal to zero.
> As a result, the arrangement radiates and it can not be considered as
> a transmission line.
>
> Emma.

5469. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 09:55:05 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fcf0520$0$2873$ba620e4c@reader1.news.skynet.be>
Source record: 103634

Hi there,

A GDO will give you a frequency of resonance (not always correct because of coupling effect) but not an impedance. For this you need a bridge or an antenna analyser.

73 de ON5MJ - Jacques.

5470. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 11:10:57 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3FCF1641.34CD@wt.net>
Source record: 103635

Roger Halstead wrote:

>
> >The cluttering refers to a bottlebrush arrangement of multiple sharp points, but
> >the same idea applies to a single sharp point.
>
> According to our electrical inspector it's not a myth, but I don't
> know one way or another. However I do know that it would take little
> to bleed a charge and a lot to control a strike. I also know that
> every tall structure at the chemical company where I used to work had
> lightening rods
>
> Bleeding supposedly does just that. I prevents the charge from
> building up to a potential that will help bridge the gap to the
> feeders.

I don't know if I would call it a total myth, but I call it fairly risky none the less. I know I sure wouldn't trust one to protect me from a strike. I don't think they can bleed the charges from constant hard wind and rain fast enough to do any good. It's like taking a whiz in a whirlwind. :(

The last class I had at work on electrical safety was pro
> lightening rods AND ground systems. (as was the one for skywarn from
> the NWS)

I agree there, if he is talking about the traditional pointy lightning rod used to protect other gear or buildings. I'm of the opinion strikes can never be totally avoided, and the brush things are a waste of time. I've heard of many reports of them being struck. Sometimes spraying hot metal around and causing a fire hazard. And you still should have a good ground even with those. To me, the only sure thing is expecting the strike to happen, and safely controlling it's path to ground when it finally does. So I'm firmly with polyphaser on that one. MK
--
http://web.wt.net/~nm5k

5471. Re: Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 13:52:51 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ftdusvkp5m8r0r3r64r3qh2kqp7lps2jqk@4ax.com>
Source record: 103636

On 3 Dec 2003 23:41:41 -0800, account70@yahoo.com (Steve G) wrote:

>Hi,
>
>There are no coax inputs or cables involved with 2 older TVs and 1
>VHF/UHF roof TV antenna - so I tried looking for something to split
>the antenna's 300 ohm flat wire to two TV sets, each near a different
>window. I couldn't find an online source, and younger local RadioShack
>and "TV" store people are unfamiliar with them, and the older ones
>laugh at a request for such ancient technology. I can't even find a
>back of the TV splitter with 300 ohm combined input to 1 300 ohm VHF
>output and 1 300 ohm UHF output...
>
>Thanks for any suggestions rec.radio.amateur.antenna folks can give
>me.
>
>Steve

Radio Shack no longer sells 300 ohm wire? They had two kinds of it as
recently as their 2001 catalog. Certainly they could special order
from their warehouse, if it's not in the store.

50 feet 300-ohm wire, part #15-1174.
100 feet 300-ohm wire, part #15-1175.
40 feet of budget (indoor) 300-ohm wire, part #15-1158.

My 2001 catalog also shows a 300 ohm splitter, part #15-1135. (input
and outputs are all 300 ohm.)

Bob
k5qwg

5472. Re: Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 15:02:00 UTC
From: louie <louie@lookatme.com>
Message-ID: <3FCF4C66.B9D699F0@lookatme.com>
Source record: 103637

try home depot, lowes, menards, etc. couple of bucks.

Steve G wrote:

> Hi,
>
> There are no coax inputs or cables involved with 2 older TVs and 1
> VHF/UHF roof TV antenna - so I tried looking for something to split
> the antenna's 300 ohm flat wire to two TV sets, each near a different
> window. I couldn't find an online source, and younger local RadioShack
> and "TV" store people are unfamiliar with them, and the older ones
> laugh at a request for such ancient technology. I can't even find a
> back of the TV splitter with 300 ohm combined input to 1 300 ohm VHF
> output and 1 300 ohm UHF output...
>
> Thanks for any suggestions rec.radio.amateur.antenna folks can give
> me.
>
> Steve

5473. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 15:11:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf4ece_6@corp.newsgroups.com>
Source record: 103638

Jerry Oxendine wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>But Bill has bigger problems. His car broke down and he can't afford to
>>fix it. His electricity has been turned off. His shoes have holes in them.
>>He's three months late on his taxes. What should be done?
>
> I am not following your premise. What does this have with Bill being "poor"
> and his ability, or restictions from, putting up antennas?

A ham antenna is just one of the problems that Bill has. Why should a
ham antenna problem get more of a special treatment that any of Bill's
other problems? Premise #1: Some old people need free prescription drugs.
Premise #2: Some old people need free shoes. Premise #3: Some old people
need ham radio antennas. Where does it end?
--
73, Cecil http://www.qsl.net/w5dxp

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5474. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 15:23:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf51c2$1_6@corp.newsgroups.com>
Source record: 103639

Michael Tope wrote:
> What I am getting at, is that both camps may be
> wrong. The answer may lie somewhere in between
> these two extremes ...

As I understood it, there is an extreme on only one side. One side says the current through a loading coil doesn't change. The other side says that the current through a loading coil does change. You can look at the decrease in the feedpoint impedance of a loaded antenna Vs a wire antenna and prove that the coil doesn't exactly replace that length of antenna. The coil is a more efficient inductor and less efficient radiator than the wire it replaces which results in a higher net current at the feedpoint. To the best of my knowledge, no one has said there is an exact 1:1 correspondence between the coil and the wire it replaces. The correspondence is only approximate.
--
73, Cecil http://www.qsl.net/w5dxp

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5475. Re: Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 15:28:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf52e2_6@corp.newsgroups.com>
Source record: 103640

Steve G wrote:

> Hi,
>
> There are no coax inputs or cables involved with 2 older TVs and 1
> VHF/UHF roof TV antenna - so I tried looking for something to split
> the antenna's 300 ohm flat wire to two TV sets, each near a different
> window. I couldn't find an online source, and younger local RadioShack
> and "TV" store people are unfamiliar with them, and the older ones
> laugh at a request for such ancient technology. I can't even find a
> back of the TV splitter with 300 ohm combined input to 1 300 ohm VHF
> output and 1 300 ohm UHF output...
>
> Thanks for any suggestions rec.radio.amateur.antenna folks can give
> me.

I would use a 75 ohm splitter with three 300:75 baluns all of which
I have in my junk box. That's assuming the antennas use 300 ohm twinlead.
--
73, Cecil http://www.qsl.net/w5dxp

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5476. Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 15:59:45 UTC
From: pointyhead <ftscum@hotmail.com>
Message-ID: <1070553585.69310.0@iris.uk.clara.net>
Source record: 103641

Is the plastic "lump" that is used to join the ladder line to coaxial cable really a balun or simply a "ladder line to coax adaptor" as they put it? I'd be grateful for any insight into what it actually is. Many thanks.

Best 73 es Dx

5477. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 16:22:00 UTC
From: richardharrison@webtv.net
Message-ID: <11236-3FCF5F28-141@storefull-2317.public.lawson.webtv.net>
Source record: 103642

Mike, W4EF wrote:
"What I am getting at is that both camps may be wrong."

One of the arguments is that current into one end of a loading coil equals current out of the other end of the coil. That is not required of an antenna loading coil in the middle of an antenna. Recall the diagram of a center loaded short vertical whip from ON4UN`s Fig 9-22 that Yuri Blanarovich posted early in the dispute. 45-degrees of the 90-degree total antenna length is replaced by the loading coil. Current tapers cosinusoidally from 1A at the drivepoint to 0A at the tip.

Cosine of 22.5-degrees = 0.924
Cosine of 67.5-degrees = 0.383

Roy sarcastically referred to "Yuri`s Cosine law". Yuri is right. Current into the bottom of the coil is 0.924 A, and into the top of the coil it is 0.383 A. Roy disappeared from the argument.
Yuri seems to have tired of the dispute too.

On page 86, King, Mimno, and Wing say:
"It is fundamentally incorrect to treat a centerdriven antenna as though it were the bent-open ends of a two-wire line."

This is true for a whip as a continuation of a coax line too. The antenna should radiate and the line should not. The difference between an antenna and a transmission line is fundamental. Consider the equivalent circuit of the balanced line. It is made from distributed series-connected inductors with distributed capacitors shunted across the inductor junctions. The two line conductors are closely coupled and enforce balance in the line. The close equal and opposite currents discourage radiation from the line.

Attach a non-radiating balanced load across the feedline. The currents into both terminals of the load must be the same. There is much looser coupling between the two sides of a dipole than between the wires of a transmission line.

In a transmission line feeding a mismatched load, the reflected energy "sees" Zo as does the incident energy traveling the line. Zo is enforced in both directions by the inductance and capacitance distributed uniformly in the line.

Due to energy escape in an antenna, incident and reflected energy can "see" differing impedances on either end of a loading coil. The coil doesn`t enjoy the type of enforced balanced feed imposed by a balanced transmission. The feed at its ends is asymmetrical.

Best regards, Richard Harrison, KB5WZI

5478. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 16:42:58 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312040842.9a23dfa@posting.google.com>
Source record: 103643

Richard
My question was placed at 'two whips to form a dipole'.
It was not a recomendation nor did it call for comparisons
to other designs that may be better.
With that clear I stated that the max radiation will be at 90 degrees
and that I am sure is accepted and will provide local contacts.
Now placing the two whips on top of the tower negates the need for a
ground plane which is no small matter as well as half the max
radiationwill be at
45 degrees. Thus the simple question is anybody using two whips as a
dipole?
I could well imagine a setup of a loaded dipole being a very GOOD
antenna in some instances because of the avoidance of ground losses
with those having a small lot or do not have the facilities for
extensive ground planes.
My dipole is 50% efficient on 160, 90% on 80 which means in each case
for TOA
in the 40 to 50 range they exceed gains for a run of the mill
vertical.
So again Richard I asked for experiences from those using two loaded
verticals made into a dipole for horizontal polarisation on 160M.
Regards
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<15538-3FCE1557-4@storefull-2316.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "---it should provide good local contacts if placed at a height of 70
> feet."
>
> If back to back mobile antennas are used as a dipole at 70 feet, the
> question is: why not use the vertical distance for a radiating
> conductor, and the horizontal space to load the too-short vertical?
>
> 1/4-wave at 160-meters is about 131 feet.
>
> A vertical mobile antenna is likely limited to about 4 meters and a
> dipole made from two is only about 8 meters long. That`s only 10% of
> 1/2-wavelength. Radiation resistance of such a short dipole will be very
> low and capacitive reactance will be very high requiring much reactance
> to tune out. This is inherently lossy.
>
> Another disadvantage if the dipole is only about 1/8-wavelength high and
> horizontal, will be concentration of most radiation directly overhead.

> For local and DX coverage, energy concentration near the horizon is
> important. Vertical antennas provide low angle radiation even when they
> are short. They have a null directly overhead.
>
> 70 feet is 53% of the height required for 1/4-wave resonance at 160
> meters, and some of the missing length can be made up by horizontal
> loading at the top of the vertical height.
>
> ON4UN`s "Low Band DXing" Chapter 9, "Vertical Antennas" can be very
> helpful in choosing a configuration that will work well.
>
> Best regards, Richard Harrison, KB5WZI

5479. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 17:08:21 UTC
From: richardharrison@webtv.net
Message-ID: <17311-3FCF6A05-199@storefull-2314.public.lawson.webtv.net>
Source record: 103644

Roy, W7EL wrote:
"So tell you what. If you`ll pull out your equations and calculate the expected current difference, I`ll replace the coil with one of 100 ohms reactance and remeasure."

The challenge was directed to Cecil, but anyone can respond. The current is a function of position along the antenna. Distribution is cosinusoidal as Yuri said.

Yuri Blanarovich posted ON4UN`s Fig 9-22 from "Low-Band DXing". 45-degrees of the 90-degree total length of a center-loaded whip comes from the loading coil. Current tapers cosinusoidally from 1A at the drivepoint to 0A at the tip.

Current into the bottom of the coil is 0.924A and into the top of the coil it is 0.383A. These are related to the cosines of 22.5-degrees and 67.5-degrees, 0,924 and 0.383.

The expected current difference in ON4UN`s example is 0.54A.

Best regards, Richard Harrison, KB5WZI

5480. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 17:51:20 UTC
From: richardharrison@webtv.net
Message-ID: <15534-3FCF7418-180@storefull-2316.public.lawson.webtv.net>
Source record: 103645

Art, KB9MZ wrote:
"It was not a recommendation nor did it call for comparisons to other designs that may be better."

Art is correct. Vertical antennas require radials to avoid ground loss. Norizontal dipole radiation in free-space is perpendicular to the antenna.

Art also asks: Is anybody using two whips as a dipole?

I`m sure they are. Saw a hamfest vendor selling loaded whips and mounts designed to mount two of them as a dipole. There have been discussions in previous threads about this application. Hope there are new responses to Art`s question.

Best regards, Richard Harrison, KB5WZI

5481. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:04:51 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCF7743.457072D6@uci.edu>
Source record: 103646

Richard Harrison wrote:
>
> Roy, W7EL wrote:
> "So tell you what. If you`ll pull out your equations and calculate the
> expected current difference, I`ll replace the coil with one of 100 ohms
> reactance and remeasure."
>
> The challenge was directed to Cecil, but anyone can respond. The current
> is a function of position along the antenna. Distribution is
> cosinusoidal as Yuri said.

That's right. The distribution is the result of the superposition of the forward and reflected currents. It's basically just one quarter of a cycle of the standing wave pattern. When the electrical length of a loading coil represents any significant fraction of the length of the antenna, the superposition of forward and reverse currents at each end of the inductor will result in different values. The difference is due to the phase delay through the loading coil, as Cecil has explained. Delay is an unavoidable artifact of propagation through wire - whether it happens to be wrapped into a coil, or not.

73, Jim AC6XG

5482. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:14:57 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312041014.40651ede@posting.google.com>
Source record: 103647

"
Peter,
I have no idea what you are talking about which is probably
why you didn't get any responses to your posting.
It doesn't seem to say anything and then you put a word
"what " at the end, which I can only guess it means you have
change your mind on what you stated earlier (It is the best
I could come up with
Frankly I don't see that 'What" term in my books or in the
newespapers so I presume it must be a Cajun type dielect that
is used in the swamps or something. You used it a lot when you ran
Chip off the group but since I don't know what you are talking about
I will stay on even tho Ian and Roy have now fled.
Art

Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<pFvzb.2973$Qd6.2824@newsread1.news.atl.earthlink.net>...
> Art:
>
> [snip]
> > A nobody with no credabilty !
> [snip]
>
> Cry baby!
>
> [snip]
> > It is time for people to get back to basics, that resistance,
> > inductance and capacitances are all electrical CIRCUITS and NOT a
> > lumped spot.
> > Accepting these facts forces one to consider what a current reaction
> > is when meeting ANY of the constituents of the so called lumped
> > circuit
> [snip]
>
> Heh, heh... Electrodynamics...
>
> Circuit Electrodynamics:
>
> In the beginning there was Circuit Theory [Ohm, Kirchoff] which was
> found wanting....
>
> Field Electrodynamics:
>
> Then there came Field Theory [Maxwell, Heaviside], which was found

> wanting...
>
> Quantum Electrodynamics:
>
> Then there came Quantum Electrodynamics [Einstein, Pauli, Schrodinger,
> Dirac, Feynman] and to date... nothing is found wanting...
>
> What, exactly is your problem?
>
> Circuit Theory, Field Theory and finally Quantum Theory are all evermore
> exact
> models of the real world. For many problems Circuit Theory suffices, but...
>
> For those knowledgeable... they move from Circuit-Theoretic models to
> Field-Theoretic models when the situation warrants, and they move from
> Field-Theoretic models to Quantum-Theoretic models [QED] when the
> situation warrants...
>
> Don't use QED as the infrastructure of a Spice program and don't
> use Circuit Theory as the infrastructure of an NEC program!
>
> An Engineer is... a person who knows how to model efficiently and...
>
> When to change models...
>
> What?

5483. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:32:18 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <IMWdnQsOuPBW4FKiRVn-sw@comcast.com>
Source record: 103648

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bqm61ihpj1@titan.btinternet.com...
> Tam, did you miss the programs I recommended?
> ---

Yes, I missed it the first time. Saw it now.

BTW, I might mention that at least one commercially built amplifier uses a
Pi or Pi-L network designed for 200 Ohm output, and follows that with a 4:1
balun inside the amplifier case.

Tam/WB2TT
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

5484. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:38:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aiuusv8k136nb5uqdfrsodnurk0s72jkte@4ax.com>
Source record: 103649

On Thu, 4 Dec 2003 10:22:00 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Roy disappeared from the argument.
>Yuri seems to have tired of the dispute too.

Hi Richard,

This happened more from the basis of others forcing arguments upon
them, and then proving those straw men wrong; allowing the revisionist
poster to triumph over projected stupidity.

In other words, the "debate" was whatever the last poster had framed
it to be - the resolution was whatever the last poster proclaimed it
to be. This is the legacy of Sneer Review that replaced the
examination of data, its source of errors, and the methods used to
obtain it. Clearly the circus mentality prevailed and was fed by
those criticized following the criticizers instead of letting their
work stand for itself, or fall due to its weak technical support.

The only points of interest are found in the data, and the limits of
error that surround it. Both parties were confounded by their own
narrow specifications being overwhelmed by error. Now, if they had
approached it in a true analysis that accounted for error, and
resolved that through alternative measures to cross-correlate or to
reject the statistical noise, then the merit of "debate" would have
been instructive. Instead, the problem was continually re-framed to
suit what rube-goldberg measures or latest cut-and-paste theory could
be forced to illustrate.

73's
Richard Clark, KB7QHC

5485. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:45:24 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FCF80C4.E0F7B99E@cwis.net>
Source record: 103650

Art,
Or, people do have an idea of what Peter is talking about,
and agree.
Art, you can't peek through a key hole and call it a 'world
view' without it being a 'small world'... "what?".
'Doc

5486. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:51:45 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <3e0vsv8jo82e933acbc24jd1du8ff6eqve@4ax.com>
Source record: 103651

On Thu, 4 Dec 2003 01:18:03 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote>
>(following a most interesting discussion of lightning strikes)
>
>> By the way - as a matter of geological interest - how did American oil
>> manage to find it's way underneath Iraqi, Middle-east and Central Asian
>> sand? Thats's 10,000 miles! Two billion years of percolation?
>
>No Reg, it only took a little over two hundred years following the design of
>the best system of government ever created by man, and the resulting
>successes of a free people that discovered petroleum, uses for it, and the
>ability of that most free and powerful nation to secure and protect it's
>interests worldwide that "put" that oil there. Propping up puppet kingdoms,
>dictators, or any other part of the monopoly game is bloody tough luck for
>the rest of the world that in spite of all reasonable assistance, still do
>not understand, or are perhaps genetically incapable, of living as free men.

"I think" a bit of research will show that Iraq has very little oil
compared to rest of that area. Seems like I remember reading they only
contribute 2 or 3% of the oil out of the middle east.

Roger (K8RI)

>
>Jack
>

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S/N CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5487. Re: Lightning Strokes, Masts & Volts

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:53:34 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCF82AE.DA42D736@uci.edu>
Source record: 103654

Roger Halstead wrote:
> "I think" a bit of research will show that Iraq has very little oil
> compared to rest of that area. Seems like I remember reading they only
> contribute 2 or 3% of the oil out of the middle east.

That's how much they contribute to us here in the US. They contribute
about 80% of France's oil imports.

73, Jim AC6XG

5488. Re: Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:56:51 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <vj0vsvcvpc2t9lb4uqibu071ue5p6gfpaf@4ax.com>
Source record: 103652

On 3 Dec 2003 23:41:41 -0800, account70@yahoo.com (Steve G) wrote:

>Hi,
>
>There are no coax inputs or cables involved with 2 older TVs and 1
>VHF/UHF roof TV antenna - so I tried looking for something to split
>the antenna's 300 ohm flat wire to two TV sets, each near a different
>window. I couldn't find an online source, and younger local RadioShack
>and "TV" store people are unfamiliar with them, and the older ones
>laugh at a request for such ancient technology. I can't even find a
>back of the TV splitter with 300 ohm combined input to 1 300 ohm VHF
>output and 1 300 ohm UHF output...

Me? I'd purchase 4 baluns. ($3 plus change each) one for each antenna
and one for each set, then invest in enough RG-6 to replace the twin
lead. Then you can find splitters and combiners easily. With coax
you don't have to worry so much about routing either.

You could probably do the whole thing for around $30 to $40 US.
Unfortunately if the antennas are really old the connectors may not be
good enough to be taken apart and put back together.
>
Roger (K8RI)

>Thanks for any suggestions rec.radio.amateur.antenna folks can give
>me.
>
>Steve

You'll have to fix the return add due to dumb virus checkers, not spam
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5489. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 18:59:50 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <ot0vsv0m0efimm9o0uc2jtfkp3mtmadahm@4ax.com>
Source record: 103653

On Thu, 04 Dec 2003 09:11:03 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Jerry Oxendine wrote:
>
>> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>>But Bill has bigger problems. His car broke down and he can't afford to
>>>fix it. His electricity has been turned off. His shoes have holes in them.
>>>He's three months late on his taxes. What should be done?
>>
>> I am not following your premise. What does this have with Bill being "poor"
>> and his ability, or restictions from, putting up antennas?
>
>A ham antenna is just one of the problems that Bill has. Why should a
>ham antenna problem get more of a special treatment that any of Bill's
>other problems? Premise #1: Some old people need free prescription drugs.
>Premise #2: Some old people need free shoes. Premise #3: Some old people
>need ham radio antennas. Where does it end?

You mean I wasted all those years, going to college (at age 47) and
then working to build up a retirement account when I could have gotten
some one else to foot the bill?

You'll have to fix the return add due to dumb virus checkers
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

5490. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 19:01:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jrvusv0264u56sa37nhihufpei3mvoouot@4ax.com>
Source record: 103655

On Thu, 4 Dec 2003 11:08:21 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:
>Yuri Blanarovich posted ON4UN`s Fig 9-22 from "Low-Band DXing".
>45-degrees of the 90-degree total length of a center-loaded whip comes
>from the loading coil. Current tapers cosinusoidally from 1A at the
>drivepoint to 0A at the tip.

Hi Richard,

First, and unfortunately, the antenna offered was never anywhere close to 45ï¿½ tall. The one Yuri posted barely stood 20ï¿½ tall.

Second, Yuri's complaint centered on the notion of Modeling, not measuring. He was making a plea to improve the accuracy and efficiency of Modelers (all of this is EZNEC implicit, or by extension NEC generically). Yuri never demonstrated the so-called cosinusoidal variation in either Models or in Measurement. In fact, Yuri never demonstrated ANY variation in current along ANY radiator.

Third, the argument of lumped or distributed circuit properties had been answered with a protocol BEFORE the argument started. The protocol offered every bit of correlation to ON4UN's drawings.

Fourth, this correlation did not demonstrate a slavish equality to the so-called cosinusoidal variation, but rather demonstrated a conceptual agreement. In fact, the Model data shows a divergence from that curve.

Fifth, no one has bothered to demonstrate anywhere, that with the protocol, that it is or is not born out in measurement.

Six, the differences of Models employing the protocol and those not employing it shows about 0.5dB difference. This responds to the original complaint of Yuri, in that no remarkable efficiencies are gained or lost by this debate. To make matters worse, no Measure of differences has been made to accept or dismiss this Model either. This of course returns us to methods and accuracies, and given the forecast of 0.5dB, the prospects of that turning into a metaphysical freak show are more prominent than field tests resolving it in the noise.

73's
Richard Clark, KB7QHC

5491. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 19:05:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g51vsv0sfe6o2t51d9bsv7jvst488or64d@4ax.com>
Source record: 103656

On 4 Dec 2003 08:42:58 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>I asked for experiences from those using two loaded
>verticals made into a dipole for horizontal polarisation on 160M.
>Regards
>Art

Hi Art,

Miserable. A simple balloon lifted halfwave vertical was declared the
big guns by a net (surpassing their own antennas).

Richard was right, more signal would find its way out if you simply
drove the coax shield running up to the "dipole."

73's
Richard Clark, KB7QHC

5492. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 19:56:28 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCF916C.57F1C4DC@uci.edu>
Source record: 103658

Richard Clark wrote:
> Six, the differences of Models employing the protocol and those not
> employing it shows about 0.5dB difference.

The point you straddled in that marvelous enumeration of trivia, is that there can be significantly greater that ".5dB" of difference in the attributed current profiles along an antenna, due to a much greater than ".5dB" difference in some attributes of real vs. ideal loading coils.

But there's no question that it's possible to build an airplane that flies, without understanding why if flies.

73, Jim AC6XG

5493. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:04:15 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <eoMzb.213$E7.128@bignews5.bellsouth.net>
Source record: 103657

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fcf4ece_6@corp.newsgroups.com...
> Jerry Oxendine wrote:
>
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>But Bill has bigger problems. His car broke down and he can't afford to
> >>fix it. His electricity has been turned off. His shoes have holes in
them.
> >>He's three months late on his taxes. What should be done?
> >
> > I am not following your premise. What does this have with Bill being
"poor"
> > and his ability, or restictions from, putting up antennas?
>
> A ham antenna is just one of the problems that Bill has. Why should a
> ham antenna problem get more of a special treatment that any of Bill's
> other problems? Premise #1: Some old people need free prescription drugs.
> Premise #2: Some old people need free shoes. Premise #3: Some old people
> need ham radio antennas. Where does it end?
> --
> 73, Cecil http://www.qsl.net/w5dxp

OK. Everyone has to set priorities. Housing, food, insurance (home and
car-if any), medical expenses have to come first. Ham radio is a hobby. I
have the same expense as everyone else and my rig is an IC735 and an old
Atlas I am trying to fix as time and money permits. Lots of the radio stuff
was accumulated over many, many
years.

The antenna issue, I guess, is an issue that revolves around the old saying
"Beauty is in the eye of the beholder". To *some* people, antennas are ugly,
to others (hams) they are beautiful! Now the interests of
both the neighbors need to be balanced in some way that allows the neighbors
peace and allows the ham to pursue
his hobby. Much can be done in the area of diplomacy; this is what I did
when I first moved in. As I got to know the neighbors, I mentioned that I
was a ham. Most of them knew what that was, and I told 'em to let me know
instantly if anyone had any interference. One neighbor politely let me know
I was messing up his TV. I gave him a filter and that was that. Across the
street, the people had one of those gigantic satellite dishes. One
afternoon, the maintenance guy marched over and confidantly informed me I
was getting in the Brown's dish/TV.

"OH", I said, " Um, what time of day does this happen?"

" Around 8 AM until 11:30", was the reply.

"Well, that is interesting because I leave for work at 6:15
AM every morning and don't get home until 4:30!"

The satellite guy's face fell as his confidence melted, and he walked away.
Reckon he wanted me to take my tower down?

There's NO regulations in my town forbidding towers--only zoning governing
property lines and safety. These limitations are reasonable and I
understand them and am
willing to comply by setting my tower away the house so
that, Heaven forbid, if it fell, it would do so without damaging my
neighbor. It stood thru Hugo (96+ MPH winds) and has stood for 17 years
attached to the house so that the first 30 feet is firmly secured; there are
4 sections above guyed.

I can't speak for other localities, but here (and I checked
carefully before I even put money down), if an HOA (unlikely) were to
suddenly decide to organize, I wouldn't
join it, nor would I abide by any attempts to regulate my
antennas. According to the existing, local laws, my tower
is considered a "pre-existing" condition just like the cows
that used to graze right next door. Maybe some neighbors would like to've
gotten rid of the cows as an "eyesore" or because they "smell", but the cows
were there when the area was annexed into the city, so they
stayed until grandpa died. Again, beauty is in the eye of the beholder. To
a country kid like me, smelling or seeing
cows is/wasn't offensive and was part of the landscape.
Here, as long as I maintain my tower (I have to paint it
this spring as a matter of fact), make sure it is safe, there is no existing
way, nor any current plans to make me take
it down. This is one of the best neighborhoods one could
ever live in and I plan to live right here until I die! Everybody is "cool"
with the antenna farm, we are all friends, and anyone that moves next to me
had be ready
to accept my tower or go somewhere else! LOL! "Bill"
may have to set priorities based on the conditions that
exist and do what he can afford to do, abide with the
contract he signed or just live with it. Besides, there *are* sneaky ways
to have antennas without the blue-
haired old buzzards knowing it! Just makes it more challenging!

73

Jerry

>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5494. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:16:57 UTC
From: richardharrison@webtv.net
Message-ID: <15538-3FCF9639-29@storefull-2316.public.lawson.webtv.net>
Source record: 103660

Richard Clark wrote:
"The only points of interest are found in the data and the limits of error that surround it."

Richard Clark is among other things an expert in measurements. Others may find other points of interest in things which don`t intrest Richard.

For me, a simple go or no-go scale may be good enough. Regardless of precision, the ultimate decision often must boil doewn to a simple yes or no.

If my recollection is right, Yuri presented a photo of a loading coil in action which had functioning r-f thermoammeters, one at each coil end. Their readings were significantly different. This may not be conclusive, but were I to see it often in various applications, I`d likely be persuaded that currents are likely different at opposite ends of an antenna loading coil sited in the middle of an antenna conductor.

Best regards, Richard Harrison, KB5WZI

5495. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:23:19 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf97e6_2@127.0.0.1>
Source record: 103659

Richard Clark wrote:
> This happened more from the basis of others forcing arguments upon
> them, and then proving those straw men wrong;

The original question was pretty clear: For a real-world mobile
loading coil, does the current vary from end to end? And if it
does vary from end to end, does that violate Kirchhoff's laws?
--
73, Cecil, W5DXP

5496. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:31:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <896vsvo8490ij5gsbl07qe6rpih1p8ikqk@4ax.com>
Source record: 103661

On Thu, 04 Dec 2003 11:56:28 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:
>there can be significantly greater that ".5dB" of difference in the
>attributed current profiles along an antenna, due to a much greater than
>".5dB" difference in some attributes of real vs. ideal loading coils.

Hi Jim,

I suppose that would matter if you were putting your lips to the
radiator.

73's
Richard Clark, KB7QHC

5497. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:34:18 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf9a62_2@127.0.0.1>
Source record: 103662

Richard Harrison wrote:
> Due to energy escape in an antenna, incident and reflected energy can
> "see" differing impedances on either end of a loading coil. The coil
> doesn`t enjoy the type of enforced balanced feed imposed by a balanced
> transmission. The feed at its ends is asymmetrical.

If two series coils are installed in a balanced feedline with reflections,
the net currents through the coils will also change from end to end.
--
73, Cecil, W5DXP

5498. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:40:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fd6vsvg2qnr565n1c5ks1hpv324qhhjgug@4ax.com>
Source record: 103663

On Thu, 4 Dec 2003 14:16:57 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:
>If my recollection is right, Yuri presented a photo of a loading coil in
>action which had functioning r-f thermoammeters, one at each coil end.
>Their readings were significantly different.

Hi Richard,

The astonishment arises from this commonplace being tarted up as a
revelation.

As for go/no-go sieves, mine is does it make more than a dB
difference? In this case, barely 0.5dB.

73's
Richard Clark, KB7QHC

5499. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:51:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCF9E39.199700A4@uci.edu>
Source record: 103665

Richard Clark wrote:
> Hi Jim,
>
> I suppose that would matter if you were putting your lips to the
> radiator.

Right. But it wouldn't matter if you were putting your lips to it. At least, not to me. ;-)

73, Jim AC6XG

5500. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 20:55:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcf9f6d_2@127.0.0.1>
Source record: 103664

Richard Clark wrote:
> Six, the differences of Models employing the protocol and those not
> employing it shows about 0.5dB difference.

If you would like to see more difference, try to model a 180 degree
phase-shifting coil using EZNEC.
--
73, Cecil, W5DXP

5501. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 21:35:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <13avsvksvj1ma6v86sdnuvga3d7u1cq8o1@4ax.com>
Source record: 103666

On Thu, 04 Dec 2003 14:55:51 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Richard Clark wrote:
>> Six, the differences of Models employing the protocol and those not
>> employing it shows about 0.5dB difference.
>
>If you would like to see more difference, try to model a 180 degree
>phase-shifting coil using EZNEC.

Not worth the effort.

5502. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 21:36:24 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCFA8D8.15DE3093@uci.edu>
Source record: 103667

Richard Clark wrote:
> As for go/no-go sieves, mine is does it make more than a dB
> difference? In this case, barely 0.5dB.

So as a metrologist, plus or minus a dB is good enough? Do you use the number 3 for Pi? That's only .02 dB off.

73, Jim AC6XG

5503. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 21:59:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcfae4a_2@127.0.0.1>
Source record: 103668

Jim Kelley wrote:
> Do you use the
> number 3 for Pi? That's only .02 dB off.

Heck, Pi is only 0.63 dB higher than e so they are
virtually interchangeable.

Some state (Tennessee?) once tried to pass a state law
requiring Pi to equal 3.00.
--
73, Cecil, W5DXP

5504. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 22:18:29 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312041418.4d293021@posting.google.com>
Source record: 103569

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fcf51c2$1_6@corp.newsgroups.com>...
> Michael Tope wrote:
> > What I am getting at, is that both camps may be
> > wrong. The answer may lie somewhere in between
> > these two extremes ...
>
> As I understood it, there is an extreme on only one side. One side
> says the current through a loading coil doesn't change. The other
> side says that the current through a loading coil does change.

The current through the coil is not the issue as far as my "camp" is
concerned.
I can see where the current could taper across the coil in certain
setups.
The issue as far as I'm concerned is: does this taper drastically
cause error in modeling compared to lumped elements? I don't think it
does to any great degree, and others data, including Richard Clarks,
and also W4RNL, seem to concur. Or at least as far as I can see. The
taper of the current through the coil is of no great concern to me.
The claim that this variation of current across the coil causes
drastic modeling error is what I have problems with. To me, it's
trying to explain a problem that doesn't really exist, with something
that really doesn't matter that much as far as that problem is
concerned. No one yet has shown any examples of large modeling errors
that is due to this tapering of current. And THATS what the real issue
is. Or at least as Yuri tells it. MK

5505. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 22:30:03 UTC
From: Jon Gauthier <jon.gauthier@spam.killer>
Message-ID: <bqochb$8vd$1@newslocal.mitre.org>
Source record: 103570

I assume you have permission from the owner first? :-)

I'll assume you do... The Pringles can antennas do work very nicely -
they have an effective gain of 14-18dB. OTOH, they're Pringles cans -
i.e., mylar- or aluminum-coated cardboard. If you want something a bit
more substantial, check out http://www.cantenna.com. For $20 bucks, it's
a better bargain than growing your own...

Check out http://www.wi-fiplanet.com/columns/article.php/1008901

Follow the links there and you'll be up to speed in no time.

Scott Hill wrote:

>I live just over 300m away from a house i need to make WiFi comms. with. It
>is almost LOS but there are a few trees in the way. Ive been looking at a
>few directional antennas on the net, but most are made from bean cans and
>pringle tins. On principle, the bean cans look like they should work, but
>could anyone please make any suggestions as to their credibility or
>liklehood of working!
>
>Any other (affordable!) means to make the comms. using an off the shelf
>802.11 card?
>
>thanks!
>scott :)
>
>
>
>

--
Jon Gauthier

Given the likely reaction to an increase in
terror-alert level to "severe threat imminent,"
wouldn't a more appropriate alert color be brown?
-Brad Simanek on www.ruminate.com

5506. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:06:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <55fvsv0p26dun4hd660slac3amupk3tit2@4ax.com>
Source record: 103571

On Thu, 04 Dec 2003 13:36:24 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>> As for go/no-go sieves, mine is does it make more than a dB
>> difference? In this case, barely 0.5dB.
>
>So as a metrologist, plus or minus a dB is good enough? Do you use the
>number 3 for Pi? That's only .02 dB off.
>
>73, Jim AC6XG

Hi Jim,

Error is a fact of life. My sieve of "does it make more than a dB
difference" is not a statement of error however.

A simple example of error is found in
>That's only .02 dB off.

73's
Richard Clark, KB7QHC

5507. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:11:29 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCFBF21.C8ABD695@uci.edu>
Source record: 103572

Mark Keith wrote:
> The current through the coil is not the issue as far as my "camp" is
> concerned.

Apparently it isn't now, but it was quite an issue for a while there. Initially it seemed the only correct point of view was the one which held that loading coils behave strictly as lumped inductances. Remember that?

> The issue as far as I'm concerned is: does this taper drastically
> cause error in modeling compared to lumped elements?

I think the answer is essentially, no.

For me the issue was always whether current can be unequal at opposite ends of an inductor. I find the fact that it can to be very interesting, and I wanted to understand just how it could be so. I guess I'm just not willing to accept the notion that just because fundamentals such as these may be inconsequential to how well an antenna is modeled, that they are also inconsequential to a thorough understanding of how it works.

73, Jim AC6XG

5508. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:20:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCFC126.67C3660@uci.edu>
Source record: 103573

Richard Clark wrote:
> Hi Jim,
>
> Error is a fact of life. My sieve of "does it make more than a dB
> difference" is not a statement of error however.
>
> A simple example of error is found in
> >That's only .02 dB off.

:-) What decimal fraction of a tenth of a Bel do you think the ratio Pi/3 represents, Richard?

Seventy third's de AC6XG

5509. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:37:50 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fcfc828_3@news1.prserv.net>
Source record: 103575

Dear MikeN:

I have an antique Omega pocket watch which needs adjustment. I have a 24" pipe wrench, an 8 pound sledge hammer and a blowtorch. What's the simplest method for me to adjust the movement for best accuracy?

See the problem? Mismatch between job and tools. You need a UHF bridge, and a means to calibrate it. Or a network analyzer. And some reference standards. Unfortunately, you do not have the tools to build the tools you need to do the job. Any universities or electronics labs with Ham employees nearby? Might be your best bet.

--
Crazy George
Remove N O and S P A M imbedded in return address
"MikeN" <mnewman@clear.net.nz> wrote in message
news:3jjtsvchi0h8uc2r75t4nio363oif3unrc@4ax.com...
> My question
>
> What is the simplest method for me to measure the antenna resonant
> frequency (X=0) and antenna resistance (at resonance) of a small 70 cm
> yagi, to a reasonable level of accuracy.
>
> I have a counter and GDO which work at 70 cm, and can homebrew
> anything else required.
>
> Thanks in anticipation
>
> MikeN ZL1BNB
>
>

5510. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:42:15 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <3FCFC657.3CF5@wt.net>
Source record: 103574

Richard Clark wrote:
>
> On Thu, 4 Dec 2003 11:08:21 -0600 (CST), richardharrison@webtv.net
> (Richard Harrison) wrote:
> >Yuri Blanarovich posted ON4UN`s Fig 9-22 from "Low-Band DXing".
> >45-degrees of the 90-degree total length of a center-loaded whip comes
> >from the loading coil. Current tapers cosinusoidally from 1A at the
> >drivepoint to 0A at the tip.
>
> Hi Richard,
>
> First, and unfortunately, the antenna offered was never anywhere close
> to 45ï¿½ tall. The one Yuri posted barely stood 20ï¿½ tall.
>
> Second, Yuri's complaint centered on the notion of Modeling, not
> measuring. He was making a plea to improve the accuracy and
> efficiency of Modelers (all of this is EZNEC implicit, or by extension
> NEC generically). Yuri never demonstrated the so-called cosinusoidal
> variation in either Models or in Measurement. In fact, Yuri never
> demonstrated ANY variation in current along ANY radiator.

>
> Third, the argument of lumped or distributed circuit properties had
> been answered with a protocol BEFORE the argument started. The
> protocol offered every bit of correlation to ON4UN's drawings.
>
> Fourth, this correlation did not demonstrate a slavish equality to the
> so-called cosinusoidal variation, but rather demonstrated a conceptual
> agreement. In fact, the Model data shows a divergence from that
> curve.
>
> Fifth, no one has bothered to demonstrate anywhere, that with the
> protocol, that it is or is not born out in measurement.
>
> Six, the differences of Models employing the protocol and those not
> employing it shows about 0.5dB difference. This responds to the
> original complaint of Yuri, in that no remarkable efficiencies are
> gained or lost by this debate. To make matters worse, no Measure of
> differences has been made to accept or dismiss this Model either.
> This of course returns us to methods and accuracies, and given the
> forecast of 0.5dB, the prospects of that turning into a metaphysical
> freak show are more prominent than field tests resolving it in the
> noise.
>

> 73's
> Richard Clark, KB7QHC

Bravo. Pretty much sums it all up in a nutshell. No one has shown an example of gross modeling error to date. No examples, no beef is served.
MK
--
http://web.wt.net/~nm5k

5511. Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-04 23:48:27 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031204184827.12189.00000215@mb-m05.aol.com>
Source record: 103576

Any similarity there?

For those of you who watch what you eat, here's the final word on nutrition and health. It's a relief to know the truth after all those conflicting medical studies.

1. Japanese eat very little fat and suffer fewer heart attacks than the British or Americans.

2. Mexicans eat a lot of fat and suffer fewer heart attacks than the British or Americans.

3. Africans drink very little red wine and suffer fewer heart attacks than the British or Americans.

4. Italians drink large amounts of red wine and suffer fewer heart attacks than the British or Americans.

5. Germans drink a lot of beer and eat lots of sausages and fats and suffer fewer heart attacks than the British or Americans.

CONCLUSION: Eat and drink what you like. Speaking English is apparently what kills you.

5512. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:01:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qmgvsvs6hlivpc72fgeph5fanm1hrnk68v@4ax.com>
Source record: 103577

On Thu, 04 Dec 2003 15:11:29 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:
> I find the fact that it can to be very
>interesting, and I wanted to understand just how it could be so.

Hi Jim,

It is simply that Kirchhoff's laws have been corrupted in discussion.
The Kirchhoff law of current relates to the flow into and out of "a
closed surface" or a point (where any number of components' common
leads come together) and not to the components themselves (as they
have been incorrectly injected as argument). The corruption is found
in that the current law has been expressed in the language of
Kirchhoff's voltage law by nearly EVERY correspondent.

EZNEC treats loads as lumps, lumps are the metaphor for the "closed
surface" or a point. EZNEC conforms to Kirchhoff's current law, but
not the physical reality simply because in nature a load cannot
exhibit its characteristic within a point (there are no infinitesimal
capacitors or inductors). Hence a protocol was offered to decimate
the inductor and spread its characteristic across the apparent
physical space to achieve the same, virtual response of a true
inductor immersed in reality.

The result of the protocol exhibits roughly the same characteristics
offered by ON4UN's drawings (which are also approximations
themselves).

73's
Richard Clark, KB7QHC

5513. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:14:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcfce1f_5@corp.newsgroups.com>
Source record: 103578

Mark Keith wrote:
> The claim that this variation of current across the coil causes
> drastic modeling error is what I have problems with.

Try modeling a 180 degree phase shift coil using EZNEC. (I have a
180 degree phase shift coil in my 70cm mobile antenna.) I guarantee
you will see drastic modeling errors for such an antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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5514. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:14:59 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031204191459.12189.00000224@mb-m05.aol.com>
Source record: 103579

>
>Roy sarcastically referred to "Yuri`s Cosine law". Yuri is right.
>Current into the bottom of the coil is 0.924 A, and into the top of the
>coil it is 0.383 A. Roy disappeared from the argument.
>Yuri seems to have tired of the dispute too.
>

Yuri is not really tired of the dispute, more like he has found enough support for what he was looking for. There are still those who do not believe that current can be different at the ends of a loading coil, there are those who now see that maybe "she's not flat", and then those, who new it all along - what's a big deal. The main confirmation that I am not a F0OL (as certain guru(s) tried to imply) has been achieved, thanks to Cecil and others I have understood the mechanism of the phenomena. I have enough ammunition to do some of my own testing and measurements and as I promised to write it up with other fellow believers, 'splain it, provide facts and outline importance for the loaded antenna design. Hopefully the modeling software will be able to capture and use it properly for better results and understanding. And yes Virginia, it is VERY important for the modeling. If the radiator models no change in current accorss the coil, but there is more like 40 - 60% reduction, THAT is important, because it will throw the whole model off if you add more loaded elements like in parasitic arrays.

Right now I am very busy organizing Christmas Concert in NYC/NJ area (www.computeradio.us) by 80 member Ukrainian Ensembles from Toronto. Anyone in vicinity is cordially invited to get in tune with Christmas spirit, away from the shopping fever. It is something to see, like small Mormon's Tabernacle Choir.

I managed to play with new TenTec Orion rig in CQ WW and I am also working on writing "contesters" review of the rig. Quite a performance but how "cheap" for $3.6k radio.

So, I follow the "coil thing", I just run out of arguments, I want to do my experiments and then put it together in a comprehensive article.

So thanks to all pros and cons, I got what I needed and this group is the best! W8JI is WR0NG and one should take his "wisdom" with a grain of salt. His web page has more stuff that is off.

Yuri, K3BU.us

5515. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:16:13 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcfce94_5@corp.newsgroups.com>
Source record: 103580

Jim Kelley wrote:

> Mark Keith wrote:
>>The issue as far as I'm concerned is: does this taper drastically
>>cause error in modeling compared to lumped elements?
>
> I think the answer is essentially, no.

So you haven't tried to model an antenna with a 180 degree phase-
reversing coil, have you? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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5516. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:21:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcfcfc5$1_5@corp.newsgroups.com>
Source record: 103581

Mark Keith wrote:
> Bravo. Pretty much sums it all up in a nutshell. No one has shown an
> example of gross modeling error to date.

What is the matter with the one I posted last week with phase-
reversing coils as described by Kraus on page 824 of _Antennas_
for-all_Applications_, third edition? If you missed it, look at

http://www.qsl.net/w5dxp/current.htm
--
73, Cecil http://www.qsl.net/w5dxp

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5517. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:26:34 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031204192634.12189.00000225@mb-m05.aol.com>
Source record: 103582

KB7QHC writes:
>
> Yuri's complaint centered on the notion of Modeling, not
>measuring.

No, the first problem was that I argued that current across the loading coil is different, while W8JI still argues that it is equal, the rest developed from that. I knew it was different, W9UCW measured it, other "calculated" and "Kirchoffed" that it isn't.
I will get to measurements, just let me get my life back to normal and have some time to do the decent job. In the mean time let the games continue :-)

Yuri

5518. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:30:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcfd1d7_5@corp.newsgroups.com>
Source record: 103583

Yuri Blanarovich wrote:
> CONCLUSION: Eat and drink what you like. Speaking English is
> apparently what kills you.

Guess Texan doesn't count as English. My cholesterol is over 300,
my HDL's are low, my triglicerides are over 400, and my latest
heart scan came back with:

"NONE - essentially no calcium or cholesterol buildup is seen."

I didn't even make it to the second category, "MILD - Within normal range."
--
73, Cecil http://www.qsl.net/w5dxp

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5519. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:33:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hgkvsvcmrs6bg8pvoier9j1brlruvuf7us@4ax.com>
Source record: 103584

On Thu, 04 Dec 2003 15:20:06 -0800, Jim Kelley <jwkelley@uci.edu>
wrote:

>
>
>Richard Clark wrote:
>> Hi Jim,
>>
>> Error is a fact of life. My sieve of "does it make more than a dB
>> difference" is not a statement of error however.
>>
>> A simple example of error is found in
>> >That's only .02 dB off.
>
>:-) What decimal fraction of a tenth of a Bel do you think the ratio
>Pi/3 represents, Richard?
>
>Seventy third's de AC6XG

It only matters if you put your lips to Pi.

73's
Richard Clark, KB7QHC

5520. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 00:36:57 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FCFD328.8B3AE47C@uci.edu>
Source record: 103585

Jim Kelley wrote:
>
> Richard Clark wrote:
> > Hi Jim,
> >
> > Error is a fact of life. My sieve of "does it make more than a dB
> > difference" is not a statement of error however.
> >
> > A simple example of error is found in
> > >That's only .02 dB off.
>
> :-) What decimal fraction of a tenth of a Bel do you think the ratio
> Pi/3 represents, Richard?
>
> Seventy third's de AC6XG

The difference between .2 and .02 is less than a dB, so that falls below
your 1 dB threshold. ;-)

73, Jim AC6XG

5521. Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 01:06:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqolma$5nr$1@sparta.btinternet.com>
Source record: 103586

THE ONLY WAY TO ACCURATELY MODEL A LOADED VERTICAL

and similar coil and capacitance loaded structures, is as follows.

Let's take the most simple structure consisting of 3 sections - top, centre and bottom.

The top is usually referred to as a whip or a rod.

The centre section is a loading coil.

The bottom section can be referred to as the mast.

All three sections have length and external diameter.

All three sections have uniformly-distributed inductance, capacitance and resistance per unit length. All calculable from dimensions.

It is inescapable, therefore, the structure consists of -

THREE CASCADED TRANSMISSION LINES SECTIONS.

As with ALL transmissions lines, each section has a characteristic impedance Zo, attenuation and phase-shift per unit length. All caculable from dimensions.

The centre section, a solenoidal loading coil, clearly has inductance extra to that due to the length of the coil former. The extra inductance is calculable from the number of coil turns per unit length. If necessary self-capacitance can be included.

ALL sections have a UNIFORMLY DISTRIBUTED radiation resistance which is extra to conductor loss resistance. The two resistances are combined by simple addition. Radiation resistance is itself obtained from the length of a section.

CALCULATING PROCEDURE / PRINCIPLES.

This is done by using classical transmission formulae or by the well known sufficiently accurate approximations.

Looking upwards from the base of the antenna -

(1) Calculate the input impedance at the bottom of the whip (or rod). The whip is a transmission line open circuit at the top end.

(2) Calculate the input impedance at the bottom end of the loading coil, the centre section. The centre section is a transmission line terminated by the input impedance of the whip above it.

(3) Calculate the impedance looking up from the base of the antenna. The feedpoint impedance. The bottom antenna section being a transmission line terminated by the input impedance of the centre antenna section, the loading coil.

(4) Connect a generator, the transmitter, between the base of the antenna and ground. The ground will have its own 'input' resistance depending on the ground electrodes or perhaps the vehicle characteristics.

(5) Using classical transmission line formulae, or their close approximations, the amps, volts, relative phase-angles, can be calculated, IF NECESSARY, at any point along the antenna, at any point along the coil, from its base to the extreme tip of the whip

(6) But a full analysis is unnecessary. Nevertheless there's a big bunch of calculations to be done to calculate radiating efficiency, a single number, the ultimate solitary objective. Of what use to anybody is the difference between input and output currents of the loading coil?

(7) The radiation pattern is eventually available. But even CB-ers are familiar with the radiation pattern of a simple vertical antenna, loaded or not, which is less than 5/8ths wavelengths in height.

(8) By an obvious extension of the above principles, a top hat on the top of the whip, such as a set of radial wires within a ring, can be automatically accounted for.

Now, you old-wives, what can be more simple than THAT? KISS!

I'm very sorry, due to recommendations by the medical profession, I have to decline invitations to tea-parties in Boston, Mass.

And stop haggling amongst youselves. You have quite enough problems to sort out on your side of the Atlantic.

As examples of practical use of the foregoing principles, download in a few seconds and run immediately short, self-contained programs LOADCOIL and TOPHAT2 from website below. Free to USA citizens.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

5522. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 01:09:41 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031204200941.12189.00000226@mb-m05.aol.com>
Source record: 103587

>
>Yuri Blanarovich wrote:
>> CONCLUSION: Eat and drink what you like. Speaking English is
>> apparently what kills you.
>
>Guess Texan doesn't count as English. My cholesterol is over 300,
>my HDL's are low, my triglicerides are over 400, and my latest
>heart scan came back with:
>
>"NONE - essentially no calcium or cholesterol buildup is seen."
>
>I didn't even make it to the second category, "MILD - Within normal range."
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

...and you are sharp as a whip, congratulations Cecil.

My cholesterol is over 300 also and I realized that conventional doctors are full of it, pushing pharmaceutical "products", not realy triyng to keep us healthy. After my heart stoppage incident and believing in Dr. Atkins revolution, I finally took my health in my hands and I am back to life and radios.
I use RF to speed up healing contrary to FCC BS guidlines on RF exposure and I eat juicy steaks, drink fine vine (ok, beer and tequila) and celebrate occasional thing with fine cigar.
BTW study found that vegetarian brains keep shrinking. Any vegetarians here ?
:-)

Yuri, da BUm

5523. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 01:16:58 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <e0Rzb.4521$Oe5.685@newsread2.news.atl.earthlink.net>
Source record: 103588

Art:

[snip]
> Frankly I don't see that 'What" term in my books or in the
> newespapers so I presume it must be a Cajun type dielect that
> is used in the swamps or something. You used it a lot when you ran
> Chip off the group but since I don't know what you are talking about
> I will stay on even tho Ian and Roy have now fled.
> Art
[snip]

Heh, heh... Well, I got the term "What?" and that particular usage from my then...
teenage sons, both now in their mid-thirties, but no grandchildren, What?

"Cajun", heh, heh... Hey... I was born in the "real" Acadia [Nova Scotia] and so was formerly a British Subject. I left for the "colonies" lo these many years ago and I am no longer taxed without representation. Since I immigrated, I have always lived in the "Deep South".

I have been to "Luzianne" and "Nawlins" often and I have many Cajun friends. I have been properly introduced to "crab boils", "pulled pork" and the pleasures of cayenne pepper and "crawdads".

But... I have never "run off" any real persons, only pretentious, oafs flouting advanced University degrees!

Best Regards,
--
Peter K1PO

5524. Desperate for antenna clip art

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 02:42:45 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <gvrvsv0r95fapq6lnj9qrd0aj8mval7jjo@4ax.com>
Source record: 103589

I desperately need some good black & white antenna clip art for a serious plaque to be awarded next week.

The trophy vendors do not have any ham radio art. ARRL was no help.

Something like a 50 ft antenna with RF "bolts" emananting from the top.

Ken
(to reply via email
remove "zz" from address)

5525. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 02:43:25 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fcff115_4@corp.newsgroups.com>
Source record: 103590

Yuri Blanarovich wrote:
> ...and you are sharp as a whip, ...

I do believe that is a mixed metaphor, Yuri. It's sharp as a *tack* and
________ as a whip. Is it *keen* as a whip?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5526. Re: Desperate for antenna clip art

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 03:14:24 UTC
From: Je Forget <je.forget@frenchconnection.fr>
Message-ID: <BBF5623F.477C%je.forget@frenchconnection.fr>
Source record: 103592

50' antenna?

that's a pretty big trophy...

:)

> Subject: Desperate for antenna clip art
>
> I desperately need some good black & white antenna clip art for a
> serious plaque to be awarded next week.
>
> The trophy vendors do not have any ham radio art. ARRL was no help.
>
> Something like a 50 ft antenna with RF "bolts" emananting from the
> top.
>

5527. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 03:25:16 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnbsvuks.2ec6.bit-bucket@localhost.config.com>
Source record: 103591

On Thu, 04 Dec 2003 20:43:25 -0600, Cecil Moore hath writ:
> Yuri Blanarovich wrote:
>> ...and you are sharp as a whip, ...
>
> I do believe that is a mixed metaphor, Yuri. It's sharp as a *tack* and
> ________ as a whip. Is it *keen* as a whip?

Close. A quick Google run would've yielded:

"SMART AS A WHIP"

As in, I suppose, if you ever got smacked by a whip, *it would smart* !

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | config.com | DM68mn SK

5528. Re: Desperate for antenna clip art

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 03:51:03 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <v000tv8s7s0cjjg881j1j4dihoeo34ba0t@4ax.com>
Source record: 103593

On Fri, 05 Dec 2003 02:42:45 GMT, Ken <cprstn54zz@att.net> wrote:

>I desperately need some good black & white antenna clip art for a
>serious plaque to be awarded next week.
>
>The trophy vendors do not have any ham radio art. ARRL was no help.
>
>Something like a 50 ft antenna with RF "bolts" emananting from the
>top.

Okay, so it's a little taller than 50 feet, but maybe you can make it
work:

http://www.reelclassics.com/Studios/RKO/rko.htm

Bob
k5qwg

>
>
>
>
>
>
>Ken
>(to reply via email
>remove "zz" from address)

5529. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 04:11:53 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <0810tvggburvpdkmepui7731n6e9j2s146@4ax.com>
Source record: 103594

Thanks George

I can make a UHF bridge and a dummy load rfom SMD resistors which I
think should be good enough for 70 cm. Any comments?

Mike N

On Thu, 4 Dec 2003 17:37:50 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Dear MikeN:
>
>I have an antique Omega pocket watch which needs adjustment. I have a 24"
>pipe wrench, an 8 pound sledge hammer and a blowtorch. What's the simplest
>method for me to adjust the movement for best accuracy?
>
>
>See the problem? Mismatch between job and tools. You need a UHF bridge,
>and a means to calibrate it. Or a network analyzer. And some reference
>standards. Unfortunately, you do not have the tools to build the tools you
>need to do the job. Any universities or electronics labs with Ham employees
>nearby? Might be your best bet.

5530. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 04:55:23 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <WcUzb.11487$Yt4.7327@lakeread05>
Source record: 103595

There is a short video available (saw in a search of lightning arrestor systems) that shows the Empire State Bldg being struck several times, and not once does the lightning "visibly" hit, follow, or otherwise act impressed with the elaborate grounding system on the building. Taken as a whole though, it must be effective, because the strikes do no apparent damage, and they obviously get to the ground somehow.

JP

"Mark Keith" <nm5k@wt.net> wrote
> > The last class I had at work on electrical safety was pro
> > lightening rods AND ground systems. (as was the one for skywarn from
> > the NWS)
>
> I agree there, if he is talking about the traditional pointy lightning
> rod used to protect other gear or buildings. I'm of the opinion strikes
> can never be totally avoided, and the brush things are a waste of time.
> I've heard of many reports of them being struck. Sometimes spraying hot
> metal around and causing a fire hazard. And you still should have a good
> ground even with those. To me, the only sure thing is expecting the
> strike to happen, and safely controlling it's path to ground when it
> finally does. So I'm firmly with polyphaser on that one. MK

5531. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 05:46:19 UTC
From: richardharrison@webtv.net
Message-ID: <11236-3FD01BAB-245@storefull-2317.public.lawson.webtv.net>
Source record: 103596

Cecil, W5DXP wrote:
"So you haven`t tried to model an antenna with a 180 degree
phase-reversing coil, have you?"

Kraus` Figure 23-21(b) has phase-reversing coils used as traps. "Here the elements present a high impedance to the coil which may be resonated without an external capacitance due to its distributed capacitance."

Kraus` trap is a self parallel resonant circuit, not just another inductance.

However, a center-tapped coil can make an excellent phase inverter as in the vacuum tube type Detroit Electric Company (Delco) Buick car radios of the late 1930`s and early 1940`s. This radio had great sound despite limited frequency response inevitable with choke and transformer coupling.

Best regards, Richard Harrison, KB5WZI

5532. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 06:23:39 UTC
From: richardharrison@webtv.net
Message-ID: <24588-3FD0246B-330@storefull-2315.public.lawson.webtv.net>
Source record: 103598

Jim, AC6XG wrote:
"But there`s no question that it`s possible to build an airplane that flies, without understanding why it flies."

True, but it`s often better to understand what you are doing, especially when innovating. Sometimes mistakes can be avoided. The Wright Brothers certainly understood aerodynamics and worked hard to develop their design before it ever flew.

They built the world`s first wind tunnel to perfect their airfoils while trying to avoid possible fatal cut and trys. Because they knew why it flew, The Wrights were the first to sustain powered flights.

Heath`s kits were airplanes before they started producing electronic kits.

Best regards, Richard Harrison, KB5WZI

5533. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 06:28:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k480tvsfmcg301jal8i812f6v6u72tcj5r@4ax.com>
Source record: 103597

On Fri, 05 Dec 2003 17:11:53 +1300, MikeN <mnewman@clear.net.nz>
wrote:

>Thanks George
>
>I can make a UHF bridge and a dummy load rfom SMD resistors which I
>think should be good enough for 70 cm. Any comments?
>
>Mike N
>

Hi Mike,

George has a point. Building a bridge begs the question: which one?

In the collection of works under bridges, there are many, most of
which are entirely unsuited to the job.

The first problems one would encounter is balance and isolation. At
UHF this actually is simple because visualization lends to revealing
those flaws in the implementation. IF, of course, you look at it with
that perspective. Another problem is scale. Your bridge might
present a significant intrusion into the variable being measured.

How do you put a 6X3X9 project box holding your bridge into practice
with an antenna that is the same size? The problem of isolation. SMD
components are a good first pass, but a bridge has its variables to
perform the measurement. How big is the read-out scale to the knob in
relation to that same antenna? The smaller you make it, the closer
you get your face to the antenna (isolation and balance again). How
do you adjust the balance without literally putting your hand into the
equation?

OK, so you make the bridge a remote device, you measure through a
line. Then the question becomes, are you measuring the antenna, or
the antenna AND the line? You need to isolate the line, and you do
that through a reference. Where did you get the reference?
Presumably another SMD, but was the line choked?

Another, classic solution is to scale your problems away. Take what
instrumentation you have, that exhibits the precision you need, that
contains as much error as you can tolerate, and scale a model of your
antenna to suit IT. Take a measure and reverse scale the model
antenna physical design to the target frequency. What you have to
watch out for here are those variables that are scale/frequency
variant like ground loss, dissipation factors and such. Again the
problem of perspective IF you don't know what to look for.

73's
Richard Clark, KB7QHC

5534. Re: Source for outdoor coupler/splitter - 300 ohm flat TV antenna wire ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 07:25:37 UTC
From: account70@yahoo.com
Message-ID: <7a1414d9.0312042325.2a89d0aa@posting.google.com>
Source record: 103599

Thanks to everyone. Probably need a new antenna anyway, so I'll look into going coax. Wonder if that Winegard Ghost Killer antenna really works...

Thanks again.

Steve

PS Don't know if they do cross-border tranactions, but it seems the 15-1135 300 ohm coupler is listed as being at some Radio Shack Canada locations but not available for on-line orders.

5535. Re: Antenna mast grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 07:26:20 UTC
From: richardharrison@webtv.net
Message-ID: <11237-3FD0331C-118@storefull-2317.public.lawson.webtv.net>
Source record: 103600

Jack Painter wrote:
"Taken as a whole, though, it must be effective, because the strikes do no apparent damage, and they obviously get to ground somehow."

True. I`m skeptical of claims of lightning avoidance by discharging the earth beneath the thunder cloud. I think the protection is from substituting a more attractive target to the lightning than the one you want to protect.

I`ve worked with too many radio towers. Many had inverted Copperweld ground rods bolted to the tower tops with the pointed end aimed up. Function of the rods was protection of beacons and other appurtenances atop the tower.

The towers still get lightning strikes but the beacons don`t get damaged from the tower hits when there`s a Copperweld lightning rod up there. I`ve seen broken and burnt beacons from towers that didn`t have the rods.

A radio tower with a sharp-pointed lightning rod is very salient and should discharge the earth under and around the tower, if this is a prctical course. From what I`ve seen these lightning rods do not prevent lightning strikes but they do prevent some of the damage that lightning causes.

Best regards, Richard Harrison, KB5WZI

5536. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 09:59:05 UTC
From: Joel Kolstad <JKolstad71HatesSpam@Yahoo.Com>
Message-ID: <bqpktbrii1@news.oregonstate.edu>
Source record: 103601

Jon Gauthier <jon.gauthier@spam.killer> wrote:
> I'll assume you do... The Pringles can antennas do work very nicely -
> they have an effective gain of 14-18dB. OTOH, they're Pringles cans -
> i.e., mylar- or aluminum-coated cardboard. If you want something a bit
> more substantial, check out http://www.cantenna.com. For $20 bucks, it's
> a better bargain than growing your own...

It certainly looks well-constructed, but I'd have a lot more confidence in Cantenna's products if they had measured (or even simulated) radiation patterns and calculations. They also don't mention their feed arrangement which could make a huge difference in actual performance.

---Joel Kolstad

5537. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 10:00:51 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <6HYzb.60651$m24.23169@fed1read02>
Source record: 103602

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:SWnzb.289798$9E1.1488386@attbi_s52...
> Ed Price wrote:
>
> SNIPPED
> >
> > OK, just what justifies Bill's actions? His age? His loss of memory?
He's a
> > retiree? His simple antenna design? Or, to put it simpler, after a few
years
> > go by, is it OK to ignore parts of a contract that may complicate your
life?
> >
> > His current options? Take down that simple antenna, and all is now in
> > compliance with the HOA CC&R's. That shouldn't stretch his budget too
far.
> >
> > Ed
> > wb6wsn
>
> Ed, when he signed his contract the CC&Rs on antennas were not the issue
> as has been the premise in previous posts on this topic. If a ham moves
> INTO a CC&R community he has contracted to comply with the CC&Rs. [Note:
> my sister lives in a CC&R community and her antenna structure provision
> has the adjective 'permanent' in the statement of terms. So, a
> 'temporary' antenna structure is allowed!]
>
> However, at a later time Bill develops a new interest, ham radio, and
> that includes an activity that is prohibited. Does that mean that the
> VEC/VE should advise potential applicants that if you live in a CC&R
> community 'Forget it!!'??
>
> As the thread was/is developing anyone who currently lives in a CC&R
> community should be discouraged from becoming a ham!
>
> Deacon Dave
>

Framed that way, then, YES, a good friend would warn a neophyte about some
of the possible hassles of a hobby.

However, what prevents Bill from operating mobile, from his car? Or joining
a club and using its common station? Or, heaven forbid, finding an in-person

ham friend and setting up some kind of agreement to use his station (like good old Bill comes over every Saturday afternoon with a pizza and a couple of six-packs, and they do some contesting till the dials get too fuzzy to read). Or, since he's retired, why doesn't Bill volunteer to set up a station at one or two local schools, organize a radio club (remember them?), and do something constructive in life instead of fighting a losing battle against the HOA where he lives?

You are being fanatically short-sighted by insisting that an antenna farm is needed or the hobby is impossible to pursue.

Ed
WB6WSN

5538. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 10:03:34 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <GJYzb.60671$m24.16250@fed1read02>
Source record: 103603

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fce0e37_7@corp.newsgroups.com...
> Ed Price wrote:
>
> > "Dave Shrader" <david.shrader@comcast.net> wrote:
> >>The HOA police show up! What are Bill's options: He is retired and his
> >>income is lower than when employed so moving is a very difficult option?
> >>
> > His current options? Take down that simple antenna, and all is now in
> > compliance with the HOA CC&R's. That shouldn't stretch his budget too
far.
>
> But Bill has bigger problems. His car broke down and he can't afford to
> fix it. His electricity has been turned off. His shoes have holes in them.
> He's three months late on his taxes. What should be done?
> --
> 73, Cecil http://www.qsl.net/w5dxp

Pity party?

Ed
WB6WSN

5539. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 10:06:56 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <PMYzb.60696$m24.40547@fed1read02>
Source record: 103604

"Bill Turner" <noway@nohow.com> wrote in message
news:7e50tvgr30ti06jhclvmheoe3uo7bhrlts@4ax.com...
> On 04 Dec 2003 23:48:27 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
> wrote:
>
> >CONCLUSION: Eat and drink what you like. Speaking English is
> >apparently what kills you.
>
> --
>
> Not true. All those countries speak English. :-)
>
> --
> Bill, W6WRT
>

True, but you have to speak very loud to help them understand you.

Ed
WB6WSN

5540. Re: Desperate for antenna clip art

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 10:46:50 UTC
From: Freddie <brianNOSPAM86@iquest.net>
Message-ID: <umZzb.138$7p2.38@newsread2.news.atl.earthlink.net>
Source record: 103605

Go to www.alltheweb.com

Search for "Amateur Radio Clipart"

Enjoy

"Ken" <cprstn54zz@att.net> wrote in message
news:gvrvsv0r95fapq6lnj9qrd0aj8mval7jjo@4ax.com...
> I desperately need some good black & white antenna clip art for a
> serious plaque to be awarded next week.
>
> The trophy vendors do not have any ham radio art. ARRL was no help.
>
> Something like a 50 ft antenna with RF "bolts" emananting from the
> top.
>
>
>
>
>
>
> Ken
> (to reply via email
> remove "zz" from address)

5541. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 12:14:34 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <AOydnYPH2acx602iRVn-uA@crocker.com>
Source record: 103606

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bqolma$5nr$1@sparta.btinternet.com...
>
> THE ONLY WAY TO ACCURATELY MODEL A LOADED VERTICAL
<snip>
> All three sections have uniformly-distributed inductance, capacitance and
> resistance per unit length. All calculable from dimensions.
<snip>
> THREE CASCADED TRANSMISSION LINES SECTIONS.
<snip>
> Now, you old-wives, what can be more simple than THAT? KISS!
<snip>

simple or accurate??? you can't have both. in this case you have ignored, among other things, that the capacitance between each infinitesimal part of each vertical piece to the rest of the world is different. therefore your transmission line sections are not uniform from end to end as needed to use the classical transmission line formulations. Then of course you must also consider that the actual radiated part of the field makes those 'transmission lines' appear extremely lossy... unfortunately that loss is not the R and G type loss as the transmission line formulas use, though those losses do also exist.

5542. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 12:16:31 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031205071631.04265.00000215@mb-m29.aol.com>
Source record: 103607

>> Yuri Blanarovich wrote:
>>> ...and you are sharp as a whip, ...
>>
>> I do believe that is a mixed metaphor, Yuri. It's sharp as a *tack* and
>> ________ as a whip. Is it *keen* as a whip?
>
>Close. A quick Google run would've yielded:
>
> "SMART AS A WHIP"
>
>As in, I suppose, if you ever got smacked by a whip, *it would smart* !
>
>73
>Jonesy
>--

Something like that, sharp - smart, smartsharp. Maybe translation of saying
from old country, or my poor English will save me from the A-tack?
Jus' another proof that meat eating hams are smartsharp and know what's cooking
in the coils (meat of course).
Meteo guys are scaring us with foot of snow, time to sharpen the showels.

73 Yuri

5543. Form Art Uwinn?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 12:40:27 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031205074027.04265.00000216@mb-m29.aol.com>
Source record: 103608

I thought that Art knew something I didn't, here is, what?

>>Check this out!
It's really strange....

Aoccdrnig to a rscheearch at an Elingsh uinervtisy, it deosn't mttaer in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht frist and lsat ltteer is at the rghit pclae. The rset can be a toatl mses and you can sitll raed it wouthit porbelm. Tihs is bcuseae we do not raed ervey lteter by it slef but the wrod as a wlohe.
Initsereg!!
<<

So throw your speelcheckers out :-)

Yuri Balnarowitch

5544. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 12:54:17 UTC
From: jaroslavlipka@msn.com
Message-ID: <d7855f42.0312050454.2e26cf3c@posting.google.com>
Source record: 103609

'Doc <w5lz@cwis.net> wrote in message news:<3FCF80C4.E0F7B99E@cwis.net>...
> Art,
> Or, people do have an idea of what Peter is talking about,
> and agree.
> Art, you can't peek through a key hole and call it a 'world
> view' without it being a 'small world'... "what?".
> 'Doc

Doc

There you go again attacking a poster without adding any
substance to the discussion. Just for once to prove your not full of
sh#t, explain if you can, what Peter is talking about.
Perhaps you could also enlighten us with your theory of the
subject at hand, but then, as most readers know on this group you
"never" get involved in depth you just stand on the sidelines throwing
barbs at those with the ability to do so.
Jaro

5545. Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:12:01 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <Eu%zb.348$%i5.20668@news20.bellglobal.com>
Source record: 103610

I have come to the conclusion the only antenna I am going to be able to use is a ground mounted dipole or random wire. No antenna supports in the yard, no fences, no attic. I tried a vertical "flagpole" but it is just too noisy. Nothing but me and the yards of my two neighbours. I am able to run about 60 feet of 22 gauge green enameled wire along the length of the yards. I have done extensive reading on NVIS propagation, but I'm curious if anyone is actually using this method on 160, 80 or 40m.

Thanks,

Max

5546. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:26:35 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vt11tahss93e3a@corp.supernews.com>
Source record: 103612
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

>
> I wouldn't. I'd recomend that if you can't abide by the
> rules
> that you said you would, then either don't sign the contract, or
> move. All these little tales say more about the person's moral
> fortitude than it does the HOA's policies...
> 'Doc

ah.

Nice advice for pacifists and those having a lack of spine and
a yellow tint to the bellies.

Clint

5547. Re: Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:28:04 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <ni11tv8fjmbiraogq6c4qglgbvtskf7j3l@4ax.com>
Source record: 103611

If it's the one that looks like a small section of PVC, with about 60 feet of coax on one side and 300 ohm heavy duty twin lead on the other, then I think it's just a protected coax to twin lead protected junction box. The paper with mine calls it a 'transformer', but it seems to act and measure out as a straight connection.

5548. Re: Form Art Uwinn?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:42:20 UTC
From: rb <ancient@blueyonder.co.uk>
Message-ID: <v2Gx76A8sI0$EwiN@desk.local.co.uk>
Source record: 103613

In message <20031205074027.04265.00000216@mb-m29.aol.com>, Yuri
Blanarovich <k3bu@aol.comnoSaddam> writes
>I thought that Art knew something I didn't, here is, what?
>
>
>>>Check this out!
>It's really strange....
>
>Aoccdrnig to a rscheearch at an Elingsh uinervtisy, it deosn't mttaer in waht
>oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht frist and
>lsat ltteer is at the rghit pclae. The rset can be a toatl mses and you can
>sitll raed it wouthit porbelm. Tihs is bcuseae we do not raed ervey lteter by
>it slef but the wrod as a wlohe.
> Initsereg!!
><<
>
>So throw your speelcheckers out :-)
>
>Yuri Balnarowitch
English educational authorities did that for enough years to produce
teachers who can not spell to teach children not to spell correctly.

rb

--
rb

5549. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:52:13 UTC
From: Alex Flinsch <alex@localhost.localdomain>
Message-ID: <slrnbt13kk.935.alex@homer.linux1.lan>
Source record: 103614

In rec.radio.amateur.antenna, you wrote:
> have done extensive reading on NVIS propagation, but I'm curious if anyone
> is actually using this method on 160, 80 or 40m.

I am using a 100 foot long wire about 6ft off the ground (basically a wire tacked to a wooden fence). I am able to make contacts out to about 400 miles on 40m, but have not tried it on 160 or 80. Funny thing is that it works really well on 6m (when the band is open) with contacts in the 1000+ mile range.

Alex / AB2RC

5550. Re: Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 13:57:36 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <3FD08ECE.90408@frontiernet.net>
Source record: 103615

pointyhead wrote:
> Is the plastic "lump" that is used to join the ladder line to coaxial cable
> really a balun or simply a "ladder line to coax adaptor" as they put it?

Mine had about 20 ferrite core donuts over the end of the coax in PVC pipe. I discovered this when I replaced the coax-xfmr section with twin lead all the way to my tuner, which gave me a better antenna. In a sense it's a balun, it tries to keep RF energy from conducting back up the shield of the coax so the balanced line twin lead approximates a balanced line.

W8LNA

5551. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:08:46 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312050608.527f765f@posting.google.com>
Source record: 103616

Exactly
The ground influence on verticals is horible so getting
away from it or going horizontal are good viable choices
depending on the TOA required for your own particular purposes
Art

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<g51vsv0sfe6o2t51d9bsv7jvst488or64d@4ax.com>...
> On 4 Dec 2003 08:42:58 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >I asked for experiences from those using two loaded
> >verticals made into a dipole for horizontal polarisation on 160M.
> >Regards
> >Art
>
> Hi Art,
>
> Miserable. A simple balloon lifted halfwave vertical was declared the
> big guns by a net (surpassing their own antennas).
>
> Richard was right, more signal would find its way out if you simply
> drove the coax shield running up to the "dipole."
>
> 73's
> Richard Clark, KB7QHC

5552. Re: Current in antenna loading coils controversy - new measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:11:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd09265$1_1@corp.newsgroups.com>
Source record: 103617

Richard Harrison wrote:
> Kraus` trap is a self parallel resonant circuit, not just another
> inductance.

Point is that all real-world coils possess distributed capacitance
and distributed resistance as well as inductance. There is capacitance
but no capacitor in Kraus' trap. If one replaces the "phase-reversing
coil" with a phase-reversing stub, EZNEC gives the correct current
distribution.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5553. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:13:27 UTC
From: Crocodilo <a@b.c>
Message-ID: <3fd0928f$0$244$4d4efb8e@read.news.pt.uu.net>
Source record: 103618

If you go to the doctor you will die ill...
If you ignore him you also die but healthy...

Some years ago olive oil was blamed for a lot of diseases. Today the same guys say that olive oil is the solution for the same diseases...
Same aplies to some types of fish...

73

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message news:20031204200941.12189.00000226@mb-m05.aol.com...
> >
> >Yuri Blanarovich wrote:
> >> CONCLUSION: Eat and drink what you like. Speaking English is
> >> apparently what kills you.
> >
> >Guess Texan doesn't count as English. My cholesterol is over 300,
> >my HDL's are low, my triglicerides are over 400, and my latest
> >heart scan came back with:
> >
> >"NONE - essentially no calcium or cholesterol buildup is seen."
> >
> >I didn't even make it to the second category, "MILD - Within normal range."
> >--
> >73, Cecil http://www.qsl.net/w5dxp
> >
> >
>
> ...and you are sharp as a whip, congratulations Cecil.
>
> My cholesterol is over 300 also and I realized that conventional doctors are
> full of it, pushing pharmaceutical "products", not realy triyng to keep us
> healthy. After my heart stoppage incident and believing in Dr. Atkins
> revolution, I finally took my health in my hands and I am back to life and
> radios.
> I use RF to speed up healing contrary to FCC BS guidlines on RF exposure and I
> eat juicy steaks, drink fine vine (ok, beer and tequila) and celebrate
> occasional thing with fine cigar.
> BTW study found that vegetarian brains keep shrinking. Any vegetarians here ?
> :-)
>

> Yuri, da BUm

5554. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:16:36 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312050616.48d10733@posting.google.com>
Source record: 103519

But Peter you said something about changing a model
What was that all about ?
Regards
Art

"Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<e0Rzb.4521$Oe5.685@newsread2.news.atl.earthlink.net>...
> Art:
>
> [snip]
> > Frankly I don't see that 'What" term in my books or in the
> > newespapers so I presume it must be a Cajun type dielect that
> > is used in the swamps or something. You used it a lot when you ran
> > Chip off the group but since I don't know what you are talking about
> > I will stay on even tho Ian and Roy have now fled.
> > Art
> [snip]
>
> Heh, heh... Well, I got the term "What?" and that particular usage from my
> then...
> teenage sons, both now in their mid-thirties, but no grandchildren, What?
>
> "Cajun", heh, heh... Hey... I was born in the "real" Acadia [Nova Scotia]
> and so was formerly a British Subject. I left for the "colonies" lo these
> many years ago and I am no longer taxed without representation. Since
> I immigrated, I have always lived in the "Deep South".
>
> I have been to "Luzianne" and "Nawlins" often and I have many
> Cajun friends. I have been properly introduced to "crab boils", "pulled
> pork" and the pleasures of cayenne pepper and "crawdads".
>
> But... I have never "run off" any real persons, only pretentious, oafs
> flouting advanced University degrees!
>
> Best Regards,

5555. Re: Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:21:15 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd094a3$1_1@corp.newsgroups.com>
Source record: 103520

Jim Leder wrote:
> If it's the one that looks like a small section of PVC, with about 60
> feet of coax on one side and 300 ohm heavy duty twin lead on the
> other, then I think it's just a protected coax to twin lead protected
> junction box. The paper with mine calls it a 'transformer', but it
> seems to act and measure out as a straight connection.

The G5RV I bought years ago had 7 FB775621 toroids inside the PVC
acting as a 1:1 choke-balun. That was a good design.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5556. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:25:24 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312050625.26b5a16e@posting.google.com>
Source record: 103521

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<24588-3FD0246B-330@storefull-2315.public.lawson.webtv.net>...
> Jim, AC6XG wrote:
> "But there`s no question that it`s possible to build an airplane that
> flies, without understanding why it flies."
>
> True, but it`s often better to understand what you are doing, especially
> when innovating. Sometimes mistakes can be avoided. The Wright Brothers
> certainly understood aerodynamics and worked hard to develop their
> design before it ever flew.
>
> They built the world`s first wind tunnel to perfect their airfoils while
> trying to avoid possible fatal cut and trys. Because they knew why it
> flew,

The Wrights were the first to sustain powered flights.

What do you mean by that Richard ? My understanding is that many had
conquered powered flight in Europe before the Wrights even got
off the ground. As far as powered flights was it not the French that
crossed the Atlantic first?

Regards
Art

>
> Heath`s kits were airplanes before they started producing electronic
> kits.
>
> Best regards, Richard Harrison, KB5WZI

5557. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 14:32:22 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FD0989E.3BA0687@uwe.ac.uk>
Source record: 103522

Joel Kolstad wrote:
>
> Jon Gauthier <jon.gauthier@spam.killer> wrote:
> > I'll assume you do... The Pringles can antennas do work very nicely -
> > they have an effective gain of 14-18dB. OTOH, they're Pringles cans -
> > i.e., mylar- or aluminum-coated cardboard. If you want something a bit
> > more substantial, check out http://www.cantenna.com. For $20 bucks, it's
> > a better bargain than growing your own...
>
> It certainly looks well-constructed, but I'd have a lot more confidence in
> Cantenna's products if they had measured (or even simulated) radiation
> patterns and calculations. They also don't mention their feed arrangement
> which could make a huge difference in actual performance.
>
> ---Joel Kolstad

A home made yagi might fill the bill. Try one of these

http://www.geocities.com/gimmickmo/wireless/antenna/brassyagi/
http://www.users.bigpond.com/darren.fulton/yagi/13_element_yagi_antenna_for_2.htm
http://www.andrewhakman.dhs.org/yagi/

There are many others. I had some success with one.

vy 73

Andy, M1EBV

5558. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 15:14:43 UTC
From: mxduffie@axtxom.net
Message-ID: <cp71tv86q5lppuo9ccm2m8hapns4v1gngg@4ax.com>
Source record: 103523

On Fri, 5 Dec 2003 01:59:05 -0800, "Joel Kolstad"
<JKolstad71HatesSpam@Yahoo.Com> wrote:

> It certainly looks well-constructed, but I'd have a lot more confidence in
> Cantenna's products if they had measured (or even simulated) radiation
> patterns and calculations. They also don't mention their feed arrangement
> which could make a huge difference in actual performance.

For a few dollars more, you can get real commercial antennas. My
internet service comes to me via a 7 mile hop using a PCI card or
WGB external box running 100mw. Works great, giving me better than
1/3 T-1 connection. When I swing the antenna around, I see all of
my ISP's APs, including one 35 miles away in the next state. I've
got a few links if you need them. I just went through them and see
that some have changed, but there's lots of stuff out there for
WiFi. Your main worry is the antenna connector, if you are running
a PCMCIA card.

Gary
--
Replace x in adr with c

5559. Re: Gotham Antenna info needed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 16:09:14 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <K42Ab.3037$NN.109046@news1.news.adelphia.net>
Source record: 103524

I once had a Gotham which worked very well. Somewhere I have a sales
brochure, I will dig it out and mail you a copy if you will contact me
direct and give me a mailing address to send it to
Just might have some other info., I will send you copies of what I have.
It's good antenna that serves it purpose, great to start with.

Jim, kf4tun

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:k82zb.641$yf.196@fed1read01...
> Received the following from a Ham who came into possession of the "famous"
> Gotham antenna and would like to resurrect it.
>
> Please e-mail Bruce N3XUK direct (NOT ME)
> -------------------------
>
> Hello Name hr is Bruce N3xuk I have a gotham vertical that my father left
me
> when he passed.. I been looking for some info on the antenna but no luck
as
> of yet. I was going to use it for 80m but I think I need a coil. Also
would
> like to know how this antenna was feed because the info I did get there
was
> a coil on it some where .
>
> thank you for your time ..
> Bruce N3XUK
> <gilsonbruce@hotmail.com>
>
> --
> 73 From The Wilderness Keyboard
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.547 / Virus Database: 340 - Release Date: 12/2/03

5560. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 16:13:41 UTC
From: richardharrison@webtv.net
Message-ID: <7481-3FD0AEB5-17@storefull-2315.public.lawson.webtv.net>
Source record: 103525

Max, VE3TMT wrote:
"I have come to the conclusion that the only antenna I am going to be able to use is a ground mounted dipole or random wire."

Don`t expect much NVIS broadside to a dipole on the ground unless it`s on deep dry sand.

For NVIS the ideal height over the effective earth reflector is about 1/4-wave. This is because the earth is 90-degrees away from the radiator. This makes a round-trip for the signal of 180-degrees. This added to the 180-degrees of phase inversion produced in reflection gives a total of 360-degrees so that the reflected wave when it returns to the radiator is back in-phase with the new emissions which are headed in the same direction, that is toward the zenith (straight up).

Lowering the height of the radiator shifts the phase between the two signal components from directly in-phase at 1/4-wave distance between radiator and reflector sites to out-of-phase at zero distance between their sites.

At zero height the radiator and earth behave as a lossy single-wire transmission system where opposing polarities nullify radiation broadside to the radiator.

Hope for effective radio communications using a near to the earth antenna comes in the form of a Beverage antenna. I`ve used a Beverage antenna very successfully for sky-wave tnans-Atlantic reception in Portugal of WCBS in New York, and WWL in New Orleans.

The 1945 War Department book, "Electrical Communication Systems Engineering" on page 317 says:
"Insulated wires of sufficient length laid on the ground, or better yet on vegetation just above the ground, will provide ground-wave transmission with vertical polarization in line with the direction of the wire, that is, off either end of the wire, and for moderate horizontal angles from this direction. Such low antennas have the advantage of being easily concealed. A length of about 600/F feet (where F is the frequency in megacycles), or somewhat longer, is suitable, if the length is adjusted by trial to permit good transmitter loading. A 100-foot on-ground antenna attached to Radio Set SCR-536 (handie-talkie) gives at least as good transmission in such directions as the whip supplied with the set, and can be more easily concealed. Half-wave on-ground antennas---can sometimes be used for short distance sky-wave reception or transmission."

Stealth has a price to pay in efficiency when low height must be used.

Best regards, Richard Harrison, KB5WZI

5561. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 16:44:04 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <oB2Ab.236939$Dw6.825828@attbi_s02>
Source record: 103526

hmmm, this stuff I have read on NVIS says 0.1 to 0.2 wavelengths. I can find the source if anyone is interested (I am not at home right now). I am certainly not arguing (I have no problem arguing, but this is one of many subjects about which I have very little knowledge), Richard, just mentioning a difference in what I have read.

Paul AB0SI

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:7481-3FD0AEB5-17@storefull-2315.public.lawson.webtv.net...
> Max, VE3TMT wrote:
> "I have come to the conclusion that the only antenna I am going to be
> able to use is a ground mounted dipole or random wire."
>
> Don`t expect much NVIS broadside to a dipole on the ground unless it`s
> on deep dry sand.
>
> For NVIS the ideal height over the effective earth reflector is about
> 1/4-wave. This is because the earth is 90-degrees away from the
> radiator. This makes a round-trip for the signal of 180-degrees. This
> added to the 180-degrees of phase inversion produced in reflection gives
> a total of 360-degrees so that the reflected wave when it returns to the
> radiator is back in-phase with the new emissions which are headed in the
> same direction, that is toward the zenith (straight up).
>
> Lowering the height of the radiator shifts the phase between the two
> signal components from directly in-phase at 1/4-wave distance between
> radiator and reflector sites to out-of-phase at zero distance between
> their sites.
>
> At zero height the radiator and earth behave as a lossy single-wire
> transmission system where opposing polarities nullify radiation
> broadside to the radiator.
>
> Hope for effective radio communications using a near to the earth
> antenna comes in the form of a Beverage antenna. I`ve used a Beverage
> antenna very successfully for sky-wave tnans-Atlantic reception in
> Portugal of WCBS in New York, and WWL in New Orleans.
>
> The 1945 War Department book, "Electrical Communication Systems
> Engineering" on page 317 says:
> "Insulated wires of sufficient length laid on the ground, or better yet
> on vegetation just above the ground, will provide ground-wave
> transmission with vertical polarization in line with the direction of
> the wire, that is, off either end of the wire, and for moderate

> horizontal angles from this direction. Such low antennas have the
> advantage of being easily concealed. A length of about 600/F feet (where
> F is the frequency in megacycles), or somewhat longer, is suitable, if
> the length is adjusted by trial to permit good transmitter loading. A
> 100-foot on-ground antenna attached to Radio Set SCR-536 (handie-talkie)
> gives at least as good transmission in such directions as the whip
> supplied with the set, and can be more easily concealed. Half-wave
> on-ground antennas---can sometimes be used for short distance sky-wave
> reception or transmission."
>
> Stealth has a price to pay in efficiency when low height must be used.
>
> Best regards, Richard Harrison, KB5WZI
>

5562. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 17:21:16 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312050921.388bc71b@posting.google.com>
Source record: 103527

Peter,
I have read your posting again and again
without commic thoughts to the term 'What'
and I have no intention of following 'Doc"
I do see that you are educated as I believe I am,
tho I am not a Doctor.
But where you and I differ is in philosophy.
One can become educated by following the crowd
and concentrate on what is necessary to pass the exam.
By the same token one can do the same but place attention to what is
pushed aside as being inconsequential in terms of general useage ans
inductance
pretty much fits into that bracket, whereas even the inconsequental
information is also pursued by the inquisitive.
To make money in life one can push aside what is inconsequential
but if you are inquisitive it is often the study of what is placed on
the cutting room floor that provides inovation, the latter is what I
do.
Now let us consider my model and since you are educated I can cut some
corners.
When looking at antennas current is everything so that is where
inovation starts.
An examle where current can be changed is a simple transformere.
It has two seperate circuits and it satisfies lawas of E = I R
(add cos phi if you want to)but what it does do that one doesn't
normally thing off is to add the function of coupling.
Link coupling when coils are wound on top of each other or proximity
coupling when wound on separate bobbins. So thinking outside of the
box we have a model that matches its power input, has two circuits
that are connected and suplies a means for high current flow. All of
this is down to COUPLING....
Now this tyransformer model provides exactly what the World requires
of an antenna and pushes aside physical dimensions such as wavelength,
radials e.t.c. I know ...there is nothing new.....
Now apply that same thinking to the subject of antennas.
We have an equivalent item that we use for matching purposes and
that is a pi network. Now we have the means of providing matching
to an antenna with capacitance etc. to provide an output
but remember what we called inconsequential about lumped items which
are really attempts to remove what we originally disliked ala coupled
networks.
By coupling circuits (networks) we can maintain ideal input matching,
increase current into a desired circuit and because it is a circuit
it will radiate. And do it very well with high efficiency as well as

meeting the reqirement for high radiation by virtue of the increased current.

Now this model or way of thought is new but it is a different application
of the known that is considered inconsequential and thus is not seen in books
that is written for crowd followers. Should one discard a model
just because it is not in a book ? Not if you are inquisitive, you then make
such a system that has all these desirably qualities and enjoy your efforts
while others who rely only on books or exercise their mouths poke fun
because to them it is unknown.
I HAVE THAT ANTENNA AND IT WORKS EXACTLY CCORDING TO KNOWN THEORY
you are welcome to point out any fallacies as why it shouldn't
or can't work as I believe it is the new horizon for antennas
and experimental work.
Regards
Art

5563. Re: 160 metre efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 17:37:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6eg1tvcb0uujtfoeius48c6uvr71ka3pe2@4ax.com>
Source record: 103528

On 5 Dec 2003 06:08:46 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Exactly
>The ground influence on verticals is horible so getting
> away from it or going horizontal are good viable choices
>depending on the TOA required for your own particular purposes
>Art

Hi Art,

You really need to read posts before "agreeing" with them.

73's
Richard Clark, KB7QHC
>
>
>Richard Clark <kb7qhc@comcast.net> wrote in message
news:<g51vsv0sfe6o2t51d9bsv7jvst488or64d@4ax.com>...
>> On 4 Dec 2003 08:42:58 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
>> wrote:
>>
>> >I asked for experiences from those using two loaded
>> >verticals made into a dipole for horizontal polarisation on 160M.
>> >Regards
>> >Art
>>
>> Hi Art,
>>
>> Miserable. A simple balloon lifted halfwave vertical was declared the
>> big guns by a net (surpassing their own antennas).
>>
>> Richard was right, more signal would find its way out if you simply
>> drove the coax shield running up to the "dipole."
>>
>> 73's
>> Richard Clark, KB7QHC

5564. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 17:56:38 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD0C6D6.B0FFCE78@cwis.net>
Source record: 103529

Max,
An antenna as you described would make a good wireless
'dog fence' on 160 meters, but that's about it, I'm afraid.
Just slightly 'better' on 80 meters, and on 40 meters, just
very slightly 'better' than that. It will become 'almost-
an-antenna' on bands higher than 40 meters where it's length
is more than just a fraction of a wave length, but don't expect
much performance, NVIS or not. That's for transmitting. On
the other hand, it'll make a very quiet recieving antenna for
bands where it's length is more than a small fraction of a
wave length.
From what you say (no supports of any kind for an antenna)
I think you are going to be 'hurting' for an HF antenna, other
than a vertical of some kind. Is there any way you could
attach a wire doublet of some length to the eaves or peak of
your roof? Doesn't necessarily have to be of any particular
lengths or symetrical shape Longer is better), although that
would peobably help. Any height is better than no height,
as you'll be finding out...
'Doc

5565. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:06:42 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD0C932.4B69D6DA@cwis.net>
Source record: 103530

David Robbins wrote:
>

> simple or accurate??? you can't have both. in this case you have ignored,
> among other things, that the capacitance between each infinitesimal part of
> each vertical piece to the rest of the world is different. therefore your
> transmission line sections are not uniform from end to end as needed to use
> the classical transmission line formulations.

But, since the 'classic' antenna calculations are only
approximate, how
much additional error would Reg's method entail, if any? I
think the
"simple -vs- accurate" thingy is one of the things that Reg was
getting at.
Very 'fiddly' (Hey Reg! I picked up an 'English' word, or would
that be
an 'UK-ism', sort of like an 'American-ism'?)...
'Doc

5566. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:34:35 UTC
From: richardharrison@webtv.net
Message-ID: <7481-3FD0CFBB-27@storefull-2315.public.lawson.webtv.net>
Source record: 103533

Art, KB9MZ wrote:
"What do you mean by that Richard?"

The Wrights were the first to sustain powered flight. That means the first practical airplane.

It wasn`t really Ernest and Julio Gallo that first got Americans to fly. It was the Wright Brothers. The Wrights were already accomplished mechanical designers and bicycle manufacturers. They collected and studied all the information on flight they could get from around the world and analyzed it for flaws to avoid in their own work. They designed a new aluminum engine from the ground up to avoid overloading their new flying machine. These guys were serious and practical scientists and engineers.

This all happened 100 years ago. After the prototype flew, the Wrights went into production on air frames and engines. Many WW-2 aircraft were powered by "Wright Cyclone Engines".

One of the original Wright engines was owned by a California collector. When a replica of the original Wright Flyer was recently built from the original plans and specifications, the nearly 100 year old engine was obtained from the collector, bolted into the new-old airframe and the engine worked very well in powered flight of the replica. The builders of the replica tested it on the ground for thrust the same as the Wright brothers had. When the plane flew it was just like old times.

Best regards, Richard Harrison, KB5WZI

5567. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:39:00 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <bqqjc4gbb1@mail.specsol.com>
Source record: 103531

VE3TMT <ve3tmt@rac.ca> wrote:
> I have come to the conclusion the only antenna I am going to be able to use
> is a ground mounted dipole or random wire. No antenna supports in the yard,
> no fences, no attic. I tried a vertical "flagpole" but it is just too noisy.
> Nothing but me and the yards of my two neighbours. I am able to run about
> 60 feet of 22 gauge green enameled wire along the length of the yards. I
> have done extensive reading on NVIS propagation, but I'm curious if anyone
> is actually using this method on 160, 80 or 40m.

> Thanks,

> Max

Can you not put a small pole at each end of the building and hang a doublet?

How about a loop or doublet on small stand offs attached to the eaves of the
building?

A pair of moble whips set up as a dipole on a pole somewhere?

A perusal of the ARRL Antenna Book for other ideas?

--
Jim Pennino

Remove -spam-sux to reply.

5568. AMATEUR RADIO EQUIPMENT WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:40:18 UTC
From: n2ion@aol.com
Message-ID: <20031205134018.21586.00000145@mb-m23.aol.com>
Source record: 103532

NOT USING YOUR ANTENNA ANYMORE?
IS YOUR RIG COLLECTING DUST?

LONG ISLAND MOBILE AMATEUR RADIO CLUB IS

LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR

EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW

BAND YAGIS AND VERTICALS, RADIOS, TOWERS TO USE

FOR EMERGENCY COMMUNICATION AND FIELD DAY.

IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL

GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A

WORTHY CAUSE.

EMAIL AND LET US KNOW WHAT YOU HAVE!

THANKS IN ADVANCE

5569. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:45:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f4k1tvoadrca3kfi9sjv3sr7gffcl4n9o3@4ax.com>
Source record: 103534

On Fri, 05 Dec 2003 12:06:42 -0600, 'Doc <w5lz@cwis.net> wrote:
>But, since the 'classic' antenna calculations are only approximate,
>how much additional error would Reg's method entail, if any?
Hi Doc,

Or more to the tenor of the purpose, how much accuracy would they add?
The point was in critical thinking and David's post extended that
horizon. This is all for the purpose of deriving a drive point Z,
which is the Three Card Monty of analysis.

73's
Richard Clark, KB7QHC

5570. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:47:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqqjrjaud1@titan.btinternet.com>
Source record: 103535

When you can write AND DEMONSTRATE QUANTITATIVELY programs which provide even more accurate models/results than what I have provided then please make them available to the world.

You have much to learn. From the zero level of bafflegab you have just produced I'll give you another 40 years. As things are you are well on your way to joining the 'old wives' brigade.

But please believe me. I have no wish to be unkind or discourage your admirable young man's enterprise. By all means keep persisting.

Yours, Reg.

5571. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:52:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6ik1tvcau49dm93a9ennbb11odvp6qqk87@4ax.com>
Source record: 103536
Body handling: HTML body converted to readable text

On Fri, 05 Dec 2003 16:44:04 GMT, "paulfriedman@comcast.net"
wrote:

>hmmm, this stuff I have read on NVIS says 0.1 to 0.2 wavelengths. I can find
>the source if anyone is interested (I am not at home right now). I am
>certainly not arguing (I have no problem arguing, but this is one of many
>subjects about which I have very little knowledge), Richard, just mentioning
>a difference in what I have read.
>
>Paul AB0SI

Hi Paul,

The troops, during Desert Storm, achieved NVIS by laying the antenna
on the ground. I will add, that like Richard points out, it was sand.

Logic would suggest that an antenna very close to ground has no chance
of launching much energy tangential to the earth's surface (a direct
short), leaving what's left to go straight up and hazard a bounce from
above. If you raise that antenna to a quarter wave up, you simply
optimize the straight up radiation, but you also lose a lot of the
immediate ground loss that snubbed the tangential angles.

What few dipole users would admit (because they love to crow about not
having radials) is that if you add radials, you can further improve
your dipole performance up AND tangentially.

73's
Richard Clark, KB7QHC

5572. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:53:30 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <Ku4Ab.32955$5E5.10776@newssvr29.news.prodigy.com>
Source record: 103537

<jimp@specsol-spam-sux.com> wrote in message
news:bqqjc4gbb1@mail.specsol.com...
> VE3TMT <ve3tmt@rac.ca> wrote:
> > I have come to the conclusion the only antenna I am going to be able to
use
> > is a ground mounted dipole or random wire. No antenna supports in the
yard,
> > no fences, no attic. I tried a vertical "flagpole" but it is just too
noisy.
> > Nothing but me and the yards of my two neighbours. I am able to run
about
> > 60 feet of 22 gauge green enameled wire along the length of the yards.
I
> > have done extensive reading on NVIS propagation, but I'm curious if
anyone
> > is actually using this method on 160, 80 or 40m.
> > Thanks,
> > Max
>
> Can you not put a small pole at each end of the building and hang a
doublet?
> How about a loop or doublet on small stand offs attached to the eaves of
the
> building?
> A pair of moble whips set up as a dipole on a pole somewhere?
> A perusal of the ARRL Antenna Book for other ideas?
> Jim Pennino

Number 28 is too small to be much use, and too fragile. Get some Electric
fence wire, which is 15 gage, and as you indicate a clear length of 60 Feet,
Run several strands spaced a few inches apart for that distance. It is not
too obvious, and could be described as a way to discourage birds, or
providing the birds a place to land, depending upon whom you are answering.
By adding a loading coil in a couple of the strands, and a few shorter
lengths to provide a wider band width, you can cobble together an all band
net..... or fence! I've done it, but I ran mine along the roof peak. The
HOA wouldn't like that!

5573. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 18:58:16 UTC
From: MD <ts850_guy@yahoo.ca>
Message-ID: <kv4Ab.14034$yd.2102859@news20.bellglobal.com>
Source record: 103538

> Can you not put a small pole at each end of the building and hang a
doublet?
>
> How about a loop or doublet on small stand offs attached to the eaves of
the
> building?
>
> A pair of moble whips set up as a dipole on a pole somewhere?
>
> A perusal of the ARRL Antenna Book for other ideas?
>
> --
> Jim Pennino

I'm located on the ground level of a two level apartment. Balcony overhangs my yard, which would be great to hang something off, but it is a strickly "no antennas allowed period" building. I thought about a dipole using a pair of hamsticks, but I would have to go out and change them to operate different bands. And the height would not be great. If I stick anything under the balcony above me it picks up too much electrical noise from the building. There are wall supports at each end of the balcony, approx 50' total length, but my feedline would be visible. My main intention is to get something, anything hidden so I can spend the winter nights warm in the shack. I am house hunting next year!!!

Max

5574. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 19:03:34 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <bgl1tvctrf2hoih7i19pdt0vsr8176cvrv@4ax.com>
Source record: 103539

On Fri, 05 Dec 2003 18:52:30 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>
>What few dipole users would admit (because they love to crow about not
>having radials) is that if you add radials, you can further improve
>your dipole performance up AND tangentially.

Where would I attach radials on a dipole?

Bob
k5qwg
>
>73's
>Richard Clark, KB7QHC

5575. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 19:13:37 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <CN4Ab.390$%i5.22478@news20.bellglobal.com>
Source record: 103542

"'Doc" <w5lz@cwis.net> wrote in message news:3FD0C6D6.B0FFCE78@cwis.net...
> Is there any way you could
> attach a wire doublet of some length to the eaves or peak of
> your roof? Doesn't necessarily have to be of any particular
> lengths or symetrical shape Longer is better), although that
> would peobably help. Any height is better than no height,
> as you'll be finding out...

Hello Doc,

I am on the ground floor of a two level apartment building. No roof to get at and no eaves. My unit itself has 3 floors counting the basement where the shack is. I was running a vertical, about 25' hung from under the balcony above me, totally invisible, except being so close to the building itself, the noise levels on 40 and 20 made those bands useless. Also being vertically polarized, it was causing RFI on the computer upstairs, and probably the neighbours as well. I have no way of running anything horizontal above the ground as this would involve climbing and hard to do that without the neighbours noticing. I have a feeling the property managers will be doing some work on the balconies in the spring anyway, so the antenna would surely be noticed then. I think I am going to go for the ground laid antenna and hope for the best. My other alternative is a 8' CB whip with a flag on the top, which has been up before without any problems. This antenna is however too short to load on 40 with the tuner.

Thanks for all the input guys, I will scratch my head some more, maybe I will think of some way to hang something from the balcony.

5576. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 19:16:54 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FD0D9A6.C55CC23A@uci.edu>
Source record: 103540

Richard Harrison wrote:
>
> Jim, AC6XG wrote:
> "But there`s no question that it`s possible to build an airplane that
> flies, without understanding why it flies."
>
> True, but it`s often better to understand what you are doing, especially
> when innovating.

It's probably true for antennas as well as airplanes.

73, Jim AC6XG

5577. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 19:24:48 UTC
From: richardharrison@webtv.net
Message-ID: <1272-3FD0DB80-25@storefull-2318.public.lawson.webtv.net>
Source record: 103543

Paul, AB0SI wrote:
"hmmm, this stuff I have read on NVIS says 0.1 to 0.2 wavelengths."

Yes, and I said 0,25 and explained how I arrived at that figure. So, I went to page 3-11 of the 19th edition of the ARRL Antenna Book to look at Fig 12.

Fig 12(A) is for 1/8-WL high and Fig 12(B) is for 1/4-WL high. Paul is supported by Fig 12 because the 1/8-WL high antenna appears to have more radiation toward the zenith than does the 1/4-WL high antenna.

I don`t know why, but would speculate it is due to closer coupling of the radiator with the earth which gives the reflector (earth) more energy to work with on the reflection. Maybe I`ll learn something from this bum steer. I learn something nearly every day here and find this a rewarding experience.

Best regards, Richard Harrison, KB5WZI

5578. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 19:26:29 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <dI-dnXJZy9d6Rk2iRVn-sA@crocker.com>
Source record: 103541

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bqqjrjaud1@titan.btinternet.com...
>
> When you can write AND DEMONSTRATE QUANTITATIVELY programs which provide
> even more accurate models/results than what I have provided then please
make
> them available to the world.
>
> You have much to learn. From the zero level of bafflegab you have just
> produced I'll give you another 40 years. As things are you are well on
your
> way to joining the 'old wives' brigade.
>
> But please believe me. I have no wish to be unkind or discourage your
> admirable young man's enterprise. By all means keep persisting.
> ---
> Yours, Reg.
>
>

it would help if you provided your model.

5579. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:01:15 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312051201.2ac48b99@posting.google.com>
Source record: 103544

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<19832-3FCE45C7-108@storefull-2312.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "---resistance, inductance and capacitance are all electrical CIRCUITS
> and NOT a lumped spot."
>
> I`m guessing Art`s point was that all circuit elements are impure. A
> resistor has lead inductance and is shunted by self-capacitance, etc.
> That is not the only cause of anomaly. Size in terms of wavelength means
> that radiation becomes significant in some cases, especially in
> structures designed to radiate.
>
> If there is radiation from a circuit, ordinary circuit analysis does not
> apply say King, Mimno, and Wing, all Ph.D.`s at Harvard teaching U.S.
> Army and Navy officers in the Graduate School of Engineering during
> WW-2.
>
> Best regards, Richard Harrison, KB5WZI

Exactly Richard,
To have an iductor you must have wire length and if it is part of a
circuit
it therefore radiates. No messing around with theoretical back SWR to
confuse the issue or mythical components. The real world says
inductance is just part of many things that come as part of it
including length which means radiation and capacitance which means
phase angle change.
In the case of radiation it must beconsidered as a 'loss' when solving
equations. The so called experts are really screwing around to provide
a platform to show off there learned minds instead of sticking to
basics
Art

5580. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:01:15 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312051201.135560cf@posting.google.com>
Source record: 103545

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<19832-3FCE45C7-108@storefull-2312.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "---resistance, inductance and capacitance are all electrical CIRCUITS
> and NOT a lumped spot."
>
> I`m guessing Art`s point was that all circuit elements are impure. A
> resistor has lead inductance and is shunted by self-capacitance, etc.
> That is not the only cause of anomaly. Size in terms of wavelength means
> that radiation becomes significant in some cases, especially in
> structures designed to radiate.
>
> If there is radiation from a circuit, ordinary circuit analysis does not
> apply say King, Mimno, and Wing, all Ph.D.`s at Harvard teaching U.S.
> Army and Navy officers in the Graduate School of Engineering during
> WW-2.
>
> Best regards, Richard Harrison, KB5WZI

Exactly Richard,
To have an iductor you must have wire length and if it is part of a
circuit
it therefore radiates. No messing around with theoretical back SWR to
confuse the issue or mythical components. The real world says
inductance is just part of many things that come as part of it
including length which means radiation and capacitance which means
phase angle change.
In the case of radiation it must beconsidered as a 'loss' when solving
equations. The so called experts are really screwing around to provide
a platform to show off there learned minds instead of sticking to
basics
Art

5581. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:06:46 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD0E556.460B4B0@cwis.net>
Source record: 103546

Max,
If nothing else presents it's self, you might try a
'CCD' (Controled Capacitance Distribution antenna). The
biggest draw backs are that they are a wave length long
and use silver mica capacitors that are not cheap. But
it can be laid on the ground and they do work. There's
a pretty good writeup in one of the ARRL's Antenna
Compendium books, not sure which one. It wouldn't be my
first choice in your situation, but it is an alternative.
'Doc

5582. Re: Similarity between coils and heart attacks "science"

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:14:01 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD0E709.553EBC6C@cwis.net>
Source record: 103547

Ed,
Not necessarily loud, but you do have to wave your
hands around a lot...
'Doc

5583. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:17:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD0E7ED.63E9A627@cwis.net>
Source record: 103548

jaro,
Sort of like what you are doing? Art drew one conclusion
from Peter's post. I supplied another. What's your problem?
'Doc

5584. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:24:00 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031205152400.04241.00000285@mb-m29.aol.com>
Source record: 103550

>The so called experts are really screwing around to provide
>a platform to show off there learned minds instead of sticking to
>basics
>Art
>
>

Their you go!
Wuold the rael epertxs santd up and sictk to biascs?

Bdaa BUm

5585. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:24:32 UTC
From: nat.gurumoorthy@ubicom.com
Message-ID: <41325e56.0312051224.483a699e@posting.google.com>
Source record: 103549

Reg,
I recommend the following pair of wonderful articles.
Part one is in HAM RADIO, April, 1977, pp. 52-58. The second in May,
1977, pp. 29-39.
The full reference is: Boyer, Joseph M. (W6UYH): "The
Antenna-Transmission
Line Analog".

Mr Boyer simplifies the antenna analysis by equating parts of the
antenna to transmission lines along the same lines that you have.
Regards
Nat

5586. Re: AMATEUR RADIO EQUIPMENT WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:26:10 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031205152610.04241.00000286@mb-m29.aol.com>
Source record: 103551

>WE ARE LOOKING FOR LOW
>
>BAND YAGIS AND VERTICALS, RADIOS, TOWERS TO USE

Me too, any 3 el 80m yagis out there gathering dust?

5587. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:29:29 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <JU5Ab.238263$Dw6.827341@attbi_s02>
Source record: 103552

Richard:

Interesting, thanks. This is one of the few places it seems where folks can have a reasonable conversation without it quickly turning into a name-calling contest. You idea of why a lower elevation works a bit better sounds reasonable. I just remember the empirical fact. Sort of like a 5-year old's reason for do anything --- b'cause!

Paul AB0SI

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:1272-3FD0DB80-25@storefull-2318.public.lawson.webtv.net...
> Paul, AB0SI wrote:
> "hmmm, this stuff I have read on NVIS says 0.1 to 0.2 wavelengths."
>
> Yes, and I said 0,25 and explained how I arrived at that figure. So, I
> went to page 3-11 of the 19th edition of the ARRL Antenna Book to look
> at Fig 12.
>
> Fig 12(A) is for 1/8-WL high and Fig 12(B) is for 1/4-WL high. Paul is
> supported by Fig 12 because the 1/8-WL high antenna appears to have more
> radiation toward the zenith than does the 1/4-WL high antenna.
>
> I don`t know why, but would speculate it is due to closer coupling of
> the radiator with the earth which gives the reflector (earth) more
> energy to work with on the reflection. Maybe I`ll learn something from
> this bum steer. I learn something nearly every day here and find this a
> rewarding experience.
>
> Best regards, Richard Harrison, KB5WZI
>

5588. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:44:58 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fd0f07d_2@news1.prserv.net>
Source record: 103553

Max:

It appears you are overlooking the very useful possibility of using different antennas for transmit and receive. If the computer RFI problem can be addressed, then use the vertical for transmitting, and whatever is quietest for receive.

--
Crazy George
Remove N O and S P A M imbedded in return address
"VE3TMT" <ve3tmt@rac.ca> wrote in message
news:Eu%zb.348$%i5.20668@news20.bellglobal.com...
> I have come to the conclusion the only antenna I am going to be able to
use
> is a ground mounted dipole or random wire. No antenna supports in the
yard,
> no fences, no attic. I tried a vertical "flagpole" but it is just too
noisy.
> Nothing but me and the yards of my two neighbours. I am able to run about
> 60 feet of 22 gauge green enameled wire along the length of the yards. I
> have done extensive reading on NVIS propagation, but I'm curious if anyone
> is actually using this method on 160, 80 or 40m.
>
> Thanks,
>
> Max
>
>
>

5589. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 20:50:49 UTC
From: VE3TMT <ve3tmt@rac.ca>
Message-ID: <Oc6Ab.427$%i5.23194@news20.bellglobal.com>
Source record: 103554

"'Doc" <w5lz@cwis.net> wrote in message news:3FD0E556.460B4B0@cwis.net...
> Max,
> If nothing else presents it's self, you might try a
> 'CCD' (Controled Capacitance Distribution antenna). The
> biggest draw backs are that they are a wave length long
> and use silver mica capacitors that are not cheap. But
> it can be laid on the ground and they do work. There's
> a pretty good writeup in one of the ARRL's Antenna
> Compendium books, not sure which one. It wouldn't be my
> first choice in your situation, but it is an alternative.
> 'Doc

Thanks Doc, I'll look into it. At this stage in the game I am open to any
suggestions!!

5590. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 21:33:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <29t1tvsotnutmleoovbk92i56u44hf3anu@4ax.com>
Source record: 103555

On Fri, 05 Dec 2003 13:03:34 -0600, Bob Miller
<bxmiller@texas.netNOSPAM> wrote:

>On Fri, 05 Dec 2003 18:52:30 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>>What few dipole users would admit (because they love to crow about not
>>having radials) is that if you add radials, you can further improve
>>your dipole performance up AND tangentially.
>
>Where would I attach radials on a dipole?
>

Hi Bob,

Not to the dipole certainly; to the ground below the dipole. It is,
after all, the ground that presents the loss. The radials reduce that
loss as is their function.

For example, a 20M dipole one halfwave over a ground mat (1M grid
about 1 wavelength in XY dimension), shows a gain of 7dBi at 30ï¿½.

Take away that ground mat, it shows a gain of 6.5dBi at that same 30ï¿½.

Nothing remarkable in my book, but I have the ground mat anyway.

73's
Richard Clark, KB7QHC

5591. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 22:48:28 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <bqr1vsrct1@mail.specsol.com>
Source record: 103556

MD <ts850_guy@yahoo.ca> wrote:
> > Can you not put a small pole at each end of the building and hang a
> doublet?
> >
> > How about a loop or doublet on small stand offs attached to the eaves of
> the
> > building?
> >
> > A pair of moble whips set up as a dipole on a pole somewhere?
> >
> > A perusal of the ARRL Antenna Book for other ideas?
> >
> > --
> > Jim Pennino

> I'm located on the ground level of a two level apartment. Balcony overhangs
> my yard, which would be great to hang something off, but it is a strickly
> "no antennas allowed period" building. I thought about a dipole using a
> pair of hamsticks, but I would have to go out and change them to operate
> different bands. And the height would not be great. If I stick anything
> under the balcony above me it picks up too much electrical noise from the
> building. There are wall supports at each end of the balcony, approx 50'
> total length, but my feedline would be visible. My main intention is to get
> something, anything hidden so I can spend the winter nights warm in the
> shack. I am house hunting next year!!!

> Max

Unless you use an autotuner, just about anything you do will require
changing something to work multiple bands.

How about a collapsible pole with a pair of whips on the end hung off
your window/patio with clamps. Put it up after night falls and take it
down before morning.

A pain in the butt but extra motivation to go house hunting.

--
Jim Pennino

Remove -spam-sux to reply.

5592. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-05 23:39:28 UTC
From: kashe@rahul.net
Message-ID: <op52tv4mmctpogrouhqju2g4kuo7d1e2ff@4ax.com>
Source record: 103557

On Fri, 5 Dec 2003 14:13:37 -0500, "VE3TMT" <ve3tmt@rac.ca> wrote:

> My other alternative is a 8' CB
>whip with a flag on the top, which has been up before without any problems.
>This antenna is however too short to load on 40 with the tuner.

Interesting. How about mounting the whip on a small bike (for
extra height) and attaching an orange pennant to the top? Looks just
like the things some parents have their kids use for visibility when
riding near cars. Should questions arise about the feedline -- uh,
it's for theft-proofing?

5593. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 00:19:55 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <is72tvgk7hv77ocbermtn9a2kb7jkodu1f@4ax.com>
Source record: 103558

On Fri, 5 Dec 2003 14:13:37 -0500, "VE3TMT" <ve3tmt@rac.ca> wrote:

>
>"'Doc" <w5lz@cwis.net> wrote in message news:3FD0C6D6.B0FFCE78@cwis.net...
>> Is there any way you could
>> attach a wire doublet of some length to the eaves or peak of
>> your roof? Doesn't necessarily have to be of any particular
>> lengths or symetrical shape Longer is better), although that
>> would peobably help. Any height is better than no height,
>> as you'll be finding out...
>
>Hello Doc,
>
>I am on the ground floor of a two level apartment building. No roof to get
>at and no eaves. My unit itself has 3 floors counting the basement where
>the shack is. I was running a vertical, about 25' hung from under the
>balcony above me, totally invisible, except being so close to the building
>itself, the noise levels on 40 and 20 made those bands useless. Also being
>vertically polarized, it was causing RFI on the computer upstairs, and
>probably the neighbours as well. I have no way of running anything
>horizontal above the ground as this would involve climbing and hard to do
>that without the neighbours noticing. I have a feeling the property managers
>will be doing some work on the balconies in the spring anyway, so the
>antenna would surely be noticed then. I think I am going to go for the
>ground laid antenna and hope for the best. My other alternative is a 8' CB
>whip with a flag on the top, which has been up before without any problems.
>This antenna is however too short to load on 40 with the tuner.
>
>Thanks for all the input guys, I will scratch my head some more, maybe I
>will think of some way to hang something from the balcony.
>

HI all

In your Circumstance I would opt for a small transmitting loop.. that
you could set out when on the air and bring in when not.. Though the
small loop is very Hi-Q and has to be retuned every few KHZ. it would
be a good compromise for you as they work really well when mounted
vertically close to the ground. they offer all radiation angles from
0 to 90 degrees and will give you plenty of qso's .. give it some
thought and I bet you can even find ways to hid one.. in the yard.

73 , Dave KC1DI

P.S. a google search for small transmitting loop will return numerous
pages to explore on the topic.

5594. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 01:15:26 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312051715.424ac2bc@posting.google.com>
Source record: 103559

David,
I do like your reply to Reg since it evokes more thought
to the transmission line theory talk.
But the main point Reg, is I believe that all the group is in
in agreement with respect to current change and a 'large '
inductance, and those bonded to 50/60 hertz type thinking
have fled.
The only important thing left for some is to not
over react at the knowledge that lumped loads are theoretical
in nature since viewing same can provide advantages in
solutions for networks whether it be household frequency
or broadcast style frequencies.
Knowledge is what is valuable, whether that knoweledge
is inconsequential or not to ones needs.

As far as our problems in the U.S.A. Reg. As I pointed out
in a Letter to the Editor when presented with terrorism by
the Stern gang in London the U.K. handed the problem of
a homeland for Jews to the U.N. The U.N. never anticipated
that the U.S. by virtue of its veto, would support an expansion
of lands in the same way we did against the American Indian,
forgetting that if you can't kill them all then you have a
world wide conflict with respect to those who practice Islam.

Cheers and beers
Art

"David Robbins" <noone@nowhere.com> wrote in message
news:<AOydnYPH2acx602iRVn-uA@crocker.com>...
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bqolma$5nr$1@sparta.btinternet.com...
> >
> > THE ONLY WAY TO ACCURATELY MODEL A LOADED VERTICAL
> <snip>
> > All three sections have uniformly-distributed inductance, capacitance and
> > resistance per unit length. All calculable from dimensions.
> <snip>
> > THREE CASCADED TRANSMISSION LINES SECTIONS.
> <snip>
> > Now, you old-wives, what can be more simple than THAT? KISS!
> <snip>
>
> simple or accurate??? you can't have both. in this case you have ignored,
> among other things, that the capacitance between each infinitesimal part of
> each vertical piece to the rest of the world is different. therefore your

> transmission line sections are not uniform from end to end as needed to use
> the classical transmission line formulations. Then of course you must also
> consider that the actual radiated part of the field makes those
> 'transmission lines' appear extremely lossy... unfortunately that loss is
> not the R and G type loss as the transmission line formulas use, though
> those losses do also exist.

5595. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 01:48:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqrcgncep1@sparta.btinternet.com>
Source record: 103560

> it would help if you provided your model.
>
==========

There's a dozen of them to choose from at my website. Some been sitting there for years. Moneyback guarantee. Present download rate averages around 200 per day.

When can we expect one of yours? Try an easy one first. What about doing a 10 feet length of 14 gauge plastic-insulated stuff? Don't forget end-effect or you'll receive hate-mail from people suffering from delusions of accuracy.

Reg

5596. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 02:24:12 UTC
From: bob <k6rtm@nospam.comcast.net>
Message-ID: <0512200031824127396%k6rtm@nospam.comcast.net>
Source record: 103561

In article <Eu%zb.348$%i5.20668@news20.bellglobal.com>, VE3TMT
<ve3tmt@rac.ca> wrote:

> I have come to the conclusion the only antenna I am going to be able to use
> is a ground mounted dipole or random wire. No antenna supports in the yard,
> no fences, no attic. I tried a vertical "flagpole" but it is just too noisy.
> Nothing but me and the yards of my two neighbours. I am able to run about
> 60 feet of 22 gauge green enameled wire along the length of the yards. I
> have done extensive reading on NVIS propagation, but I'm curious if anyone
> is actually using this method on 160, 80 or 40m.
>
> Thanks,
>
> Max
>
>

We used an NVIS for Field Day this year, and it was a lot of fun. Good
for 40 and 80, and that's about it. Ours was built after the Jelenik
design (http://www1.vcars.org:8040/CARL/NVIS.html), with an SGC tuner
at the base.

73--

--
Namaste-

5597. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 03:54:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqrjtg$4vi$1@hercules.btinternet.com>
Source record: 103562

"Nat Gurumoorthy" wrote > Reg,
> I recommend the following pair of wonderful articles.
> Part one is in HAM RADIO, April, 1977, pp. 52-58. The second in May,
> 1977, pp. 29-39.
> The full reference is: Boyer, Joseph M. (W6UYH): "The
> Antenna-Transmission
> Line Analog".
>
> Mr Boyer simplifies the antenna analysis by equating parts of the
> antenna to transmission lines along the same lines that you have.
> Regards
> Nat

==========

Nat, Antennas and transmission lines are not just analogues - Antennas ARE transmission lines with controlled 'leakage'. In fact, as people forever complain on these walls, it is impossible to prevent a transmission line FROM leaking.

Genuine guru's lump the names 'lines' and 'antennas' together in one volume. They may mention in passing that the mathematics are identical to both in case a casual reader doesn't realise it. But if Terman disdainfully omits mention of the obvious there's always the danger that his disciples may think it doesn't exist.

I produced the brief semi-serious description just for the purpose described in the subject line ;o)

Reg, G4FGQ

5598. Re: AMATEUR RADIO EQUIPMENT WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 08:07:52 UTC
From: matt wilson <mwilson2@nospam.bigpond.net.au>
Message-ID: <s7gAb.41549$aT.21960@news-server.bigpond.net.au>
Source record: 103563

Perhaps if you stop yelling you might get more offers.

P.S. try typing "netiquette" into google.

"N2ION" <n2ion@aol.com> wrote in message
news:20031205134018.21586.00000145@mb-m23.aol.com...
> NOT USING YOUR ANTENNA ANYMORE?
> IS YOUR RIG COLLECTING DUST?
>
> LONG ISLAND MOBILE AMATEUR RADIO CLUB IS
>
> LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR
>
> EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW
>
> BAND YAGIS AND VERTICALS, RADIOS, TOWERS TO USE
>
> FOR EMERGENCY COMMUNICATION AND FIELD DAY.
>
>
> IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL
>
> GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A
>
> WORTHY CAUSE.
>
> EMAIL AND LET US KNOW WHAT YOU HAVE!
>
> THANKS IN ADVANCE

5599. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 09:20:38 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <GbhAb.1136$Ho3.26@newsread1.news.atl.earthlink.net>
Source record: 103564

Art:

[snip]
"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0312050616.48d10733@posting.google.com...
> But Peter you said something about changing a model
> What was that all about ?
> Regards
> Art
[snip]

What I meant is that there is the "real world" and its' behaviour as evidenced by
experiment and measurement and then there are "models" , i.e. theories or mathematical constructs which humans have devised to "imitate" or "model" the
"real world".

When considering accuracy and precision whenrepresenting real experiments and measurements models that attempt to reflect real world performance over time have come in various stripes.

In the history of electro-dynamics there have been three major models/theories
developed in three eras over the last couple of hundred years.

(I) Circuit-Theoretic Model Era (circa: 1750 - 1850):

The first model/theory of electro-dynamics was the "circuit-theoetic" model which
used the circuit theory of Messers Kirchoff and Ohm, developed in the late 1700's and the early part of the 1800's . Kirchoff's Laws and Ohm's Laws for DC circuits ultimately supported by Heaviside's operational calculus in
the mid 1800's to reflect both DC and AC phenomena. [Heaviside invented the terms reactance, and impedance, etc.] But experimentalists and the "electricians"
of the day found that circuit theory models did not predict everything exactly!

All that said, the circuit-theoretic electro-dynamic model is pretty simple and
accessible to anyone with a modicum of mathematical background, say the equivalent of high school algebra and complex numbers.

Sorry... but if you can't do simple algebra, deal with the square root of minus

one, and manipulate complex numbers then circuit-theoretic models are not your cup of tea.

Get off the train here and go into marketing or the social sciences!

:-)

Circuit theory does a pretty good job of predicting lots of things, but it fails to predict
effects such as skin effect, proximity effect, radiation, etc...

And so the electro-dynamic model was eventually augmented by a newer model which
was more accurate reflects reality more closely. The second stage of the three eras of
electro-dynamic theories was the:

(II) Field-Theoretic Model Era (circa: 1840 - 1910):

The "field-theoretic" model was first formulated the famous Scottish theoretical
physicist James Clerk Maxwell, and rendered in its' modern form by the eccentric,
uneducated, self-taught English genius Oliver Heaviside. Heaviside wrote down
Maxwell's extremely complex theory in the form of four simple vector differential
equations as we now know them. Whilst previously it had taken the Cambridge
educated Maxwell 22 quaternion laced equations to write down the same simple theory!

Heh, heh... Of course Heaviside, a denzien of the London slums, who never went to school
beyond age 16, had the advantage of "simplicity-of-thought" over the Cambridge educated
Maxwell.

All that said, the field-theoretic model is considerably more complicated than the
circuit-theoretic model and is only accessible to those prepared to go beyond high school
algebra and complex numbers into the calculus of vector differential equations.

Sorry but if you are not prepared to go there, as the sixteen year old poor boy from the
slums of mid 1800's London did, then field-theoretic modeling is not your cup of tea, and
you need to go into marketing or the social sciences...

:-)

Field theory is more complicated than circuit theory but it does a pretty good job of

predicting all that circuit theory predicts plus a lot of other things, such as skin effect,
proximity effect, radiation, etc... but even field theory fails to predict the photo-electric
effect, and other interactions of photonic energy and matter, etc...

And so the electro-dynamic model had to be expanded yet again, this third (and final)
theory is called QED or Quantum Electrodynamics.

(III) Quantum-Theoretic Model Era a.k.a. QED (circa: 1900 - 2000)

The quantum-theoretic model was initiated by Einstein in the first decade of the 1900's
to explain the photoelectric effect and was further developed by Pauli, Dirac, Schrodinger,
Planck, and many others and ultimately "simplified", in the Oliver Heaviside style, by
one Richard P. Feynman from the Bronx, NY who also dramatically exposed the cause of the Challenger tragedy with a glass of ice water. For these efforts "Albert"
was awarded the Nobel prize. One can only presume that the Nobel committee did
not feel that the Theory of Relativity a.k.a the "Ultimate Theory of Gravitation", was
worth the prize! Although they did award the prize to that Italian ham radio operator
Guglielmo Marconi! What? :-)

Now the mathematics needed to access QED is considerably more complex than that needed for circuit theory (Algebra and Complex Numbers), field theory (Algebra
and Complex Numbers plus Vector Calculus and Vector Differential Equations).
Indeed to access QED models one needs to understand all of the aforementioned
plus the mathematical Theory of Probability and the Theory of Groups, Rings and Ideals.
If you are not prepared to go there, as that poor boy named "Richard" from the Bronx
was, why then QED is not your cup of tea and you should get off the model train now
and take up marketing or the social sciences...

:-)

It seems today that QED models encompass all prior models and fully explain all
known electro-dynamic phenomena and that mankind does not require further models to augment those at hand to predict electrodynamic reality.

I wonder?

All that said... this does not mean that QED has displaced field-theoretic and
circuit-theoretic concepts and models. Indeed circuit-theroretic and field-theoretic
models are more widely used today than ever before!

Indeed circuit-theoretic models and field-theoretic models are used daily by Engineers
and scientists (Note the capitalization!) on a daily basis. [Engineers make things
people need out of stuff they can get, while scientists... :-)]

Indeed the mathematics and mechanisms of QED and field-theory are much to
complicated and unecessary to make efficient modeling of phenomena that are
quite adequately described by circuit theory. Hence the very popular
SPICE computer programs, originally developed, with US Taxpayer
support, at UC Berkeley in California and widely available for free download,
which are used everywhere today to design both discrete and integrated electronic
circuits from modern Op-Amps to Pentium processors uses the century and
a half old circuit-theoretic models. For an excellent free version of SPICE download
LTSpice from the Linear Technology Corp. web site at:

http://www.linear.com/software/

and run circuit-theoretic models to your heart's content, just don't use SPICE codes
to design antennas or predict the skin effect! :-)

Oliver Heaviside would quickly recognize the SPICE program flow charts and
computer codes were he alive today!

But circuit theory is not complex enough to solve antenna and radiation problems
or skin and proximity effects and so one needs access to models and computer
programs that solve the partial differential vector equations of the Maxwell-Heaviside
field theory. Hence the very popular, US Taxpayer supported, NEC computer
program codes were developed at Lawrence Livermore Labs, also available as free
downloads. Our own Roy Lewallen W7EL provides his EZNEC programs based upon
the free NEC codes for a modest fee.

Download Roy's free demo of EZNEC at:

http://www.eznec.com/index.shtml

and run field-theoretic models to your heart's content, just don't use it to design
photoelectric sensors or Pentium processors! ;-)

Finally if you really need to go there...

There are plenty of QED computer programs available, also widely supported by the US Taxpayers, just google...

An Engineer is a person who knows reality and knows her models, and she... "knows whento hold them and when to fold them".

She uses them to design and build things that people need out of stuff that she can get.

Don't forget to thank the, often vilified, US Taxpayers for their unwavering support of
the development of all of the free computer program implementations of circuit-theoretic,
field-theoretic and QED models with the computer programs called SPICE, NEC and
other QED kinda stuff...

Happy Holidays, y'all!

--
Peter K1PO
Indialantic By-the-Sea, FL
Hey... "surf's up"!

5600. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 12:43:12 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <T-Gdncj58fh5U0yiRVn-sQ@crocker.com>
Source record: 103565

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0312051715.424ac2bc@posting.google.com...
> As far as our problems in the U.S.A. Reg. As I pointed out

politics... plonk!

5601. Re: Form Art Uwinn?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 13:16:56 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <cFkAb.245588$Dw6.843397@attbi_s02>
Source record: 103566

> It's really strange....
>
> Aoccdrnig to a rscheearch at an Elingsh uinervtisy, it deosn't mttaer in waht
> oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht frist and
> lsat ltteer is at the rghit pclae. The rset can be a toatl mses and you can
> sitll raed it wouthit porbelm. Tihs is bcuseae we do not raed ervey lteter by
> it slef but the wrod as a wlohe.
> Initsereg!!
> <<
>
> So throw your speelcheckers out :-)
>

Hwta??

5602. Re: Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 13:19:17 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <uol3tvse5hle7camonng6ehplktjpgrb19@4ax.com>
Source record: 103567

It's possible that this one has the toroids in it, I've never taken it apart. Don't remember who made it.

5603. remote sensing--- need schematics to build

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 14:36:25 UTC
From: easyarm <easyarm@on_earth.com>
Message-ID: <bqsppp$epd1@imsp212.netvigator.com>
Source record: 103469

greeting,

http://dtusat.dtu.dk/group.php?c_gid=7&PHPSESSID=8a15807b22370d1ff7c854a08ba71d19

I would to built radio transceiver so that everyone can do the remote sensing.

is this a right choice ?

http://www.amsat.org/amsat/articles/kd2bd/9k6modem/9k6modem.html

5604. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 14:40:43 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <LTIAb.4242$NN.449196@news1.news.adelphia.net>
Source record: 103568

Bob Miller wrote:
> On Fri, 05 Dec 2003 18:52:30 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>
>
>>What few dipole users would admit (because they love to crow about not
>>having radials) is that if you add radials, you can further improve
>>your dipole performance up AND tangentially.
>
>
> Where would I attach radials on a dipole?

Just remove the bias plys and substitute the radials! 8^)

But seriously, they are set the same way as you would on a vertical, in
the ground. And Richard is right.

- Mike KB3EIA -

5605. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 14:41:16 UTC
From: Bruce <xxx@yyy.zzz>
Message-ID: <Xns9449635E9A444xxxyyyzzz@216.77.188.18>
Source record: 103470
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Midwest Kid" <NoSpamPlease@aol.com> wrote in
news:6hezb.404210$Tr4.1164670@attbi_s03:

>
> "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> news:C54zb.13226$5d.9130@bignews4.bellsouth.net...
>>
>> And they shouldn't have to put up with people moving in
>> long before the ham did and using "some" idiot CCR crap
>> to make him take down his tower(s).
If that's all that is available in your area, move to a
> new city or state. If you want to stay, but a Honda and move further
> away. Everything we have in life is a choice.

Oh how you make it sound so easy. Maybe it is where you live.

-Bruce

5606. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 14:56:06 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031206095606.16046.00000208@mb-m21.aol.com>
Source record: 103471

Peter K1PO among other wow stuff:

> [Engineers make things people need out of stuff they can get, while scientists... :-)]

...take a free ride, write the papers, get government grants, fancy titles, give engineers hard time by nitpicking on 0.00001, and .... :-(

In Europe engineers get to use the title Ing. or Dipl.Ing. to indicate that they completed studies and are working on improving the tools for mankind. In Canada they use P.Eng., here in Hamerica they are the best kept secret, underpaid, overworked, oversued. Just look at Nikola Tesla or ask any student. Who? What?

Yuri
:-(da ridiculed peng)-:

5607. Re: Van Gordon G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 15:04:16 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <itr3tvo43ee7n22j401sfgam3kqivo370g@4ax.com>
Source record: 103472

On Thu, 04 Dec 2003 15:59:45 +0000, pointyhead <ftscum@hotmail.com>
wrote:

>Is the plastic "lump" that is used to join the ladder line to coaxial cable
>really a balun or simply a "ladder line to coax adaptor" as they put it? I'd be
>grateful for any insight into what it actually is. Many thanks.
>
>Best 73 es Dx

The AES catalog calls it a "transformer/coupler".

Bob
k5qwg

5608. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 16:00:18 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <m2nAb.1540$7p2.705@newsread2.news.atl.earthlink.net>
Source record: 103473

Yuri:

[snip]
> In Europe engineers get to use the title Ing. or Dipl.Ing. to indicate
that
> they completed studies and are working on improving the tools for mankind.
In
> Canada they use P.Eng., here in Hamerica they are the best kept secret,
> underpaid, overworked, oversued. Just look at Nikola Tesla or ask any
student.
> Who? What?
>
> Yuri
> :-(da ridiculed peng)-:
[snip]

So you are saying that Engineers are the Rodney Dangerfield of American
society!

Yep, I do believe that you are correct.

First manufacturing and then Engineering follows... it's getting worse
over here year by year with more and more "high tech" Engineering work
being done by our far eastern brothers and less here in the West. Each
year the next generation of Engineers I see graduating from our schools
seem to exhibit less and less knowledge and skill.

It happened with consumer electronics and ham radio equipment lo these
many years ago today it is software development and soon "all" Engineering
will be gone from the West.

Eventually there will be no more Engineers in the West who understand
technology, just a bunch of "technology operators" with great social
science and marketing skills operating the video games of life!

Only be a few of us old-time "antenna gurus" will recall when and how
the A/D and D/A converters got put on the outside of the antenna
connectors on our SDR's!!! And... all the rest will olny have Art
Uwnin explagnini to htem woh thigns wrk.

Not a pretty picture!

;-)

--
Peter K1PO
Indialantic By-the-Sea, FL

5609. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 16:49:52 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd208fc$1_5@corp.newsgroups.com>
Source record: 103474

Reg Edwards wrote:
> Antennas and transmission lines are not just analogues - Antennas
> ARE transmission lines with controlled 'leakage'. In fact, as people
> forever complain on these walls, it is impossible to prevent a transmission
> line FROM leaking.

The reason they are considered separately is that their functions are
different. Steps are taken to minimize transmission line 'leakage'.
Steps are taken to maximize antenna 'leakage'.

I was surprised that, for the purpose of a ballpark conceptual analysis,
Kraus considers the reflected current on a dipole to be equal to the
forward current. But then I remembered 50% of the power can be radiated
while the current drops by only 29.3%.

Here's what Kraus says: "It is generally assumed that the current
distribution of an infinitesimally thin antenna is sinusoidal and
that the phase is constant over a 1/2WL interval ... A sinusoidal
current distribution may be regarded as the standing wave produced
by two uniform (unattenuated) traveling waves of equal amplitude
moving in opposite directions along the antenna."

Exactly the same thing can be said about a lossless unterminated
transmission line. If lumped circuit analysis doesn't work on
transmission lines with reflections, why should it be expected
to work on antennas with reflections?
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5610. Re: remote sensing--- need schematics to build

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 16:54:29 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <jbGdnUTwWbpUlE-iRVn-sA@crocker.com>
Source record: 103475

"easyarm" <easyarm@on_earth.com> wrote in message
news:bqsppp$epd1@imsp212.netvigator.com...
> greeting,
>
>
http://dtusat.dtu.dk/group.php?c_gid=7&PHPSESSID=8a15807b22370d1ff7c854a08ba
> 71d19
>
> I would to built radio transceiver so that everyone can do the remote
> sensing.
>
> is this a right choice ?
>
> http://www.amsat.org/amsat/articles/kd2bd/9k6modem/9k6modem.html
>

it doesn't look like it, the amsat article is about a 9600 baud modem, the
dtusat says it uses 2400 baud. it also sounds like the dtusat uses a not
quite standard transmission format so you may have to wait till they publish
the details and how to decode it.

5611. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 16:58:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd20b08$1_5@corp.newsgroups.com>
Source record: 103476

Peter O. Brackett wrote:
> And so the electro-dynamic model had to be expanded yet again, this third
> (and final)

So far, :-)

> theory is called QED or Quantum Electrodynamics.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5612. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 17:41:30 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <hwoAb.1061$IF.303@bignews4.bellsouth.net>
Source record: 103477
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Bruce" <xxx@yyy.zzz> wrote in message
news:Xns9449635E9A444xxxyyyzzz@216.77.188.18...
> "Midwest Kid" <NoSpamPlease@aol.com> wrote in
> news:6hezb.404210$Tr4.1164670@attbi_s03:
>
> >
> > "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
> > news:C54zb.13226$5d.9130@bignews4.bellsouth.net...
> >>
> >> And they shouldn't have to put up with people moving in
> >> long before the ham did and using "some" idiot CCR crap
> >> to make him take down his tower(s).
> If that's all that is available in your area, move to a
> > new city or state. If you want to stay, but a Honda and move further
> > away. Everything we have in life is a choice.
>
> Oh how you make it sound so easy. Maybe it is where you live.
>
> -Bruce

Move to NC! While I am sure there are HOA communities as the population
grows, there are still plenty
of older neighborhoods with excellent homes without HOAs here in my state.
And I have never had trouble finding a place to live without 'em. Once
checked out
a neighborhood in my town called YorkChester. Many
older homes of many styles and sizes. It had been desig-
nated an historic neighborhood and you couldn't even change the style of
your front door without dealing with
the old blue-haired lady with the peepovers. NOPE! I
ain't moving there. But I found a nice place on a dead end street where
such things had never been thought of.
Been here for 17 years.

Maybe it is more difficult in, say, California (the land of
fruits and nuts--dare I say it), but it is still possible to find
antenna-friendly places to live if one really wants to.

I have no sympathy for someone who moves into such a place where
restrictions exist KNOWING it. I am just
fiesty enough and ornery enough not to let someone else
tell me what I can do on my own property. One's property rights should
reign supreme; i.e., your rights end

at my property line, and mine end at yours. Most people
are sincerely enough for such rules not have to exist. The
neighborhood will conform by osmosis or "peer" pressure. If a neighborhood
has junk cars in it, look at the
rest of the houses; they likely will too. If there are mostly
frame "shotgun" houses, the rest are likely to be, too. If
the neighborhood is nice, brick/frame, trimmed hedges, mown lawns, *most*
all the others will be, too. Choose
your neighbors carefully and check for HOAs and coven-
ents FIRST.

Jerry

5613. the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 17:50:03 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87k7596dkk.fsf@jidanni.org>
Source record: 103491

Dear antenna pros, I've always taken it for grunted about the
300/75/50 ohms of TV ribbon, coax, etc. But how does one measure it?
My ohmsmeter doesn't budge. Is there some standard formula, like wrap
grandma 100 times, with the far end connected to a cheeseburger in her
mouth, the near end finally displaying the characteristic 300/75/50
whatever ohmses?

5614. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 17:53:44 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd217f3$1_3@corp.newsgroups.com>
Source record: 103478
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Jerry Oxendine wrote:
> Move to NC!

Or TX, or AZ. I didn't even have an HOA in San Jose, CA.
--
73, Cecil http://www.qsl.net/w5dxp

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5615. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 18:06:24 UTC
From: Michael Tope <W4EF@dellroy.com>
Message-ID: <AUoAb.316279$9E1.1574338@attbi_s52>
Source record: 103479

>
> Exactly the same thing can be said about a lossless unterminated
> transmission line. If lumped circuit analysis doesn't work on
> transmission lines with reflections, why should it be expected
> to work on antennas with reflections?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

While I agree with this statement, it still doesn't prove anything
about the value of the characteristic impedance and electrical
length of a loading coil and the relationship between these
parameters and the inductive reactance of the loading coil.
This is what bothers me about the claims that the "cosine law"
can be used to predict the current taper in the loading coil.
Seems that there is a big leap of faith taking place when going
from the observation (which I believe is correct) that current
taper is caused by standing waves on the resonant antenna,
and a "law" that says what we can predict that taper with a
simple formula without saying anything about the shunt
capacitance per unit length and series inductance per
unit length of the loading coil, quantities which normally
bear directly on the characteristic impedance and velocity
of propagation of the EM structure (at least in an
analogous transmission line case).

73 de Mike, W4EF.....................................

>
> Exactly the same thing can be said about a lossless unterminated
> transmission line. If lumped circuit analysis doesn't work on
> transmission lines with reflections, why should it be expected
> to work on antennas with reflections?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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5616. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 18:57:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6i94tvof7uaqerp4cf0n0u8ihn8616iga6@4ax.com>
Source record: 103480

On Sat, 6 Dec 2003 03:54:24 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>I produced the brief semi-serious description just for the purpose described
>in the subject line

So, are you feeling better? ;o)

5617. current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 19:20:59 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312061120.4f67c8ed@posting.google.com>
Source record: 103481

Yuri'
Ther is no reason that you can't be a P.E. if you are worthy of it
Since you entered this side of the pond in Canada and if you had
completed your studies in the U.K. then it is recognised and you are
qualified to become a P.E.
If you don't do your studies in the U.K. or some other Countries then
you may well have had to take the Canadian exam in a similar way in
the individual States do in the U.S. And why not since even those born
here have to pass the test.
Apply at your home state to take the examination if you feel you
are worthy of it because of your previous studies and knoweledge.
If you haven't walked the walk then you cannot possibly do the talk,
at least not with any credability. Knocking those who have done the'
walk'
such as Tom who is a well known expert in the field of Antennas, by
talking of a project that you 'may' do someday to prove your own worth
really doesn't cut it. Usually when a person resorts to personal
attacks it signifies
an expiration of further knoweledge just the same way when a person
resorts
to vulgar language when he has a stinted vocabulary.
Where do you fit in Yuri....? An antenna expert?

Have a nice Xmas
Art

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031206095606.16046.00000208@mb-m21.aol.com>...
> Peter K1PO among other wow stuff:
>
> > [Engineers make things people need out of stuff they can get, while
> scientists... :-)]
>
> ...take a free ride, write the papers, get government grants, fancy titles,
> give engineers hard time by nitpicking on 0.00001, and .... :-(
>
> In Europe engineers get to use the title Ing. or Dipl.Ing. to indicate that
> they completed studies and are working on improving the tools for mankind. In
> Canada they use P.Eng., here in Hamerica they are the best kept secret,
> underpaid, overworked, oversued. Just look at Nikola Tesla or ask any student.
> Who? What?
>
> Yuri
> :-(da ridiculed peng)-:

5618. Re: remote sensing--- need schematics to build

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 19:32:24 UTC
From: harshit <hsuri@usc.edu>
Message-ID: <bqtas3$n8n$1@gist.usc.edu>
Source record: 103482

btw have they been able to contact the DTU Sat ..last time i checked they
werent able to contact it?

"easyarm" <easyarm@on_earth.com> wrote in message
news:bqsppp$epd1@imsp212.netvigator.com...
> greeting,
>
>
http://dtusat.dtu.dk/group.php?c_gid=7&PHPSESSID=8a15807b22370d1ff7c854a08ba
> 71d19
>
> I would to built radio transceiver so that everyone can do the remote
> sensing.
>
> is this a right choice ?
>
> http://www.amsat.org/amsat/articles/kd2bd/9k6modem/9k6modem.html
>
>
>
>
>

5619. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:14:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bmd4tvgoatf8b0sasg4okq90mh2ov5gl0m@4ax.com>
Source record: 103483

On 6 Dec 2003 11:20:59 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Ther is no reason that you can't be a P.E. if you are worthy of it
...
>Where do you fit in Yuri....? An antenna expert?

Hi Art,

This is rec.radio.AMATEUR.antenna

When the discussion descends to propping up professional shingles like
phD or PE then it should be redirected to
rec.radio.ego.support

In this forum there are plenty enough who are content to act like a
phD or PE (or dress like one).

73's
Richard Clark, KB7QHC

5620. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:23:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqtdrgrul1@sparta.btinternet.com>
Source record: 103484

You have missed the point again. It is I who should be asking YOU if you are feeling better ;o)

5621. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:27:00 UTC
From: emma_hentenna@hotmail.com
Message-ID: <7d290799.0312061227.26b0bb33@posting.google.com>
Source record: 103485

Hi Richard,

I tried it. I considered my Hentenna as a transmission line and I
applied the standing wave theory according to "THE ARRL ANTENNA BOOK
18th Ed 1997, Fig 65".
The currents flow the antenna as shown below:

http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/standingwavew/standingwaves.ht
m

Obviously, the currents of the 3 parallel horizontal branches are
flowing in the same direction. Their sum gives the total field. On the
other hand, we have 3 antiparallel pairs of currents flowing through
the vertical branches. Therefore the field becomes equal to zero.
As a result, the arrangement radiates and it can not be considered as
a transmission line.

Emma.

5622. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:40:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2hf4tvgp3caq2d1r1ngffpulhvsq70sf1a@4ax.com>
Source record: 103486

On Sat, 6 Dec 2003 20:23:12 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>You have missed the point again. It is I who should be asking YOU if you are
>feeling better ;o)
>
Never been better OM. I'm off to Buenos Aires for a couple of weeks
to escape the rain. Hope you are feeling better soon.

73's
Richard Clark, KB7QHC

5623. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:41:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd23f2f_1@corp.newsgroups.com>
Source record: 103487

Michael Tope wrote:
> This is what bothers me about the claims that the "cosine law"
> can be used to predict the current taper in the loading coil.

It is certainly NOT a "cosine law". It is at best an approximation.
From _Antennas_For_All_Applications_ by Kraus & Marhefka, third
edition, page 464: "The difference between these (dashed) curves
and the solid curves is not large but is appreciable." The solid
curves are cosine curves. The dashed curves, indicating the actual
current, are not cosine curves but are relatively close approximations.

The only time pure cosine curves will result for net current is in
a lossless situation which is certainly not entirely valid or accurate
for a radiating antenna.

If the magnitudes of the forward current and reflected currents are
not equal, there will be a drift away from a pure cosine shape.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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5624. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 20:59:44 UTC
From: Jim@nauticon.net
Message-ID: <3FD24340.FE9CACF0@nauticon.net>
Source record: 103488
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Jerry, my daughter lives in Cornelius NC, (which is as you know just a
few miles north of you) they have an HOA but it apparently doesn't mean
a darn thing.

The neighbors are moving into $220,000 new homes, they put up metal
sheds chain link fences, etc. which both are against the HOA rules. NC
is no different than any other state, they all have the dreaded HOA's.
From what I see, the HOA rules are only enforced when some damn nosey
neighbor want's to put there nose into your business.

God Bless America for our Freedoms, where ever they may be.

Jerry Oxendine wrote:
>
> Move to NC! While I am sure there are HOA communities as the population
> grows, there are still plenty
> of older neighborhoods with excellent homes without HOAs here in my state.
> And I have never had trouble finding a place to live without 'em. Once
> checked out
> a neighborhood in my town called YorkChester. Many
> older homes of many styles and sizes. It had been desig-
> nated an historic neighborhood and you couldn't even change the style of
> your front door without dealing with
> the old blue-haired lady with the peepovers. NOPE! I
> ain't moving there. But I found a nice place on a dead end street where
> such things had never been thought of.
> Been here for 17 years.
>
> Maybe it is more difficult in, say, California (the land of
> fruits and nuts--dare I say it), but it is still possible to find
> antenna-friendly places to live if one really wants to.
>
> I have no sympathy for someone who moves into such a place where
> restrictions exist KNOWING it. I am just
> fiesty enough and ornery enough not to let someone else
> tell me what I can do on my own property. One's property rights should
> reign supreme; i.e., your rights end
> at my property line, and mine end at yours. Most people
> are sincerely enough for such rules not have to exist. The
> neighborhood will conform by osmosis or "peer" pressure. If a neighborhood
> has junk cars in it, look at the
> rest of the houses; they likely will too. If there are mostly
> frame "shotgun" houses, the rest are likely to be, too. If

> the neighborhood is nice, brick/frame, trimmed hedges, mown lawns, *most*
> all the others will be, too. Choose
> your neighbors carefully and check for HOAs and coven-
> ents FIRST.
>
> Jerry

5625. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 21:02:50 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031206160250.26118.00000308@mb-m06.aol.com>
Source record: 103489

```
... snip sinp
>
>Not a pretty picture!
>
>;-)
>
>--
>Peter K1PO
>Indialantic By-the-Sea, FL

Right on Peter,
Maybe time for engineers to get into politics, replace lawyers and dumb
politicians in running the country. Get some sanity into governing because it
doesn't look too promising. Seeing dummycRATS spewing venom at president with
loud support from the "media", brainwashing illiterates just doesn't look so
good. I hope that country is being pushed to the extreme only to kick back and
shake the liberal commie establishment back to the caves.

73 Yuri
```

5626. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 21:57:14 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vt4k4q6942q0f6@corp.supernews.com>
Source record: 103490

Dear Peter:
I would have sent this to you privately, but you do not provide a
valid E-mail address.

Well done on presenting the sequence of understanding and
emphasizing the role of mathematics.

In "Hamerica" some real Engineers are P.E.s. It is not just for
Canadians.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

5627. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 22:43:26 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vt4q1hrm8v6la5@corp.supernews.com>
Source record: 103494

The impedance of a transmission line is dependent on the physical characteristics such as conductor spacing, conductor size and the insulation characteristics. Impedance is an AC parameter and can't be measured with an ordinary DC ohmeter. But if you had an infinite length of any transmission line unterminated and connected an impedance bridge, it would read the characteristic impedance. The ARRL handbook or any decent antenna books will have the formulas you want and IIRC there's no factors for grandmas or cheeseburgers, hi hi.
hank wd5jfr
"Dan Jacobson" <jidanni@jidanni.org> wrote in message news:87k7596dkk.fsf@jidanni.org...
> Dear antenna pros, I've always taken it for grunted about the
> 300/75/50 ohms of TV ribbon, coax, etc. But how does one measure it?
> My ohmsmeter doesn't budge. Is there some standard formula, like wrap
> grandma 100 times, with the far end connected to a cheeseburger in her
> mouth, the near end finally displaying the characteristic 300/75/50
> whatever ohmses?

5628. Re: Anyone using antennas for NVIS?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 23:27:59 UTC
From: whagen6@cs.com
Message-ID: <20031206182759.21882.00000176@mb-m19.news.cs.com>
Source record: 103493

How did you find out? That is exactly what I use as a stealth antenna. I have a bicycle out in front of theapartment in the bike rack, with the very whip you described with the triangle orange flag on the top to decieve the cops, and I run coax from the house to the bike, running it up the kickstand, across the frame to the 'flag' on the back. With it parked in the bike rack here at the apartment complex with all the other kid's bikes, no-one seems to notice a thing. I keep the power down on transmit just in case some kid just happens to be getting his bike from the bike rack at the same time I am txing.
jkhh

5629. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-06 23:30:35 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <356dnZcc19Nx_k-iRVn-iw@ctc.net>
Source record: 103492

> Dear antenna pros, I've always taken it for grunted about the
> 300/75/50 ohms of TV ribbon, coax, etc. But how does one measure it?
> My ohmsmeter doesn't budge. Is there some standard formula, like wrap
> grandma 100 times, with the far end connected to a cheeseburger in her
> mouth, the near end finally displaying the characteristic 300/75/50
> whatever ohmses?

You don't measure it with most instruments you would have . It is a calculated value from the size and spacing of the conductors and the insulation between them. There are ways to measure it but most would not have them.

Here is a place you can go for an explination.

http://www.epanorama.net/documents/wiring/cable_impedance.html

5630. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 00:41:14 UTC
From: jgboyles@aol.com
Message-ID: <20031206194114.09506.00000258@mb-m17.aol.com>
Source record: 103495

> I've always taken it for grunted

I have often grunted when taking transmission line measurments, but I try to keep it to a low volume.
Your ohmmeter will budge if you terminate the line with a short, or some resistance. The Characteristic Impedance (300/75/50 ohms) is an AC or RF measurement, and can not be done with a DC VOM. The devices that the average Ham has on hand include, antenna analyzer, grid dip meter, and rf signal generator. Transmission line measurements with these devices can been found in the ARRL books or with the instruction books with the instruments.
73 Gary N4AST

5631. Gates Radio amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 01:30:05 UTC
From: amdx <amdx@att.net>
Message-ID: <xovAb.405370$0v4.20019460@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103496

I am repairing a Gates Radio Co. amplifier, it is labeled,
Power Amplifier
Model # 992-1715-001
Serial # 73-1184-004
Power Amplifer may be misleading, I suspect the
output is less than 10 watts.
I'm looking for a schematic or info leading me to a schematic.
Would you have any information?

Thanks
Mike

5632. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 02:10:15 UTC
From: James <hoa_no_thanks@nobody.com>
Message-ID: <3FD28C04.ECE5BCE5@nobody.com>
Source record: 103497
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Same where I live in Raleigh NC, only enforce these hoa rules when it is convenient.

Case in point, somebody put in a pool in backyard, not allowed in hoa and county rules,
homeowner stops paying hoa dues, hoa filed lein, homeowner filed lawsuit.
His/her rights of due process were violated.
Homeowner collected over $ 350,000 from our hoa, the insurance only covered $ 200,000 and we the rest of the hood had to pay up with increase in hoa dues.
Homeowner sells house and moved out. Did the hoa board learn ? no !
They changed rules so now you need three signed complaints from separate neighbors before
the hoa will look into anything.

One guy rides a mobility scooter and he takes photos of anything he don't like to see.

I can't move out because the homes are too expensive here and almost all have hoa stuff.
I could move out of the county to the country but the commute and schools are a factor.
hoa rules not problem for me, nobody can see my antenna and if there is a contest,
I put them up and take them down a day or two later.

Jim@nauticon.net wrote:

> Jerry, my daughter lives in Cornelius NC, (which is as you know just a
> few miles north of you) they have an HOA but it apparently doesn't mean
> a darn thing.
>
> The neighbors are moving into $220,000 new homes, they put up metal
> sheds chain link fences, etc. which both are against the HOA rules. NC
> is no different than any other state, they all have the dreaded HOA's.
> From what I see, the HOA rules are only enforced when some damn nosey
> neighbor want's to put there nose into your business.
>
> God Bless America for our Freedoms, where ever they may be.
>
> Jerry Oxendine wrote:
> >
> > Move to NC! While I am sure there are HOA communities as the population
> > grows, there are still plenty

> > of older neighborhoods with excellent homes without HOAs here in my state.
> > And I have never had trouble finding a place to live without 'em. Once
> > checked out
> > a neighborhood in my town called YorkChester. Many
> > older homes of many styles and sizes. It had been desig-
> > nated an historic neighborhood and you couldn't even change the style of
> > your front door without dealing with
> > the old blue-haired lady with the peepovers. NOPE! I
> > ain't moving there. But I found a nice place on a dead end street where
> > such things had never been thought of.
> > Been here for 17 years.
> >
> > Maybe it is more difficult in, say, California (the land of
> > fruits and nuts--dare I say it), but it is still possible to find
> > antenna-friendly places to live if one really wants to.
> >
> > I have no sympathy for someone who moves into such a place where
> > restrictions exist KNOWING it. I am just
> > fiesty enough and ornery enough not to let someone else
> > tell me what I can do on my own property. One's property rights should
> > reign supreme; i.e., your rights end
> > at my property line, and mine end at yours. Most people
> > are sincerely enough for such rules not have to exist. The
> > neighborhood will conform by osmosis or "peer" pressure. If a neighborhood
> > has junk cars in it, look at the
> > rest of the houses; they likely will too. If there are mostly
> > frame "shotgun" houses, the rest are likely to be, too. If
> > the neighborhood is nice, brick/frame, trimmed hedges, mown lawns, *most*
> > all the others will be, too. Choose
> > your neighbors carefully and check for HOAs and coven-
> > ents FIRST.
> >
> > Jerry

5633. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 02:12:18 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312061812.7f79a986@posting.google.com>
Source record: 103498

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<bmd4tvgoatf8b0sasg4okq90mh2ov5gl0m@4ax.com>...
> On 6 Dec 2003 11:20:59 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
> >Ther is no reason that you can't be a P.E. if you are worthy of it
> ...
> >Where do you fit in Yuri....? An antenna expert?
>
> Hi Art,
>
> This is rec.radio.AMATEUR.antenna
>
> When the discussion descends to propping up professional shingles like
> phD or PE then it should be redirected to
> rec.radio.ego.support
>
> In this forum there are plenty enough who are content to act like a
> phD or PE (or dress like one).
>
> 73's

I do like that one Richard
I felt no different when I retired and became
a 'nothing'.Its amasing how some who read that
feel they have an oportunity to attack to polish
their own ego's and wannabee ambitions.
My latest antenna works just great even tho I have
not got the nod of approval from those who flaunt
the path to Q.E.D. or other erstwhile experts.
The bandwidth I have for top band is just about
perfect with a 7 khz bandwidth (2: 1 ratio) that
follows the radio's frequency. And some who can
'talk the talk' say I should throw the model away!!!
I have seen pictures of the beach where you are
going and it looks fabulous but I understand it
is the land of pickpockets as well as female
jigglers.
Have fun
Art

> Richard Clark, KB7QHC

5634. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 02:48:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bqu4diddl1@titan.btinternet.com>
Source record: 103499

Dear OM Rich,

I have no wish to be unkind but who the hell is Kraus ?

Of what particular sect is HE the Saviour?

99.999 percent of radio amateurs, either cannot afford to obtain such academic works, or have no chance of getting their hands on unsmudged copies within the next 10 years by which time they will have lost all interest, or, in any case, of ever understanding what the highly impractical authors are waffling about.

As for other educational sources, this newsgroup is amongst the most efficient sources of dis-information ever invented.

Have you ever read any of Bertrand Russels's philosophical works on Logic. I havn't!

But radio is just another hobby. For a few years I gazed expectantly at Guppies in tropical fish tanks. There was an extended period of being a TN (Telescope Nuts). Home-brewed 8" Newtonian mirrors and such stuff.

Incidentally, at Chance's Glass Works from where I obtained my mirror blanks, 2 miles from where I sit at this keyboard, all the World's optical machinery was manufactured for installation in lighthouses still saving the lives for 100 years of many thousands of international mariners and fishermen.. At a distance of 3 miles the world's first iron-hulled steamship was made. At distance of 1.5 miles were forged the many giant links of the anchor chains of the Transatlantic Queens Mary and Elizabeth. Underneath the foundations of this house is a flooded mine which was exhausted of coal 75 years ago. Local coal and limestone was used in the blast furnces to produce millions of tons molten iron. At a distance of 4 miles remain the hallowed walls of the factory within which Boulton and Watt constructed the first of hundreds of giant condensing steam engines to drive not just local factories but world-wide heavy industrial machinery, textile mills, mine lifts, and land irrigation pumps. In the Birmingham Science Museum is a steam hammer, the life expectancy of the operators being about 2 years. At a distance of 4 miles is the more recent laboratory at Birmingham (the original) University where, under the nightly rain of incendiaries and high-explosives, Randall and Boot constructed the original 50 KW, 3000 Mc/s, Pulsed Cavity Magnetron. Churchill was obliged to swap it for bunch of pre-WW1 rusty destroyers plus several minor colonies of the British Empire. We wuz robbed. The Earth's crust in these parts is the thinnest anywhere on Earth. This house is on the slopes of Rowley Hills, a long extinct volcano, the granite of which (renowned as Rowley Rag) is the world's finest road-making material. Engineers of the disciplined Roman Legions first

recognised its durability 2000 years ago. Thousands of tons of Rag are still blasted, crushed, graded and conveyed away to distant parts every day. We survive in the midst of the dusty, soot-blackened, tainted, remains of History!

Talking of volcanos, when is Yellowstone, much bigger than Crakatoa, due to take off?

However, perhaps after occasionally doing something useful, it will be found that Internet entertainment, amusement and verbal newsgroup sporting activities form worthwhile passtimes. When our obese stomachs have been thrice-each-day distended, and the roof doesn't leak, room temperature is a comfortable 25 degrees C, the G5RV is in working order, and there's a month's supply of Viagra in the medicine cabinet conveniently mounted on the bathroom wall, why should we not sit back and enjoy ouselves in the short time still available to the human race as Armageddon visibly progresses by every news bulletin?

By the way, on the subject of analysing antenna performance in the rather obvious terms of transmission lines, has it occurred to anybody to ask what is Zo = Ro+jXo of a magloop? Or am I just a Troll?

As a confirmed addict to lemonade, tonight I am thinning down the wicked stuff with Scotch.

Reg, G4FGQ

==========

"Richard Harrison" wrote -
> Henry Kolesnik wrote:
> "---I wonder if it (battery-powered corkscrew) could be the basis of a
> "Corkscrew Antenna" to compete with the screwdriver antenna?"
>
> We should consult Kraus, the developer of most of those helical
> antennas.
>
> Best regards, Richard Harrison, KB5WZI
>

5635. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 03:21:13 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <J0xAb.5934$NN.673502@news1.news.adelphia.net>
Source record: 103500

Reg Edwards wrote:
> Dear OM Rich,
>
> I have no wish to be unkind but who the hell is Kraus ?

Darned if I know!

> Of what particular sect is HE the Saviour?
>
> 99.999 percent of radio amateurs, either cannot afford to obtain such
> academic works, or have no chance of getting their hands on unsmudged copies
> within the next 10 years by which time they will have lost all interest, or,
> in any case, of ever understanding what the highly impractical authors are
> waffling about.
>
>
> As for other educational sources, this newsgroup is amongst the most
> efficient sources of dis-information ever invented.

Is that the same as B.S?

>
> Have you ever read any of Bertrand Russels's philosophical works on Logic.
> I havn't!
>
>
> But radio is just another hobby. For a few years I gazed expectantly at
> Guppies in tropical fish tanks. There was an extended period of being a TN
> (Telescope Nuts). Home-brewed 8" Newtonian mirrors and such stuff.

Ahh, another thing we have in common! I enjoy making telescopes. I've
made a 12.5 inch and a 6.5 inch reflector. Great hobby, but the skies
are so often cloudy, so I found amateur radio.

> Incidentally, at Chance's Glass Works from where I obtained my mirror
> blanks, 2 miles from where I sit at this keyboard, all the World's optical
> machinery was manufactured for installation in lighthouses still saving the
> lives for 100 years of many thousands of international mariners and
> fishermen.. At a distance of 3 miles the world's first iron-hulled steamship
> was made. At distance of 1.5 miles were forged the many giant links of the
> anchor chains of the Transatlantic Queens Mary and Elizabeth. Underneath the
> foundations of this house is a flooded mine which was exhausted of coal 75
> years ago. Local coal and limestone was used in the blast furnces to produce
> millions of tons molten iron. At a distance of 4 miles remain the hallowed
> walls of the factory within which Boulton and Watt constructed the first of
> hundreds of giant condensing steam engines to drive not just local factories

> but world-wide heavy industrial machinery, textile mills, mine lifts, and
> land irrigation pumps. In the Birmingham Science Museum is a steam hammer,
> the life expectancy of the operators being about 2 years. At a distance of
> 4 miles is the more recent laboratory at Birmingham (the original)
> University where, under the nightly rain of incendiaries and
> high-explosives, Randall and Boot constructed the original 50 KW, 3000 Mc/s,
> Pulsed Cavity Magnetron. Churchill was obliged to swap it for bunch of
> pre-WW1 rusty destroyers plus several minor colonies of the British Empire.
> We wuz robbed. The Earth's crust in these parts is the thinnest anywhere on
> Earth. This house is on the slopes of Rowley Hills, a long extinct volcano,
> the granite of which (renowned as Rowley Rag) is the world's finest
> road-making material. Engineers of the disciplined Roman Legions first
> recognised its durability 2000 years ago. Thousands of tons of Rag are still
> blasted, crushed, graded and conveyed away to distant parts every day. We
> survive in the midst of the dusty, soot-blackened, tainted, remains of
> History!
>
>
> Talking of volcanos, when is Yellowstone, much bigger than Crakatoa, due to
> take off?

Could be any time! Did you know that as the earth's crust moves over the
hot spot, the volcano moves south and east? If you ever get the chance
go there. Perhaps the weirdest beautiful place on earth.

>
> However, perhaps after occasionally doing something useful, it will be found
> that Internet entertainment, amusement and verbal newsgroup sporting
> activities form worthwhile passtimes. When our obese stomachs have been
> thrice-each-day distended, and the roof doesn't leak, room temperature is a
> comfortable 25 degrees C, the G5RV is in working order, and there's a
> month's supply of Viagra in the medicine cabinet conveniently mounted on the
> bathroom wall, why should we not sit back and enjoy ouselves in the short
> time still available to the human race as Armageddon visibly progresses by
> every news bulletin?

Yeah, but you don't have to be so cheerful about it! <grin>

> By the way, on the subject of analysing antenna performance in the rather
> obvious terms of transmission lines, has it occurred to anybody to ask what
> is Zo = Ro+jXo of a magloop? Or am I just a Troll?
>
> As a confirmed addict to lemonade, tonight I am thinning down the wicked
> stuff with Scotch.

ARG, ruining good lemonade like that! But then I'm not fond of Scotch -
the drink - the people are just fine.

- Mike KB3EIA -

5636. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 03:24:16 UTC
From: tdonaly@aol.com
Message-ID: <20031206222416.15352.00000386@mb-m03.aol.com>
Source record: 103501

Reg wrote,
(snip)
>
>As a confirmed addict to lemonade, tonight I am thinning down the wicked
>stuff with Scotch.
>----
>Reg, G4FGQ

You put lemonade in good Scotch Whiskey? Aren't you
afraid of being lynched by your neighbors?
73,
Tom Donaly, KA6RUH

5637. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 04:12:57 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <dNxAb.451881$Fm2.447511@attbi_s04>
Source record: 103502

Tdonaly wrote:
> Reg wrote,
> (snip)
>
>>As a confirmed addict to lemonade, tonight I am thinning down the wicked
>>stuff with Scotch.
>>----
>>Reg, G4FGQ
>
>
> You put lemonade in good Scotch Whiskey? Aren't you
> afraid of being lynched by your neighbors?
> 73,
> Tom Donaly, KA6RUH
>
>
I won't even put one ice cube in Scotch!!

5638. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 04:21:32 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <gVxAb.444125$HS4.3497784@attbi_s01>
Source record: 103503

As stated in other responses, it is not measured with simple instruments.

Every wire has self inductance. It can be calculated using commonly available equations.

Every pair of wires has self capacitance. It can be calculated using commonly available equations.

So, the 300/75/50 ohm term, characteristic impedance, is the square root of L/C

W1MCE

Dan Jacobson wrote:

> Dear antenna pros, I've always taken it for grunted about the
> 300/75/50 ohms of TV ribbon, coax, etc. But how does one measure it?
> My ohmsmeter doesn't budge. Is there some standard formula, like wrap
> grandma 100 times, with the far end connected to a cheeseburger in her
> mouth, the near end finally displaying the characteristic 300/75/50
> whatever ohmses?

5639. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 04:26:43 UTC
From: richardharrison@webtv.net
Message-ID: <2146-3FD2AC03-100@storefull-2314.public.lawson.webtv.net>
Source record: 103504

Yuri Blanarovich wrote:
"Just look at Nikola Tesla or ask any student."

Nikola Tesla was a productive genius, and as long as there are exams, we will have prayer in our schools.

From "The Inventions, Researches, and Writings of Nikola Tesla" by Thomas Commerford Martin, 1893, and from comments on the jacket:
"In the second year of his Gratz course, Mr. Tesla gave up the notion of becoming a teacher, and took up the engineering curriculum. His studies ended---. For a short time he served as an assistant in the Government Telegraph Engineering Department---. He made a number of telephonic inventions---. To gain a wider field of action, he pushed on to Paris and there secured employment as an electrical engineer with one of the large companies in the new industry of electrical lighting.

It was during this period, and as early as 1882 that he began serious and continued efforts to embody the rotating field principle in operative apparatus---.

At last he determined that it would be best to try his fortunes in America. In France he had met many Americans, and in conntact with them learned the desirability in turning every new idea in electricity to practical use.

NIkola Tesla was born in Croatia in 1856. He emigrated to the United States in 1884 and worked for a short while for Thomas Edison. A pioneer in the field of high tension electricity, Tesla made many discoveries and inventions of lasting value to the development of radio transmission and electricity, one of the most famous of which was the power system at Niagra Falls. He died in 1943.

Best regards, Richard Harrison, KB5WZI

5640. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 05:08:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd2b61a_4@corp.newsgroups.com>
Source record: 103505

Reg Edwards wrote:
> I have no wish to be unkind but who the hell is Kraus ?

The inventor of the helical beam antenna and the corner reflector
antenna. The McDougal Chair Professor of EE, Emeritus, Ohio State U.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5641. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 05:16:06 UTC
From: richardharrison@webtv.net
Message-ID: <29130-3FD2B796-83@storefull-2316.public.lawson.webtv.net>
Source record: 103506

Reg, G4FGQ wrote:
"---who the hell is Kraus?"

I asked the same question long ago because his contributions were not directly a part of the curriculum where I studied.. They should have been.

John D. Kraus is an Emeritus Professor of Electrical Engineering and Astronomy at Ohio State University. His amateur call sign is W8JK which is also the name given to a family of antennas, which are just one of the types he invented.

If I were limited to only one book devoted solely to antennas, "Antennas For All Applications" by John D. Kraus and Ronald J. Marhefka would be my choice.

My daughter gave me a copy in July. In August when I was visiting her in London during the record breaking heat wave which killed so many chickens in France, I looked out the window of her air conditioned flat and spied one of Kraus` helical antennas on a rooftop just across the street. I`m sure many Brits are familiar with Kraus. McGraw-Hill is the publisher of his book.

Best regards, Richard Harrison, KB5WZI

5642. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 05:25:38 UTC
From: "Gary \"Joe\" Mayfield" <gary_mayfield@spamfree.hotmail.com>
Message-ID: <vt5egunmiet1b1@corp.supernews.com>
Source record: 103507

Kraus is John D. Kraus (W8JK) PHD EE, Ohio State University. Inventor of
the Helical antenna, and in general considered the ultimate guru of antenna
theory and practice (I know others have their fans). His book "Antennas" is
considered the bible of antenna work. Go to your nearest college with an
Electrical Engineering Dept. They are using it as a text book. Kraus is
far from impractical, he is a ham like us.

73,
Joe

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bqu4diddl1@titan.btinternet.com...
> Dear OM Rich,
>
> I have no wish to be unkind but who the hell is Kraus ?
>
> Of what particular sect is HE the Saviour?
>
> 99.999 percent of radio amateurs, either cannot afford to obtain such
> academic works, or have no chance of getting their hands on unsmudged
copies
> within the next 10 years by which time they will have lost all interest,
or,
> in any case, of ever understanding what the highly impractical authors are
> waffling about.
>
>
> As for other educational sources, this newsgroup is amongst the most
> efficient sources of dis-information ever invented.
>
>
> Have you ever read any of Bertrand Russels's philosophical works on Logic.
> I havn't!
>
>
> But radio is just another hobby. For a few years I gazed expectantly at
> Guppies in tropical fish tanks. There was an extended period of being a
TN
> (Telescope Nuts). Home-brewed 8" Newtonian mirrors and such stuff.
>
>
> Incidentally, at Chance's Glass Works from where I obtained my mirror
> blanks, 2 miles from where I sit at this keyboard, all the World's optical
> machinery was manufactured for installation in lighthouses still saving
the

> lives for 100 years of many thousands of international mariners and
> fishermen.. At a distance of 3 miles the world's first iron-hulled
steamship
> was made. At distance of 1.5 miles were forged the many giant links of the
> anchor chains of the Transatlantic Queens Mary and Elizabeth. Underneath
the
> foundations of this house is a flooded mine which was exhausted of coal 75
> years ago. Local coal and limestone was used in the blast furnces to
produce
> millions of tons molten iron. At a distance of 4 miles remain the hallowed
> walls of the factory within which Boulton and Watt constructed the first
of
> hundreds of giant condensing steam engines to drive not just local
factories
> but world-wide heavy industrial machinery, textile mills, mine lifts, and
> land irrigation pumps. In the Birmingham Science Museum is a steam hammer,
> the life expectancy of the operators being about 2 years. At a distance
of
> 4 miles is the more recent laboratory at Birmingham (the original)
> University where, under the nightly rain of incendiaries and
> high-explosives, Randall and Boot constructed the original 50 KW, 3000
Mc/s,
> Pulsed Cavity Magnetron. Churchill was obliged to swap it for bunch of
> pre-WW1 rusty destroyers plus several minor colonies of the British
Empire.
> We wuz robbed. The Earth's crust in these parts is the thinnest anywhere
on
> Earth. This house is on the slopes of Rowley Hills, a long extinct
volcano,
> the granite of which (renowned as Rowley Rag) is the world's finest
> road-making material. Engineers of the disciplined Roman Legions first
> recognised its durability 2000 years ago. Thousands of tons of Rag are
still
> blasted, crushed, graded and conveyed away to distant parts every day. We
> survive in the midst of the dusty, soot-blackened, tainted, remains of
> History!
>
>
> Talking of volcanos, when is Yellowstone, much bigger than Crakatoa, due
to
> take off?
>
>
> However, perhaps after occasionally doing something useful, it will be
found
> that Internet entertainment, amusement and verbal newsgroup sporting
> activities form worthwhile passtimes. When our obese stomachs have been
> thrice-each-day distended, and the roof doesn't leak, room temperature is
a
> comfortable 25 degrees C, the G5RV is in working order, and there's a

> month's supply of Viagra in the medicine cabinet conveniently mounted on
the
> bathroom wall, why should we not sit back and enjoy ouselves in the short
> time still available to the human race as Armageddon visibly progresses by
> every news bulletin?
>
> By the way, on the subject of analysing antenna performance in the rather
> obvious terms of transmission lines, has it occurred to anybody to ask
what
> is Zo = Ro+jXo of a magloop? Or am I just a Troll?
>
> As a confirmed addict to lemonade, tonight I am thinning down the wicked
> stuff with Scotch.
> ----
> Reg, G4FGQ
>
> ====================================
>
> "Richard Harrison" wrote -
> > Henry Kolesnik wrote:
> > "---I wonder if it (battery-powered corkscrew) could be the basis of a
> > "Corkscrew Antenna" to compete with the screwdriver antenna?"
> >
> > We should consult Kraus, the developer of most of those helical
> > antennas.
> >
> > Best regards, Richard Harrison, KB5WZI
> >
>
>

5643. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 06:03:16 UTC
From: richardharrison@webtv.net
Message-ID: <19802-3FD2C2A4-59@storefull-2313.public.lawson.webtv.net>
Source record: 103508

Henry, WD5JFR wrote:
"can`t be measured with an ordinary ohmmeter. But if you had an infinite length of any transmission line unterminated and connected an impedance bridge, it would read the chatracteristic impedance."

Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter would read Zo if connected to the end of an infinite line. He is right of course.

Best regards, Richard Harrison, KB5WZI

5644. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 08:14:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nsn5tv4uq6v23fbp5utbudld0kgrt6s5mh@4ax.com>
Source record: 103509

On 6 Dec 2003 18:12:18 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

> I have seen pictures of the beach where you are
>going and it looks fabulous but I understand it
>is the land of pickpockets as well as female
>jigglers.
>Have fun
>Art

Hi Art,

It's Buenos Aires, not Rio. In Rio, it is suggested you hire a
personal bodyguard to accompany you touring. Argentina is the safest
country in South America to travel. This is the city of the Tango,
not the girl from Ipenema.

73's
Richard Clark, KB7QHC

5645. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 11:53:50 UTC
From: Bruce <xxx@yyy.zzz>
Message-ID: <Xns944A46B23C187xxxyyyzzz@216.77.188.18>
Source record: 103512
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Jerry Oxendine" <joxendi@bellsouth.net> wrote in
news:hwoAb.1061$IF.303@bignews4.bellsouth.net:

>
> "Bruce" <xxx@yyy.zzz> wrote in message
> news:Xns9449635E9A444xxxyyyzzz@216.77.188.18...
>> "Midwest Kid" <NoSpamPlease@aol.com> wrote in
>> news:6hezb.404210$Tr4.1164670@attbi_s03:
>>
>> >
>> > "Jerry Oxendine" <joxendi@bellsouth.net> wrote in message
>> > news:C54zb.13226$5d.9130@bignews4.bellsouth.net...
>> >>
>> >> And they shouldn't have to put up with people moving in
>> >> long before the ham did and using "some" idiot CCR crap
>> >> to make him take down his tower(s).
>> If that's all that is available in your area, move to a
>> > new city or state. If you want to stay, but a Honda and move
>> > further away. Everything we have in life is a choice.
>>
>> Oh how you make it sound so easy. Maybe it is where you live.
>>
>> -Bruce
>
>
> Move to NC! >
> Jerry
>
>
>

Right. I'm sure I could convince the fortune 100 company I have 25 years
with to just up and move on my say so.....again, if it were so easy.

-Bruce

5646. TWIMC (you know who your are)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 11:56:52 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bqv4hu$26ice4$1@ID-175933.news.uni-berlin.de>
Source record: 103511

- Original post by Dave Dunsmoor (to another list server):

"For some levity, I thought I'd send this along:

How many forum members does it takes to change a light bulb?

1 to change the light bulb and to post that the light bulb has been changed

14 to share similar experiences of changing light bulbs and how the light bulb could have been changed differently

7 to caution about the dangers of changing light bulbs

10 to point out spelling/grammar errors in posts about changing light bulbs

5 to flame the spell checkers

3 to correct spelling/grammar flames

6 to argue over whether it's "lightbulb" or "light bulb" ... another 6 to condemn those 6 as stupid

2 industry professionals to inform the group that the proper term is "lamp"

15 know-it-alls who claim they were in the industry, and that "light bulb" is perfectly correct

19 to post that this forum is not about light bulbs and to please take this discussion to a lightbulb forum

11 to defend the posting to this forum saying that we all use light bulbs and therefore the posts are relevant to this forum

36 to debate which method of changing light bulbs is superior, where to buy the best light bulbs, what brand of light bulbs work best for this technique and what brands are faulty

7 to post URL's where one can see examples of different light bulbs

4 to post that the URL's were posted incorrectly and then post the corrected URL's

3 to post about links they found from the URL's that are relevant to this group which makes light bulbs relevant to this group

13 to link all posts to date, quote them in their entirety including all headers and signatures, and add "Me too"

5 to post to the group that they will no longer post because they cannot handle the light bulb controversy

4 to say "didn't we go through this already a short time ago?"

13 to say "do a Google search on light bulbs before posting questions about light bulbs"

18 who trip over each other in their rush to say "repost!"

1 forum lurker to respond to the original post 6 months from now and start it all over again."

5647. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 12:56:20 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <lrFAb.71668$m24.21306@fed1read02>
Source record: 103513
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"James" <hoa_no_thanks@nobody.com> wrote in message
news:3FD28C04.ECE5BCE5@nobody.com...
> Same where I live in Raleigh NC, only enforce these hoa rules when it is
> convenient.
>
> Case in point, somebody put in a pool in backyard, not allowed in hoa and
county
> rules,
> homeowner stops paying hoa dues, hoa filed lein, homeowner filed lawsuit.
> His/her rights of due process were violated.
> Homeowner collected over $ 350,000 from our hoa, the insurance only
covered
> $ 200,000 and we the rest of the hood had to pay up with increase in hoa
dues.
> Homeowner sells house and moved out. Did the hoa board learn ? no !
> They changed rules so now you need three signed complaints from separate
> neighbors before
> the hoa will look into anything.
>
> One guy rides a mobility scooter and he takes photos of anything he don't
like
> to see.

Complain to the HOA about the pervert who keeps taking pictures.

Ed
WB6WSN

5648. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 13:38:15 UTC
From: richardharrison@webtv.net
Message-ID: <11303-3FD32D47-187@storefull-2315.public.lawson.webtv.net>
Source record: 103515

Richard Clark wrote:
"It`s Buenos Aires, not Rio,"

I`ve worked in Argentina and visited Brasil`s Rio. I`ll take Rio. Buenos Aires, which we called the city of darkness, if Paris is the "city of light. Buenos Aires has provocative women where Paris has smart women. The women in both cities are great! Argentina is the whitest country south of Canada. They exterminated their indigenous people while Brasil imported slaves. These were emancipated in Brasil long before that happened in the U.S.

Both B.A. and Paris have excellent food. The beef is better in B.A. If the restaurant La Cabana survives, the beef is legendary. It is served with a redundant sharp Bowie knife. It can easily be cut with your fork. El Pulpo was famous for sea food. You may like McDonald`s freedom fries, but B.A. has El Palacio de Las Papas Fritas. Never before seen such a variety of ways to fix the fried potato. All good!

B.A. has a Texas Bar. as do many sea ports. It caters to sailors. For seamy action it`s a sight to behold. B.A. has great shopping along a pedestrian street closed to vehicular traffic. It`s La Calle Florida. Hope Argentina has got a grip on inflation. Prices used to rise by the hour.

Summer begins in B.A. in a couple of weeks.
B. A. is hot and humid in summer and cold and damp in winter. The climate is almost identical to Houston`s. I felt right at home there. Have fun on your visit.

Best regards, Richard Harrison, KB5WZI

5649. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 13:44:29 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <sb96tvcodu891eo1ep8jq1ttgkjhn8sg72@4ax.com>
Source record: 103514

On 06 Dec 2003 21:02:50 GMT, k3bu@aol.comnoSaddam (Yuri Blanarovich)
wrote:

|... snip sinp
|>
|>Not a pretty picture!
|>
|>;-)
|>
|>--
|>Peter K1PO
|>Indialantic By-the-Sea, FL
|
|
|Right on Peter,
|Maybe time for engineers to get into politics, replace lawyers and dumb
|politicians in running the country. Get some sanity into governing because it
|doesn't look too promising. Seeing dummycRATS spewing venom at president with
|loud support from the "media", brainwashing illiterates just doesn't look so
|good. I hope that country is being pushed to the extreme only to kick back and
|shake the liberal commie establishment back to the caves.

We had an engineer for President. Look how well that worked out. One
term and we replaced him with a movie actor.

A former boss of mine at Hughes is now mayor of Tucson. I'm glad that
I don't live within the city limits where I would have had to vote in
the election last month. The difficult choice was between re-electing
him or another former mayor, who is a nitwit fuzzyheaded, left wing
professor of political science (what an oxymoron).

Another former Hughes engineer was a politician of sorts; he was
elected Chairman of the Navajo Indian Tribe. He's out of jail now,
thanks to a pardon from Clinton.

Sorry, I worked for 30+ years for Hughes and after a buyout, Raytheon;
companies mostly run by engineers. I can't think of any of the
"leaders" in those companies who I would want to have any more control
over my life than they did while I was working for them. They were
just as vain, backstabbing, mealy-mouthed, and win-at-all-costs as any
ambulance-chasing lawyer could ever be.

Wes

5650. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 13:56:16 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <sbc6tv82ekgrnf5c2d5jvgguej3ic3qgi1@4ax.com>
Source record: 103516

On Sat, 06 Dec 2003 20:40:31 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Sat, 6 Dec 2003 20:23:12 +0000 (UTC), "Reg Edwards"
|<g4fgq.regp@ZZZbtinternet.com> wrote:
|
|>You have missed the point again. It is I who should be asking YOU if you are
|>feeling better ;o)
|>
|Never been better OM. I'm off to Buenos Aires for a couple of weeks
|to escape the rain. Hope you are feeling better soon.

You don't have to go that far. It was sunny and 82 degrees in Tucson
yesterday :-)

Lovely antenna building weather.

5651. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 14:04:38 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <vpc6tvob1p938hs6jkidjh4gofp2s3l728@4ax.com>
Source record: 103517

On Sun, 7 Dec 2003 02:48:18 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|Dear OM Rich,
|
|I have no wish to be unkind but who the hell is Kraus ?
|

Trolling again, Reg?

|
|As a confirmed addict to lemonade, tonight I am thinning down the wicked
|stuff with Scotch.

And again?

5652. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 14:09:12 UTC
From: richardharrison@webtv.net
Message-ID: <24161-3FD33488-77@storefull-2317.public.lawson.webtv.net>
Source record: 103518

Mike, W4EF wrote:
"---standing waves on the resonant antenna, and a "law" that says what we can predict that taper with a simple formula---."

It`s as simple as ON4UN`s Fig 9-22 center loading diagram. The resonant element is 90-degrees long. Any missimg wire length must be provided by the loading.

Best regards, Richard Harrison, KB5WZI

5653. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 14:17:45 UTC
From: James <hoa_no_thanks@nobody.com>
Message-ID: <3FD33687.DC9EC2E1@nobody.com>
Source record: 103419

Problem is the scooter guy is on the hoa board !

The hoa will disolve in 89 more years !

my neighbor thought my 2m quad beam pvc framed
was a kite ! Told him it was stuck in the tree !

This topic has been and still is active on
http://www.eham.net/forums
antenna restrictions

Ed wrote:

> >
> > One guy rides a mobility scooter and he takes photos of anything he don't
> like
> > to see.
>
> Complain to the HOA about the pervert who keeps taking pictures.
>
> Ed
> WB6WSN

5654. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 14:38:48 UTC
From: richardharrison@webtv.net
Message-ID: <24162-3FD33B78-30@storefull-2317.public.lawson.webtv.net>
Source record: 103420

Wes, N7WS wrote:
"We had an engineer for President. Look how well that worked out. One term and we replaced him with a movie actor.

Jimmy Carter in retirement, is negotiating peace accords around the world. He is now in Geneva working with Palestineans and Israelis.

We`ve had other engineers starting with George Washington.

We`ve had Herbert Hoover, a,n engineer, who wrecked the economy, as Ronald Reagan later did. Hoover, the engineer was replaced by FDR who served 11 years and changed the world for the better forever. W. is trying to undo the New Deal and in the process will likely wreck the economy as Hoover did.

Best regards, Richard Harrison, KB5WZI

5655. Icom-IC-R8500 receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 16:10:06 UTC
From: John J McCoy Jr <kb9qng@charter.net>
Message-ID: <vt6k6gav25rie9@corp.supernews.com>
Source record: 103421

```
For sale
Icom IC-R8500 Receiver
Top of the line Excelent shape
$950.00 kb9qng@charter.net
```

5656. Ionoshpere book FYI

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 16:12:08 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vt6kdd3bvblgaf@corp.supernews.com>
Source record: 103422

Browsing at the Tulsa library I found "Radio Amateurs Guide To The Ionosphere" by Leo F. McNamara, 1994. The author knows his stuff, writes well and it't a facinating read. Lots of things explained that I couldn't comprenhend before. His specialty is HF SSL ,single station location, using the ionosphere which I didn't know was possible. I wonder if anyone has any stories on SSL from actual experience.
73
hank wd5jfr

5657. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 16:30:09 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <IAIAb.3159$7p2.1784@newsread2.news.atl.earthlink.net>
Source record: 103423

Mac:

[snip]
"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vt4k4q6942q0f6@corp.supernews.com...
> Dear Peter:
> I would have sent this to you privately, but you do not provide a
> valid E-mail address.
[snip]

The Internet "worms" nearly *killed* my computer communications capability
this past year, no thanks to the younger generation of unethical "hackers"
and
brought to everyone courtesy of the "world's richest man", and so these
days...

If you want to email me direct you must send via the arrl dot net relay.

:-)

[snip]
> Well done on presenting the sequence of understanding and
> emphasizing the role of mathematics.
[snip]

Thanks!

As you no doubt appreciate, it pays to know a little history only to
avoid repeating it.

There is very little ambiguity equivocationn or cause for argument when
using the universal albeit sometimes cryptic language of mathematics.

The elementary mathematical skills which Art often eschews are neither
difficult nor expensive to acquire and definitely not difficult to carry
around.

Such skills do however require some little dedication to study...

just as the ham radio license *used to* require. :-)

Art's "cry baby" attitude about his lack of such skills does nothing to help
either himself or the other NG participants.

"Mathematics - just do it" would be a good motto for Art to follow perhaps
replacing his continual complaints regarding his lack of ability and
qualifications.
Art's "cry baby" comments only appear boorish and become very tiresome to

NG participants.

[snip]
> In "Hamerica" some real Engineers are P.E.s. It is not just for
> Canadians.
[snip]

Well Mac as you well know, MI is not far from Canada sharing both
a riverside a lakeside and common weather. What's your point?

:-)

[snip]
> 73 Mac N8TT
> --
> J. Mc Laughlin - Michigan USA
[snip]

Speaking of Michigan, my wife and I attended a party at our next door
neighbour's home here last week. MI snowbirds, Jo and Ivan had just
arrived here in FL from MI to stay over the season here in their winter
home on our "tropical island".

Me? Even though an ex-Canadian, I like it here on the island all year long.

Mac. Take care and enjoy the Holiday Season up North.

--
Peter K1PO
Indialantic By-the-Sea, FL

5658. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 18:53:40 UTC
From: Jim@nauticon.net
Message-ID: <3FD37734.EA9A23D4@nauticon.net>
Source record: 103424
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Ed Price wrote:
>
> "James" <hoa_no_thanks@nobody.com> wrote in message
> news:3FD28C04.ECE5BCE5@nobody.com...
> > Same where I live in Raleigh NC, only enforce these hoa rules when it is
> > convenient.
> >
> > Case in point, somebody put in a pool in backyard, not allowed in hoa and
> county
> > rules,
> > homeowner stops paying hoa dues, hoa filed lein, homeowner filed lawsuit.
> > His/her rights of due process were violated.
> > Homeowner collected over $ 350,000 from our hoa, the insurance only
> covered
> > $ 200,000 and we the rest of the hood had to pay up with increase in hoa
> dues.
> > Homeowner sells house and moved out. Did the hoa board learn ? no !
> > They changed rules so now you need three signed complaints from separate
> > neighbors before
> > the hoa will look into anything.
> >
> > One guy rides a mobility scooter and he takes photos of anything he don't
> like
> > to see.
>
> Complain to the HOA about the pervert who keeps taking pictures.
>
> Ed
> WB6WSN

That's called invasion of your privacy and harassment. To hell with the
HOA, call the police and file a complaint. Make it a matter for the
court, put this guy where he belongs. Some of those kind of people don't
learn until the financial ball hits them in there pocket.

5659. Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:21:01 UTC
From: fjx1@aol.comnospam
Message-ID: <20031207142101.21697.00000226@mb-m23.aol.com>
Source record: 103425

I can't run wires on my property(no trees and tower rotates). I've used a ^btv for years with usual weak results on 80. LAways thought Butternut was weakly made.

What is recommendation out there?
Butternut
Gap
Force sigma for 80 know very little about it they don't answer e-mails
MFK

??? other ideas
Really want 80 and 160 would be great bonus.

73
Gerry fjx1@aol.com

5660. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:21:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pmt6tv4recg106q0uvt321np1rbg7ffmse@4ax.com>
Source record: 103426

On Sun, 7 Dec 2003 08:38:48 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Wes, N7WS wrote:
>"We had an engineer for President. Look how well that worked out. One
>term and we replaced him with a movie actor.
>
>Jimmy Carter in retirement, is negotiating peace accords around the
>world. He is now in Geneva working with Palestineans and Israelis.
>
>We`ve had other engineers starting with George Washington.
>
>We`ve had Herbert Hoover, a,n engineer, who wrecked the economy, as
>Ronald Reagan later did. Hoover, the engineer was replaced by FDR who
>served 11 years and changed the world for the better forever. W. is
>trying to undo the New Deal and in the process will likely wreck the
>economy as Hoover did.
>
>Best regards, Richard Harrison, KB5WZI

Hi All,

The statement "an engineer" is certainly inaccurate by my count too.
What about Davis, Grant, and Eisenhower?

73's
Richard Clark, KB7QHC

5661. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:31:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hev6tvcog8hk34okmae9bh2kokdklahkpu@4ax.com>
Source record: 103427

On Sun, 07 Dec 2003 16:30:09 GMT, "Peter O. Brackett"
<no_such_address@ix.netcom.com> wrote:
>The Internet "worms" nearly *killed* my computer communications capability
>this past year, no thanks to the younger generation of unethical "hackers"
>and brought to everyone courtesy of the "world's richest man", and so these
>days...
>
>If you want to email me direct you must send via the arrl dot net relay.

Hi Peter,

Security is your responsibility unless you intend to vote Fascist in
the next election. Blaming others is simple, and leaving it up to
arrl dot net to take the spam flak is moral equivocation.

Why don't you ask them how they cope where you stumble?

OR

Simply visit:
http://grc.com/default.htm

My address has been exposed to every robot for a decade. Agent kills
the porn quicker that this group downloads to my reader. I've tried
GB's of free/shareware and I haven't suffered a virus since they came
hidden the floppy's boot sector in the late 80's.

73's
Richard Clark, KB7QHC

5662. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:35:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t007tvsac6qrntimavg7eu2ipola2kcmda@4ax.com>
Source record: 103428

On Sun, 07 Dec 2003 06:56:16 -0700, Wes Stewart <*n7ws*@arrl.net>
wrote:

>On Sat, 06 Dec 2003 20:40:31 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>|On Sat, 6 Dec 2003 20:23:12 +0000 (UTC), "Reg Edwards"
>|<g4fgq.regp@ZZZbtinternet.com> wrote:
>|
>|>You have missed the point again. It is I who should be asking YOU if you are
>|>feeling better ;o)
>|>
>|Never been better OM. I'm off to Buenos Aires for a couple of weeks
>|to escape the rain. Hope you are feeling better soon.
>
>You don't have to go that far. It was sunny and 82 degrees in Tucson
>yesterday :-)
>
>Lovely antenna building weather.

Hi Wes,

Well, in truth, I am only going half way (metaphorically speaking) to
meet friends returning from a 3 week Antarctic cruise.

73's
Richard Clark, KB7QHC

5663. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:40:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd38264$1_2@corp.newsgroups.com>
Source record: 103429

Peter O. Brackett wrote:
> If you want to email me direct you must send via the arrl dot net relay.

For anyone who is a member of the IEEE, their forwarding service
is very secure.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5664. Re: current/inductance discussion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:42:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ta07tv85a75ij2f5b2cov3d58rrp0tocgg@4ax.com>
Source record: 103430

On Sun, 7 Dec 2003 07:38:15 -0600 (CST), richardharrison@webtv.net
(Richard Harrison) wrote:

>Richard Clark wrote:
>"It`s Buenos Aires, not Rio,"
>
>I`ve worked in Argentina and visited Brasil`s Rio. I`ll take Rio. Buenos
>Aires, which we called the city of darkness, if Paris is the "city of
>light. Buenos Aires has provocative women where Paris has smart women.
>The women in both cities are great! Argentina is the whitest country
>south of Canada. They exterminated their indigenous people while Brasil
>imported slaves. These were emancipated in Brasil long before that
>happened in the U.S.
>
>Both B.A. and Paris have excellent food. The beef is better in B.A. If
>the restaurant La Cabana survives, the beef is legendary. It is served
>with a redundant sharp Bowie knife. It can easily be cut with your fork.
>El Pulpo was famous for sea food. You may like McDonald`s freedom fries,
>but B.A. has El Palacio de Las Papas Fritas. Never before seen such a
>variety of ways to fix the fried potato. All good!
>
>B.A. has a Texas Bar. as do many sea ports. It caters to sailors. For
>seamy action it`s a sight to behold. B.A. has great shopping along a
>pedestrian street closed to vehicular traffic. It`s La Calle Florida.
>Hope Argentina has got a grip on inflation. Prices used to rise by the
>hour.
>
>Summer begins in B.A. in a couple of weeks.
>B. A. is hot and humid in summer and cold and damp in winter. The
>climate is almost identical to Houston`s. I felt right at home there.
>Have fun on your visit.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Thanks, I am taking note of all recommendations! (Except for the
catering to sailors - I had wilder times in the Bible Belt of
Charleston S.C. when I was in Nixon's Canoe Club).

73's
Richard Clark, KB7QHC

5665. Re: Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:53:32 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <4yLAb.2100$IF.1868@bignews4.bellsouth.net>
Source record: 103431

"Fjx1" <fjx1@aol.comnospam> wrote in message
news:20031207142101.21697.00000226@mb-m23.aol.com...
> I can't run wires on my property(no trees and tower rotates). I've used a
^btv
> for years with usual weak results on 80. LAways thought Butternut was
weakly
> made.
>
> What is recommendation out there?
> Butternut
> Gap
> Force sigma for 80 know very little about it they don't answer e-mails
> MFK
>
> ??? other ideas
> Really want 80 and 160 would be great bonus.
>
> 73
> Gerry fjx1@aol.com

If there are no trees for support, and you say you have
a rotating tower, do you have room for a couple of poles
or stakes.....say, 10-12 feet high? I know it would be
somewhat "unsightly" (beauty is in the eye of the beholder), but an inverted
Vee would do pretty well on
75. I had a 75 dipole at one of my prior residences that
drooped down to 10' and it worked better than I expected. So if you could
droop a V down off the tower
(the whole thing doesn't turn does it?) it would work. There are also some
ways you can make a loaded vertical to hang under a tree/tower--saw that in
QST a few years back. A bit of experimenting, but a good project which,
according to the author, got some pretty
good results. Sloper off the tower? And then you
could put a screwdriver at the top to work all bands and
put radials underneath--saw that method, again, in one of
the ham rags where a series of wires of different lengths
were positioned in a circle like a bird cage with a home-
brew vertical at top. Lots of ideas. I don't know how they work (haven't
had to try it). If you get out and "putter" with it, you'll come up with
something.

Now if you need a help with a screwdriver, just let me know
(www.qsl.net/k4kwh) .

73

Jerry
K4KWH

5666. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 19:55:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <km07tvsmnan5m1lgmipo35qd61haq03gn0@4ax.com>
Source record: 103432

On 6 Dec 2003 12:27:00 -0800, emma_hentenna@hotmail.com (emma) wrote:

>Hi Richard,
>
>I tried it. I considered my Hentenna as a transmission line and I
>applied the standing wave theory according to "THE ARRL ANTENNA BOOK
>18th Ed 1997, Fig 65".
>The currents flow the antenna as shown below:
>
>http://antennas.ee.duth.gr/recradioamateurantenna/dt31draft/standingwavew/standingwaves.h
tm
>
>
>Obviously, the currents of the 3 parallel horizontal branches are
>flowing in the same direction. Their sum gives the total field. On the
>other hand, we have 3 antiparallel pairs of currents flowing through
>the vertical branches. Therefore the field becomes equal to zero.
>As a result, the arrangement radiates and it can not be considered as
>a transmission line.
>
>Emma.

Hi Emma,

You are arguing from a forced analysis not from transmission line
theory. The flaw is that the current defines a transmission line.
The current flow defines the results, the transmission line structure
imposes the laws they must operate within.

The structure is a transmission line shorted at both ends and fed at
an opportunistic point for the purpose of matching to the source. It
is a classic, skeletal cavity resonator that leaks. Efficiency is in
the eye of the beholder.

More the question is: "What does it matter?" There is no gain
obtained from a design's name redefined away from transmission line to
the term Hentenna. Further, given the japanese expression of Hen to
denote strange (strange antenna), this naming only seeks to mystify
what is quite ordinary (even if it is uncommon).

73's
Richard Clark, KB7QHC

5667. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 20:08:51 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <vKLAb.19054$mG.10975@bignews5.bellsouth.net>
Source record: 103433
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

OOOPS! Sorry about that. I forgot about Huntersville,
Davidson, etc. Nice area and expensive! I remember when the area was still
country and all those houses right the shoreline weren't built. Could've
bought a house in
the '70's for a 3rd of what it is now. And, also, I wouldn't move in there
for nut'in'--not to mention the
traffic is HORRIFIC on the I-77 corridor. Bumper to
bumper morning and evening--least little fender scraper,
your commute is over!

Let me modify this by say that, yes, there are lots of HOA communities
everywhere. But if you do a little
snooping before moving, you can find older neighborhoods that dont have the
HOA nonsense. I am
just independent to let someone tell me what to do on/with my own property.
And if I catch some bird on
a scooter taking pictures, he better not be on my land!
He comes down my driveway snooping, he just might get
his (*censored*) kicked. Sorry, but that is the way I feel about it. But
I've been here for many years, all of us here
get along well, stand beside the proverbial fence and chat,
borrow/loan tools, and all is well! ...Without any cussed
HOA!

Jerry
K4KWH

www.qsl.net/k4kwh
<Jim@nauticon.net> wrote in message news:3FD24340.FE9CACF0@nauticon.net...
>
> Jerry, my daughter lives in Cornelius NC, (which is as you know just a
> few miles north of you) they have an HOA but it apparently doesn't mean
> a darn thing.
>
> The neighbors are moving into $220,000 new homes, they put up metal
> sheds chain link fences, etc. which both are against the HOA rules. NC
> is no different than any other state, they all have the dreaded HOA's.
> From what I see, the HOA rules are only enforced when some damn nosey
> neighbor want's to put there nose into your business.
>
> God Bless America for our Freedoms, where ever they may be.
>
> Jerry Oxendine wrote:

> >
> > Move to NC! While I am sure there are HOA communities as the population
> > grows, there are still plenty
> > of older neighborhoods with excellent homes without HOAs here in my
state.
> > And I have never had trouble finding a place to live without 'em. Once
> > checked out
> > a neighborhood in my town called YorkChester. Many
> > older homes of many styles and sizes. It had been desig-
> > nated an historic neighborhood and you couldn't even change the style of
> > your front door without dealing with
> > the old blue-haired lady with the peepovers. NOPE! I
> > ain't moving there. But I found a nice place on a dead end street where
> > such things had never been thought of.
> > Been here for 17 years.
> >
> > Maybe it is more difficult in, say, California (the land of
> > fruits and nuts--dare I say it), but it is still possible to find
> > antenna-friendly places to live if one really wants to.
> >
> > I have no sympathy for someone who moves into such a place where
> > restrictions exist KNOWING it. I am just
> > fiesty enough and ornery enough not to let someone else
> > tell me what I can do on my own property. One's property rights should
> > reign supreme; i.e., your rights end
> > at my property line, and mine end at yours. Most people
> > are sincerely enough for such rules not have to exist. The
> > neighborhood will conform by osmosis or "peer" pressure. If a
neighborhood
> > has junk cars in it, look at the
> > rest of the houses; they likely will too. If there are mostly
> > frame "shotgun" houses, the rest are likely to be, too. If
> > the neighborhood is nice, brick/frame, trimmed hedges, mown lawns,
most
> > all the others will be, too. Choose
> > your neighbors carefully and check for HOAs and coven-
> > ents FIRST.
> >
> > Jerry

5668. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 20:15:52 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <4RLAb.19059$mG.384@bignews5.bellsouth.net>
Source record: 103434

"James" <hoa_no_thanks@nobody.com> wrote in message
news:3FD33687.DC9EC2E1@nobody.com...
> Problem is the scooter guy is on the hoa board !
>
> The hoa will disolve in 89 more years !

Like I said, I catch that so-n-so in my yard, I'll take that "board" away
from him and stomp his (*censored*) with
it. I better NOT catch anyone "snooping" around here.
>
> my neighbor thought my 2m quad beam pvc framed
> was a kite ! Told him it was stuck in the tree !

Now THAT I simple LOVE!!!!!!!!! Those blue hairs aren't as smart as they
think! Need to keep their nose back in their OWN business instead of
poking around
worrying about what is in someone elses' yard.

Jerry
>
>
> This topic has been and still is active on
> http://www.eham.net/forums
> antenna restrictions
>
>
> Ed wrote:
>
> > >
> > > One guy rides a mobility scooter and he takes photos of anything he
don't
> > like
> > > to see.
> >
> > Complain to the HOA about the pervert who keeps taking pictures.
> >
> > Ed
> > WB6WSN
>

5669. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 20:25:57 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <k137tv0sravhmtu5ets79qg5clegitpusq@4ax.com>
Source record: 103435
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Sun, 07 Dec 2003 13:53:40 -0500, Jim@nauticon.net wrote:

>
>
>Ed Price wrote:
>>
>> "James" <hoa_no_thanks@nobody.com> wrote in message
>> news:3FD28C04.ECE5BCE5@nobody.com...
>> > Same where I live in Raleigh NC, only enforce these hoa rules when it is
>> > convenient.
>> >
>> > Case in point, somebody put in a pool in backyard, not allowed in hoa and
>> county
>> > rules,
>> > homeowner stops paying hoa dues, hoa filed lein, homeowner filed lawsuit.
>> > His/her rights of due process were violated.
>> > Homeowner collected over $ 350,000 from our hoa, the insurance only
>> covered
>> > $ 200,000 and we the rest of the hood had to pay up with increase in hoa
>> dues.
>> > Homeowner sells house and moved out. Did the hoa board learn ? no !
>> > They changed rules so now you need three signed complaints from separate
>> > neighbors before
>> > the hoa will look into anything.
>> >
>> > One guy rides a mobility scooter and he takes photos of anything he don't
>> like
>> > to see.
>>
>> Complain to the HOA about the pervert who keeps taking pictures.
>>
>> Ed
>> WB6WSN
>
>That's called invasion of your privacy and harassment. To hell with the
>HOA, call the police and file a complaint. Make it a matter for the
>court, put this guy where he belongs. Some of those kind of people don't
>learn until the financial ball hits them in there pocket.

Bzzzzt! Thank you for playing. You have no expectation of privacy in
a public place. You cannot forbid photography of the public areas of
your property.

Russ

5670. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 21:27:06 UTC
From: MGoBlue <nospam@anytime.net>
Message-ID: <3fd39b2b_1@127.0.0.1>
Source record: 103436
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Russ" <carlzomer@hotmail.com> wrote in message
news:k137tv0sravhmtu5ets79qg5clegitpusq@4ax.com...
> On Sun, 07 Dec 2003 13:53:40 -0500, Jim@nauticon.net wrote:
>
> >
> >
> >Ed Price wrote:
> >>
> >> "James" <hoa_no_thanks@nobody.com> wrote in message
> >> news:3FD28C04.ECE5BCE5@nobody.com...
> >> > Same where I live in Raleigh NC, only enforce these hoa rules when
it is
> >> > convenient.
> >> >
> >> > Case in point, somebody put in a pool in backyard, not allowed in hoa
and
> >> county
> >> > rules,
> >> > homeowner stops paying hoa dues, hoa filed lein, homeowner filed
lawsuit.
> >> > His/her rights of due process were violated.
> >> > Homeowner collected over $ 350,000 from our hoa, the insurance only
> >> covered
> >> > $ 200,000 and we the rest of the hood had to pay up with increase in
hoa
> >> dues.
> >> > Homeowner sells house and moved out. Did the hoa board learn ? no !
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> >> > neighbors before
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> >> >
> >> > One guy rides a mobility scooter and he takes photos of anything he
don't
> >> like
> >> > to see.
> >>
> >> Complain to the HOA about the pervert who keeps taking pictures.
> >>
> >> Ed
> >> WB6WSN
> >

> >That's called invasion of your privacy and harassment. To hell with the
> >HOA, call the police and file a complaint. Make it a matter for the
> >court, put this guy where he belongs. Some of those kind of people don't
> >learn until the financial ball hits them in there pocket.
>
> Bzzzzt! Thank you for playing. You have no expectation of privacy in
> a public place. You cannot forbid photography of the public areas of
> your property.
>
> Russ

Yes, you can. None of your private property is public. Expectation of privacy has nothing to do with the civil claim of Invasion of Privacy. It is only a 4th Amendment doctrine.

You have every right to forbid photography of your private property, much like concert venues and museums have that right, whether open to view or not. To say otherwise would allow photography through open windows, if viewable from the outside.

Thank YOU for playing.

-----== Posted via Newsfeed.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeed.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= 19 East/West-Coast Specialized Servers - Total Privacy via Encryption =---

5671. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 21:50:14 UTC
From: Stinger <contact@newsserveronly.com>
Message-ID: <keNAb.5017$rG.1227@bignews3.bellsouth.net>
Source record: 103437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Taking curbside photos happens all the time. Real Estate Appraisers have to produce pictures of at least two (usually three) comparable homes when they're doing an appraisal. Sometimes, they get lucky and find one on MLS, but usually they're shooting photos from across the street.

Having known several appraisers, I can tell you that they know very well to be discreet when doing this. If people are present in the yard, they will ask permission, but most just leave their motor running and shoot them out of a rolled-down window.

-- Stinger

"MGoBlue" <nospam@anytime.net> wrote in message news:3fd39b2b_1@127.0.0.1...
>
> "Russ" <carlzomer@hotmail.com> wrote in message
> news:k137tv0sravhmtu5ets79qg5clegitpusq@4ax.com...
> > On Sun, 07 Dec 2003 13:53:40 -0500, Jim@nauticon.net wrote:
> >
> > >
> > >
> > >Ed Price wrote:
> > >>
> > >> "James" <hoa_no_thanks@nobody.com> wrote in message
> > >> news:3FD28C04.ECE5BCE5@nobody.com...
> > >> > Same where I live in Raleigh NC, only enforce these hoa rules when
> it is
> > >> > convenient.
> > >> >
> > >> > Case in point, somebody put in a pool in backyard, not allowed in
hoa
> and
> > >> county
> > >> > rules,
> > >> > homeowner stops paying hoa dues, hoa filed lein, homeowner filed
> lawsuit.
> > >> > His/her rights of due process were violated.
> > >> > Homeowner collected over $ 350,000 from our hoa, the insurance only
> > >> covered
> > >> > $ 200,000 and we the rest of the hood had to pay up with increase
in
> hoa
> > >> dues.
> > >> > Homeowner sells house and moved out. Did the hoa board learn ? no

!
> > >> > They changed rules so now you need three signed complaints from
> separate
> > >> > neighbors before
> > >> > the hoa will look into anything.
> > >> >
> > >> > One guy rides a mobility scooter and he takes photos of anything he
> don't
> > >> like
> > >> > to see.
> > >>
> > >> Complain to the HOA about the pervert who keeps taking pictures.
> > >>
> > >> Ed
> > >> WB6WSN
> > >
> > >That's called invasion of your privacy and harassment. To hell with the
> > >HOA, call the police and file a complaint. Make it a matter for the
> > >court, put this guy where he belongs. Some of those kind of people
don't
> > >learn until the financial ball hits them in there pocket.
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> > Bzzzzt! Thank you for playing. You have no expectation of privacy in
> > a public place. You cannot forbid photography of the public areas of
> > your property.
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> > Russ
>
> Yes, you can. None of your private property is public. Expectation of
> privacy has nothing to do with the civil claim of Invasion of Privacy. It
> is only a 4th Amendment doctrine.
>
> You have every right to forbid photography of your private property, much
> like concert venues and museums have that right, whether open to view or
> not. To say otherwise would allow photography through open windows, if
> viewable from the outside.
>
> Thank YOU for playing.
>
>
>
>
> ----== Posted via Newsfeed.Com - Unlimited-Uncensored-Secure Usenet
News==----
> http://www.newsfeed.com The #1 Newsgroup Service in the World! >100,000
Newsgroups
> ---= 19 East/West-Coast Specialized Servers - Total Privacy via Encryption
=---

5672. Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 21:59:53 UTC
From: James W <change-to-jw22-at-trlp-dot-com@trlp.com>
Message-ID: <3FD3A2D9.6030000@trlp.com>
Source record: 103438

Cannot find those good old 102inch CB antennas any more. Anyone have a source I can mail order from?

- jim KG7HH

5673. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 22:23:17 UTC
From: Henry Kolesnik <wd5jfr@oklahoma.net>
Message-ID: <vt7fa8r9shvbc8@corp.supernews.com>
Source record: 103444

most Radio Shack stores have or can order..
Also try a bigger Truck Stop on the Interstate..
hank wd5jfr
"James W" <change-to-jw22-at-trlp-dot-com@trlp.com> wrote in message
news:3FD3A2D9.6030000@trlp.com...
> Cannot find those good old 102inch CB antennas any more. Anyone have a
> source I can mail order from?
>
> - jim KG7HH
>

5674. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 22:25:37 UTC
From: Don Forsling <dforsling@msn.com>
Message-ID: <vt7a6v6b8t8dd5@news.supernews.com>
Source record: 103439
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

```
ddforsling@msn.com
"Iowa--Gateway to Those Big Rectangular States"
"MGoBlue" <nospam@anytime.net> wrote in message news:3fd39b2b_1@127.0.0.1...
>
> "Russ" <carlzomer@hotmail.com> wrote in message
> news:k137tv0sravhmtu5ets79qg5clegitpusq@4ax.com...
> > On Sun, 07 Dec 2003 13:53:40 -0500, Jim@nauticon.net wrote:
> >
> > >
> > >
> > >Ed Price wrote:
> > >>
> > >> "James" <hoa_no_thanks@nobody.com> wrote in message
> > >> news:3FD28C04.ECE5BCE5@nobody.com...
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> > >> >
> > >> > Case in point, somebody put in a pool in backyard, not allowed in
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> lawsuit.
> > >> > His/her rights of due process were violated.
> > >> > Homeowner collected over $ 350,000 from our hoa, the insurance only
> > >> covered
> > >> > $ 200,000 and we the rest of the hood had to pay up with increase
in
> hoa
> > >> dues.
> > >> > Homeowner sells house and moved out. Did the hoa board learn ? no
!
> > >> > They changed rules so now you need three signed complaints from
> separate
> > >> > neighbors before
> > >> > the hoa will look into anything.
> > >> >
> > >> > One guy rides a mobility scooter and he takes photos of anything he
> don't
> > >> like
```

> > >> > to see.
> > >>
> > >> Complain to the HOA about the pervert who keeps taking pictures.
> > >>
> > >> Ed
> > >> WB6WSN
> > >
> > >That's called invasion of your privacy and harassment. To hell with the
> > >HOA, call the police and file a complaint. Make it a matter for the
> > >court, put this guy where he belongs. Some of those kind of people
don't
> > >learn until the financial ball hits them in there pocket.
> >
> > Bzzzzt! Thank you for playing. You have no expectation of privacy in
> > a public place. You cannot forbid photography of the public areas of
> > your property.
> >
> > Russ
>
> Yes, you can. None of your private property is public. Expectation of
> privacy has nothing to do with the civil claim of Invasion of Privacy. It
> is only a 4th Amendment doctrine.
>
> You have every right to forbid photography of your private property, much
> like concert venues and museums have that right, whether open to view or
> not. To say otherwise would allow photography through open windows, if
> viewable from the outside.
>
> Thank YOU for playing.
>
>
>
No, thank you! The BASIC rule of photography is this (and I make a living
at it):

If you are standing (or sitting for that matter) on public property, you can
legally photograph anything you can see from where you are standing. There
are, of course, exceptions for various national security considerations,
etc., but it is absolutely not against the law to stand on a public sidewalk
or in a public street and take a picture of somebody's house, their rose
bushes, their car, their ugly fence, their goofy-looking mailbox, their body
etc., etc. The fourth amendment has absolutely nothing to do with it. And
it's not at all like the case of a museum--a museum is, first of all, not
public property in the sense of the law as it applies to photography (or
just plain "seeing"). First of all, photography (flash) can damage museum
property and annoy the patrons and is often prohibited by _rule_ for that
reason. Also, and one does not have unrestricted access to a museum as one
does to a street. It is not _public_ in the sense that's pertinent here.
And by the way, you _can_ legally take a picture of, say, the side of a
house sporting an open window and capture, perhaps, some of what's inside

the house and visible. And that's the law.

5675. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 22:28:45 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <xQNAb.52397$_M.246898@attbi_s54>
Source record: 103440
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

MGoBlue wrote:

SNIP

> Yes, you can. None of your private property is public. Expectation of
> privacy has nothing to do with the civil claim of Invasion of Privacy. It
> is only a 4th Amendment doctrine.
>
> You have every right to forbid photography of your private property, much
> like concert venues and museums have that right, whether open to view or
> not. To say otherwise would allow photography through open windows, if
> viewable from the outside.
>
> Thank YOU for playing.
>

In a former profession, I needed a modified model release to photograph
the exterior of houses.

At the Mystic Seaport Museum in Connecticut, where there are outdoor
exhibits open to all, I have to register as a photographer and sign an
affidavit that the photographs are for personal, not professional, use.

DD, W1MCE

5676. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 23:15:26 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <iwOAb.3579$7p2.1519@newsread2.news.atl.earthlink.net>
Source record: 103441

Cec:

[snip]
"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fd38264$1_2@corp.newsgroups.com...
> Peter O. Brackett wrote:
> > If you want to email me direct you must send via the arrl dot net relay.
>
> For anyone who is a member of the IEEE, their forwarding service
> is very secure.
> --
> 73, Cecil http://www.qsl.net/w5dxp
[snip]

I too use the IEEE relay service, but on different NG's from this one.

--
Peter K1PO
k1po at arrl dot net
peter dot brackett at ieee dot org
:-)

5677. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 23:16:28 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312071516.59b309f2@posting.google.com>
Source record: 103442

"Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<lAIAb.3159$7p2.1784@newsread2.news.atl.earthlink.net>...
> Mac:
>
> [snip]
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> news:vt4k4q6942q0f6@corp.supernews.com...
> > Dear Peter:
> > I would have sent this to you privately, but you do not provide a
> > valid E-mail address.
> [snip]
>
> The Internet "worms" nearly *killed* my computer communications capability
> this past year, no thanks to the younger generation of unethical "hackers"
> and
> brought to everyone courtesy of the "world's richest man", and so these
> days...
>
> If you want to email me direct you must send via the arrl dot net relay.
>
> :-)
>
> [snip]
> > Well done on presenting the sequence of understanding and
> > emphasizing the role of mathematics.
> [snip]
>
> Thanks!
>
> As you no doubt appreciate, it pays to know a little history only to
> avoid repeating it.
>
> There is very little ambiguity equivocationn or cause for argument when
> using the universal albeit sometimes cryptic language of mathematics.
>
> The elementary mathematical skills which Art often eschews are neither
> difficult nor expensive to acquire and definitely not difficult to carry
> around.
>
> Such skills do however require some little dedication to study...
>
> just as the ham radio license *used to* require. :-)
>
> Art's "cry baby" attitude about his lack of such skills does nothing to help

> either himself or the other NG participants.
>
> "Mathematics - just do it" would be a good motto for Art to follow perhaps
> replacing his continual complaints regarding his lack of ability and
> qualifications.
> Art's "cry baby" comments only appear boorish and become very tiresome to
> NG participants.

Well Peter now you are being stupid and making up stories.
Maybe I can expect the same tactics that you put on Chip when he made claims on antennas which you didn't understand
But I am ready. You stated lack of skills on my part well I have enough of those skills that you are talking about. I made the claim of an antenna that uses all those skills and you stated a good engineer knows when to discard his model. Well Peter, if you were an engineer you would not discard it until you made a working model and compared it to theory (using all those mathematical skills that you bandy about or as I say talking the talk). I also gave you the theoretical background of the antenna and invited you to point out the fallacies , mathematical ofcourse, and all you still do is 'talk the talk' with no show.
Well Peter, if that the attitude you need to take me on with then be my guest,
even with the likes of the Doctor and the Bum holding your coat or throwing snide remarks is not enough to push me off the newsgroup like you did with Chip.
So go ahead and be my guest and flaunt your mathematical skills to show how I and my antenna is a fake and my skills are lacking. I would love it for you to make a stand on that subject so everybody can see who you are and what you are
when forced to 'walk the walk'. If I haven't the qualifications in any subject I carefully state so especially when talking on this newsgroup,
I am no way interested in infering that I am an expert where I am not, there are enough doing that already, but with respect to my antenna work I stand by it. I am willing to walk the walk but you Peter obviously feel more comfortable in just talking or making acrid remarks.

So I am staying here Peter, and you can have at it and show your true colours
Can I now expect for you to sue me now since you are well practiced at that?

Art Unwin..... XG

>
> [snip]
> > In "Hamerica" some real Engineers are P.E.s. It is not just for
> > Canadians.
> [snip]

>
> Well Mac as you well know, MI is not far from Canada sharing both
> a riverside a lakeside and common weather. What's your point?
>
> :-)
>
> [snip]
> > 73 Mac N8TT
> > --
> > J. Mc Laughlin - Michigan USA
> [snip]
>
> Speaking of Michigan, my wife and I attended a party at our next door
> neighbour's home here last week. MI snowbirds, Jo and Ivan had just
> arrived here in FL from MI to stay over the season here in their winter
> home on our "tropical island".
>
> Me? Even though an ex-Canadian, I like it here on the island all year long.
>
> Mac. Take care and enjoy the Holiday Season up North.

5678. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-07 23:36:48 UTC
From: Larry <larry@telepostinc.com>
Message-ID: <kQOAb.14645$P%1.13604794@newssvr28.news.prodigy.com>
Source record: 103443

A little off subject, but did you know Robert E. Lee was originally an engineer in the Army? One of the reasons he was so successful is that he helped design many of the forts he later captured... partly because he knew their structural weaknesses.

Larry N8LP

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:pmt6tv4recg106q0uvt321np1rbg7ffmse@4ax.com...
> On Sun, 7 Dec 2003 08:38:48 -0600 (CST), richardharrison@webtv.net
> (Richard Harrison) wrote:
>
> >Wes, N7WS wrote:
> >"We had an engineer for President. Look how well that worked out. One
> >term and we replaced him with a movie actor.
> >
> >Jimmy Carter in retirement, is negotiating peace accords around the
> >world. He is now in Geneva working with Palestineans and Israelis.
> >
> >We`ve had other engineers starting with George Washington.
> >
> >We`ve had Herbert Hoover, a,n engineer, who wrecked the economy, as
> >Ronald Reagan later did. Hoover, the engineer was replaced by FDR who
> >served 11 years and changed the world for the better forever. W. is
> >trying to undo the New Deal and in the process will likely wreck the
> >economy as Hoover did.
> >
> >Best regards, Richard Harrison, KB5WZI
>
> Hi All,
>
> The statement "an engineer" is certainly inaccurate by my count too.
> What about Davis, Grant, and Eisenhower?
>
> 73's
> Richard Clark, KB7QHC

5679. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 00:34:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd3c765_1@corp.newsgroups.com>
Source record: 103445

Peter O. Brackett wrote:
> I too use the IEEE relay service, but on different NG's from this one.

The IEEE relay service filters for viruses and worms. I don't know for
sure but I don't think the ARRL relay service performs that function.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5680. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 00:36:57 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <scc7tvsbsckjs93tladqjovd4p4ic1qqov@4ax.com>
Source record: 103446

On Sun, 07 Dec 2003 19:21:56 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Sun, 7 Dec 2003 08:38:48 -0600 (CST), richardharrison@webtv.net
|(Richard Harrison) wrote:
|
|>Wes, N7WS wrote:
|>"We had an engineer for President. Look how well that worked out. One
|>term and we replaced him with a movie actor.
|>
|>Jimmy Carter in retirement, is negotiating peace accords around the
|>world. He is now in Geneva working with Palestineans and Israelis.
|>
|>We`ve had other engineers starting with George Washington.
|>
|>We`ve had Herbert Hoover, a,n engineer, who wrecked the economy, as
|>Ronald Reagan later did. Hoover, the engineer was replaced by FDR who
|>served 11 years and changed the world for the better forever. W. is
|>trying to undo the New Deal and in the process will likely wreck the
|>economy as Hoover did.
|>
|>Best regards, Richard Harrison, KB5WZI
|
|Hi All,
|
|The statement "an engineer" is certainly inaccurate by my count too.
|What about Davis, Grant, and Eisenhower?

I was thinking of people that I had a chance to vote for. But, what
about them? If we're going to get picky.

Davis wasn't POTUS.

Washington was not an engineer in the usually accepted sense of the
word.

If attending West Point makes one an engineer, then Grant and Ike were
engineers. Otherwise...

Grant worked in his father's leather shop, and was a failed farmer and
financier. (Anheuser Busch owns the farm now. I was there a couple of
months ago.)

Ike was a jock, who went to West Point intending to play ball, not to
get an engineering degree. (I was at his library, tomb, etc. a couple
of months ago too.)

If we're looking for qualifications for greatness, maybe "self-taught" should be more important than "Harvard-educated lawyer" or "West Point-educated engineer." Washington and Lincoln top my list. (I spent some time with Abe this summer too)

5681. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 01:15:02 UTC
From: James W <change-to-jw22-at-trlp-dot-com@trlp.com>
Message-ID: <3FD3D096.9090708@trlp.com>
Source record: 103447

Well, my local radio shack told me that hadn't seen one in years. A
fellow responded to me direct from this newsgroup with the radio shack
part number (21-903), and suddenly, my local store had four in stock.

- jim

Henry Kolesnik wrote:
> most Radio Shack stores have or can order..
> Also try a bigger Truck Stop on the Interstate..
> hank wd5jfr
> "James W" <change-to-jw22-at-trlp-dot-com@trlp.com> wrote in message
> news:3FD3A2D9.6030000@trlp.com...
>
>>Cannot find those good old 102inch CB antennas any more. Anyone have a
>>source I can mail order from?
>>
>> - jim KG7HH
>>
>
>
>

5682. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 01:31:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <smj7tvkpmbsvrvtlfs8dfas4mmdc0f3i74@4ax.com>
Source record: 103448

On Sun, 07 Dec 2003 17:36:57 -0700, Wes Stewart <n7ws@_arrl.net>
wrote:
>|Hi All,
>|
>|The statement "an engineer" is certainly inaccurate by my count too.
>|What about Davis, Grant, and Eisenhower?
>
>I was thinking of people that I had a chance to vote for. But, what
>about them? If we're going to get picky.

You choose to limit the population by who you could've voted for is
not?
>
>Davis wasn't POTUS.

He sure wasn't POTUSSR.

>
>Washington was not an engineer in the usually accepted sense of the
>word.

A technically trained user of instrumentation for the purpose of
measuring and generating specifications is not an engineer? We are
not talking about Alchemy or Astrology here. Getting picky.

>If attending West Point makes one an engineer, then Grant and Ike were
>engineers. Otherwise...

Otherwise? ALL graduates of West Point are engineers. West Point is
the 4th overall rated Engineering school in America. It was the ONLY
Engineering school in America for decades.

>
>Grant worked in his father's leather shop, and was a failed farmer and
>financier. (Anheuser Busch owns the farm now. I was there a couple of
>months ago.)

I have degrees in the Liberal Arts and have made a career in
Engineering. I have failed in many things. I don't suppose you want
to vote for me, but then I'm not running.
>
>Ike was a jock, who went to West Point intending to play ball, not to
>get an engineering degree. (I was at his library, tomb, etc. a couple
>of months ago too.)

Begs the results, he graduated with an Engineering degree.

>If we're looking for qualifications for greatness, maybe "self-taught"
>should be more important than "Harvard-educated lawyer" or "West
>Point-educated engineer." Washington and Lincoln top my list. (I
>spent some time with Abe this summer too)
>
This, too, is picky. I can't say that I have any favorite president, especially after having put my life on the line to obey their orders. Those several, I'm sure, considered themselves great presidents.

The point is, there is nothing inherently distinctive about being an Engineer, and being President, and the combination being great or bad.

There is nothing distinctive about a president wearing a flight-suit for an afternoon - especially when 77% of the troops would vote for someone else ("The Army Times" Poll, Oct 2003).

73's
Richard Clark, KB7QHC

5683. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 01:38:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o1l7tv8d9uiki6mlli0isa02621fjm8d33@4ax.com>
Source record: 103449

On Sun, 07 Dec 2003 23:36:48 GMT, "Larry" <larry@telepostinc.com>
wrote:

>A little off subject, but did you know Robert E. Lee was originally an
>engineer in the Army? One of the reasons he was so successful is that he
>helped design many of the forts he later captured... partly because he knew
>their structural weaknesses.
>
>Larry N8LP
>

Hi Larry,

We are all off topic. Lee graduated from West Point as Honor man. He
was the first cadet to do so with 0 demerits (damned difficult to,
considering using the word damn hits you with one demerit). Lee was
also the Superintendent of West Point (same as Chancellor or head of a
University). The infrastructure of America (canals, railways,
bridges...) were all designed by West Pointers before the Civil War.

73's
Richard Clark, KB7QHC

5684. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 01:47:54 UTC
From: Ronald Bilodeau <va3sgr@vianet.ca>
Message-ID: <vt7m26hhhg6h2a@corp.supernews.com>
Source record: 103450

I am after a chart that will tell me the Ohms of all the coaxes. Thanks,Ron
"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:bqim5bssj1@newshost.mot.com...
> What kind of a "chart" are you after?
> I made an Excel spreadsheet plotting the loss for a few common types
> RG 8, 58 213 9913 LMR400
> Steve,
> --
> Steve N, K,9,d, c. i email via the arrl net. or remove the q's from
the
> following
> sqteqveq.nqoqsqkqoqwiqczq.@mqoqtoqroqla.com
>
>
> <spamproof@nospam.com> wrote in message
> news:MPG.1a3564851edccdbf9896b1@netnews.comcast.net...
> > In article <vsnf1a70skho2a@corp.supernews.com>, va3sgr@vianet.ca says...
> > > Hi, Where can I get a coax chart. Thank you very mutch.
> > > Ron. VA3*SGR
> > >
> > >
> > >
> > A "Google" Search reveals quite a few resources. This one might be what
> > you want.
> >
> > http://www.eweb-planet.com/kk6ss/coax.html
> >
> > KA7RGO
>
>

5685. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 02:18:04 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <hmn7tvsh9feo8622ful6jqqpcqvj7mi328@4ax.com>
Source record: 103451

I would avoid Rat Shack and others that cater to the CB crowd. Those products lose their spring, corrode, etc., Try a manufacturer which sells to public safety users (Antenna Specialists, etc.).A few decent sources:
http://www.antenex.com/
http://www.tessco.com/
GL & 73
Dan (K0DAN)

On Sun, 07 Dec 2003 13:59:53 -0800, James W
<change-to-jw22-at-trlp-dot-com@trlp.com> wrote:

>Cannot find those good old 102inch CB antennas any more. Anyone have a
>source I can mail order from?
>
> - jim KG7HH

5686. Re: Gates Radio amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 02:45:38 UTC
From: richardharrison@webtv.net
Message-ID: <19802-3FD3E5D2-104@storefull-2313.public.lawson.webtv.net>
Source record: 103453

Mike wrote:
"I am repairing a Gates Radio Company amplifier, it is labeled Power
Amplifier #99-2-1715-001
Serial #73-1184-004

Cates Radio is now a part of Harris Corp. They have a web site and may
be willing and able too supply the information you need.

Best regards, Richard Harrison, KB5WZI

5687. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 02:48:33 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <53o7tvg3vf43n5kvh3m4ukfdclie0sn53u@4ax.com>
Source record: 103452

On Mon, 08 Dec 2003 01:31:12 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Sun, 07 Dec 2003 17:36:57 -0700, Wes Stewart <n7ws@_arrl.net>
|wrote:
|>|Hi All,
|>|
|>|The statement "an engineer" is certainly inaccurate by my count too.
|>|What about Davis, Grant, and Eisenhower?
|>
|>I was thinking of people that I had a chance to vote for. But, what
|>about them? If we're going to get picky.
|
|You choose to limit the population by who you could've voted for is
|not?

Forgive me. This topic drifted off when Yuri (if I can remember that
far back) proposed the premise that maybe we would be better off with
engineers running things rather than lawyers and politicians.

I offered *an* example of POTUS and *an* example of a mayor to refute
this idea. I did not intend them to be the *only* examples.

|>
|>Davis wasn't POTUS.
|
|He sure wasn't POTUSSR.
|
|>
|>Washington was not an engineer in the usually accepted sense of the
|>word.
|
|A technically trained user of instrumentation for the purpose of
|measuring and generating specifications is not an engineer? We are
|not talking about Alchemy or Astrology here. Getting picky.

Not me, the place that I worked for sure was though. I can tell you
from very personal experience that it was the accepted norm that many,
many graduate engineers thought that *anyone*, regardless of talent,
without an engineering degree was not a "real" engineer.

Hell, I knew people that thought that if you didn't have a PhD you
didn't know squat. One of these could not hold a conversation about
the weather without interjecting, "When I was working on my
thesis...."

[snip]

| I don't suppose you want
|to vote for me,

You have a great gift of gab, but no, I wouldn't vote for you <g>

5688. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 03:25:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312071925.6795befa@posting.google.com>
Source record: 103454

"Larry" <larry@telepostinc.com> wrote in message
news:<kQOAb.14645$P%1.13604794@newssvr28.news.prodigy.com>...
> A little off subject, but did you know Robert E. Lee was originally an
> engineer in the Army? One of the reasons he was so successful is that he
> helped design many of the forts he later captured... partly because he knew
> their structural weaknesses.
>
> Larry N8LP

Larry, so good to see you back.
What ever happenned with your article and ARRL?
It would be a real shameif your article doesn't reach
the ham community at large.
Best regards
Art

>
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:pmt6tv4recg106q0uvt321np1rbg7ffmse@4ax.com...
> > On Sun, 7 Dec 2003 08:38:48 -0600 (CST), richardharrison@webtv.net
> > (Richard Harrison) wrote:
> >
> > >Wes, N7WS wrote:
> > >"We had an engineer for President. Look how well that worked out. One
> > >term and we replaced him with a movie actor.
> > >
> > >Jimmy Carter in retirement, is negotiating peace accords around the
> > >world. He is now in Geneva working with Palestineans and Israelis.
> > >
> > >We`ve had other engineers starting with George Washington.
> > >
> > >We`ve had Herbert Hoover, a,n engineer, who wrecked the economy, as
> > >Ronald Reagan later did. Hoover, the engineer was replaced by FDR who
> > >served 11 years and changed the world for the better forever. W. is
> > >trying to undo the New Deal and in the process will likely wreck the
> > >economy as Hoover did.
> > >
> > >Best regards, Richard Harrison, KB5WZI
> >
> > Hi All,
> >
> > The statement "an engineer" is certainly inaccurate by my count too.
> > What about Davis, Grant, and Eisenhower?
> >

> > 73's
> > Richard Clark, KB7QHC

5689. Re: Gates Radio amplifier

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 04:05:32 UTC
From: richardharrison@webtv.net
Message-ID: <941-3FD3F88C-252@storefull-2311.public.lawson.webtv.net>
Source record: 103456

Mike wrote:
"I a,m repairing a Gates Radio Co. Amplifier,---."

Barry Mishkind seems to be a Gates Radio fan. He has web pages devoted to the company. He says Gates was sold to Harris in 1957. Barry also says that reportedly Parker Gates died 9/16/86 at home in Quincy, IL.

A search on Gates Radio produces much information. If Gated should not be responsive, Barry may help you get the diagram you desire. His address:

Barry Mishkind
2033 Augusta Place
Tucson, AZ 85710
Phone: (520) 296 3797
e-mail: barry@broadcast.net

Best regards, Richard Harrison, KB5WZI

5690. Re: Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 04:12:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD3FA19.EA5A908C@cwis.net>
Source record: 103455

Gerry,
Do you have guy wires on your tower? How long are they,
and how hard would it be to put an insulator on the top end
of one, or several? How about loading the tower? Or running
a wire from the top to some point close to the shack, or a
tree / pole / top of the garage? All kinds of possibilities.
An 80 or 160 meter antenna doesn't have to be of any
'classic'
design to work. You may have to use a tuner, but that's no big
deal. Guess it is if you don't have one, huh?
'Doc

5691. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 04:15:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD3FAF5.75635F92@cwis.net>
Source record: 103457

Dan,
Contrary to what some people think, 'Radio Shack' doesn't
make many of their products. They buy from the same suppliers
that 'Antenna Specialists' buys from, or the 'truck stop'
shops, among others...
'Doc

5692. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 04:35:41 UTC
From: James <jimbo@nospam.net>
Message-ID: <3FD3FF9C.9F1B4035@nospam.net>
Source record: 103458

hi

http://www.cablexperts.com

jimbo

Ronald wrote:

> I am after a chart that will tell me the Ohms of all the coaxes. Thanks,Ron
> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> news:bqim5bssj1@newshost.mot.com...
> > What kind of a "chart" are you after?
> > I made an Excel spreadsheet plotting the loss for a few common types
> > RG 8, 58 213 9913 LMR400
> > Steve,
> > --
> > Steve N, K,9,d, c. i email via the arrl net. or remove the q's from
> the
> > following
> > sqteqveq.nqoqsqkqoqwiqczq.@mqoqtoqroqla.com
> >
> >
> > <spamproof@nospam.com> wrote in message
> > news:MPG.1a3564851edccdbf9896b1@netnews.comcast.net...
> > > In article <vsnf1a70skho2a@corp.supernews.com>, va3sgr@vianet.ca says...
> > > > Hi, Where can I get a coax chart. Thank you very mutch.
> > > > Ron. VA3*SGR
> > > >
> > > >
> > > >
> > > A "Google" Search reveals quite a few resources. This one might be what
> > > you want.
> > >
> > > http://www.eweb-planet.com/kk6ss/coax.html
> > >
> > > KA7RGO
> >
> >

5693. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 04:52:27 UTC
From: MikeN <mnewman@clear.net.nz>
Message-ID: <mrv7tvk1mpfqi21es581m8d1dhik7jps4h@4ax.com>
Source record: 103459

Thanks Jacques, George and Richard for you replies.

I've got in mind building an HA8ET return loss bridge
http://www.pollak.sulinet.hu/elektro/hidak/hidak.htm, if necessary
separating it from the antenna by a couple of wavelengths of coax,
expecting the antenna load to repeat at half-multiples of a
wavelength.

This resistive bridge is physically small and specified at 40 dB
return loss at 70 cm, so why shouldn't it give some meaningful
although not necessarily exact results for the impedance?

Would the separating cable add to the imprecision.of the results.

Any views?

MikeN ZL1BNB

On Fri, 05 Dec 2003 06:28:44 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 05 Dec 2003 17:11:53 +1300, MikeN <mnewman@clear.net.nz>
>wrote:
>
>>Thanks George
>>
>>I can make a UHF bridge and a dummy load rfom SMD resistors which I
>>think should be good enough for 70 cm. Any comments?
>>
>>Mike N
>>
>
>Hi Mike,
>
>George has a point. Building a bridge begs the question: which one?
>
>In the collection of works under bridges, there are many, most of
>which are entirely unsuited to the job.
>
>The first problems one would encounter is balance and isolation. At
>UHF this actually is simple because visualization lends to revealing
>those flaws in the implementation. IF, of course, you look at it with
>that perspective. Another problem is scale. Your bridge might
>present a significant intrusion into the variable being measured.
>
>How do you put a 6X3X9 project box holding your bridge into practice

>with an antenna that is the same size? The problem of isolation. SMD
>components are a good first pass, but a bridge has its variables to
>perform the measurement. How big is the read-out scale to the knob in
>relation to that same antenna? The smaller you make it, the closer
>you get your face to the antenna (isolation and balance again). How
>do you adjust the balance without literally putting your hand into the
>equation?
>
>OK, so you make the bridge a remote device, you measure through a
>line. Then the question becomes, are you measuring the antenna, or
>the antenna AND the line? You need to isolate the line, and you do
>that through a reference. Where did you get the reference?
>Presumably another SMD, but was the line choked?
>
>Another, classic solution is to scale your problems away. Take what
>instrumentation you have, that exhibits the precision you need, that
>contains as much error as you can tolerate, and scale a model of your
>antenna to suit IT. Take a measure and reverse scale the model
>antenna physical design to the target frequency. What you have to
>watch out for here are those variables that are scale/frequency
>variant like ground loss, dissipation factors and such. Again the
>problem of perspective IF you don't know what to look for.
>
>73's
>Richard Clark, KB7QHC

5694. RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 05:12:27 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <moUAb.29779$Bk1.25134@fed1read05>
Source record: 103460

Ok so I'm getting back active with my ham gear and while looking into a new HF antenna, discovered a new cable type being recommended here and there, RG-213. What is so much better about RG-213 than what I have used so much of over the years, RG-8? TIA. :)

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

5695. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 06:56:26 UTC
From: Michael Tope <W4EF@dellroy.com>
Message-ID: <ugVAb.333602$ao4.1117359@attbi_s51>
Source record: 103461

Interesting. I don't have this book handy [all I have is my signed
copy of "Antennas, 2ed" :):)]. Is there any indication in the text as
to where the "actual current" data came from? Is it derived from
some sort of EM analysis, or is it measured data I wonder?
I think Kraus spent a lot of time studying helical structures
while he was developing the helical antenna. Since a loading
coil is basically a helical antenna operating in the normal mode
perhaps the answer to this question lies in some of his early
work.

Thanks,

Mike, W4EF.....

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fd23f2f_1@corp.newsgroups.com...
> Michael Tope wrote:
> > This is what bothers me about the claims that the "cosine law"
> > can be used to predict the current taper in the loading coil.
>
> It is certainly NOT a "cosine law". It is at best an approximation.
> From _Antennas_For_All_Applications_ by Kraus & Marhefka, third
> edition, page 464: "The difference between these (dashed) curves
> and the solid curves is not large but is appreciable." The solid
> curves are cosine curves. The dashed curves, indicating the actual
> current, are not cosine curves but are relatively close approximations.
>
> The only time pure cosine curves will result for net current is in
> a lossless situation which is certainly not entirely valid or accurate
> for a radiating antenna.
>
> If the magnitudes of the forward current and reflected currents are
> not equal, there will be a drift away from a pure cosine shape.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

5696. Re: UHF antenna measurements

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 07:08:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b888tvoag9bhrdpk8g9kf6mafaorcf4dle@4ax.com>
Source record: 103462

On Mon, 08 Dec 2003 17:52:27 +1300, MikeN <mnewman@clear.net.nz>
wrote:

>Thanks Jacques, George and Richard for you replies.
>
>I've got in mind building an HA8ET return loss bridge
>http://www.pollak.sulinet.hu/elektro/hidak/hidak.htm, if necessary
>separating it from the antenna by a couple of wavelengths of coax,
>expecting the antenna load to repeat at half-multiples of a
>wavelength.
>
>This resistive bridge is physically small and specified at 40 dB
>return loss at 70 cm, so why shouldn't it give some meaningful
>although not necessarily exact results for the impedance?
>
>Would the separating cable add to the imprecision.of the results.
>
>Any views?
>
>MikeN ZL1BNB
>
Hi Mike,

Resistive Bridges (in other words, those not using directional
coupling through ferrites) are pretty robust up to this region. You
definitely want to keep the power down because it will cause the
reference load to change resistance if it heats up appreciably.

Also, use odd 1/8th wave cable lengths so that the reactance change
that is being transformed is not on the edge of a steep slope
(resonance causes things to change fast making accurate measurements
difficult). Reference Walt Maxwell's "Reflections" to delve deeper
into this matter. Half waves for casting back a repeated Z only if
you can insure you can measure a short at the connector (not as easy
as it may seem - hence the 1/8th wave recommendation).

73's
Richard Clark, KB7QHC

5697. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 11:08:02 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <mYYAb.4066$Ho3.2198@newsread1.news.atl.earthlink.net>
Source record: 103463
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Don Forsling" wrote:
>
> (snip) The BASIC rule of photography is this
> (and I make a living at it):
>
> If you are standing (or sitting for that matter)
> on public property, you can legally photograph
> anything you can see from where you are
> standing. There are, of course, exceptions
> for various national security considerations,
> etc., but it is absolutely not against the law to
> stand on a public sidewalk or in a public street
> and take a picture of somebody's house, their
> rose bushes, their car, their ugly fence, their
> goofy-looking mailbox, their body etc., etc.
> (snip)

Exactly right, Don. According to several court cases, a person in a pubic place has no reasonable expectation of privacy. Likewise, property is not protected when photographed from a public place. In other words, as long as you're not on private property, and what you're photographing can be seen from outside that property, you can photograph it. There are a few exceptions. For example, you cannot photograph someone through a window of a house, even if you do so from a public place. You also cannot do anything out of the ordinary, such as climbing a fence to photograph into private property.

What you can do with those photographs is another matter (and this is where some protections exist). In general, there are few restrictions on photographs used for private or journalistic purposes, but commerical use often requires permission (a release) from the person on the photograph or the owner of the property photographed. But even here there are exceptions. For example, a person photographed in an embarassing situation may be protected from even journalistic use if the photograph is not specifically news related and a person included in the general background of a photograph used for commercial purposes may not be protected.

Everything changes when you enter private property (and a museum is often considered private property, even if only owned by the state). In this case, the owner of that property makes the rules.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5698. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 11:30:28 UTC
From: ariexyz@hotmail.com
Message-ID: <995b9343.0312080330.79b0f935@posting.google.com>
Source record: 103464

Reg, Tarmo,

sorry for the delay, because I have been sick for a few days..

I am using some 3000 volts and some 300 volts screen-grid supply.
That should lead to some 5400 volts p-p

And yes, for the moment I am using L and c values comparable
to those mentioned by Tarmo. (designed for a loaded Q of around
12 as recomended by the ARRL handbook) However the inductor is
becoming quite hot, so I was wondering what could be done to
improve efficiency, without neglecting harmonic suppression.

I used Reg's program to recalculate things a couple of times
and to get a Q of around 12. However I could only realize this
by entering a phase-shift of about 90 degrees, which in turn
gave me the 'strange' C and L values...
However somehow (and do I feel stupid !) I do not succeed in
getting 'normal' values when using Reg's program....

Maybe his Q value is another value than mentioned by the ARRL ?

Arie.

5699. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 13:00:40 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <YB_Ab.4098$Ho3.2607@newsread1.news.atl.earthlink.net>
Source record: 103465

Art:

My friend you have me confused with someone else!

I have never once commented or posted anything about *your* antenna
inventions or technical claims. Nor do I intend to until you stop whining!

What I have commented on is your many posts which contain
complaints laments and cries for pity and understanding because of your
claimed lack of knowledge, expertise, or whatever.

Your suppositions that others do not give your *inventions* credit
simply because you lack such personal qualifications is plain stupidity.

Art, that's why I call you "cry baby" and "whiner".

If your technical inventions/claims/whatever... are great then they will
stand
on their own merits and need no support by claims of the insufficient
qualifications of their inventor!

I have noted one here who gives a damn what technical credentials you,
or any other poster to the NG, hold! Your qualifications are irrelevant to
the subject.

[Unless of course you happen to hold a Ph.D. from Cornell
in Astrophysics, only then apparently can you claim that your
graduaton diploma makes your inventions unique and special!
[Heh, heh... That last sentence was not meant to denigrate
that fine University, only one of it's claimed graduates.]

Art, just stop your whining and let the world get on with its
valid and invalid critiques of your work!

Hey... Oliver Heaviside, never accepted his nomination to the Royal Society,
by degreed grandees and he never completed grade school, or studied anything
formally beyond age 16, yet Oliver stood with the greatest scientists,
mathematicians,
engineers and natural philosphers of his time simply be "doing" things that
they couldn't.

Education, academic degrees, and technical training mean nothing.

Art my friend, it's your "track record, it's what you accomplish in life
or do that is important, not what examinations you have passed!

Get real you big cry baby, let what you have done or accomplished stand on
it's

own merits and see if it survives and what others think of it, and just stop
all of your
damned whining!

If it doesn't survive the critiques of the world then it isn't worth a damn
anyway.

No one pays attention to whiners!

I for one simply don't care to waste valuable time investigating any
technical advances
or claims put forward and supported by a whiner and whining.

Whining about inferiority and lack of academic qualifications is a sure sign
that the
prosyletizer probably has nothing worth while to contribute.

Art, put your ideas and inventions out there and let others have at it, if
your ideas
and accomplishments are worthy they will stand on their on, if not they
wont!

But whining about inferior technical qualifications...? What does that
accomplish?

Whining... Man, give it up!

Instead, spend your bandwidth on clear concise explanations of your the
benefits
and originality of your technical contributions.

Nuff said?

--
Peter K1PO
Indialantic By-the-Sea, FL.

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0312071516.59b309f2@posting.google.com...
> "Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<lAIAb.3159$7p2.1784@newsread2.news.atl.earthlink.net>...
> > Mac:
> >
> > [snip]
> > "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> > news:vt4k4q6942q0f6@corp.supernews.com...
> > > Dear Peter:
> > > I would have sent this to you privately, but you do not provide a
> > > valid E-mail address.
> > [snip]
> >
> > The Internet "worms" nearly *killed* my computer communications
capability
> > this past year, no thanks to the younger generation of unethical

"hackers"
> > and
> > brought to everyone courtesy of the "world's richest man", and so these
> > days...
> >
> > If you want to email me direct you must send via the arrl dot net relay.
> >
> > :-)
> >
> > [snip]
> > > Well done on presenting the sequence of understanding and
> > > emphasizing the role of mathematics.
> > [snip]
> >
> > Thanks!
> >
> > As you no doubt appreciate, it pays to know a little history only to
> > avoid repeating it.
> >
> > There is very little ambiguity equivocationn or cause for argument when
> > using the universal albeit sometimes cryptic language of mathematics.
> >
> > The elementary mathematical skills which Art often eschews are neither
> > difficult nor expensive to acquire and definitely not difficult to carry
> > around.
> >
> > Such skills do however require some little dedication to study...
> >
> > just as the ham radio license *used to* require. :-)
> >
> > Art's "cry baby" attitude about his lack of such skills does nothing to
help
> > either himself or the other NG participants.
> >
> > "Mathematics - just do it" would be a good motto for Art to follow
perhaps
> > replacing his continual complaints regarding his lack of ability and
> > qualifications.
> > Art's "cry baby" comments only appear boorish and become very tiresome
to
> > NG participants.
>
> Well Peter now you are being stupid and making up stories.
> Maybe I can expect the same tactics that you put on Chip when he made
> claims on antennas which you didn't understand
> But I am ready. You stated lack of skills on my part well I have
> enough of those skills that you are talking about. I made the claim of
> an antenna that uses all those skills and you stated a good engineer
> knows when to discard his model. Well Peter, if you were an engineer
> you would not discard it until you made a working model and compared

> it to theory (using all those mathematical skills that you bandy
> about or as I say talking the talk). I also gave you the theoretical
> background of the antenna and invited you to point out the fallacies
> , mathematical ofcourse, and all you still do is 'talk the talk' with
> no show.
> Well Peter, if that the attitude you need to take me on with then be
> my guest,
> even with the likes of the Doctor and the Bum holding your coat or
> throwing snide remarks is not enough to push me off the newsgroup like
> you did with Chip.
> So go ahead and be my guest and flaunt your mathematical skills to
> show how I and my antenna is a fake and my skills are lacking. I would
> love it for you to make a stand on that subject so everybody can see
> who you are and what you are
> when forced to 'walk the walk'. If I haven't the qualifications in
> any subject I carefully state so especially when talking on this
> newsgroup,
> I am no way interested in infering that I am an expert where I am not,
> there are enough doing that already, but with respect to my antenna
> work I stand by it. I am willing to walk the walk but you Peter
> obviously feel more comfortable in just talking or making acrid
> remarks.
>
> So I am staying here Peter, and you can have at it and show your true
> colours
> Can I now expect for you to sue me now since you are well practiced at
> that?
>
> Art Unwin..... XG
>
>
> >
> > [snip]
> > > In "Hamerica" some real Engineers are P.E.s. It is not just for
> > > Canadians.
> > [snip]
> >
> > Well Mac as you well know, MI is not far from Canada sharing both
> > a riverside a lakeside and common weather. What's your point?
> >
> > :-)
> >
> > [snip]
> > > 73 Mac N8TT
> > > --
> > > J. Mc Laughlin - Michigan USA
> > [snip]
> >
> > Speaking of Michigan, my wife and I attended a party at our next door
> > neighbour's home here last week. MI snowbirds, Jo and Ivan had just

> > arrived here in FL from MI to stay over the season here in their winter
> > home on our "tropical island".
> >
> > Me? Even though an ex-Canadian, I like it here on the island all year
long.
> >
> > Mac. Take care and enjoy the Holiday Season up North.

5700. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 13:47:50 UTC
From: richardharrison@webtv.net
Message-ID: <19802-3FD48106-124@storefull-2313.public.lawson.webtv.net>
Source record: 103466

Mike, W4EF wrote:
"Is there any indication in the text as to where the actual current data came from?"

Not exactly, on page 464 of the 3rd edition of Kraus` "Antennas", that I saw. Below the diagrams of current versus distance from the center of the dipole, the text says:

"It is generally assumed that current distribution on an infinitesimally thin antenna---is sinusoidal, and that the phase is constant over 1/,2-WL interval, changing abruptly by 180-degrees between intervals."

On page 295, Kraus says:
"If the dimensions (of a helix) are small (nL<<lambda), the maximum radiation is in the xy plane for a helix oriented as in Fig 8-69a, with zero radiation in the z direction."

In other words, radiation is perpendicular (normal) to the axis of small diameter coils.

On page 295, Kraus says:
In the preceding discussion on the normal mode of radiation, the assumption is made that the current is uniform in magnitude and in phase over the entire length of the helix. This condition could be approximated if the helix is very small (nL<<lambda) and is end loaded. However, the bandwidth of such a small helix is very narrow, and the radiation efficiency is low."

It is obvious that the inductance and delay of a coil depend upon on the coil`s diameter and pitch, in addition to the length of the coil.

Best regards, Richard Harrison, KB5WZI

5701. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 14:26:07 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031208092607.15826.00000309@mb-m21.aol.com>
Source record: 103467

>Ok so I'm getting back active with my ham gear and while looking into a new
>HF antenna, discovered a new cable type being recommended here and there,
>RG-213. What is so much better about RG-213 than what I have used so much
>of over the years, RG-8?

RG-213 has less loss per 100 ft than RG-8. Nothing too significant though, not
at HF freq's at least. Check out:

http://www.radio-ware.com/products/techinfo/coaxloss.htm
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5702. Salt Water Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 14:27:31 UTC
From: Vito Steockli <vito@crosslink.net>
Message-ID: <3fd48a59$0$23547@dingus.crosslink.net>
Source record: 103468

The good old boys over on rec.boats.electronics continually worry over having enough ground plane for their seagoing HF SSB antennae, which typically comprise a vertical or near vertical insulated rigging element fed thru a tuner. All of my HF antenna experience has been on land and I was always led to believe that salt water otta make a great ground plane for a HF vertical - at least a whole lot better than the dirt under mine. So why does everybody add copper strips, et cetera, to their bildges?

TIA
Howard, K3DWW

5703. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 14:39:24 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <w20Bb.461703$HS4.3603203@attbi_s01>
Source record: 103319

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031208092607.15826.00000309@mb-m21.aol.com...
> >Ok so I'm getting back active with my ham gear and while looking into a
new
> >HF antenna, discovered a new cable type being recommended here and there,
> >RG-213. What is so much better about RG-213 than what I have used so
much
> >of over the years, RG-8?
>
> RG-213 has less loss per 100 ft than RG-8. Nothing too significant though,
not
> at HF freq's at least. Check out:
>
> http://www.radio-ware.com/products/techinfo/coaxloss.htm
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has lower
lose than 213.

Sorry, I don't mean to be pedantic, but as a new ham myself, I found the
various 8s confusing.

73

Paul AB0SI

5704. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 14:51:58 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <je0Bb.30145$Bk1.26174@fed1read05>
Source record: 103320
Body handling: HTML body converted to readable text

I had noticed the same thing, that RG-213 seemed to have very slightly more loss per foot than RG-8 did. Somewhere I got a feeling that perhaps RG-213's strength was that it was longer lasting but even that doesn't make sense for several reasons. I've even noticed antenna kits that include RG-213 so maybe its just less expensive and they can make higher profits with RG-213 than they can with RG-8 at the expense of slightly higher loss?

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"paulfriedman@comcast.net" wrote in message
news:w20Bb.461703$HS4.3603203@attbi_s01...
> "VHFRadioBuff" wrote in message
> news:20031208092607.15826.00000309@mb-m21.aol.com...
> > >Ok so I'm getting back active with my ham gear and while looking into a
> new
> > >HF antenna, discovered a new cable type being recommended here and
there,
> > >RG-213. What is so much better about RG-213 than what I have used so
> much
> > >of over the years, RG-8?
> >
> > RG-213 has less loss per 100 ft than RG-8. Nothing too significant
though,
> not
> > at HF freq's at least. Check out:
> >
> > http://www.radio-ware.com/products/techinfo/coaxloss.htm
> > =-
> > 73! de Andy KC2SSB - WPYI880 (GMRS)
> > Beachwood, NJ USA! Grid FM29vw
> > http://vhfradiobuff.tripod.com
>
> I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has
lower
> lose than 213.
>
> Sorry, I don't mean to be pedantic, but as a new ham myself, I found the
> various 8s confusing.

>
> 73
>
> Paul AB0SI
>
>

5705. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:04:18 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD492F2.8BD13B5F@cwis.net>
Source record: 103321

Art,
For the last time, I am not a doctor. I have never been
a doctor. And, I've never claimed to be a doctor of any
kind. It's a nick name. I didn't pick it, it was 'given'
to me, I didn't have any choice in the matter. But I've had
it for quite some time now and have gotten used to it. If
you want to misconstrue it's meaning, I can't do anything
about that, other than explain as I have a number of times.
If you don't like it, then I'm sorry. But don't expect me
to change it, I'm not going to do that at this late date.
If you don't want to call me 'Doc, that's fine, don't. My
name is Paul, you can use that, or whatever your little
heart desires. I'm tired of your nonsense about a nick name.
-------> 'Doc <-------

PS - Rather than 'snide', call my remarks about you 'pithy'.
I've never been full of 'snide'. I'll probably admit
to being full of 'pith'.

5706. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:06:46 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <as0Bb.469926$Fm2.459011@attbi_s04>
Source record: 103322
Body handling: HTML body converted to readable text

RG-213 is also rated for somewhat higher power than RG-8.

Off the subject, but....

Last week I had an interesting QSO with a gentleman who runs nothing but hard line -- and SERIOUS hardline at that. His jumpers are LHR 600 -- he uses lower loss stuff (honest) for his runs. This includes the runs for his 160m and 80m antennas. Now, there is a person who does not like loss.

Paul AB0SI

"Jerry Bransford" wrote in message
news:je0Bb.30145$Bk1.26174@fed1read05...
> I had noticed the same thing, that RG-213 seemed to have very slightly
more
> loss per foot than RG-8 did. Somewhere I got a feeling that perhaps
> RG-213's strength was that it was longer lasting but even that doesn't
make
> sense for several reasons. I've even noticed antenna kits that include
> RG-213 so maybe its just less expensive and they can make higher profits
> with RG-213 than they can with RG-8 at the expense of slightly higher
loss?
>
> Jerry
> --
> Jerry Bransford
> To email, remove 'me' from my email address
> KC6TAY, PP-ASEL
> See the Geezer Jeep at
> http://members.cox.net/jerrypb/
>
> "paulfriedman@comcast.net" wrote in message
> news:w20Bb.461703$HS4.3603203@attbi_s01...
> > "VHFRadioBuff" wrote in message
> > news:20031208092607.15826.00000309@mb-m21.aol.com...
> > > >Ok so I'm getting back active with my ham gear and while looking into
a
> > new
> > > >HF antenna, discovered a new cable type being recommended here and
> there,
> > > >RG-213. What is so much better about RG-213 than what I have used so
> > much
> > > >of over the years, RG-8?
> > >

> > > RG-213 has less loss per 100 ft than RG-8. Nothing too significant
> though,
> > not
> > > at HF freq's at least. Check out:
> > >
> > > http://www.radio-ware.com/products/techinfo/coaxloss.htm
> > > =-
> > > 73! de Andy KC2SSB - WPYI880 (GMRS)
> > > Beachwood, NJ USA! Grid FM29vw
> > > http://vhfradiobuff.tripod.com
> >
> > I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has
> lower
> > lose than 213.
> >
> > Sorry, I don't mean to be pedantic, but as a new ham myself, I found the
> > various 8s confusing.
> >
> > 73
> >
> > Paul AB0SI
> >
> >
>
>

5707. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:10:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd4949d_4@corp.newsgroups.com>
Source record: 103323

Michael Tope wrote:
> Interesting. I don't have this book handy [all I have is my signed
> copy of "Antennas, 2ed" :):)]. Is there any indication in the text as
> to where the "actual current" data came from?

King, Ronold & C.W.Harrison, Jr, "The Distribution of Current along a
Symmetrical Center-Driven Antenna", Proc. IRE, 31, 548-567, October 1943.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5708. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:11:13 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <br24ah$1j7e$1@f04n12.cac.psu.edu>
Source record: 103325

Hi:
RG-8 used to be a military specification cable but the military dropped it in favor of a new specification called RG-213. They are very similar coaxes in general, but manufactures are free to make any cable they like and call it RG-8 so the quality and consistency can vary widely. Also RG-8 with foam a center insulator, and all the other variations are not nor never were MilSpec.That does not mean that all RG-8 cables are crap, but it could be and it depends on the manufactures idea of what kind of cable they want to sell. On the other hand RG-213 as a current MilSpec cable is a higher grade cable and is more consistent from manufacture to manufacture. My feeling is that if I'm going to go to all the work of installing a antenna, I want to use the best material I can. So I use RG-213. But my favorite coax is Davis RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low loss and a very tough jacket. I have 500 feet of it in my antenna system and so far I'm very happy.

--
John Passaneau W3JXP
State College Pa
jxp16@psu.edu
This mail is a natural product. The slight variations in spelling and grammar enhance its individual character and beauty and in no way are to be considered flaws or defects.

"Jerry Bransford" <jerrypb@mecox.net> wrote in message
news:moUAb.29779$Bk1.25134@fed1read05...
> Ok so I'm getting back active with my ham gear and while looking into a
new
> HF antenna, discovered a new cable type being recommended here and there,
> RG-213. What is so much better about RG-213 than what I have used so much
> of over the years, RG-8? TIA. :)
>
> Jerry
> --
> Jerry Bransford
> To email, remove 'me' from my email address
> KC6TAY, PP-ASEL
> See the Geezer Jeep at
> http://members.cox.net/jerrypb/
>
>
>
>

5709. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:13:28 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd49569_4@corp.newsgroups.com>
Source record: 103324
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Dwight Stewart wrote:
> According to several court cases, a person in a pubic
> place has no reasonable expectation of privacy. Likewise, property is not
> protected when photographed from a public place. In other words, as long as
> you're not on private property, and what you're photographing can be seen
> from outside that property, you can photograph it.

If one doesn't want those photons being collected by a camera,
one should keep them at home.
--
73, Cecil http://www.qsl.net/w5dxp

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5710. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:28:21 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <pM0Bb.30159$Bk1.5722@fed1read05>
Source record: 103326

THERE'S the answer I was looking for and it all now makes perfect sense.
Thank you very much John.

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"John Passaneau" <jxp16@psu.edu> wrote in message
news:br24ah$1j7e$1@f04n12.cac.psu.edu...
> Hi:
> RG-8 used to be a military specification cable but the military dropped it
> in favor of a new specification called RG-213. They are very similar
coaxes
> in general, but manufactures are free to make any cable they like and
call
> it RG-8 so the quality and consistency can vary widely. Also RG-8 with
foam
> a center insulator, and all the other variations are not nor never were
> MilSpec.That does not mean that all RG-8 cables are crap, but it could be
> and it depends on the manufactures idea of what kind of cable they want to
> sell. On the other hand RG-213 as a current MilSpec cable is a higher
grade
> cable and is more consistent from manufacture to manufacture. My feeling
is
> that if I'm going to go to all the work of installing a antenna, I want to
> use the best material I can. So I use RG-213. But my favorite coax is
Davis
> RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low loss
> and a very tough jacket. I have 500 feet of it in my antenna system and so
> far I'm very happy.
>
>
> --
> John Passaneau W3JXP
> State College Pa
> jxp16@psu.edu
> This mail is a natural product. The slight variations in spelling and
> grammar enhance its individual character and beauty and in no way are to
> be considered flaws or defects.
>
> "Jerry Bransford" <jerrypb@mecox.net> wrote in message

> news:moUAb.29779$Bk1.25134@fed1read05...
> > Ok so I'm getting back active with my ham gear and while looking into a
> new
> > HF antenna, discovered a new cable type being recommended here and
there,
> > RG-213. What is so much better about RG-213 than what I have used so
much
> > of over the years, RG-8? TIA. :)
> >
> > Jerry
> > --
> > Jerry Bransford
> > To email, remove 'me' from my email address
> > KC6TAY, PP-ASEL
> > See the Geezer Jeep at
> > http://members.cox.net/jerrypb/
> >
> >
> >
> >
>
>

5711. Re: Putting old-wives and baffle-gabbers out of their misery.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:35:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd49a93$1_4@corp.newsgroups.com>
Source record: 103327

Richard Harrison wrote:
> "It is generally assumed that current distribution on an infinitesimally
> thin antenna---is sinusoidal, and that the phase is constant over
> 1/,2-WL interval, changing abruptly by 180-degrees between intervals."

I just realized that the IRE reference I gave in another thread is for
a l/a=75 example, i.e. not for an l/a=infinity example.

But we can deduce the answer from what Kraus says on page 187. "A
sinusoidal current distribution may be regarded as the standing wave
produced by two uniform (unattenuated) traveling waves of equal
amplitude moving in opposite directions along the antenna."

And Yes, for a lossless unterminated transmission line, the current
distribution of the standing waves is sinusoidal. But not so for
a transmission line with losses. See "Transmission Lines & Networks",
by Johnson, Fig 4.11 or "Transmission Lines" by Chipman, Fig. 8-10.

We know a radiating dipole has "losses" due to radiation. Therefore,
the current distribution will be more like the two above graphs than
a pure sinusoid. For a real-world current distribution on a real
world dipole, an attenuation factor must be included. That makes
the reflected current less than the forward current which moves
the phase angle away from what it would be on a lossless transmission
line (or on an antenna that didn't radiate).

On a lossless transmission line, the forward current may be 1 at 45 degrees
while the reflected current is 1 at -45 degrees. Thus the net current would
be 1.414 at zero degrees. But on a real-world antenna, the forward current
may be 1 at 45 degrees while the reflected current is 0.85 at -45 degrees.
which would be approximately 1.3 at 4.4 degrees.
--
73, Cecil http://www.qsl.net/w5dxp

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5712. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 15:49:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br26i2mbo1@hercules.btinternet.com>
Source record: 103328
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

```
> I'm simply trying to establish the radiation resistance of a non-ideal
> antenna so I can reasonably match it to the output impedance of the
> transmitter PA stage.
========================

The input impedance of a 1/2-wave resonant dipole is about 70 ohms. But
this may be at a considerable distance from the transmitter output
terminals. What do you have in mind to put in between?

Then all you have to do is find the purely resistive load the transmitter
would be most happy with. Almost certainly it will not correspond to an
impedance match.
----
Reg G4FGQ
```

5713. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 16:06:43 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031208110643.03858.00000462@mb-m07.aol.com>
Source record: 103329

>I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has lower
>lose than 213.

According to the webpage that I referenced, the differences are as follows:

RG-8X: 0.5dB at 1mhz
1.0 dB at 10mhz

RG-213: 0.2dB at 1mhz
0.6db at 10mhz

The original poster asked about RG-8. No reference to either X or U.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5714. Re: Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 16:16:24 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <st1Bb.8822$NN.1145933@news1.news.adelphia.net>
Source record: 103330

Don't know what you mean by weak, my HS5 (mounted on top a 14' base pole, with a total antenna height of 40'. It is mounted in a surveyors tripod. It has withstood winds up to 75mph with out guying. Works great on all bands (using a simple tuner. Plan on adding on a additional 10 more feet of base, and I the will guy the base pole at 23'. There will be three guys, one affixed to each tripod leg anchor.

Butternut makes good tripods, but a lot depends on how the user puts them together. You got to have radials and a good ground.

Jim

"Fjx1" <fjx1@aol.comnospam> wrote in message
news:20031207142101.21697.00000226@mb-m23.aol.com...
> I can't run wires on my property(no trees and tower rotates). I've used a
^btv
> for years with usual weak results on 80. LAways thought Butternut was
weakly
> made.
>
> What is recommendation out there?
> Butternut
> Gap
> Force sigma for 80 know very little about it they don't answer e-mails
> MFK
>
> ??? other ideas
> Really want 80 and 160 would be great bonus.
>
> 73
> Gerry fjx1@aol.com

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.547 / Virus Database: 340 - Release Date: 12/2/03

5715. Re: Salt Water Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 16:21:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br28depsd1@hercules.btinternet.com>
Source record: 103331

"Vito Steockli" wrote in message
> The good old boys over on rec.boats.electronics continually worry over
> having enough ground plane for their seagoing HF SSB antennae, which
> typically comprise a vertical or near vertical insulated rigging element
fed
> thru a tuner. All of my HF antenna experience has been on land and I was
> always led to believe that salt water otta make a great ground plane for a
> HF vertical - at least a whole lot better than the dirt under mine. So why
> does everybody add copper strips, et cetera, to their bildges?
>
==========

Because it does not occur to anybody to try the obvious - just shout into the mike BEFORE going to all the trouble of fitting yards and yards of radials.

In SALT sea water a 12 inch square plate is being extravagant.

But not in unpolluted fresh water.

5716. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 16:21:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br28esput1@hercules.btinternet.com>
Source record: 103332

```
Einstein : E = m*c^2

Heaviside : p = d/dt
```

5717. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 16:56:07 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <6f99tv46nuaglrgtvtclps93j9bnc53qmp@4ax.com>
Source record: 103333
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Mon, 8 Dec 2003 15:29:59 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

[snip]

Hi Reg,

>It so happens the uniformly distributed radiation resistance is exactly
>twice the radiation resistance of a 1/2-wave dipole when concentrated at its
>centre. So the uniformly distributed radiation resistance along a 1/2-wave
>dipole is about 140 ohms. It cannot be measured. It can be calculated from
>aerial dimensions. But best just to remember the approximate number 140. It
>does depend to small extent on wire diameter and 'end-effect'.

It's annoying, because the tx output Z I'm trying to match is (by a
strange coincidence) 140 ohms! So a folded dipole would be ideal, I
guess. However - and it's a big *however* - I can't use one. I'm stuck
with a telescopic whip and a ground plane the size of a box of Swan
Vestas. I imagine the radiation resistance of such a non-ideal antenna
is pretty low, but until someone can gimme a ballpark figure for it, I
can't even begin to think about how to go about matching it. :-(

--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

5718. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 17:10:56 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312080910.6ab16adf@posting.google.com>
Source record: 103334

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fb148fe_4@corp.newsgroups.com>...
> Jack Smith wrote:
> > My understanding of the particular question being debated is that the
> > loading coil is physically small and at the frequency in question may
> > be safely treated as a lumped element, and that some have said that
> > current-in <> current-out.
>
> A 200 cubic inch 75m bugcatcher coil is NOT physically small and should
> NOT be treated as a lumped element if one desires real-world results.

Cecil
When I first started working on my antenna design I didn't look at a
coil
as representing degrees per se. What I did was to ascertain the
resonant
frequency and the Q of the coil and transpose this into a length
that resonated with the same Q at the original frequency. True, the
radiation per unit length is different and has to be accounted for (a
critical important factor when comparing toroids to air wound coils)
but this aproach is quite different from using the "degrees" aproach
which is not the same because of the radiation difference (See Roy's
aproach).
This aproach was the one I took with my antenna design
and it worked very well in practice as well as being confirmed by a
"theoretical" computor programs.
This aproach then allows a tranditional aproach of viewing current
behavior as it moves thru a distributed resistance and its limited
radiation.
Is there a fallacy in this aproach ?
Appreciate any insights that you have on the above to further my
education
Best Regards
Art

5719. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 17:23:53 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd4b3fb_3@corp.newsgroups.com>
Source record: 103335

Art Unwin KB9MZ wrote:
> Is there a fallacy in this aproach ?

The 'gotcha' in such an approach is why distributed network analysis had to be invented. The problem is ascertaining whether the model one is using is sufficient for the task. One can be using the wrong model and not realize it. It appears that is the problem that W8JI has encountered with his insistence that net current through a coil is always constant. If there are two constant currents flowing through a real-world coil in opposite directions, the superposed net current will not be constant.

Any time there exist forward waves and reflected waves, a lumped circuit analysis would be suspect. Sometimes one gets the same results as a distributed network analysis and sometimes not. What I do is keep the distributed network analysis as a concept in the background to verify the validity of any lumped circuit analysis.
--
73, Cecil http://www.qsl.net/w5dxp

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5720. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 17:46:54 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnbt9e8e.1brd.bit-bucket@localhost.config.com>
Source record: 103336

On Sun, 07 Dec 2003 22:15:49 -0600, 'Doc hath writ:
> Dan,
> Contrary to what some people think, 'Radio Shack' doesn't
> make many of their products. They buy from the same suppliers
> that 'Antenna Specialists' buys from, or the 'truck stop'
> shops, among others...

Maybe... My guess is they buy from The Lowest Bidder.
Sure, it may be
".. from the same suppliers that 'Antenna Specialists' buys from...",
but my suspicion is it'd be the dregs -- the stuff A.S. rejected.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | config.com | DM68mn SK

5721. Re: Salt Water Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 18:06:13 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-854A6A.09054808122003@netnews.worldnet.att.net>
Source record: 103338

In article <3fd48a59$0$23547@dingus.crosslink.net>,
"Vito Steockli" <vito@crosslink.net> wrote:

> The good old boys over on rec.boats.electronics continually worry over
> having enough ground plane for their seagoing HF SSB antennae, which
> typically comprise a vertical or near vertical insulated rigging element fed
> thru a tuner. All of my HF antenna experience has been on land and I was
> always led to believe that salt water otta make a great ground plane for a
> HF vertical - at least a whole lot better than the dirt under mine. So why
> does everybody add copper strips, et cetera, to their bildges?
>
> TIA
> Howard, K3DWW
>
>

The reason folks put copper in the bildge is very simple. These folks
are trying to couple the ground side of their antenna system to the
Salt water that their vessel floats in. This can be done either by
direct connection, or capacative coupling. In the direct connection
method, electrolysis is a MAJOR problem. Most of these folks don't
want their props and engines to dissappear in a matter on months, so
they try and keep their vessels DC Isolated from the water. What's left
is capacative coupling. How does one build a larger capacitor?
Increase surface area of the capacative plates. (salt water being one
plate) Decrease the distance between the plates. (Move the ground side
closer to the water) Copper inside the hull works, and adding more
surface area (copper) works. This isn't rocket science, but it does
take a few nurons firing for a few seconds to figure it out.

Bruce in alaska
--
add a <2> before @

5722. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 18:06:32 UTC
From: john graesser <graesser@tca.net>
Message-ID: <vt9f734n19he1d@corp.supernews.com>
Source record: 103337
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> It's annoying, because the tx output Z I'm trying to match is (by a
> strange coincidence) 140 ohms! So a folded dipole would be ideal, I
> guess. However - and it's a big *however* - I can't use one. I'm stuck
> with a telescopic whip and a ground plane the size of a box of Swan
> Vestas. I imagine the radiation resistance of such a non-ideal antenna
> is pretty low, but until someone can gimme a ballpark figure for it, I
> can't even begin to think about how to go about matching it. :-(

Depending on frequency in use, could you do it experimentally?

The way I tune up antennas for ham bands is to hook up a mfj 249 and the tuner to the antenna, get a best fit with the 249 and then replace the 249 with the radio and fine tune from there. There always seems to be some small differance between the result from the mfj and the meter built into the tuner, and at full power I would rather trust the meter built into the tuner (a Millen transmatch jr).

You could build an L match with a tapped inductor and variable cap, then experiment with values until you get somewhere in the ballpark of being matched. From there it is is just small adjustments to get perfect matching.
thanks, John.
KC5DWD

5723. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 18:31:32 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <ieg9tv0iab5pvv64h5i0uahgrq03kihg4m@4ax.com>
Source record: 103339

On Mon, 8 Dec 2003 07:28:21 -0800, "Jerry Bransford"
<jerrypb@mecox.net> wrote:

>THERE'S the answer I was looking for and it all now makes perfect sense.
>Thank you very much John.
>
>Jerry

Not to confuse/clarify matters more, but try the coax chart at
http://thewireman.com/coaxp.html

They have five kinds of rg-8 and four kinds of 213. The rg-8s all show
less loss than the 213s.

Guess it all depends on who's manufacturing the stuff.

Bob
k5qwg

5724. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 19:00:30 UTC
From: Joe McElvenney <ximac@btinternet.com>
Message-ID: <VA.0000011c.00854b02@btinternet.com>
Source record: 103340
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hi,

For a whip, much shorter than a quarter wave against a poor
ground - who knows? However, you want a number?

So here's a number; 2 - j500 and it won't be too far wrong.

The name of the game in such a situation is "Suck-it and see."

Make an intelligent guess at what the impedance is likely to
be, rig up a far-field meter and adjust the tap/link/network
until it peaks. Then go out for a curry and maybe a drink or two
or...

Alternatively, buy an antenna book and RTFM :-)

Cheers - Joe

5725. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 19:37:25 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <Ml4Bb.13870$Yt4.6119@lakeread05>
Source record: 103341

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031208110643.03858.00000462@mb-m07.aol.com...
> >I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has
lower
> >lose than 213.
>
> According to the webpage that I referenced, the differences are as
follows:
>
> RG-8X: 0.5dB at 1mhz
> 1.0 dB at 10mhz
>
> RG-213: 0.2dB at 1mhz
> 0.6db at 10mhz
>
> The original poster asked about RG-8. No reference to either X or U.
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

I think most would assume he meant for similarly sized cables.

5726. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 20:35:49 UTC
From: Jim@nauticon.net
Message-ID: <3FD4E0A5.7D3521EE@nauticon.net>
Source record: 103342
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

What I failed to say Jerry, I am moving to Myrtle, yes there is an HOA but from what I found out from the neighbors and the real estate lady (who also resides there) the HOA is not all that strong. Wait until they find out i'm a ham. No, I have no intention of putting up a tower, just a long wire from the back of my property to the house (1/2 acre). Yes, my daughter does reside in a rather expensive area. And "NO", I don't enjoy driving on I-77. It's bumper to bumper three lanes wide from exit 21 south to the state line at 60 MPH. Happy to see they are widening the roadway, I might even give 495 west of I-77 a shot to the state line when it's finished. Seems for what I understand they decided to build the east part of 495 first to accommodate the rich folks in around Union County area. One would think the area west of I-77 close to the airport would have heavier traffic.

Back to stealth antennas and HOA's. I have been planning for several months how I am going to put up an antenna. Ideas I have considered are: Slinky's in the rafters, gutters, yes the house I bought does have gutters as compared to all the other homes, most do not. And finally long wires. So far, the only people that know I am a ham is the real estate lady and the guy next door.

I wouldn't stop in my driveway and start taking photos of my home if you enjoy life as it is. Don't invade my privacy and I shall not invade yours. I invite Russ to give it a try, and "I'm NOT playing". I enjoy my privacy. What's mine is mine and what's yours is yours. Russ, just because the U.S. Attorney General got a new law passed in the U.S. Congress doesn't give you or the Feds to invade my privacy.

"God Bless America"

Jerry Oxendine wrote:
>
> OOOPS! Sorry about that. I forgot about Huntersville,
> Davidson, etc. Nice area and expensive! I remember when the area was still
> country and all those houses right the shoreline weren't built. Could've
> bought a house in
> the '70's for a 3rd of what it is now. And, also, I wouldn't move in there
> for nut'in'--not to mention the
> traffic is HORRIFIC on the I-77 corridor. Bumper to
> bumper morning and evening--least little fender scraper,
> your commute is over!
>
> Let me modify this by say that, yes, there are lots of HOA communities

> everywhere. But if you do a little
> snooping before moving, you can find older neighborhoods that dont have the
> HOA nonsense. I am
> just independent to let someone tell me what to do on/with my own property.
> And if I catch some bird on
> a scooter taking pictures, he better not be on my land!
> He comes down my driveway snooping, he just might get
> his (*censored*) kicked. Sorry, but that is the way I feel about it. But
> I've been here for many years, all of us here
> get along well, stand beside the proverbial fence and chat,
> borrow/loan tools, and all is well! ...Without any cussed
> HOA!
>
> Jerry
> K4KWH
>
> www.qsl.net/k4kwh
> <Jim@nauticon.net> wrote in message news:3FD24340.FE9CACF0@nauticon.net...
> >
> > Jerry, my daughter lives in Cornelius NC, (which is as you know just a
> > few miles north of you) they have an HOA but it apparently doesn't mean
> > a darn thing.
> >
> > The neighbors are moving into $220,000 new homes, they put up metal
> > sheds chain link fences, etc. which both are against the HOA rules. NC
> > is no different than any other state, they all have the dreaded HOA's.
> > From what I see, the HOA rules are only enforced when some damn nosey
> > neighbor want's to put there nose into your business.
> >
> > God Bless America for our Freedoms, where ever they may be.
> >
> > Jerry Oxendine wrote:
> > >
> > > Move to NC! While I am sure there are HOA communities as the population
> > > grows, there are still plenty
> > > of older neighborhoods with excellent homes without HOAs here in my
> state.
> > > And I have never had trouble finding a place to live without 'em. Once
> > > checked out
> > > a neighborhood in my town called YorkChester. Many
> > > older homes of many styles and sizes. It had been desig-
> > > nated an historic neighborhood and you couldn't even change the style of
> > > your front door without dealing with
> > > the old blue-haired lady with the peepovers. NOPE! I
> > > ain't moving there. But I found a nice place on a dead end street where
> > > such things had never been thought of.
> > > Been here for 17 years.
> > >
> > > Maybe it is more difficult in, say, California (the land of
> > > fruits and nuts--dare I say it), but it is still possible to find

> > > antenna-friendly places to live if one really wants to.
> > >
> > > I have no sympathy for someone who moves into such a place where
> > > restrictions exist KNOWING it. I am just
> > > fiesty enough and ornery enough not to let someone else
> > > tell me what I can do on my own property. One's property rights should
> > > reign supreme; i.e., your rights end
> > > at my property line, and mine end at yours. Most people
> > > are sincerely enough for such rules not have to exist. The
> > > neighborhood will conform by osmosis or "peer" pressure. If a
> neighborhood
> > > has junk cars in it, look at the
> > > rest of the houses; they likely will too. If there are mostly
> > > frame "shotgun" houses, the rest are likely to be, too. If
> > > the neighborhood is nice, brick/frame, trimmed hedges, mown lawns,
> *most*
> > > all the others will be, too. Choose
> > > your neighbors carefully and check for HOAs and coven-
> > > ents FIRST.
> > >
> > > Jerry

5727. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 20:58:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312081258.78b0fe7b@posting.google.com>
Source record: 103343

Petert,
I bemoan the fact that so many on this newsgroup such as yourself
just do not understand complex circuits and how it relates to
antennas.
We have an abundance of people who can only do the talk as well as
some that can do the walk. As far as antennas and complex circuitry
goes you have shown that you can only do the walk. That will disapoint
the Doctor of Phillosophy as well as the Bum since they now do not
have anybody to follow, tailgate or whatever for their snide remarks
without content. You are quite correct that
having something after your name as it only shows a level of education
that you have recieved and not meant to show what one has achieved.
As for myself it was my future employer that paved the way with money
and government interjection for me and my family to come to the U.S.
If I 'fooled' them then at that time while in the U.K.then I fooled
them until my retirement in the U.S.where again I became a nothing.

You however, feel that not having retired retains a couple of steps
above us that have, which gives you the right to admonish at will with
a spray of He, He ,He's and a "What" or "Twat' thrown in for good
measure probably to relieve your own similar tensions obtained by you
from your collegues at work !

Art
By the way I have this picture of you in my mind that shows you short
in height
but certainly not retund. Am I close?
As for lifes track record time is short and the grim reaper does not
give advance notice so get moving.

"Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<YB_Ab.4098$Ho3.2607@newsread1.news.atl.earthlink.net>...
> Art:
>
> My friend you have me confused with someone else!
>
> I have never once commented or posted anything about *your* antenna
> inventions or technical claims. Nor do I intend to until you stop whining!
>
> What I have commented on is your many posts which contain
> complaints laments and cries for pity and understanding because of your
> claimed lack of knowledge, expertise, or whatever.
>
> Your suppositions that others do not give your *inventions* credit
> simply because you lack such personal qualifications is plain stupidity.

>
> Art, that's why I call you "cry baby" and "whiner".
>
> If your technical inventions/claims/whatever... are great then they will
> stand
> on their own merits and need no support by claims of the insufficient
> qualifications of their inventor!
>
> I have noted one here who gives a damn what technical credentials you,
> or any other poster to the NG, hold! Your qualifications are irrelevant to
> the subject.
>
> [Unless of course you happen to hold a Ph.D. from Cornell
> in Astrophysics, only then apparently can you claim that your
> graduaton diploma makes your inventions unique and special!
> [Heh, heh... That last sentence was not meant to denigrate
> that fine University, only one of it's claimed graduates.]
>
> Art, just stop your whining and let the world get on with its
> valid and invalid critiques of your work!
>
> Hey... Oliver Heaviside, never accepted his nomination to the Royal Society,
> by degreed grandees and he never completed grade school, or studied anything
> formally beyond age 16, yet Oliver stood with the greatest scientists,
> mathematicians,
> engineers and natural philosphers of his time simply be "doing" things that
> they couldn't.
>
> Education, academic degrees, and technical training mean nothing.
>
> Art my friend, it's your "track record, it's what you accomplish in life
> or do that is important, not what examinations you have passed!
>
> Get real you big cry baby, let what you have done or accomplished stand on
> it's
> own merits and see if it survives and what others think of it, and just stop
> all of your
> damned whining!
>
> If it doesn't survive the critiques of the world then it isn't worth a damn
> anyway.
>
> No one pays attention to whiners!
>
> I for one simply don't care to waste valuable time investigating any
> technical advances
> or claims put forward and supported by a whiner and whining.
>
> Whining about inferiority and lack of academic qualifications is a sure sign
> that the

> prosyletizer probably has nothing worth while to contribute.
>
> Art, put your ideas and inventions out there and let others have at it, if
> your ideas
> and accomplishments are worthy they will stand on their on, if not they
> wont!
>
> But whining about inferior technical qualifications...? What does that
> accomplish?
>
> Whining... Man, give it up!
>
> Instead, spend your bandwidth on clear concise explanations of your the
> benefits
> and originality of your technical contributions.
>
> Nuff said?
>
> --
> Peter K1PO
> Indialantic By-the-Sea, FL.
>
>
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0312071516.59b309f2@posting.google.com...
> > "Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
> news:<lAIAb.3159$7p2.1784@newsread2.news.atl.earthlink.net>...
> > > Mac:
> > >
> > > [snip]
> > > "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> > > news:vt4k4q6942q0f6@corp.supernews.com...
> > > > Dear Peter:
> > > > I would have sent this to you privately, but you do not provide a
> > > > valid E-mail address.
> > > [snip]
> > >
> > > The Internet "worms" nearly *killed* my computer communications
> capability
> > > this past year, no thanks to the younger generation of unethical
> "hackers"
> > > and
> > > brought to everyone courtesy of the "world's richest man", and so these
> > > days...
> > >
> > > If you want to email me direct you must send via the arrl dot net relay.
> > >
> > > :-)
> > >

> > > [snip]
> > > > Well done on presenting the sequence of understanding and
> > > > emphasizing the role of mathematics.
> > > [snip]
> > >
> > > Thanks!
> > >
> > > As you no doubt appreciate, it pays to know a little history only to
> > > avoid repeating it.
> > >
> > > There is very little ambiguity equivocationn or cause for argument when
> > > using the universal albeit sometimes cryptic language of mathematics.
> > >
> > > The elementary mathematical skills which Art often eschews are neither
> > > difficult nor expensive to acquire and definitely not difficult to carry
> > > around.
> > >
> > > Such skills do however require some little dedication to study...
> > >
> > > just as the ham radio license *used to* require. :-)
> > >
> > > Art's "cry baby" attitude about his lack of such skills does nothing to
> help
> > > either himself or the other NG participants.
> > >
> > > "Mathematics - just do it" would be a good motto for Art to follow
> perhaps
> > > replacing his continual complaints regarding his lack of ability and
> > > qualifications.
> > > Art's "cry baby" comments only appear boorish and become very tiresome
> to
> > > NG participants.
> >
> > Well Peter now you are being stupid and making up stories.
> > Maybe I can expect the same tactics that you put on Chip when he made
> > claims on antennas which you didn't understand
> > But I am ready. You stated lack of skills on my part well I have
> > enough of those skills that you are talking about. I made the claim of
> > an antenna that uses all those skills and you stated a good engineer
> > knows when to discard his model. Well Peter, if you were an engineer
> > you would not discard it until you made a working model and compared
> > it to theory (using all those mathematical skills that you bandy
> > about or as I say talking the talk). I also gave you the theoretical
> > background of the antenna and invited you to point out the fallacies
> > , mathematical ofcourse, and all you still do is 'talk the talk' with
> > no show.
> > Well Peter, if that the attitude you need to take me on with then be
> > my guest,
> > even with the likes of the Doctor and the Bum holding your coat or
> > throwing snide remarks is not enough to push me off the newsgroup like

> > you did with Chip.
> > So go ahead and be my guest and flaunt your mathematical skills to
> > show how I and my antenna is a fake and my skills are lacking. I would
> > love it for you to make a stand on that subject so everybody can see
> > who you are and what you are
> > when forced to 'walk the walk'. If I haven't the qualifications in
> > any subject I carefully state so especially when talking on this
> > newsgroup,
> > I am no way interested in infering that I am an expert where I am not,
> > there are enough doing that already, but with respect to my antenna
> > work I stand by it. I am willing to walk the walk but you Peter
> > obviously feel more comfortable in just talking or making acrid
> > remarks.
> >
> > So I am staying here Peter, and you can have at it and show your true
> > colours
> > Can I now expect for you to sue me now since you are well practiced at
> > that?
> >
> > Art Unwin..... XG
> >
> >
> > >
> > > [snip]
> > > > In "Hamerica" some real Engineers are P.E.s. It is not just for
> > > > Canadians.
> > > [snip]
> > >
> > > Well Mac as you well know, MI is not far from Canada sharing both
> > > a riverside a lakeside and common weather. What's your point?
> > >
> > > :-)
> > >
> > > [snip]
> > > > 73 Mac N8TT
> > > > --
> > > > J. Mc Laughlin - Michigan USA
> > > [snip]
> > >
> > > Speaking of Michigan, my wife and I attended a party at our next door
> > > neighbour's home here last week. MI snowbirds, Jo and Ivan had just
> > > arrived here in FL from MI to stay over the season here in their winter
> > > home on our "tropical island".
> > >
> > > Me? Even though an ex-Canadian, I like it here on the island all year
> long.
> > >
> > > Mac. Take care and enjoy the Holiday Season up North.

5728. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:13:03 UTC
From: Pappy127@usa.net
Message-ID: <3FD4E95F.3D42784F@usa.net>
Source record: 103344
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

The media doesn't even photograph people without their permission. Who the heck do you think you are, someone special? Don't invade the wrong persons privacy, you could be surprised.

Basic rule of photography? Is NOT the law of the land.

Don Forsling wrote:

> No, thank you! The BASIC rule of photography is this (and I make a living
> at it):
>
> If you are standing (or sitting for that matter) on public property, you can
> legally photograph anything you can see from where you are standing. There
> are, of course, exceptions for various national security considerations,
> etc., but it is absolutely not against the law to stand on a public sidewalk
> or in a public street and take a picture of somebody's house, their rose
> bushes, their car, their ugly fence, their goofy-looking mailbox, their body
> etc., etc. The fourth amendment has absolutely nothing to do with it. And
> it's not at all like the case of a museum--a museum is, first of all, not
> public property in the sense of the law as it applies to photography (or
> just plain "seeing"). First of all, photography (flash) can damage museum
> property and annoy the patrons and is often prohibited by _rule_ for that
> reason. Also, and one does not have unrestricted access to a museum as one
> does to a street. It is not _public_ in the sense that's pertinent here.
> And by the way, you _can_ legally take a picture of, say, the side of a
> house sporting an open window and capture, perhaps, some of what's inside
> the house and visible. And that's the law.

5729. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:32:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br2qm4aje1@sparta.btinternet.com>
Source record: 103345
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I can see from the way you have made your enquiry you havn't the foggiest idea about what you are trying to accomplish. Do you know the frequency? What transmitter power output do you have in mind - 10 milliwatts or 1KW? For starters forget all about folding anything - you've been reading the wrong books. However you now mention a short whip above a groundplane of unknown construction.

The input radiation resistance at the base of a very short vertical antenna, say less than 1/10th of a wavelength, is given by -

Rrad = Squareroot(20 * Height in metres / Wavelength in metres) ohms.

Rrad will be in the order of a few tenths of an ohm at 2 MHz but increases fast as the square of frequency.

In series with this radiation resistance is a high value of capacitative reactance which has to be tuned out somewhere by a lot of micro-henries. Best located at or near the antenna base.

For a very crude guess the input reactance will be in the order of -

Xin = -300 * Cotangent(Angle) ohms.

where Angle = 360 * Height / Wavelength degrees.

You will then have the task of winding the correct number of turns on a coil former, of your chosen length and diameter, to provide an inductance of similar value of reactance as presented by the whip. Download program SOLNOID3 for coil design.

In series with Rrad and Xin there will be a loss resistance due to the connection to the ground plane. If the ground plane is a vehicle then you can expect a loss resistance between 3 and 15 ohms. If the ground plane consists of a cigarette-pack size metal plate buried in your back yard then expect a ground loss resistance between 500 and 5,000 ohms.

Overall antenna input resistance is then Rin = Rrad + Rcoil + Rground.

If it is your intention to connect the antenna directly to the transmitter, or via a very, very, short length of coaxial line, then Rin is the resistance which has to be matched to your 150-ohm transmitter by using an L and C impedance matching network.

Frankly, it may be easier to redesign the transmitter to match the antenna ;o)

But you won't get very far without an impedance measuring device such as a borrowed, begged or stolen antenna analyser.

As I have no idea of the purpose of the transmitter + antenna I suggest you ask around for sombody who has already solved the problem and copy his.

It may be that a very short miniature centre-loaded dipole would do the job. It doesn't need a groundplane and can be driven via a 150-ohm balanced, twisted-pair line and, if needed at the transmitter end, a simple 150-ohm, 1-to-1 balun.

Download program MIDLOAD and amuse yourself. It also designs the loading coil. I KNOW it works. Been there - done that!

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

"Paul Burridge" wrote - .
> "Reg Edwards"
>
>
> [snip]
>
> Hi Reg,
>
> >It so happens the uniformly distributed radiation resistance is exactly
> >twice the radiation resistance of a 1/2-wave dipole when concentrated at
its
> >centre. So the uniformly distributed radiation resistance along a
1/2-wave
> >dipole is about 140 ohms. It cannot be measured. It can be calculated
from
> >aerial dimensions. But best just to remember the approximate number 140.
It
> >does depend to small extent on wire diameter and 'end-effect'.
>
> It's annoying, because the tx output Z I'm trying to match is (by a
> strange coincidence) 140 ohms! So a folded dipole would be ideal, I
> guess. However - and it's a big *however* - I can't use one. I'm stuck
> with a telescopic whip and a ground plane the size of a box of Swan
> Vestas. I imagine the radiation resistance of such a non-ideal antenna
> is pretty low, but until someone can gimme a ballpark figure for it, I
> can't even begin to think about how to go about matching it. :-(
>
>
> --
>
> "I expect history will be kind to me, since I intend to write it."
> -

Winston Churchill

5730. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:43:29 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <br2rd1$49s$1@newshost.mot.com>
Source record: 103347
Body handling: HTML body converted to readable text

Got more money that he knows what to do with.

and brains.
Steve K<9;D:C:I
"paulfriedman@comcast.net" wrote in message
news:as0Bb.469926$Fm2.459011@attbi_s04...
> RG-213 is also rated for somewhat higher power than RG-8.
>
> Off the subject, but....
>
> Last week I had an interesting QSO with a gentleman who runs nothing but
> hard line -- and SERIOUS hardline at that. His jumpers are LHR 600 -- he
> uses lower loss stuff (honest) for his runs. This includes the runs for
his
> 160m and 80m antennas. Now, there is a person who does not like loss.
>
> Paul AB0SI
>
>
> "Jerry Bransford" wrote in message
> news:je0Bb.30145$Bk1.26174@fed1read05...
> > I had noticed the same thing, that RG-213 seemed to have very slightly
> more
> > loss per foot than RG-8 did. Somewhere I got a feeling that perhaps
> > RG-213's strength was that it was longer lasting but even that doesn't
> make
> > sense for several reasons. I've even noticed antenna kits that include
> > RG-213 so maybe its just less expensive and they can make higher profits
> > with RG-213 than they can with RG-8 at the expense of slightly higher
> loss?
> >
> > Jerry
> > --
> > Jerry Bransford
> > To email, remove 'me' from my email address
> > KC6TAY, PP-ASEL
> > See the Geezer Jeep at
> > http://members.cox.net/jerrypb/
> >
> > "paulfriedman@comcast.net" wrote in message
> > news:w20Bb.461703$HS4.3603203@attbi_s01...
> > > "VHFRadioBuff" wrote in message
> > > news:20031208092607.15826.00000309@mb-m21.aol.com...

> > > > >Ok so I'm getting back active with my ham gear and while looking
into
> a
> > > new
> > > > >HF antenna, discovered a new cable type being recommended here and
> > there,
> > > > > >RG-213. What is so much better about RG-213 than what I have used
so
> > > much
> > > > > >of over the years, RG-8?
> > > > >
> > > > > RG-213 has less loss per 100 ft than RG-8. Nothing too significant
> > though,
> > > not
> > > > > at HF freq's at least. Check out:
> > > > >
> > > > > http://www.radio-ware.com/products/techinfo/coaxloss.htm
> > > > > =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> > > > > 73! de Andy KC2SSB - WPYI880 (GMRS)
> > > > > Beachwood, NJ USA! Grid FM29vw
> > > > > http://vhfradiobuff.tripod.com
> > > >
> > > > I think you are comparing RG-8X (the mini stuff) to RG-213. RG-8U has
> > lower
> > > > lose than 213.
> > > >
> > > > Sorry, I don't mean to be pedantic, but as a new ham myself, I found
the
> > > various 8s confusing.
> > > >
> > > > 73
> > > >
> > > > Paul AB0SI
> > > >
> > > >
> > >
> > >
>
>

5731. Re: Coax Chart.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:49:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <br2rot$4dr$1@newshost.mot.com>
Source record: 103348

Try:

http://www.radio-ware.com/products/techinfo/coaxloss.htm

or

http://thewireman.com/coaxp.html

--
Steve N, K,9
d, c. i

"James" <jimbo@nospam.net> wrote in message
news:3FD3FF9C.9F1B4035@nospam.net...
> hi
>
> http://www.cablexperts.com
>
> jimbo
>
> Ronald wrote:
>
> > I am after a chart that will tell me the Ohms of all the coaxes.
Thanks,Ron
> > "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> > news:bqim5bssj1@newshost.mot.com...
> > > What kind of a "chart" are you after?
> > > I made an Excel spreadsheet plotting the loss for a few common types
> > > RG 8, 58 213 9913 LMR400
> > > Steve,
> > > --
> > > Steve N, K,9,d, c. i email via the arrl net. or remove the q's
from
> > the
> > > following
> > > sqteqveq.nqoqsqkqoqwiqczq.@mqoqtoqroqla.com
> > >
> > >
> > > <spamproof@nospam.com> wrote in message
> > > news:MPG.1a3564851edccdbf9896b1@netnews.comcast.net...
> > > > In article <vsnf1a70skho2a@corp.supernews.com>, va3sgr@vianet.ca
says...
> > > > > Hi, Where can I get a coax chart. Thank you very mutch.
> > > > > Ron. VA3*SGR
> > > > >
> > > > >

> > > > >
> > > > A "Google" Search reveals quite a few resources. This one might be
what
> > > > you want.
> > > > >
> > > > http://www.eweb-planet.com/kk6ss/coax.html
> > > > >
> > > > KA7RGO
> > >
> > >
>

5732. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:52:37 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <br2ru5$4hm$1@newshost.mot.com>
Source record: 103349

Rat Shack has good whips, if you can find a store with one/them. DO NOT, however, use their springs. They WILL rust since they are plated. I believe the whips are stainless. Guys around here have been using them
Steve
K'9'd'c'i

"James W" <change-to-jw22-at-trlp-dot-com@trlp.com> wrote in message news:3FD3A2D9.6030000@trlp.com...
> Cannot find those good old 102inch CB antennas any more. Anyone have a
> source I can mail order from?
>
> - jim KG7HH
>

5733. Re: Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:55:19 UTC
From: fjx1@aol.comnospam
Message-ID: <20031208165519.16180.00000427@mb-m22.aol.com>
Source record: 103346

You got me. What is an HS5? Not familiar with that model.

Tks Gerry
fjx1@aol.com

5734. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 21:57:32 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <br2s7c$4ic$1@newshost.mot.com>
Source record: 103350

For you young fellas, it used to be called "surge impedance" just for that reason.

Steve K/9/d/c/i
"Richard Harrison" <richardharrison@webtv.net> wrote in message news:19802-3FD2C2A4-59@storefull-2313.public.lawson.webtv.net...
> Henry, WD5JFR wrote:
> "can`t be measured with an ordinary ohmmeter. But if you had an infinite
> length of any transmission line unterminated and connected an impedance
> bridge, it would read the chatracteristic impedance."
>
> Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter
> would read Zo if connected to the end of an infinite line. He is right
> of course.
>
> Best regards, Richard Harrison, KB5WZI
>

5735. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 22:14:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd4f82b$1_5@corp.newsgroups.com>
Source record: 103351

Steve Nosko wrote:
Guys around here have been using them

I have found RS' stainless steel whips to be virtually indestructible.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5736. Re: TWIMC (you know who your are)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 22:19:16 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <br2tg4$55i$1@newshost.mot.com>
Source record: 103354

What about the group who takes the thread in another completely different
direction without changing the subject line?
Steve
k/9/d/c/i
"Richard Fry" <rfry@adams.net> wrote in message
news:bqv4hu$26ice4$1@ID-175933.news.uni-berlin.de...
> - Original post by Dave Dunsmoor (to another list server):
>
> "For some levity, I thought I'd send this along:
>
> How many forum members does it takes to change a light bulb?
>

5737. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 22:36:32 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <Ge6dndslYr6XYEmiRVn-gw@comcast.com>
Source record: 103352

Arie,

The only two ways I can think of to reduce coil heating/losses is to lower the loaded Q and increase the unloaded Q. I don't remember if you told us what frequency this amp was for, but I have seen coils wound from 1/4 inch copper tubing, or flat straps.For lower frequencies you could consider using powdered iron toroids, perhaps several epoxied together, and wind them with #16 or #14 wire. I don't know how large your coil is, but for 80 meters, dimensions like 2 inch diameter and 5 inches long air core also come to mind. Have you looked at construction articles in the ARRL, RSGB, or other handbook?

Tam/WB2TT
"arie" <ariexyz@hotmail.com> wrote in message
news:995b9343.0312080330.79b0f935@posting.google.com...
> Reg, Tarmo,
>
> sorry for the delay, because I have been sick for a few days..
>
> I am using some 3000 volts and some 300 volts screen-grid supply.
> That should lead to some 5400 volts p-p
>
> And yes, for the moment I am using L and c values comparable
> to those mentioned by Tarmo. (designed for a loaded Q of around
> 12 as recomended by the ARRL handbook) However the inductor is
> becoming quite hot, so I was wondering what could be done to
> improve efficiency, without neglecting harmonic suppression.
>
> I used Reg's program to recalculate things a couple of times
> and to get a Q of around 12. However I could only realize this
> by entering a phase-shift of about 90 degrees, which in turn
> gave me the 'strange' C and L values...
> However somehow (and do I feel stupid !) I do not succeed in
> getting 'normal' values when using Reg's program....
>
> Maybe his Q value is another value than mentioned by the ARRL ?
>
> Arie.

5738. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 23:28:27 UTC
From: jgboyles@aol.com
Message-ID: <20031208182827.26088.00000330@mb-m15.aol.com>
Source record: 103353

>Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter
>would read Zo if connected to the end of an infinite line. He is right
>of course.

He is right of course. Do you know of anyone that has an infinite length of transmission line? Or an infinite anything? :-).
73 Gary N4AST

5739. Re: TWIMC (you know who you are)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-08 23:54:27 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <br32vd$280vv6$1@ID-175933.news.uni-berlin.de>
Source record: 103355

Another example -- with many others.

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:br2tg4$55i$1@newshost.mot.com...
> What about the group who takes the thread in another completely different
> direction without changing the subject line?
> Steve
> k/9/d/c/i
> >
> > "For some levity, I thought I'd send this along:
> >
> > How many forum members does it takes to change a light bulb?

5740. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 00:01:28 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312081601.546982b7@posting.google.com>
Source record: 103356
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Paul Burridge <pb@osiris1.notthisbit.co.uk> wrote in message
news:<6f99tv46nuaglrgtvtclps93j9bnc53qmp@4ax.com>...
...
> It's annoying, because the tx output Z I'm trying to match is (by a
> strange coincidence) 140 ohms! So a folded dipole would be ideal, I
> guess. However - and it's a big *however* - I can't use one. I'm stuck
> with a telescopic whip and a ground plane the size of a box of Swan
> Vestas. I imagine the radiation resistance of such a non-ideal antenna
> is pretty low, but until someone can gimme a ballpark figure for it, I
> can't even begin to think about how to go about matching it. :-(

Paul, it would be reeeeally helpful if you'd include enough info so we
could give you a ballpark figure. What wavelength (or frequency)?
How long is the antenna? How big is that box? (Will someone be
holding it during operation?) Yeah, someone did offer a ballpark
figure, but that depends a whole lot on what fraction of a wavelength
you have for your antenna and your ground plane. (Or perhaps the
posting in which you explained all that hasn't made it to this corner
of the universe.)

Cheers,
Tom

5741. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 00:04:00 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <gl3atvckehljnt7t2vbap9itd3ag6at0d5@4ax.com>
Source record: 103357
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Mon, 8 Dec 2003 21:32:52 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>I can see from the way you have made your enquiry you havn't the foggiest
>idea about what you are trying to accomplish. Do you know the frequency?
>What transmitter power output do you have in mind - 10 milliwatts or 1KW?
>For starters forget all about folding anything - you've been reading the
>wrong books. However you now mention a short whip above a groundplane of
>unknown construction.

Perhaps you didn't see the earlier posts on the subject. The frequency
is 40Mhz (radio control band) and the tx output stage as it stands
puts out maximum power of 475mW with a 140 ohm resistor as load. I
only *need* 50mW ERP., however, so can stand to see quite a bit of
loss from an inefficient antenna. The antenna I will be using is a
telescopic whip - exactly the same set-up as you see with model
vehicle radio control transmitters- which is what it is, in fact.
It ain't rocket science.
Someone out there must know the radiation resistance of such a
telescopic whip (which has a ground plane of just around 16 square
inches contained within the remote control handset) and the best way
to couple it to a PA with a 140 ohm output impedance?
--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

5742. From multiband dipole to multiple monoband dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 00:22:12 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <867k16q1qj.fsf@duchess.twilley.org>
Source record: 103358

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

I recently set up a multiband dipole with six elements tuned for 40,
20, and 10 respectively. I now find myself wondering if I should
convert it to monoband dipoles.

The end result would be three coplanar monoband dipoles with three
coincident feedpoints with three parallel runs of ~100 feet of RG-58
coax to an antenna switch in the shack.

What effect would this change have on performance?

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/1RW6GPFSfAB/ezgRAquAAKCm5vQacEYv59sE39pCFsyoNsaiVQCfQeLy
+7mXWiv1dYegl7T63zu3uIo=
=sW9G
-----END PGP SIGNATURE-----
```

5743. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 00:58:28 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vta7gjibf1um5b@corp.supernews.com>
Source record: 103359

"Bury Flex" is ideal for jumpers of all kinds and long runs at lower
frequencies. Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"John Passaneau" <jxp16@psu.edu>
<snip>
But my favorite coax is Davis
> RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low
loss
> and a very tough jacket. I have 500 feet of it in my antenna system
and so
> far I'm very happy.
>
>
> --
> John Passaneau W3JXP
> State College Pa
> jxp16@psu.edu

5744. Re: Losses in PI-filter output

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:07:16 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <MPadnWUGatLAvUii4p2dnA@comcast.com>
Source record: 103360

Arie,

I took a look at some handbooks to see exactly how the coils for their high power amplifiers were made. (Personally, I chickened out at about 600V). Anyhow, for a bandswitching transmitter:

A) All of them separated the coil into 2 or 3 segments.

B) Averaging about 6 designs, the 10 - 20 meter coil was wound with 3/16 or 1/4 inch copper tubing. In one case silver plated.

C) the remaining coil was most often wound with #10 copper wire; in one case on 3 toroids glued together.

I had once calculated the Qs for inductors to use in antenna traps, and unless I messed up, the coils described above would have unloaded Qs of at least 400.

Tam/WB2TT

5745. Re: Corkscrew Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:10:52 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vta87oteivope6@corp.supernews.com>
Source record: 103361

... and a first class person, also my mentor.

The Englishman is up to tricks.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA

"Bill Turner" <noway@nohow.com> wrote in message
news:a826tvogn1a55v530qo6t75j483ft9bth7@4ax.com...
> On Sat, 06 Dec 2003 23:08:29 -0600, Cecil Moore
> <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>
> >> I have no wish to be unkind but who the hell is Kraus ?
> >
> >The inventor of the helical beam antenna and the corner reflector
> >antenna. The McDougal Chair Professor of EE, Emeritus, Ohio State U.
>
> ----------
>
> Also the pre-eminent radio astronomer of his day. If you can find a
> copy, read "The Big Ear", his autobiography, sort of. In it there is
a
> description of the moment as a young boy when he got on the air and
> worked his first real DX. He was walking about a foot off the ground,
a
> feeling many of us can relate to.
>
> --
> Bill, W6WRT
>

5746. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:27:22 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312081727.3f8d1e1f@posting.google.com>
Source record: 103362

Actually, I believe that the RG-designations are no longer used by the US military at all. Mil-C-17 now??--and I'm not sure any current ones are polyethylene (and not Teflon) dielectric. As John points out, RG numbers have been somewhat corrupted! But in general, "RG-213/U" and "RG-8/U" should both be solid-polyethylene dielectric cables with the same diameter and the same stranded inner conductor and single copper braid outer, and therefore should have the same attenuation per unit length, nominally. There will be minor variations from lot to lot, or larger variations if the coax was made poorly. "Reference Data for Radio Engineers" says of RG-213, "Formerly RG-8A/U."

Foam dielectric cables, perhaps called "RG-213-type" or "RG-8-type," have lower loss for a given outer conductor diameter because the inner conductor is larger diameter and therefore has less resistance than with solid dielectric. (Similarly for Belden 9913-type cables.) But they may not be able to handle as much power, because the foam dielectric may be enough better a thermal insulator that the inner conductor still gets as hot or hotter at a given power, and that's the limitation. Also, you should be careful with bends in foam dielectric cables, because they can cause the center conductor to go off-center; that's especially bad if the cable's used at VHF/UHF. There's plenty more about the subject, but hope this helps a bit.

Cheers,
Tom

"John Passaneau" <jxp16@psu.edu> wrote in message
news:<br24ah$1j7e$1@f04n12.cac.psu.edu>...
> Hi:
> RG-8 used to be a military specification cable but the military dropped it
> in favor of a new specification called RG-213. They are very similar coaxes
> in general, but manufactures are free to make any cable they like and call
> it RG-8 so the quality and consistency can vary widely. Also RG-8 with foam
> a center insulator, and all the other variations are not nor never were
> MilSpec.That does not mean that all RG-8 cables are crap, but it could be
> and it depends on the manufactures idea of what kind of cable they want to
> sell. On the other hand RG-213 as a current MilSpec cable is a higher grade
> cable and is more consistent from manufacture to manufacture. My feeling is
> that if I'm going to go to all the work of installing a antenna, I want to
> use the best material I can. So I use RG-213. But my favorite coax is Davis
> RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low loss
> and a very tough jacket. I have 500 feet of it in my antenna system and so
> far I'm very happy.
>
>

> --
> John Passaneau W3JXP
> State College Pa
> jxp16@psu.edu
> This mail is a natural product. The slight variations in spelling and
> grammar enhance its individual character and beauty and in no way are to
> be considered flaws or defects.
>
> "Jerry Bransford" <jerrypb@mecox.net> wrote in message
> news:moUAb.29779$Bk1.25134@fed1read05...
> > Ok so I'm getting back active with my ham gear and while looking into a
> new
> > HF antenna, discovered a new cable type being recommended here and there,
> > RG-213. What is so much better about RG-213 than what I have used so much
> > of over the years, RG-8? TIA. :)
> >
> > Jerry
> > --
> > Jerry Bransford
> > To email, remove 'me' from my email address
> > KC6TAY, PP-ASEL
> > See the Geezer Jeep at
> > http://members.cox.net/jerrypb/
> >
> >
> >
> >

5747. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:28:51 UTC
From: richardharrison@webtv.net
Message-ID: <19801-3FD52553-406@storefull-2313.public.lawson.webtv.net>
Source record: 103363

Gary, N4AST wrote:
"Do you know of anyone that has an infinite length of transmission line?"

I may as soon as the line constructor is finished. Now, I can`t say that I do, but for some purposes a line of random length which is terminated in Zo serves as well as an infinite line of the same Zo.

A dissipation line, of course, must have enough length not to overload the termination resistor at the end of the real line which does have an end.

Best regards, Richard Harrison, KB5WZI

5748. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:36:05 UTC
From: "R.A. & G.D. Whiting" <gdwhiting@erols.com>
Message-ID: <3fd52893$0$14955$61fed72c@news.rcn.com>
Source record: 103364

Get an impedance bridge to measure the coax.. A directional coupler will
help. The other way is calculate the impedance based on wire size, spacing,
dielectric, etc,
al

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:87k7596dkk.fsf@jidanni.org...
> Dear antenna pros, I've always taken it for grunted about the
> 300/75/50 ohms of TV ribbon, coax, etc. But how does one measure it?
> My ohmsmeter doesn't budge. Is there some standard formula, like wrap
> grandma 100 times, with the far end connected to a cheeseburger in her
> mouth, the near end finally displaying the characteristic 300/75/50
> whatever ohmses?

5749. Does A sub L vary?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 01:58:10 UTC
From: amdx <amdx@att.net>
Message-ID: <S_9Bb.418355$0v4.20280309@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103365

Does the A sub L of a ferrite core change at very low signal levels?

Background; Years ago in an electronics class we measured a

5 Henry laminated iron core inductors. We drove it with a low

current 60 hz signal. The whole class came up with an answer of

around .75 Henry. This was a 5 Henry high current inductor.

After some head scratching and looking at B-H curves I decided

it measured low because of the slope of the curve. At low B fields

the curve is horizontal and as B goes up the curve moves more

vertical.

So I'm wondering if the transformers we wind for antennas are

working properly at small signal antenna levels. Is our primary

reactance really 4 times the source impedance at very low signal

levels?

Does the AsubL of a ferrite core change at very low signal levels?

Mike

5750. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:19:15 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <DiaBb.30701$Bk1.8398@fed1read05>
Source record: 103366

Lots of great answers to my question, thanks all!

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0312081727.3f8d1e1f@posting.google.com...
> Actually, I believe that the RG-designations are no longer used by the
> US military at all. Mil-C-17 now??--and I'm not sure any current ones
> are polyethylene (and not Teflon) dielectric. As John points out, RG
> numbers have been somewhat corrupted! But in general, "RG-213/U" and
> "RG-8/U" should both be solid-polyethylene dielectric cables with the
> same diameter and the same stranded inner conductor and single copper
> braid outer, and therefore should have the same attenuation per unit
> length, nominally. There will be minor variations from lot to lot, or
> larger variations if the coax was made poorly. "Reference Data for
> Radio Engineers" says of RG-213, "Formerly RG-8A/U."
>
> Foam dielectric cables, perhaps called "RG-213-type" or "RG-8-type,"
> have lower loss for a given outer conductor diameter because the inner
> conductor is larger diameter and therefore has less resistance than
> with solid dielectric. (Similarly for Belden 9913-type cables.) But
> they may not be able to handle as much power, because the foam
> dielectric may be enough better a thermal insulator that the inner
> conductor still gets as hot or hotter at a given power, and that's the
> limitation. Also, you should be careful with bends in foam dielectric
> cables, because they can cause the center conductor to go off-center;
> that's especially bad if the cable's used at VHF/UHF. There's plenty
> more about the subject, but hope this helps a bit.
>
> Cheers,
> Tom
>
> "John Passaneau" <jxp16@psu.edu> wrote in message
news:<br24ah$1j7e$1@f04n12.cac.psu.edu>...
> > Hi:
> > RG-8 used to be a military specification cable but the military dropped
it
> > in favor of a new specification called RG-213. They are very similar
coaxes

> > in general, but manufactures are free to make any cable they like and
call
> > it RG-8 so the quality and consistency can vary widely. Also RG-8 with
foam
> > a center insulator, and all the other variations are not nor never were
> > MilSpec.That does not mean that all RG-8 cables are crap, but it could
be
> > and it depends on the manufactures idea of what kind of cable they want
to
> > sell. On the other hand RG-213 as a current MilSpec cable is a higher
grade
> > cable and is more consistent from manufacture to manufacture. My feeling
is
> > that if I'm going to go to all the work of installing a antenna, I want
to
> > use the best material I can. So I use RG-213. But my favorite coax is
Davis
> > RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low
loss
> > and a very tough jacket. I have 500 feet of it in my antenna system and
so
> > far I'm very happy.
> >
> >
> > --
> > John Passaneau W3JXP
> > State College Pa
> > jxp16@psu.edu
> > This mail is a natural product. The slight variations in spelling and
> > grammar enhance its individual character and beauty and in no way are to
> > be considered flaws or defects.
> >
> > "Jerry Bransford" <jerrypb@mecox.net> wrote in message
> > news:moUAb.29779$Bk1.25134@fed1read05...
> > > Ok so I'm getting back active with my ham gear and while looking into
a
> > new
> > > HF antenna, discovered a new cable type being recommended here and
there,
> > > RG-213. What is so much better about RG-213 than what I have used so
much
> > > of over the years, RG-8? TIA. :)
> > >
> > > Jerry
> > > --
> > > Jerry Bransford
> > > To email, remove 'me' from my email address
> > > KC6TAY, PP-ASEL
> > > See the Geezer Jeep at
> > > http://members.cox.net/jerrypb/

> > >
> > >
> > >
> > >

5751. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:27:21 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <4mbatvcagphd83jigqa7uua8u5m0a9dkbp@4ax.com>
Source record: 103367
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Mon, 08 Dec 2003 15:35:49 -0500, Jim@nauticon.net wrote:

>What I failed to say Jerry, I am moving to Myrtle, yes there is an HOA
>but from what I found out from the neighbors and the real estate lady
>(who also resides there) the HOA is not all that strong. Wait until they
>find out i'm a ham. No, I have no intention of putting up a tower, just
>a long wire from the back of my property to the house (1/2 acre). Yes,
>my daughter does reside in a rather expensive area. And "NO", I don't
>enjoy driving on I-77. It's bumper to bumper three lanes wide from exit
>21 south to the state line at 60 MPH. Happy to see they are widening the
>roadway, I might even give 495 west of I-77 a shot to the state line
>when it's finished. Seems for what I understand they decided to build
>the east part of 495 first to accommodate the rich folks in around Union
>County area. One would think the area west of I-77 close to the airport
>would have heavier traffic.
>
>Back to stealth antennas and HOA's. I have been planning for several
>months how I am going to put up an antenna. Ideas I have considered are:
>Slinky's in the rafters, gutters, yes the house I bought does have
>gutters as compared to all the other homes, most do not. And finally
>long wires. So far, the only people that know I am a ham is the real
>estate lady and the guy next door.
>
>I wouldn't stop in my driveway and start taking photos of my home if you
>enjoy life as it is. Don't invade my privacy and I shall not invade
>yours. I invite Russ to give it a try, and "I'm NOT playing". I enjoy my
>privacy. What's mine is mine and what's yours is yours. Russ, just
>because the U.S. Attorney General got a new law passed in the U.S.
>Congress doesn't give you or the Feds to invade my privacy.
>
>"God Bless America"

Tell you what Jim, I'll stand in the public street all I want and take
pictures of anything I want to and you can't do squat about it. I
won't trespass on your property and I won't take pictures inside your
property without your permission. Your privacy ends at your front
door, and rightly so but what's in public view is just that...public.
Ask the people at Bay Hill CC in Orlando who lost the lawsuit against
the computer game company that used images of their houses in a golf
game. Ask the big-time Hollywood star who just lost the lawsuit
against the paparazzi taking pictures outside her house. Don't be
foolish enough to accost me on public property or threaten me. The
immediate and long-term repercussions will amaze you. You aren't big

enough to intimidate me and you don't have enough money to make the legal problems go away. Grow up a little and consult a professional instead of getting legal advice from television or here on the 'net. In a bit of irony, we are almost on the same side in this. I am currently looking for a home in an area without deed restrictions. Even if I weren't a ham, I would not sign a contract for a house with CCRs. I lived in Heathrow in Seminole County, FL and in another CCR community here in NC and I've had enough. When you sign for a house in a CCR community, you are signing an ordinary commercial contract that is completely enforceable (from both sides!) no matter what you think or how hard you stamp your feet.

Russ

5752. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:30:39 UTC
From: "Bob Lewis (AA4PB)" <rlewis@staffnet.com>
Message-ID: <vtacvno610djd3@corp.supernews.com>
Source record: 103368
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Its not a simple matter of matching the transmitter to the radiation resistance. First a short antenna is going to have a capacitive reactance. You must add an equal amount of inductive reactance (a loading coil) in order to cancel the capacitive reactance and make the antenna resonant at the operating frequency. Then what the transmitter needs to match is the total load impedance of the antenna "system". The load impedance includes the radiation resistance plus the resistance of the loading inductance plus the ground losses. The hardest thing to get a handle on will be the ground losses. The physical size of the transmitter housing is a small portion of a wavelength and losses will change as you handle the unit.

5753. Re: From multiband dipole to multiple monoband dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:31:49 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD53415.7E7A1669@cwis.net>
Source record: 103369

Jack,
I seriously doubt if it will have any noticable affect,
other than to block out a little more sun light and cost
three times as much.
'Doc

5754. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:35:46 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <lpcatvsiclq671rv870m2uns1u63tae0nb@4ax.com>
Source record: 103370
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Mon, 08 Dec 2003 16:13:03 -0500, Pappy127@usa.net wrote:

>The media doesn't even photograph people without their permission. Who
>the heck do you think you are, someone special? Don't invade the wrong
>persons privacy, you could be surprised.
>
>Basic rule of photography? Is NOT the law of the land.
>
>Don Forsling wrote:
>
>> No, thank you! The BASIC rule of photography is this (and I make a living
>> at it):
>>
>> If you are standing (or sitting for that matter) on public property, you can
>> legally photograph anything you can see from where you are standing. There
>> are, of course, exceptions for various national security considerations,
>> etc., but it is absolutely not against the law to stand on a public sidewalk
>> or in a public street and take a picture of somebody's house, their rose
>> bushes, their car, their ugly fence, their goofy-looking mailbox, their body
>> etc., etc. The fourth amendment has absolutely nothing to do with it. And
>> it's not at all like the case of a museum--a museum is, first of all, not
>> public property in the sense of the law as it applies to photography (or
>> just plain "seeing"). First of all, photography (flash) can damage museum
>> property and annoy the patrons and is often prohibited by _rule_ for that
>> reason. Also, and one does not have unrestricted access to a museum as one
>> does to a street. It is not _public_ in the sense that's pertinent here.
>> And by the way, you _can_ legally take a picture of, say, the side of a
>> house sporting an open window and capture, perhaps, some of what's inside
>> the house and visible. And that's the law.

Sorry Pappy, you're wrong. You have NO expectation of privacy in a
public place. How many photos have you had published? I have had
many and none of them required model releases. Why? You guessed it,
didn't you...there is no privacy in public. I cited examples in
another post but I'll repeat them here, just for your edification. A
big Hollywood star lost a lawsuit in the last couple of weeks against
the paparazzi taking pictures outside of her house from public
property. Some homeowners at the Bay Hill CC in Orlando, FL lost a
suit against a computer game compant that used images of their houses
in a game. As a matter of fact, the law protects ME from your
intrusion or interference when I'm in public no matter what I'm doing.

Russ

5755. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:55:07 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <gOaBb.1725$tU6.2809@reggie.win.bright.net>
Source record: 103371

One interesting thing I noticed about RG-213...

It was installed in the KC, EC and RC-135's I worked on in the Air Force in the 80's. The planes were built in 1955 through about 1964 that I worked on. One day we had a transmit problem on our UHF radio (225-399.975 MHz AM). 10 Watts out, 10 Watts reflected. That's bad. We put a TDR on the line and saw an impedance discontinuity about 30 feet downstream from the transmitter. After pulling several floor panels and sending our only (tiny) female Tech Sargeant head-first down the floorboards, we had her disconnect the coax clamps and removed the coax. Cut it open and found the center conductor had migrated through the inner insulation allowing contact with the shield. The defective area was on a horizontal run. Not sure if gravity or vibration over 30 some years was at work or maybe fuel fumes deteriorated the stuff, softening it. I guess I suspected fumes because not long after that, we had a KC-135 blow up at Altus AFB in Oklahoma. Cause was determined to be a loose N-Connector at the antenna and when the radio keyed up there was a spark as the RF jumped the gap and boom. Cinders on the runway.

Scott
N0EDV

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0312081727.3f8d1e1f@posting.google.com...
> Actually, I believe that the RG-designations are no longer used by the
> US military at all. Mil-C-17 now??--and I'm not sure any current ones
> are polyethylene (and not Teflon) dielectric. As John points out, RG
> numbers have been somewhat corrupted! But in general, "RG-213/U" and
> "RG-8/U" should both be solid-polyethylene dielectric cables with the
> same diameter and the same stranded inner conductor and single copper
> braid outer, and therefore should have the same attenuation per unit
> length, nominally. There will be minor variations from lot to lot, or
> larger variations if the coax was made poorly. "Reference Data for
> Radio Engineers" says of RG-213, "Formerly RG-8A/U."
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> have lower loss for a given outer conductor diameter because the inner
> conductor is larger diameter and therefore has less resistance than
> with solid dielectric. (Similarly for Belden 9913-type cables.) But
> they may not be able to handle as much power, because the foam
> dielectric may be enough better a thermal insulator that the inner
> conductor still gets as hot or hotter at a given power, and that's the
> limitation. Also, you should be careful with bends in foam dielectric
> cables, because they can cause the center conductor to go off-center;
> that's especially bad if the cable's used at VHF/UHF. There's plenty

> more about the subject, but hope this helps a bit.
>
> Cheers,
> Tom
>
> "John Passaneau" <jxp16@psu.edu> wrote in message
news:<br24ah$1j7e$1@f04n12.cac.psu.edu>...
> > Hi:
> > RG-8 used to be a military specification cable but the military dropped
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> > in favor of a new specification called RG-213. They are very similar
coaxes
> > in general, but manufactures are free to make any cable they like and
call
> > it RG-8 so the quality and consistency can vary widely. Also RG-8 with
foam
> > a center insulator, and all the other variations are not nor never were
> > MilSpec.That does not mean that all RG-8 cables are crap, but it could
be
> > and it depends on the manufactures idea of what kind of cable they want
to
> > sell. On the other hand RG-213 as a current MilSpec cable is a higher
grade
> > cable and is more consistent from manufacture to manufacture. My feeling
is
> > that if I'm going to go to all the work of installing a antenna, I want
to
> > use the best material I can. So I use RG-213. But my favorite coax is
Davis
> > RF Bury Flex, http://www.davisrf.com/ . It's a good coax that has low
loss
> > and a very tough jacket. I have 500 feet of it in my antenna system and
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> > far I'm very happy.
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> > John Passaneau W3JXP
> > State College Pa
> > jxp16@psu.edu
> > This mail is a natural product. The slight variations in spelling and
> > grammar enhance its individual character and beauty and in no way are to
> > be considered flaws or defects.
> >
> > "Jerry Bransford" <jerrypb@mecox.net> wrote in message
> > news:moUAb.29779$Bk1.25134@fed1read05...
> > > Ok so I'm getting back active with my ham gear and while looking into
a
> > new
> > > HF antenna, discovered a new cable type being recommended here and

there,
> > > RG-213. What is so much better about RG-213 than what I have used so
much
> > > of over the years, RG-8? TIA. :)
> > >
> > > Jerry
> > > --
> > > Jerry Bransford
> > > To email, remove 'me' from my email address
> > > KC6TAY, PP-ASEL
> > > See the Geezer Jeep at
> > > http://members.cox.net/jerrypb/
> > >
> > >
> > >
> > >

5756. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 02:59:05 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <ZTaBb.6815$7p2.4496@newsread2.news.atl.earthlink.net>
Source record: 103372

Art:

[snip]
> By the way I have this picture of you in my mind that shows you short
> in height but certainly not retund. Am I close?
[snip]

Heh, heh... yse. You really wanna know my physical description!

What's with you?

Next you'll be whining that a short but not rotund man is being critical of
your inventions simply because you are tall and rotund!

Hey! Just in case it matters and FYI...

I'm 5' 8", 165 pounds, blood pressure 115/70, I run 7 minute
miles daily, current age 62, born just after Pearl Harbour,
and my dear wife Mary still thinks I'm a "hunk" after 40 years
of marriage!

What?

Currently I run a "thriving" personal consulting business from my home
office - doing analog and RF design for companies that no longer seem
to be able to find good analog and RF designers among the current
generation of Engineers - and so keep coming back to us "old farts"
for new designs!

What?

--
Peter K1PO
Indialantic By-the-Sea, FL.

5757. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 03:44:42 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <KybBb.6788$Ho3.909@newsread1.news.atl.earthlink.net>
Source record: 103373
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Cecil Moore" wrote:
>
> If one doesn't want those photons being
> collected by a camera, one should keep
> them at home.

Greetings, Cecil. Haven't heard from you in that other newsgroup (rrap)
for some time. Where have you been lately?

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5758. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 03:51:25 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fd549e8_1@news1.prserv.net>
Source record: 103374

OK, guys and gals, lets move smartly on into the 21st century. John, get a current copy of MIL-C-17. Throw away your MIL-C-17E or earlier. Cables nomenclatured simply RG-nnn/U haven't been supported by the DOD system for well over 20 years. Only M17/+++-RGNNN nomenclatured cables are truly MIL-SPEC. See below.

Jerry: Here is a very condensed history of coaxial cable nomenclature.

Now, in the beginning, coax impedances resulted from standard size wires and tubing. RG-8/U was 52 ohms, which resulted from the dimensions which were quickly attainable in wire manufacturing in the 1930s. RG-8A/U was the same, except the jacket was made from a plastic which did not contaminate the dielectric through migration of the plasticizer. I recently had access to some old Federal Radio and Telephone Labs records which contained quite a discussion on dielectrics and jackets. Plastic technology was pretty primitive back then. So was wire manufacturing, and braid overlaying.

In the 1960s all common coaxes were normalized to round number impedances and issued new nomenclature, RG-8/U at 52 ohms becoming RG-213/U at 50.0 ohms. RG-9/U became RG-214/U, and so on ad naseum. RG-11/U was already exactly 75 ohms, so it remained the same (and then moved on to M17/6-RG11). RG-13/U, on the other hand, the double shielded half inch 74 ohm coax became RG-216/U at 75 ohms. The new numbered cables were, for all practical purposes, the same as their predecessors, except for the impedance. 50.000 ohm network analyzers were now safe.

Then in the 70s came cable TV and other wideband systems, which encountered performance problems due to unpredictable phase characteristics across the frequency range. This was found to be typically caused by repetitive mechanical disturbances in the cable construction. To fully qualify the cables, swept frequency performance measurements were added to MIL-C-17E, and the nomenclature changed yet again to the present M17/+++. Now, you don't see much of this 'new' M17/+++ stuff in ham use because it is another increment more expensive, and hams typically don't have requirements for wideband, predictable phase characteristics anyway. But, RG-213/U, which we had just gotten used to then became M17/163-00001, the cheaper non-swept direct equivalent, or M17/74-RG213 for the more expensive version swept from 50 MHz to 1 GHz. And cable bearing that nomenclature better meet the specifications of the current MIL-C-17.

Now, just to be clear, there is no rule anywhere against anyone with cable manufacturing facilities making coax of any kind and quality (or even rope or water hose for that matter), and labeling it RG-8, or RG-213, or RG-(anything else). So asking about RG-8 (or RG-213) is like asking what the impedance of a wet noodle is.

Finally, a quote from the MIL-C-17 page in the Times Fiber RF Transmission Line Handbook pretty well summarizes it, even better than the specification itself. Especially the last sentence:

"Cables that are manufactured to MIL-C-17 specification no longer carry the RG designation. Instead, they are marked with an M17 designation. For example, RG-214 has been replaced by M17/75--RG214. In the future, any new cable design will be designated by a M17 number only.
"In addition to the M17 number, all cables are marked with the manufacturer's name and government identification number, for example, 'M17/75-RG214, MIL-C-17, Times Fiber Communications, 68999, AA-3409.' Cables that are not marked with all this information are not qualified and there is no guarantee of their performance."
--
Crazy George

5759. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:02:13 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031208230213.15174.00000455@mb-m04.aol.com>
Source record: 103376

>I think most would assume he meant for similarly sized cables.

Since I don't know the physical differences between RG-8, RG-8U, RG-8X and
RG-213, I wouldn't know that he meant similarly sized cables.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5760. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:02:40 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <APbBb.6808$Ho3.6168@newsread1.news.atl.earthlink.net>
Source record: 103375
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

<Pappy127@usa.net> wrote:
>
> The media doesn't even photograph people
> without their permission. (snip)

It's done all the time, Pappy. Do you honestly think the media runs around getting permission (a release) for all those people at a sports event, demonstration, or some other news story? If you or your home is a news story, or either is caught in a photograph of a news story, there are few privacy protections involved. If you or your home is photographed from a public place, there are few privacy protections involved.

> Who the heck do you think you are, someone
> special? Don't invade the wrong persons privacy,
> you could be surprised.
>
> Basic rule of photography? Is NOT the law of
> the land.

The case law is clear on the matter, Pappy. And there are dozens of books on the legal issues surrounding photography, most citing specific cases, available to photographers. Any wise photographer has read several (I've read perhaps all of them over the years).

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5761. antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:05:47 UTC
From: rckchp@comcast.net
Message-ID: <6dc33f40.0312082005.38e57472@posting.google.com>
Source record: 103377

What are pros and cons of using insulated twisted pair wire for wire antenna projects? (its what I have handy) Comments invited.

5762. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:06:27 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <7TbBb.30713$Bk1.27409@fed1read05>
Source record: 103378

Wow, you guys are great... thanks for the info Crazy George. I may be an electronics whiz to my friends and neighbors but I feel like a beginner here. Thanks again! :)

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message news:3fd549e8_1@news1.prserv.net...
> OK, guys and gals, lets move smartly on into the 21st century. John, get a
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> the dielectric through migration of the plasticizer. I recently had access
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> discussion on dielectrics and jackets. Plastic technology was pretty
> primitive back then. So was wire manufacturing, and braid overlaying.
>
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> and issued new nomenclature, RG-8/U at 52 ohms becoming RG-213/U at 50.0
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> RG-13/U, on the other hand, the double shielded half inch 74 ohm coax became
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> purposes, the same as their predecessors, except for the impedance.
50.000

> ohm network analyzers were now safe.
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encountered
> performance problems due to unpredictable phase characteristics across the
> frequency range. This was found to be typically caused by repetitive
> mechanical disturbances in the cable construction. To fully qualify the
> cables, swept frequency performance measurements were added to MIL-C-17E,
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> had just gotten used to then became M17/163-00001, the cheaper non-swept
> direct equivalent, or M17/74-RG213 for the more expensive version swept
from
> 50 MHz to 1 GHz. And cable bearing that nomenclature better meet the
> specifications of the current MIL-C-17.
>
> Now, just to be clear, there is no rule anywhere against anyone with cable
> manufacturing facilities making coax of any kind and quality (or even rope
> or water hose for that matter), and labeling it RG-8, or RG-213, or
> RG-(anything else). So asking about RG-8 (or RG-213) is like asking what
> the impedance of a wet noodle is.
>
> Finally, a quote from the MIL-C-17 page in the Times Fiber RF Transmission
> Line Handbook pretty well summarizes it, even better than the
specification
> itself. Especially the last sentence:
>
> "Cables that are manufactured to MIL-C-17 specification no longer carry
the
> RG designation. Instead, they are marked with an M17 designation. For
> example, RG-214 has been replaced by M17/75--RG214. In the future, any
new
> cable design will be designated by a M17 number only.
> "In addition to the M17 number, all cables are marked with the
> manufacturer's name and government identification number, for example,
> 'M17/75-RG214, MIL-C-17, Times Fiber Communications, 68999, AA-3409.'
> Cables that are not marked with all this information are not qualified and
> there is no guarantee of their performance."
> --
> Crazy George
>
>

5763. Re: Source for CB 102inch whip antenna for use to Icom AH-4 tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:16:58 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <_0cBb.343279$275.1133472@attbi_s53>
Source record: 103379

Copper Electronics.

"James W" <change-to-jw22-at-trlp-dot-com@trlp.com> wrote in message
news:3FD3A2D9.6030000@trlp.com...
> Cannot find those good old 102inch CB antennas any more. Anyone have a
> source I can mail order from?
>
> - jim KG7HH
>

5764. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:34:59 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031208233459.03858.00000505@mb-m07.aol.com>
Source record: 103380

>
>Heh, heh... yse. You really wanna know my physical description!
>
>What's with you?
>

Could it be that he is long lost brother of Chipster?
There is some silimarity :-)
Pa-tents, inquiring mnid, vining, yada, yada

fat BUm but back on Atkins

5765. Website recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:44:02 UTC
From: niftydog@hotmail.com
Message-ID: <e28c5b43.0312082044.32803994@posting.google.com>
Source record: 103381

I'm looking for websites that will assist me with a technical college assignment about the following subjects.

-Antenna siting and installation
-Environmental effects of installations
-Health and safety factors
-Methods of isolation
-duplexers/diplexers
-3 port circulators

Have been googling around, but people "in the know" tend to know where the goldmines are! Any info greatly appreciated!

TIA, Steve

5766. G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 04:49:29 UTC
From: Andrew Rich <andrew@tech-software.net>
Message-ID: <3fd55463_1@news.iprimus.com.au>
Source record: 103382

What are the dimensions of a G5RV jr (40-10m)

with 300 ohm tv ribbon ?

5767. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 05:46:55 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd56222_8@corp.newsgroups.com>
Source record: 103383
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Paul Burridge wrote:
> ... the best way
> to couple it to a PA with a 140 ohm output impedance?

Use a loading coil to resonate the antenna to 40MHz. Use a transformer
or tank circuit to transform the impedance.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5768. Re: G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 06:03:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd565fd$1_8@corp.newsgroups.com>
Source record: 103384

Andrew Rich wrote:

> What are the dimensions of a G5RV jr (40-10m)
> with 300 ohm tv ribbon ?

51 ft. center-fed with 15.6 ft. of 300 ohm line assuming a VF of 0.9.

It's 1.5WL on 10m fed with 1/2WL of twinlead.

It will work well on 40m, 20m, and 10m. Not well on 17m and 12m.
EZNEC says a 50 ohm SWR of 21:1 on 17m and 73:1 on 12m.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5769. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 06:39:49 UTC
From: Mac <foo@bar.net>
Message-ID: <pan.2003.12.09.06.39.37.171898@bar.net>
Source record: 103385
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Tue, 09 Dec 2003 00:04:00 +0000, Paul Burridge wrote:

> On Mon, 8 Dec 2003 21:32:52 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>>I can see from the way you have made your enquiry you havn't the foggiest
>>idea about what you are trying to accomplish. Do you know the frequency?
>>What transmitter power output do you have in mind - 10 milliwatts or 1KW?
>>For starters forget all about folding anything - you've been reading the
>>wrong books. However you now mention a short whip above a groundplane of
>>unknown construction.
>
> Perhaps you didn't see the earlier posts on the subject. The frequency
> is 40Mhz (radio control band) and the tx output stage as it stands
> puts out maximum power of 475mW with a 140 ohm resistor as load. I
> only *need* 50mW ERP., however, so can stand to see quite a bit of
> loss from an inefficient antenna. The antenna I will be using is a
> telescopic whip - exactly the same set-up as you see with model
> vehicle radio control transmitters- which is what it is, in fact.
> It ain't rocket science.
> Someone out there must know the radiation resistance of such a
> telescopic whip (which has a ground plane of just around 16 square
> inches contained within the remote control handset) and the best way
> to couple it to a PA with a 140 ohm output impedance?

You have had quite a few answers which seem pretty good to me.

I have a few comments.

Stop saying "radiation resistance" and start saying "input impedance" or "feed impedance." Once you know the input impedance, getting maximum power transfer is a straightforward matching problem that can be solved in a variety of ways. True, you won't know for sure how much power is "getting out," but some of the posts in this thread have given you some estimates. If that isn't good enough, then you will have to measure by putting a receive antenna in the far field.

Anyway, if you want to measure the input impedance, you should be able to do it with a two-channel oscilloscope and a 40 MHz function generator. Drive the antenna with the function generator and simultaneously measure the input voltage and current, including the phase relationship between them. The input impedance is V/I. To measure the current, put a suitably sized resistor in series with the antenna and measure the voltage across it. The voltage across the resistor should be small compared to the voltage into the antenna. If it is too small to see, use a bigger resistor

until you can see it. Make sure both oscilloscope probes are grounded in the same place. Unless you have a differential probe (in which case, use it to measure the voltage across the current sensing resistor).

From what others have already said, it sounds like the input will be extremely capacitive with a small series resistance. Once you know the details, however, it will be easy to tell you how to match this to your amplifier.

That's my $0.02.

Mac

5770. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 07:29:04 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <ostatvkqsksafum8n0p5kalb5rpmamens2@4ax.com>
Source record: 103386
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Tue, 09 Dec 2003 02:27:21 GMT, Russ <carlzomer@hotmail.com> wrote:

>On Mon, 08 Dec 2003 15:35:49 -0500, Jim@nauticon.net wrote:
>
>>What I failed to say Jerry, I am moving to Myrtle, yes there is an HOA
>>but from what I found out from the neighbors and the real estate lady
>>(who also resides there) the HOA is not all that strong. Wait until they
>>find out i'm a ham. No, I have no intention of putting up a tower, just
>>a long wire from the back of my property to the house (1/2 acre). Yes,
>>my daughter does reside in a rather expensive area. And "NO", I don't
>>enjoy driving on I-77. It's bumper to bumper three lanes wide from exit
>>21 south to the state line at 60 MPH. Happy to see they are widening the
>>roadway, I might even give 495 west of I-77 a shot to the state line
>>when it's finished. Seems for what I understand they decided to build
>>the east part of 495 first to accommodate the rich folks in around Union
>>County area. One would think the area west of I-77 close to the airport
>>would have heavier traffic.
>>
>>Back to stealth antennas and HOA's. I have been planning for several
>>months how I am going to put up an antenna. Ideas I have considered are:
>>Slinky's in the rafters, gutters, yes the house I bought does have
>>gutters as compared to all the other homes, most do not. And finally
>>long wires. So far, the only people that know I am a ham is the real
>>estate lady and the guy next door.
>>
>>I wouldn't stop in my driveway and start taking photos of my home if you
>>enjoy life as it is. Don't invade my privacy and I shall not invade
>>yours. I invite Russ to give it a try, and "I'm NOT playing". I enjoy my
>>privacy. What's mine is mine and what's yours is yours. Russ, just
>>because the U.S. Attorney General got a new law passed in the U.S.
>>Congress doesn't give you or the Feds to invade my privacy.
>>
>>"God Bless America"
>
>Tell you what Jim, I'll stand in the public street all I want and take
>pictures of anything I want to and you can't do squat about it. I

Actually there is. As a civil matter, if you have enough money you
can sue most any one for most any thing that you *think* affects you.

Now you might, win, or quite likely would win, but to do so is
expensive. For many just the prospect of being taken to court can be
a deterrent.

You could also sue for harassment... But we are looking at something like 20 grand to file a suit unless it's small claims. A good lawyer can draw it out to the point where it can run into 6 figures. The only ones winning in that case are the lawyers. It *may* depend on how much you can afford to protect your legal rights to do what some one else doesn't like.

Another option is for him to contact a couple neighbors and they report you to the police as acting suspicious. You may get hauled away and only have the opportunity to explain later.

In New England a group is suing the pilots flying out of a local airport because they don't like the noise and there is nothing illegal about what the pilots are doing. So, by harassing the pilots by filing lawsuits they figure they can force them out. It may work and it may backfire if the pilots counter sue for harassment.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

5771. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 07:44:21 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD57D55.72F89DC3@cwis.net>
Source record: 103387

Rich,
The best 'pro' is that you already have it! The first 'con'
that comes to mind is, is it large enough to hold up it's own
weight and not stretch to the next lower band?
Within reason, the 'type' of wire/conductor you use to make
an antenna just doesn't matter a lot. It has to be a conductor,
after that, it has to be available. The rest is up to you.
'Doc

5772. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 08:01:57 UTC
From: Tony Williams <tonyw@ledelec.demon.co.uk>
Message-ID: <4c5dfffb79tonyw@ledelec.demon.co.uk>
Source record: 103388
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <gl3atvckehljnt7t2vbap9itd3ag6at0d5@4ax.com>,
Paul Burridge <pb@osiris1.notthisbit.co.uk> wrote:

> It ain't rocket science. Someone out there must know the
> radiation resistance of such a telescopic whip (which has a
> ground plane of just around 16 square inches contained within the
> remote control handset) and the best way to couple it to a PA
> with a 140 ohm output impedance?

Paul, standard CB antennas are loaded whips, for operation
at around 30MHz. Available in the CPC catalogue for about
ï¿½10 to ï¿½20, Perhaps you could start off with one of those
and modify to suit.

Note also that there is a 433MHz licence-free band for
short distance (100m) remote control. Pre-built Tx and
Rx modules are cheap, and a 433MHz antenna would be a
breeze.

<www.cpc.co.uk> or 08701 202530.

--
Tony Williams.

5773. Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 08:29:49 UTC
From: thisan@invalidaddress.com
Message-ID: <3fd58671.958421@news.netcon.net.au>
Source record: 103389

I plan to put up an 80m dipole fed with open wire feeder for multiband operation. It is down the other end of the house from the shack (50 feet away), so am thinking of mounting a remote tuner under the eaves near the antenna and coax from there back to the shack.

Anyone tried this combo or similar? Would appreciate recommendations/hints etc.

Damien VK3RX
Email: mycall_above@amsat.org
The obvious anti-spam measure; replace mycall_above with my callsign :-)

5774. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 11:40:17 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031209064017.12223.00000589@mb-m05.aol.com>
Source record: 103390

>
>What are pros and cons of using insulated twisted pair wire for wire
>antenna projects? (its what I have handy) Comments invited.
>
>

Depending on the type of plastic, physical length of insulated wire will be
shorter by about 5% for the same resonant frequency vs. bare wire.
Otherwise it will work.

Yuri

5775. WANTED: HAM GEAR

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 12:28:37 UTC
From: n2ion@aol.com
Message-ID: <20031209072837.19282.00000487@mb-m13.aol.com>
Source record: 103391

NOT USING YOUR ANTENNA ANYMORE?

IS YOUR RIG COLLECTING DUST?

LONG ISLAND MOBILE AMATEUR RADIO CLUB IS

LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR

EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW

BAND YAGIS LIKE THE MOSLEY TA-33 OR TA-33 JR, AND
VERTICALS, RADIOS, ROHN TOWERS OR VARIOUS CRANKUP
TOWERS TO USE FOR EMERGENCY COMMUNICATION AND
FIELD DAY.

IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL

GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A

WORTHY CAUSE.

EMAIL AND LET US KNOW WHAT YOU HAVE!

THANKS IN ADVANCE

5776. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 13:09:44 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <sQjBb.7144$7p2.6256@newsread2.news.atl.earthlink.net>
Source record: 103392

Yuri:

[snip]
> fat BUm but back on Atkins
[snip]

I follow the "Atkin's way to live" myself and have reversed what was a long term
and seemingly inevetible weight increase, by following Atkins plan. I lost about
40 pounds over a year's time back about five years ago and have been following
Atkins daily since.

I feel great on low carb intake, drink plenty of red and white wine,
and despite what several, such as my dear wife, told me, my lipids are
under control and what's important to me, I never feel deprived.

Atkins works for me...

Pass the steak, ham and turkey but... hold the sweet potato... :-)

Happy Holidays

--
Peter K1PO

5777. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 13:23:01 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FD5CE97.459A4F19@uwe.ac.uk>
Source record: 103393

thisan@invalidaddress.com wrote:
>
> I plan to put up an 80m dipole fed with open wire feeder for multiband
> operation. It is down the other end of the house from the shack (50
> feet away), so am thinking of mounting a remote tuner under the eaves
> near the antenna and coax from there back to the shack.
>
> Anyone tried this combo or similar? Would appreciate
> recommendations/hints etc.
>
> Damien VK3RX
> Email: mycall_above@amsat.org
> The obvious anti-spam measure; replace mycall_above with my callsign
> :-)

I've used a 102' centre fed wire with 28' home brew 600 ohm ladder to an SGC 230. 230 is floated by coiled coax (and control lines) 11 turns about 12" diameter plus a couple of clip on ferrites forming a choke balun. Tunes all bands 160-10. I think you'd be better of with 102' or 135' rather than a resonant 80 m aerial as these are easier to match on some of the other bands. An 80 m dipole is not easy to drive on 40 for instance. To get all bands you obviously have to compromise and those lengths give an easier match on all bands but don't have a perfect match on any.

My aerial is fairly low 30' - 45' and I don't seem to suffer too badly from a 'lobey' pattern on the higher bands.

You might take a look at

http://www.camuw.demon.co.uk/web_site/g3ynh/antenna/sgc230.html

Which describes a similar setup in more detail.

vy 73

Andy, M1EBV

5778. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 13:41:03 UTC
From: Jim@nauticon.net
Message-ID: <3FD5D0EF.8BA5F29A@nauticon.net>
Source record: 103394
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

Let's not get stupid here.

I don't make threats.

I as well as you and all reading this do know that there are HOA's that run a decent and positive program.
I believe this thread was centered around the HOA that wants to try and push their program to the limit with some people on the boards and some neighborhood people who think they are cops, running around the neighborhood harassing their fellow neighbors for the most stupid thing they can find. That is what the majority of us are complaining about. People who think they are real cops when in fact they are just the neighborhood nuisance.

The new neighborhood I am moving into (159 homes), there are 9 "real" cops, 3 still on the job and 5 retired, just like myself. I do believe the neighborhood is well protected. Oh, I failed to mention that the Chief of the County Police also resides there. Being private property we do not have police patrols so the good neighbors as they are look out for each other when it comes to strangers driving through. When I was ask by two people when I stopped at a stop sign if they could help me find someone I was looking for. I told them I was looking over the area because I was buy a home there and gave them the address. We had a very nice talk and I moved on about my business.

As I have said before as well as others: I respect your privacy rights, you should be doing the same.

"God Bless America"

Russ wrote:
>
> On Mon, 08 Dec 2003 15:35:49 -0500, Jim@nauticon.net wrote:
>
> >What I failed to say Jerry, I am moving to Myrtle, yes there is an HOA
> >but from what I found out from the neighbors and the real estate lady
> >(who also resides there) the HOA is not all that strong. Wait until they
> >find out i'm a ham. No, I have no intention of putting up a tower, just
> >a long wire from the back of my property to the house (1/2 acre). Yes,
> >my daughter does reside in a rather expensive area. And "NO", I don't
> >enjoy driving on I-77. It's bumper to bumper three lanes wide from exit
> >21 south to the state line at 60 MPH. Happy to see they are widening the
> >roadway, I might even give 495 west of I-77 a shot to the state line
> >when it's finished. Seems for what I understand they decided to build

> >the east part of 495 first to accommodate the rich folks in around Union
> >County area. One would think the area west of I-77 close to the airport
> >would have heavier traffic.
> >
> >Back to stealth antennas and HOA's. I have been planning for several
> >months how I am going to put up an antenna. Ideas I have considered are:
> >Slinky's in the rafters, gutters, yes the house I bought does have
> >gutters as compared to all the other homes, most do not. And finally
> >long wires. So far, the only people that know I am a ham is the real
> >estate lady and the guy next door.
> >
> >I wouldn't stop in my driveway and start taking photos of my home if you
> >enjoy life as it is. Don't invade my privacy and I shall not invade
> >yours. I invite Russ to give it a try, and "I'm NOT playing". I enjoy my
> >privacy. What's mine is mine and what's yours is yours. Russ, just
> >because the U.S. Attorney General got a new law passed in the U.S.
> >Congress doesn't give you or the Feds to invade my privacy.
> >
> >"God Bless America"
>
> Tell you what Jim, I'll stand in the public street all I want and take
> pictures of anything I want to and you can't do squat about it. I
> won't trespass on your property and I won't take pictures inside your
> property without your permission. Your privacy ends at your front
> door, and rightly so but what's in public view is just that...public.
> Ask the people at Bay Hill CC in Orlando who lost the lawsuit against
> the computer game company that used images of their houses in a golf
> game. Ask the big-time Hollywood star who just lost the lawsuit
> against the paparazzi taking pictures outside her house. Don't be
> foolish enough to accost me on public property or threaten me. The
> immediate and long-term repercussions will amaze you. You aren't big
> enough to intimidate me and you don't have enough money to make the
> legal problems go away. Grow up a little and consult a professional
> instead of getting legal advice from television or here on the 'net.
> In a bit of irony, we are almost on the same side in this. I am
> currently looking for a home in an area without deed restrictions.
> Even if I weren't a ham, I would not sign a contract for a house with
> CCRs. I lived in Heathrow in Seminole County, FL and in another CCR
> community here in NC and I've had enough. When you sign for a house
> in a CCR community, you are signing an ordinary commercial contract
> that is completely enforceable (from both sides!) no matter what you
> think or how hard you stamp your feet.
>
> Russ

5779. Re: G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 14:43:24 UTC
From: GrandPa Munster <house@1313.com>
Message-ID: <gclBb.346865$ao4.1161089@attbi_s51>
Source record: 103395

Look here:

http://www.qsl.net/aa3px/g5rv.htm

5780. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:20:36 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd5e897_8@corp.newsgroups.com>
Source record: 103396

Andy Cowley wrote:
> I think you'd be better of with 102' or 135' rather
> than a resonant 80 m aerial as these are easier to match on some of the other
> bands.

If he were using 300 ohm or lower Z0 feedline, you might have a
point, but there's nothing to worry about with 600 ohm feedline.

A resonant 80m dipole may have a feedpoint impedance of 60 ohms.
An 80m dipole used on 40m may have a feedpoint impedance of 6000
ohms. In both cases, the SWR on the 600 ohm open-wire line is 10:1.
A 60 ohm antenna fed with 600 ohm feedline and a 6000 ohm antenna
fed with 600 ohm line are equally mismatched. If one doesn't know
the length of the feedline, one can't tell the difference at the
transmitter.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5781. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:25:16 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312090725.19153184@posting.google.com>
Source record: 103397

So you work alone. That explains a lot, your superior attitude and
penchant for labeling people such as those who are in your profession
who don,t have it
fits in quite well with your lack of people skills. Actually I am
surprised that you have a wife knowing how vindictive you are as shown
with your outrageous treatment of Chip Cohen. In fact I see a great
similarity with the so called shoot out with Tom by the Bum where it
showed complete arrogance with respect to people who have earned the
right of respect because of their contributions.
Look at E ham and read that horrible discourse even tho it does not
match
that of you and Chip.I see your company has arrived (the bum) to give
you support from the rear by throwing darts which now complets the
trio.
Art

"Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message
news:<ZTaBb.6815$7p2.4496@newsread2.news.atl.earthlink.net>...
> Art:
>
> [snip]
> > By the way I have this picture of you in my mind that shows you short
> > in height but certainly not retund. Am I close?
> [snip]
>
> Heh, heh... yse. You really wanna know my physical description!
>
> What's with you?
>
> Next you'll be whining that a short but not rotund man is being critical of
> your inventions simply because you are tall and rotund!
>
> Hey! Just in case it matters and FYI...
>
> I'm 5' 8", 165 pounds, blood pressure 115/70, I run 7 minute
> miles daily, current age 62, born just after Pearl Harbour,
> and my dear wife Mary still thinks I'm a "hunk" after 40 years
> of marriage!
>
> What?
>
> Currently I run a "thriving" personal consulting business from my home
> office - doing analog and RF design for companies that no longer seem
> to be able to find good analog and RF designers among the current

> generation of Engineers - and so keep coming back to us "old farts"
> for new designs!
>
> What?

5782. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:50:03 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <MamBb.36052$Bk1.16425@fed1read05>
Source record: 103398

> Depending on the type of plastic, physical length of insulated wire will
be
> shorter by about 5% for the same resonant frequency vs. bare wire.
> Otherwise it will work.

Isn't that true just for VHF and higher frequencies due to the velocity
factor??? I'm fairly certain that doesn't apply for HF.

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031209064017.12223.00000589@mb-m05.aol.com...

5783. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:53:30 UTC
From: jder8745@aol.com
Message-ID: <20031209105330.01826.00000419@mb-m18.aol.com>
Source record: 103399

Howdy,

I personally like RG-214 but it's very expensive, at least as far as I'm concerned,

I only have a small amount I have gotten at hamfests.

75-Ohm TV hardline is available from your TV cable company as reel ends usually for free.

The last I got had 134 feet left on the reel and was insulated and 1/2 inch in diameter. But there is a price problem with connectors. Many hams fabricate their own. TV cable companies don't give connectors away.

73 de Jack, K9CUN

5784. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:57:56 UTC
From: jder8745@aol.com
Message-ID: <20031209105756.01826.00000420@mb-m18.aol.com>
Source record: 103400

Howdy,

These numbers are characteristic impedances of the cables. If you had an infinite length of it all you would have to do is use an impedance meter and it would yield the correct C. I.

It is a function of the frequency and the distributed R, L, C, and G of the cable.

The ARRL Handbook and their antenna book can tell you much.

7e de Jack, K9CUN

5785. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 15:59:43 UTC
From: jder8745@aol.com
Message-ID: <20031209105943.01826.00000421@mb-m18.aol.com>
Source record: 103401

It's actually Ohms with a capital OH.

:-)

5786. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 16:14:15 UTC
From: Robert Spooner <rls19@psu.edu>
Message-ID: <3FD5F4D7.2090900@psu.edu>
Source record: 103402

Andy,

Is there any particular reason why you didn't use a balun on the
output of the SGC rather than on the input?

73,
Bob AD3K

Andy Cowley wrote:

> ...
> http://www.camuw.demon.co.uk/web_site/g3ynh/antenna/sgc230.html
>
> Which describes a similar setup in more detail.
>
> vy 73
>
> Andy, M1EBV

--
Robert L. Spooner
Registered Professional Engineer
Associate Research Engineer
Intelligent Control Systems Department

Applied Research Laboratory Phone: (814) 863-4120
The Pennsylvania State University FAX: (814) 863-7841
P. O. Box 30
State College, PA 16804-0030 rls19@psu.edu

5787. Re: Salt Water Ground Plane

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 16:54:27 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <77nBb.4818$8y1.24613@attbi_s52>
Source record: 103403

Electrolysis maybe? :-)

Vito Steockli wrote:

> The good old boys over on rec.boats.electronics continually worry over
> having enough ground plane for their seagoing HF SSB antennae, which
> typically comprise a vertical or near vertical insulated rigging element fed
> thru a tuner. All of my HF antenna experience has been on land and I was
> always led to believe that salt water otta make a great ground plane for a
> HF vertical - at least a whole lot better than the dirt under mine. So why
> does everybody add copper strips, et cetera, to their bildges?
>
> TIA
> Howard, K3DWW
>
>

5788. Re: From multiband dipole to multiple monoband dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 17:32:58 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <moidnZKBd5n6mkuiRVn-gw@comcast.com>
Source record: 103404

Jack,

I had dipoles for 40, 17 and 12 meters fed off a common feedpoint, and presently have 40 and 17. SWR is below 1.5:1 on both bands. I have run EZNEC on both of these, and have not found any meaningful loss in gain relative to a single dipole.

If you want to improve things, get rid of the RG58. At 10 meters, LMR240 will get you at least a db. It weigh about the same, and is only about .04 inch bigger. It will also take 1400W.

Tam/WB2TT
"Jack Twilley" <jmt+usenet@twilley.org> wrote in message news:867k16q1qj.fsf@duchess.twilley.org...
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

I recently set up a multiband dipole with six elements tuned for 40, 20, and 10 respectively. I now find myself wondering if I should convert it to monoband dipoles.

The end result would be three coplanar monoband dipoles with three coincident feedpoints with three parallel runs of ~100 feet of RG-58 coax to an antenna switch in the shack.

What effect would this change have on performance?

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.3 (FreeBSD)

iD8DBQE/1RW6GPFSfAB/ezgRAquAAKCm5vQacEYv59sE39pCFsyoNsaiVQCfQeLy
+7mXWiv1dYegl7T63zu3uIo=
=sW9G
-----END PGP SIGNATURE-----

5789. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 17:36:42 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FD60A0C.A9E7E0A9@uwe.ac.uk>
Source record: 103405

Cecil Moore wrote:
>
> Andy Cowley wrote:
> > I think you'd be better of with 102' or 135' rather
> > than a resonant 80 m aerial as these are easier to match on some of the other
> > bands.
>
> If he were using 300 ohm or lower Z0 feedline, you might have a
> point, but there's nothing to worry about with 600 ohm feedline.
>
> A resonant 80m dipole may have a feedpoint impedance of 60 ohms.
> An 80m dipole used on 40m may have a feedpoint impedance of 6000
> ohms. In both cases, the SWR on the 600 ohm open-wire line is 10:1.
> A 60 ohm antenna fed with 600 ohm feedline and a 6000 ohm antenna
> fed with 600 ohm line are equally mismatched. If one doesn't know
> the length of the feedline, one can't tell the difference at the
> transmitter.
>

All true for the two bands. But - I did know the length of the feedline.
I did do the EZNEC simulations for the impedance seen looking into the
feedline for all bands and the lengths chosen do result in the 'easiest'
tuning solutions. The SGC is a good bit of kit but it won't tune just
any old thing, there are limits to the amount of L and C it can supply.
AFAIK it uses a simple 'L' solution always. If you get the wrong feedline
length and aerial length combination you can quickly get solutions which,
even when in range, produce excessive voltages at 100W. The SWR on open
wire line is not the significant factor here, losses are very low even at
very high SWRs, but the impedance transformation required in the tuner. The
SGC has fairly low voltage limits so I think 'tis best to treat it as
gently as possible.

I hope you don't think I'm recommending a G5RV here. The only good G5RV
is one without the coax, in which case I believe the design with those
lengths is due to Arthur Collins, (W9CXX?) in a prewar QST.

Thanks for the input anyway, Cecil.

vy 73

Andy, M1EBV

5790. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 18:04:34 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD60EB2.EC4FE77A@cwis.net>
Source record: 103406

Damien,
It's a fairly common practice, if you have a remote tuner handy. How well it will work depends a lot on the tuner, if it can handle the impedances presented to it. Not having a remote tuner, I do about the same thing except the coax run is very short and the parallel feed line is very long (lol). Are there any 'problems' with doing it this way (or your way)? Sure, the same ones you see in almost any antenna installation. There are frequencies where the RFI is more objectionable than others. What those frequencies are is going to be different for every installation / situation, so you'll just have to try it and see. Good luck...
'Doc

5791. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 18:07:40 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD60F6C.34AF90D1@cwis.net>
Source record: 103407

Jerry,
It applies to any frequency. I don't know if I would
agree with the 5%, but there is a 'shortening' affect if
the conductor is insulated. Is it going to make any real
difference on HF? Nope...
'Doc

5792. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 18:31:02 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd61539_4@corp.newsgroups.com>
Source record: 103408

Andy Cowley wrote:
> If you get the wrong feedline
> length and aerial length combination you can quickly get solutions which,
> even when in range, produce excessive voltages at 100W.

My point was that the wrong feedline length yields the same results for a 60 ohm antenna as it does for a 6000 ohm antenna. If you feed that 60 ohm antenna with an odd multiple of 1/4WL of feedline, the impedance seen at the tuner will be 6000 ohms. If you feed the 6000 ohm antenna with a multiple of 1/2WL, the impedance seen at the tuner will be 6000 ohms. The impedance of the antenna doesn't really matter as long as it is 1/2WL on the lowest frequency of interest. What matters is the SWR on the feedline and the length of the feedline. The feedpoint should be in the ballpark location of the current maximum point, not the voltage maximum point.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5793. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 18:39:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd6173e_4@corp.newsgroups.com>
Source record: 103409

Cecil Moore wrote:

> Andy Cowley wrote:
>
>> If you get the wrong feedline length and aerial length combination you
>> can quickly get solutions which, even when in range, produce excessive
>> voltages at 100W.
>
> My point was that the wrong feedline length yields the same results for
> a 60 ohm antenna as it does for a 6000 ohm antenna. If you feed that
> 60 ohm antenna with an odd multiple of 1/4WL of feedline, the impedance
> seen at the tuner will be 6000 ohms. If you feed the 6000 ohm antenna
> with a multiple of 1/2WL, the impedance seen at the tuner will be 6000
> ohms. The impedance of the antenna doesn't really matter as long as it
> is 1/2WL on the lowest frequency of interest. What matters is the SWR
> on the feedline and the length of the feedline. The feedpoint should be
> in the ballpark location of the current maximum point, not the voltage
> maximum point.

My statement is assuming 600 ohm open-wire feedline as specified earlier.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5794. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 19:13:50 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <O9pBb.7494$Ho3.4447@newsread1.news.atl.earthlink.net>
Source record: 103410

Art:

[snip]
"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> So you work alone.
[snip]

No! Heh, heh... can't be a consultant without customers!

One must be people oriented to be successful in business.

People do business with people!

[snip]
> Actually I am
> surprised that you have a wife
[snip]

Now that's a cruel and vindictive thing to say. You don't even know
me or my wife.

In my humble opinion Mary is the world's most wonderful woman,
a beauty, great dancer and socializer, a great life partner, mother, and
absolute saint to have put up with me for forty years.

Let me share some of her pithy comments with you so that you can see
what she is made of... :-)

She has often said, "don't bring any more of those nerdy ham radio friends
of yours around here all they can talk about is their rigs!". Or another
great
comment, "I'll never drive your car, with all those antennas on it, I don't
want
anyone to think I'm married to a nerd!

Kinda neat isn't she?

[snip]
>knowing how vindictive you are as shown
> with your outrageous treatment of Chip Cohen.
[snip]

Heh, heh... *My* outrageous treatment of dear sainted Chip?

Be fair Art.

What about his vindictive treatment of me?

He initiated his discourse with unsolicited personal attacks
on me for nothing more innocous than attempting to engage him
in scientific discourse! What?

Hey Art, go back and re-read the postings... Chip launched unwarranted
ad hominem attacks upon my person [not on my questions, statements or
discussions] the very first time he encountered me on this NG. All I had
done was to ask Dr. Cohen for a layman's explanation of what he was trying
to accomplish with fractal antennas. A fair question, no?

My first encounter with Chip on the NG went something like, "Chip: What
are the advantages of fractal antennas over other types". His response?
"Who are you to question me? -- N. Cohen, Ph.D."

For some unknown reason Chip seemed to take questions as a threat
rather than as an opportunity to learn or prosyletize.

Hmmm... it seems to me that you might also have such a "defensive" response
to technical questions as well but with a somewhat different defence
mechanism.

Art, the scientific method is fun, why can't you just be open to technical
questions and criticism and learn from it if you can. What exactly are
you afraid of when people question your ideas?

Your defensive attitude towards the questioning of your peers and
colleagues and subsequent pleas for pity and relief from further questions
because of your professed technical handicaps is not helping your cause.

Instead of hiding from questions and seeking solace in statements of
incompentence, just "have at it"!

"If you want to run with the big dogs you can't sit on the porch!"

Art... technical discourse is just that... technical *discourse*. A
technical
give and take of questions and answers intended to inform, educate and test
the validity of new ideas. It's the basis of the "scientific method".

Never take technical questioning personally! Such questions are not aimed
at your person or behaviour rather they are aimed at your ideas. Take
questions
as an opportunity to hone and improve your ideas.

Handle questions, respond to them, interact. Just do it!

Art you will do your cause more help if you abandon your defensive attitude
and just just stand up and trade information or field technical questions
from your
peers and colleagues, pleas for pity and claims of incompetence lead
nowhere!

Art if you dealt with technical questions here on the NG directly, why then
you will learn from the more knowledgeable and help to teach the less
knowledgeable and further improve or popularize your own inventions.

It's a win-win situation. Don't be a cry baby!

Life is about choices, don't choose to make yourself the worst enemy
or your own ideas!

--
Peter K1PO

5795. Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 19:51:17 UTC
From: pez <studentant@hotmail.com>
Message-ID: <br593r$9ge$1@nic.grnet.gr>
Source record: 103411

[I] Any Waves

The Google search tool returns ~6/49 references,
in the rec.radio.amateur.antenna newsgroup,
for "Kurokawa", the author of the paper
"Power Waves and Scattering Matrix",
IEEE Transactions on Microwave Theory and Techniques,
vol. MTT-13, March 1965, pp 194-202.

This search result indicates a subject of some interest.

Let us take Kurokawa's conclusion for granted:

"...the power waves are the result
of just one of an infinite number
of possible linear transformations
of voltage and current...".

Following this,
it seems that,
at least mathematically,
we can choose
any four complex constants,

p, q, r, s

and define

a, b

by the linear transformation

a = p.V + q.I
b = r.V + s.I

But as far as we consider both of

V, I

to be waves,

since they are solutions of the
-notably the same-
"One-Dimensional Wave Equation":

X'' - (g^2).X = 0

where X stands for either V or I,
it is trivial to show that each of the just defined

a, b

verify exactly the same equation.

Therefore,
it seems legitimate to call

a, b

"Any Waves", too.

Thus, as we see, we can define,
from a unique couple of (V, I) Voltage and Current waves
"an infinite number" couples of (a, b) "Any Waves",
since, the four mentioned constants can take obviously
an infinite number of values.

[II] Mathematical Restrictions

If we intend to use the Any Waves mathematically,
e.g. perhaps to facilitate a manipulation of formulas
which requires in some step
the inverse expression of V, I from the a, b,
then we have to impose
a restriction for the existence
of the inverse transformation,
that is

(1): p.s =/= q.r

After that
the

V, I

can be result from the

a, b

as

V = A.a + B.b
I = C.a + D.b

where the new four complex constants

A, B, C, D

are given in terms of the old constants

p, q, r, s

by the relations

A = [s/(p.s - q.r)]
B = [-q/(p.s - q.r)]
C = [-r/(p.s - q.r)]

D = [p/(p.s - q.r)]

since the denominator is non-zero.

The condition (1)
although restricts somehow the otherwise totally independent cases,
"The Any Waves" remain of "an infinite number".

[III] Dimension Balance Restrictions

Now if we would like to certify physically,
the validity of the introduced transformations,
then we have to establish
the "(Dimensional) Unit Balance" of these equations.

To do this,
let us note by

{y}

the Unit(s) of any Physical Quantity y.

Then, from the above equations,
it is almost obvious that
the following relations must be valid:

(2.1): {q} = {Ohms}.{p}
(2.2): {s} = {Ohms}.{r}
(2.3): {a} = {Volt}.{p}
(2.4): {b} = {Volt}.{r}

The added conditions (2),
although reduce the number of
the independently varied Physical Quantities (Units) to two,
they do not affect in essence "The Any Waves"
which are still of "an infinite number".

[IV] Restrictions referenced to Physical Principles

Next let us impose some specific
physical considerations or principles
on "The Any Waves",
e.g. that of the conservation of energy.

As an example of this
we can consider
as special cases of "The Any Waves"
those mentioned in the referenced paper,
that is the
"Power Waves" and "Traveling Waves".

Indeed;
these waves fulfill the linear transformations,
with all constants specifically expressed

in terms of some impedances,
measured as follows

{p} = {r} = 1/Sqrt(Ohms} = {Ohms}^(-1/2),
{q} = {s} = Sqrt{Ohms} = {Ohms}^(+1/2)

and from them,
the "Physical Units" of both the "Waves" are the same:

(3): {a} = {b} = Sqrt{Watt}.

Once again the additional restriction (3)
although forces the a and b to be of the same physical entity,
one which somehow is connected to the power,
still keeps "The Any Waves" to "an infinite number".

[V] Measurement Restrictions

Further we can assume, for the sake of completeness,
that maybe there is a -necessarily finite- number
of appropriate materials and/or devices,
other than the well known reflectometer,
capable to set apart the Two Any Wave Components
on the basis of some Physical Properties.

If this is the case then it is reasonable to try to build
a linear transformation
in terms of a couple of wave quantities appropriate to
express the mentioned physical properties.

But neither this case can reduce the possibly of
"The Any Waves" "of an infinite number".

[VI] Physical Hypotheses Restrictions

Finally, we can imagine that
we ingeniously predict some extraordinary Any Waves,
with the proof of their existence
to become a subject of a life-long heavy research activity.

For instance;
if for some reason we define the constants
by using some "extreme" expressions of the Impedance,
such as the following

{p} = (Ohms}^k
{q} = {Ohms}^n

with k, n equal to any other non-zero rational number,
e.g.
... -100, -1, -1/3, 1, 1/3, 100 ...

then "The Any Waves" have now
the extraordinary Physical Meaning

suggested by their corresponding physical units expressions

{a} = {Ohms^(k+(1/2)}.{W^(1/2)}
{b} = {Ohms^(n+(1/2)}.{W^(1/2)}

Fine;
but "The Any Waves" stay "of an infinite number".

[VII] Practical Applications

Let us drop from the clouds...

In the practical application of the Transmission Line,
"The Subtle Detail" which discriminates
the two instances of "The Any Waves",
"The Power Waves" and "The Traveling Waves",
with two different physical meanings for the same physical phenomenon
and the concrete result of "The Third Term" disappearance
in the "Beloved" Complex Characteristic Impedance case,
increases the confusion instead of comprehension.

Accordingly and as far as we are not in place
to reduce the number of "The Any Waves",
regardless of their more or less well established physical meaning,
in something less than infinity,
any further attempt to discuss about "what actually happens"
in the totality of the related practical applications
becomes redundant and worthless.

It seems that we have to content ourselves
with what it is already known...

Sincerely,

pez
SV7BAX
TheDAG

5796. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 20:46:18 UTC
From: Gene Fuller <W4SZzzzzz@att.net>
Message-ID: <uwqBb.172376$Ec1.6594343@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103412

Nope, it's actually ohms with a lower case oh, at least in the US.

According to the metric standard promoted by NIST and most of the world, proper names are not capitalized, with one exception. The exception is Celsius, but only because the correct unit is "degree Celsius" not "Celsius".

Contributing to the confusion is the standard that many symbols are capitalized even when the spelled out unit name is not. For example, W is the symbol for watt, Pa is the symbol for pascal, J is the symbol for joule, etc.

If this stuff actually interests anyone the reference is:

http://www.physics.nist.gov/Pubs/SP811/contents.html

73,
Gene
W4SZ

JDer8745 wrote:
> It's actually Ohms with a capital OH.
>
> :-)

5797. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 21:08:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br5dkrpqn1@titan.btinternet.com>
Source record: 103413

Pez wrote -
> It seems that we have to content ourselves
> with what it is already known...
>
==========

I am content.

Reg, G4FGQ

5798. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 21:14:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd63b91$1_8@corp.newsgroups.com>
Source record: 103414

pez wrote:
> Accordingly and as far as we are not in place
> to reduce the number of "The Any Waves",
> regardless of their more or less well established physical meaning,
> in something less than infinity,
> any further attempt to discuss about "what actually happens"
> in the totality of the related practical applications
> becomes redundant and worthless.
>
> It seems that we have to content ourselves
> with what it is already known...

Assuming an s-parameter analysis is one of the things already known ...

the equations b1 = s11*a1 + s12*a2 and b2 = s21*a1 + s22*a2

should be familiar. HP's AN 95-1 defines some powers. Assume an
impedance discontinuity in a transmission line, e.g. where 50 ohm
coax interfaces with 300 ohm twinlead aka G5RV style:

|a1|^2 is the power incident on the input of the network
|a2|^2 is the power incident on the output of the network
|b1|^2 is the power reflected from the input port
|b2|^2 is the power reflected from the output port

If we take the equation, b1 = s11*a1 + s12*a2 and square it
we get |b1|^2 = |s11*a1|^2 + |s12*a2|^2 + 2*s11*a1*s12*a2

This takes the form of Dr. Best's equation Ptot = P1 + P2 + 2[sqrt(P1)*sqrt(P2)]
in his QEX article which is also the form of Hecht's irradiance equation in _Optics_
which is: Itot = I1 + I2 + 2*sqrt(I1*I2)

In optics, 2*sqrt*I1*I2) is known as the "interference term". It's
pretty obvious that 2*s11*a1*s12*a2 is that same interference term
in an s-parameter analysis of RF waves. It follows that what happens
at a Z0-match point in a transmission line involves destructive and
constructive interference.

What?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5799. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 21:27:07 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd63e7f_8@corp.newsgroups.com>
Source record: 103415

Reg Edwards wrote:
>>It seems that we have to content ourselves
>>with what it is already known...

> I am content.

Dang Reg, I'm disappointed in you. I'm not content.
I can't wait to learn something new every day.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5800. Re: Advice good 80 meter vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 21:34:11 UTC
From: kf4tun <kf4tun@adelphia.net>
Message-ID: <ndrBb.11516$NN.1476354@news1.news.adelphia.net>
Source record: 103416

You got me! Instead of HS, it should be HF5. I also should have given the full model number HF5-Il, which covered 80, 40, 20, 15, and 10-meters. I have added coils, as needed for the for the other bands. Rolled them myself using aluminum fence wire (.25" dia), same diameter that butternut uses. All the aluminum tubing is original.

Jim

"Fjx1" <fjx1@aol.comnospam> wrote in message
news:20031208165519.16180.00000427@mb-m22.aol.com...
> You got me. What is an HS5? Not familiar with that model.
>
> Tks Gerry
> fjx1@aol.com

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.548 / Virus Database: 341 - Release Date: 12/5/03

5801. Re: Constructional details

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 21:34:24 UTC
From: pez <studentant@hotmail.com>
Message-ID: <br5f5k$f4p$1@nic.grnet.gr>
Source record: 103417

Dear Mr. Richard Clark,

I would like to much appreciate your comments
which guided Miss Emma and the rest of us, TheDAG members,
to consider the Hentenna as a parallel combination
of two shorted transmission line segments,
a fact which definitely lacked our attention!

Now, it is interesting to note that
this two Transmission Line pieces in parallel
present a theoretical SWR = oo,
independently of any parameter.
This result embarrasses somewhat the view of the Hentenna

| ...
| fed at an opportunistic point for the purpose of matching to the source
| ...

Besides that, a Richwire-MoM simulated Hentenna model
gives a computed directivity of ~3dBd,
which obviously is rather something more than

| ...
| a classic, skeletal cavity resonator that leaks
| ...

After these,
it seems more appropriate to ascribe "Hen"
to the fact that a rather slim Hentenna,
externally looked almost as a lambda/2 dipole,
gives a computed directivity twice as much as of its dipole counterpart
with a surprising 90 degrees rotated Linearly Polarized Pattern
in the direction of its maximum,
relatively to the well known polarization of its counterpart,
for the same orientation of both.

But enough with the theory.
Practical conclusions are expected to result
from the comparison of the measurements between
the two, under construction, models:
the initially given and the -hopefully- improved one.

Once again, thank you very much for your time and help.

Sincerely yours,

pez
SV7BAX
TheDAG

5802. Re: G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 22:14:08 UTC
From: Alexander Schewelew <dl1pbd@gmx.de>
Message-ID: <br5hdt$29lh84$1@ID-34767.news.uni-berlin.de>
Source record: 103418

> Look here:
>
> http://www.qsl.net/aa3px/g5rv.htm
>
And now look here:
http://www.cebik.com/g5rv.html

5803. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 23:21:31 UTC
From: kashe@rahul.net
Message-ID: <r7mctvgpp5qrslg5pq8f7mc03kfl5df9m9@4ax.com>
Source record: 103270
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

On Tue, 09 Dec 2003 07:29:04 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:

>In New England a group is suing the pilots flying out of a local
>airport because they don't like the noise and there is nothing illegal
>about what the pilots are doing. So, by harassing the pilots by
>filing lawsuits they figure they can force them out. It may work and
>it may backfire if the pilots counter sue for harassment.

This was tried in the San Francisco Bay Area some years back.
Flight patterns, changed for environmental reasons, brought outgoing
flights over housing south of San Francisco. After a number of
nuisance suits had been won in small claims court, Willie Brown, then
speaker of the assembly got a law passed preventing such suits. To
avoid problems with laws designed for specific entities (and probably
to minimize opposition), he managed to write the law so narrowly that
it applied only to SFO and one tiny airport up in Siskiyou County that
had no interest in the legislation.

5804. Re: RG-8 vs. RG-213?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 23:23:54 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <eQsBb.7797$Ho3.4865@newsread1.news.atl.earthlink.net>
Source record: 103269

"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031208230213.15174.00000455@mb-m04.aol.com...
> >I think most would assume he meant for similarly sized cables.
>
> Since I don't know the physical differences between RG-8, RG-8U, RG-8X and
> RG-213, I wouldn't know that he meant similarly sized cables.
> =-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

This is what I like about Andy...VHF Radio goof. He knows nothing but that
don't stop him from giving his 'advise'.

A MAJOR factor for using 213 is it is Mil-spec.

And it sure isn't new cable.

Dan/W4NTI

5805. Re: G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-09 23:24:43 UTC
From: Mac <vk2evb@nella.net.au>
Message-ID: <3fd65a07$0$902$61c65585@uq-127creek-reader-02.brisbane.pipenetworks.com.au>
Source record: 103281

The G5RV Junior (40-10m) or half size G5RV is exactly that, HALF SIZE. Hope that answers your question.

I personally use a 40m halfwave dipole fed with 45ft of sloted 300 ohm TV ribbon connected to about 6ft of 75 coax cable into the shack for 80 - 10 metre HF operations with a tuner. Nicknamed the 80 metre squirt by some it works quite well for a 66ft flat top and well suits my limited space.

73 de Peter vk2evb
"Andrew Rich" <andrew@tech-software.net> wrote in message
news:3fd55463_1@news.iprimus.com.au...
> What are the dimensions of a G5RV jr (40-10m)
>
> with 300 ohm tv ribbon ?
>
>
>

5806. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 00:21:03 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031209192103.15174.00000543@mb-m04.aol.com>
Source record: 103271

> So you work alone.

Oh oh, I better shutup, or I get "evaluated" and "analyzed" :-)

Chipster must have designated Art as his ambassador here.

I wonder if there is a name for this -itis (artritis? chipritis?)

Yuri da BUmmer

5807. New program: RHO_SWR.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 00:52:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br5qo7$s9s$1@titan.btinternet.com>
Source record: 103272

Program models TRUE measurements of SWR and Rho by moving current and
voltage probes along a transmission line.

Exact classical transmission line formulae used on a real lossy line with a
complex value of Zo = Ro - jXo.

Covers frequencies 20 Hz to 1GHz.

Download from website below program RHO_SWR, 50 kilobytes in a few seconds.

Read introductory notes.

--
....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

5808. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 01:53:17 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <j0vBb.37221$Bk1.5674@fed1read05>
Source record: 103273

"'Doc" <w5lz@cwis.net> wrote in message news:3FD60F6C.34AF90D1@cwis.net...Is it going to make any real
> difference on HF? Nope...

Exactly. :)

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

5809. Connecting Two Antenna's to Same Downlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 02:14:35 UTC
From: continentalplus@aol.com
Message-ID: <20031209211435.08210.00000543@mb-m02.aol.com>
Source record: 103274

Can I connect two antennas pointed in different directions and run them down the same downlead to my receiver without any reception problems?
Thank you

5810. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 02:28:49 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031209212849.15356.00000487@mb-m12.aol.com>
Source record: 103275

>.Is
>it going to make any real
>> difference on HF? Nope...
>
>Exactly. :)
>
>Jerry

YES, it makes real difference in calculating the proper length. If you are making, let's say quad for 10m and used EZNEC to calculate the dimensions using bare wire and then used insulated, you would end up exactly in the middle of CB band. Nope? Exactly! What?

Is that "any real difference on HF"? Yep, to me is. Using #12 insulated house copper wire makes exactly 5% difference.

If you do not care where the antenna resonates, than NOPE.
If you care to maintaing performance, pattern, impedance, SWR, than YEP!

If you are making long wire antenna or Beverage, than length and shortening factor does not matter. But if antenna dimensions are critical then it DOES matter. As far as performance of insulated wire as a radiator of RF, the effect is negligible.

Yuri, K3BU

5811. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 02:29:23 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312091829.233d577@posting.google.com>
Source record: 103276

Peter, the ham community is full of people who know it all each
with their own followers that tailgate and throw barbs.
When Chip came up with Fractals he shared it on this newsgroup
and imediately came under attack, before him it was a vendor
who sold a two element beam, I forget who came before that.
The important thing was that the group atacked for what they
thought was wrong with the ideas and not the good that came
with those experiments. It is natural for somebody who comes
to this group and shares his work would get upset with the
groups aproach as well as the tailgaters who join in with all
the snide comments. I am not surprised that Chip lost his cool
in the light of your and others attacks and others in the
group such as the bum
I also did many years of work on antennas and 'silly me' wanted
to share it with everybody, but ofcourse the community resists the
new.
Two of those ideas I patented as a way of putting out information
instead of persuing a publisher, what did I get from an actual antenna
group,
this one ? Nothing but resistance to new ideas and a verbal hounding
which still goes on from the likes of the bum and the Doctor, so I let
the matter rest. And you talk of scientific correctness in debate,
fine words
of a theoretical nature in this group.

Again after a couple of years I proferred my thoughts on another new
design
which not only was multiband in nature but also goes down to the 160
metre band. For people that were interested in antennas and antenna
design you would think that all would be clamouring for information.
Quite the opposite again....all is known, doesn't that idiot know
that?
So I let it go for a while and then drop morsels of info, 7 Khz
bandwidth,
lossless feed system, Swr stays constant as one turns the radio
frequency dial,
more jibes since 'all is known' about antennas.
Then I drop the fact that it is rotatable but I can do nothing about
what lack of height does to the patterns, but at least I removed the
ground losses from the picture. More mirth especially from tailgaters.
And you talk of professionalism in debate and if who ask for it then
you are asking for pity ? You have to be nuts ! The group postings are
for arguments
or finding a pecking order, not for scietific analysis. Look at bums

comments about Tom one of the most knoweledgeable people in the field and bum comes along and states that Tom's page is full of errors. Can you imagine that coming from the likes of the bum and why not, because it is often the pattern of some members of this group including the antisemetic jabs made at Chip.
And you Peter, are part of this group that throw barbs to hurt people and you call me a 'cry baby' for standing up to the likes of you when the barbs are thrown at me. Well Peter, I respond in kind, since you show lack of professionalism then so can I, you throw it at me and I with throw some back.
If interest moves away from anything new then so be it but I am not embarassed
because of those such as yourself that prejudge everything, throw barbs
and then throw insults that injure by saying I should throw my antenna model away, regardles if it workes in practice, has solid mathematical and scientific background and confirmed also no less by pro computor program with an overload
calculation points to ensure accuracy. And then you say I should do this or that, probably to pursue the likes of money, go for it etc even tho my interests do not lie in that direction. My life as an engineer was to pursue knoweledge and even tho retired I still persue same, money is nice but it is not everything if you have enough.
No Peter you make me sick with your actions of prejudgement and heckling so one cannot be heard. Well Peter it is ham radio's loss because I and others who want to share and give back to the hobby are unable to do so because of the
attitude of so called 'know it alls'.
To those who are new to this group I am sorry you are around to see the worst part of this newsgroup especially when there are so many well intentioned people, so many people with knoweledge, and then we get a few people like those who feel they have ownership to a frequency and talk like they just had more than a few beers and believe their utterances are interlectual. The hobby has had such people for a long time, hopefully you will hang around and stay with the hobby so these people don't win and the hobby dies

Art Unwin KB9MZ....XG

"Peter O. Brackett" <no_such_address@ix.netcom.com> wrote in message news:<O9pBb.7494$Ho3.4447@newsread1.news.atl.earthlink.net>...
> Art:
>
> [snip]
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > So you work alone.
> [snip]
>
> No! Heh, heh... can't be a consultant without customers!
>
> One must be people oriented to be successful in business.

>
> People do business with people!
>
> [snip]
> > Actually I am
> > surprised that you have a wife
> [snip]
>
> Now that's a cruel and vindictive thing to say. You don't even know
> me or my wife.
>
> In my humble opinion Mary is the world's most wonderful woman,
> a beauty, great dancer and socializer, a great life partner, mother, and
> absolute saint to have put up with me for forty years.
>
> Let me share some of her pithy comments with you so that you can see
> what she is made of... :-)
>
> She has often said, "don't bring any more of those nerdy ham radio friends
> of yours around here all they can talk about is their rigs!". Or another
> great
> comment, "I'll never drive your car, with all those antennas on it, I don't
> want
> anyone to think I'm married to a nerd!
>
> Kinda neat isn't she?
>
> [snip]
> >knowing how vindictive you are as shown
> > with your outrageous treatment of Chip Cohen.
> [snip]
>
> Heh, heh... *My* outrageous treatment of dear sainted Chip?
>
> Be fair Art.
>
> What about his vindictive treatment of me?
>
> He initiated his discourse with unsolicited personal attacks
> on me for nothing more innocous than attempting to engage him
> in scientific discourse! What?
>
> Hey Art, go back and re-read the postings... Chip launched unwarranted
> ad hominem attacks upon my person [not on my questions, statements or
> discussions] the very first time he encountered me on this NG. All I had
> done was to ask Dr. Cohen for a layman's explanation of what he was trying
> to accomplish with fractal antennas. A fair question, no?
>
> My first encounter with Chip on the NG went something like, "Chip: What
> are the advantages of fractal antennas over other types". His response?

> "Who are you to question me? -- N. Cohen, Ph.D."
>
> For some unknown reason Chip seemed to take questions as a threat
> rather than as an opportunity to learn or prosyletize.
>
> Hmmm... it seems to me that you might also have such a "defensive" response
> to technical questions as well but with a somewhat different defence
> mechanism.
>
> Art, the scientific method is fun, why can't you just be open to technical
> questions and criticism and learn from it if you can. What exactly are
> you afraid of when people question your ideas?
>
> Your defensive attitude towards the questioning of your peers and
> colleagues and subsequent pleas for pity and relief from further questions
> because of your professed technical handicaps is not helping your cause.
>
> Instead of hiding from questions and seeking solace in statements of
> incompentence, just "have at it"!
>
> "If you want to run with the big dogs you can't sit on the porch!"
>
> Art... technical discourse is just that... technical *discourse*. A
> technical
> give and take of questions and answers intended to inform, educate and test
> the validity of new ideas. It's the basis of the "scientific method".
>
> Never take technical questioning personally! Such questions are not aimed
> at your person or behaviour rather they are aimed at your ideas. Take
> questions
> as an opportunity to hone and improve your ideas.
>
> Handle questions, respond to them, interact. Just do it!
>
> Art you will do your cause more help if you abandon your defensive attitude
> and just just stand up and trade information or field technical questions
> from your
> peers and colleagues, pleas for pity and claims of incompetence lead
> nowhere!
>
> Art if you dealt with technical questions here on the NG directly, why then
> you will learn from the more knowledgeable and help to teach the less
> knowledgeable and further improve or popularize your own inventions.
>
> It's a win-win situation. Don't be a cry baby!
>
> Life is about choices, don't choose to make yourself the worst enemy
> or your own ideas!

5812. RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 02:42:43 UTC
From: Pete Holden <peter.holden@comcast.net>
Message-ID: <DKvBb.494686$Fm2.475601@attbi_s04>
Source record: 103277

My neighbor, and good friend (he's not mad at me), says he can hear my code transmissions on all the phones in his house, including the cordless ones. No one in my house, on the other hand, can ever hear my transmissions. I have my phones on a traditional phone line while my neighbor gets his phone service through his television (buried coax) cable.... Any ideas?

Thanks, Pete

5813. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 02:58:47 UTC
From: dplatt@radagast.org
Message-ID: <vtd2v7gfkgv5df@corp.supernews.com>
Source record: 103278

>My neighbor, and good friend (he's not mad at me), says he can hear my code
>transmissions on all the phones in his house, including the cordless ones.
>No one in my house, on the other hand, can ever hear my transmissions. I
>have my phones on a traditional phone line while my neighbor gets his phone
>service through his television (buried coax) cable.... Any ideas?

My recollection is that cable-TV-based phone service is usually
implemented via digital cable techniques (voice-over-IP or something
similar). It becomes analog when it reaches the house (at the
cablemodem or MPOE) and is distributed over the house telephone wiring
from there.

So, the interference is probably not on the cable side itself.

There might be a couple of ways that the audio could be showing up in
his phones:

- Fundamental overload - each individual phone is reacting to the
high RF voltage levels, and is detecting the RF into audio directly.

- Interface problem - the RF is being detected into audio at one
vulnerable location, and the resulting audio is being distributed
on the phone wiring along with the normal audio of the phone
conversation.

Since your neighbor reports that it's occurring on all of the phones
(including the wireless) I tend to suspect the latter. I'd suspect
the cable-company-provided phone interface... it's probably picking up
the RF floating around on the in-house phone wiring and rectifying it
in its analog electronics.

The remedy I'd suggest is the usual one for telephone RFI - start
adding ferrites and other interference suppressors. I'd probably
start out with a bunch of the little RJ-11 plug-in RFI filters (sold
for this purpose, and also to keep DSL signals out of peoples'
phones). Start by installing one where the house phone line connects
to the cable interface. I'd also suggest getting a ferrite split core
or toroid, and winding the phone wire through it a half-dozen times as
close to the cable interface as possible.

Also, add a ferrite to the cable interface's power supply wire (again,
as close to the interface as possible) and clamp one or more ferrites
onto the TV cable itself.

By keeping your RF out of the cable/phone interface I have a feeling
that you'll probably reduce the problem quite a lot and may eliminate
it entirely.

Adding additional plug-in RFI suppressors and/or ferrite cores to the wires on the other phones in the household may also help.

None of this is actually your responsibility, assuming that you're transmitting legally within your privileges, but providing good advice (and maybe a handful of plugins and ferrites) could be a helpful gesture!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

5814. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 03:05:05 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <B3wBb.486297$HS4.3736041@attbi_s01>
Source record: 103279

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031209212849.15356.00000487@mb-m12.aol.com...
> >.Is
> >it going to make any real
> >> difference on HF? Nope...
> >
> >Exactly. :)
> >
> >Jerry
>
>
> YES, it makes real difference in calculating the proper length. If you are
> making, let's say quad for 10m and used EZNEC to calculate the dimensions
using
> bare wire and then used insulated, you would end up exactly in the middle
of CB
> band. Nope? Exactly! What?
>
> Is that "any real difference on HF"? Yep, to me is. Using #12 insulated
house
> copper wire makes exactly 5% difference.
>
> If you do not care where the antenna resonates, than NOPE.
> If you care to maintaing performance, pattern, impedance, SWR, than YEP!
>
> If you are making long wire antenna or Beverage, than length and
shortening
> factor does not matter. But if antenna dimensions are critical then it
DOES
> matter. As far as performance of insulated wire as a radiator of RF, the
effect
> is negligible.
>
> Yuri, K3BU

Yuri:

You are answering a question that was not asked. Your answer is excellent if
the question were: Is it necessary, when calculating element length, to
consider the type of wire used?

If you calculate based on insulated wire and then build it out of bare wire,
it ain't going to work well either.

Assuming one calculates for whatever radiating thingy one is using, it makes little difference whether that thingy is bare or insulated.

Paul AB0SI

5815. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 03:41:47 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <5b5dtv8qq20n7dag6tq0qtfsmdtu040f01@4ax.com>
Source record: 103280
Body handling: HTML body converted to readable text

On Wed, 10 Dec 2003 03:05:05 GMT, "paulfriedman@comcast.net"
wrote:

>
>Yuri:
>
>You are answering a question that was not asked. Your answer is excellent if
>the question were: Is it necessary, when calculating element length, to
>consider the type of wire used?
>
>If you calculate based on insulated wire and then build it out of bare wire,
>it ain't going to work well either.
>
>Assuming one calculates for whatever radiating thingy one is using, it makes
>little difference whether that thingy is bare or insulated.
>
>Paul AB0SI
>

As I understand it, the formulas are based on bare wire, so if you use
insulated, you should take into account a little shortening. That was
the only point being made, I believe.

Bob
k5qwg

5816. Re: Connecting Two Antenna's to Same Downlead

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:11:51 UTC
From: richardharrison@webtv.net
Message-ID: <2146-3FD69D07-535@storefull-2314.public.lawson.webtv.net>
Source record: 103284

Continental Plus wrote:
"Can I connect two antennas pointed in different directions and run them down the same downlead to my receiver without any reception problems?"

The antennas are coupled by their common transmission line and by proximity to each other. Both antennas can capture and reradiate signals. These form a directional array of some sort in almost every case. This may or may not be a problem.

One common configuration is crossed dipoles. If these are at right angles and have equal power distribution and extraction, this array is called a simple turnstile antenna.

On page 722 of the 3rd edition of "Antennas" Kraus says:

"Thus, the field normal to the infinitesimal dipoles is circularly polarized. In the case being considered in Fig 21-13 the field rotates in a clockwise direction.

Replacing the infinitesimal dipoles with 1/2-WL dipoles results in a practical type of antenna with approximately the same pattern characteristics. This kind of antenna is a George Brown Turnstile antenna (Brown-1)."
Remember RCA`s Brown Lewis and Epstein?

The 19th edition of the ARRL Anntenna Book says on page 19-10:

"As previously mentioned, a 90-degree phase shift must exist between the two antennas."

See Fig 16 on page 19-10 for the individual and combined patterns of the crossed antennas.

Best regards, Richard Harrison, KB5WZI

5817. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:16:25 UTC
From: desmoface@aol.com
Message-ID: <20031209231625.21909.00000517@mb-m19.aol.com>
Source record: 103282

>As I understand it, the formulas are based on bare wire, so if you use
>insulated, you should take into account a little shortening. That was
>the only point being made, I believe.

You do want to make it about 5% shorter if you use insulated wire...I built my full wave 80 meter loop out of 13 gauge copper clad steel wire with a polyethylene insulator...and it turned out to be too long...I wouldn't figure the 5% in the equation, you can always trim the extra off.

Steve
kb8viv

5818. What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:24:16 UTC
From: fjx1@aol.comnospam
Message-ID: <20031209232416.01786.00000508@mb-m20.aol.com>
Source record: 103283

I need to put a hole in the house through new vinyl siding and would like to know if anyone has a clean neat way to do it. Do they make feedthroughs for cable as big as RG8? Any suggestions ?

Thanks much.

Gerry

fjx1@aol.com

5819. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:26:13 UTC
From: Pete Holden <peter.holden@comcast.net>
Message-ID: <FfxBb.72396$_M.364181@attbi_s54>
Source record: 103285

Thanks, Dave, for your detailed reply -- lots of good tips. You're right, of course. It really isn't my responsibility if the cable company is putting out equipment that can "listen in" on my HF transmissions. I'm sure my equipment is clean. Actually, before I go out and buy a collection of ferrites and suppressors, I think I'll just encourage my friend to complain to the cable company. They should be the ones fixing this.

Or, am I being naive here. Could they make more trouble for me than it's worth even if I am "innocent."

Pete

5820. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:37:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd6a35f_4@corp.newsgroups.com>
Source record: 103286

Fjx1 wrote:
> I need to put a hole in the house through new vinyl siding and would like to
> know if anyone has a clean neat way to do it. Do they make feedthroughs for
> cable as big as RG8? Any suggestions ?

Just for the distance through the siding, use RG-400 (teflon).
Diameter = 0.2"
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5821. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 04:42:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd6a46b_4@corp.newsgroups.com>
Source record: 103287

Pete Holden wrote:
> Or, am I being naive here. Could they make more trouble for me than it's
> worth even if I am "innocent."

It's the 'Golden Rule' principle. The guys with the gold make the rules.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5822. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 05:09:52 UTC
From: "Dan Richardson"
Message-ID: <2hadtv07137n7sk2t52qc4nn71ji547qnb@4ax.com>
Source record: 103288

On Tue, 09 Dec 2003 20:46:18 GMT, Gene Fuller <W4SZzzzzz@att.net>
wrote:

>Nope, it's actually ohms with a lower case oh, at least in the US.

Not according to the referance you gave at
http://www.physics.nist.gov/Pubs/SP811/contents.html

Quote:
6.1.2 Capitalization
Unit symbols are printed in lower-case letters except that:
(a)
the symbol or the first letter of the symbol is an upper-case letter
when the name of the unit is derived from the name of a person...

End quote.

Ohm is a name of a person.

Danny

5823. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 07:31:46 UTC
From: rhf-mail@pacbell.net
Message-ID: <e5e13af8.0312092331.538e6963@posting.google.com>
Source record: 103289
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

HEY ! Even though I am from the opposite side of the aisle.

You got to "LOVE" Willie Brown :o)
- He has been a Good
- - and Faithful Public Servant.
- - - Who has Served the State of California,
- - - - and the People of San Francisco very well.

God Bless Him, amen, Amen. AMEN !

~ RHF
.
.
= = = kashe@rahul.net
= = = wrote in message news:<r7mctvgpp5qrslg5pq8f7mc03kfl5df9m9@4ax.com>...
>
> On Tue, 09 Dec 2003 07:29:04 GMT, Roger Halstead
> <mynewsat@rogerhalsteaddot.com> wrote:
>
> >In New England a group is suing the pilots flying out of a local
> >airport because they don't like the noise and there is nothing illegal
> >about what the pilots are doing. So, by harassing the pilots by
> >filing lawsuits they figure they can force them out. It may work and
> >it may backfire if the pilots counter sue for harassment.
>
> This was tried in the San Francisco Bay Area some years back.
> Flight patterns, changed for environmental reasons, brought outgoing
> flights over housing south of San Francisco. After a number of
> nuisance suits had been won in small claims court, Willie Brown, then
> speaker of the assembly got a law passed preventing such suits. To
> avoid problems with laws designed for specific entities (and probably
> to minimize opposition), he managed to write the law so narrowly that
> it applied only to SFO and one tiny airport up in Siskiyou County that
> had no interest in the legislation.
>

.

5824. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 08:00:55 UTC
From: thisan@invalidaddress.com
Message-ID: <3fd6d0b4.2041937@news.netcon.net.au>
Source record: 103290

Thanks for all the good info. gents.

Actually 80m is not critical for me. I was really looking for something that will work nicely on 40 - 10m (including WARC would be nice), and have been looking over the 44' design on the W4RNL page http://www.cebik.com/aledz.html

The plan was to mount an SGC tuner or similar under the eaves near the antenna and run coax back through the roof, because running open wire feeder just isn't practical in the physical situation.

I run 250w PEP SSB, but it would also be nice if the system could handle 120w of AM because I'm into that as well. Unfortunately that means one of the high power tuners.

I have tried a Carolina Windom (40m "Beam" version") here, but while it works well on 40m it gets progressively deaf above that.

H'm.... all food for thought.

Damien VK3RX

5825. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 08:47:27 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <u4BBb.74653$m24.72283@fed1read02>
Source record: 103291
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Dwight Stewart" <stewartx@NOearthlinkSPAM.net> wrote in message
news:mYYAb.4066$Ho3.2198@newsread1.news.atl.earthlink.net...
> "Don Forsling" wrote:
> >
> > (snip) The BASIC rule of photography is this
> > (and I make a living at it):
> >
> > If you are standing (or sitting for that matter)
> > on public property, you can legally photograph
> > anything you can see from where you are
> > standing. There are, of course, exceptions
> > for various national security considerations,
> > etc., but it is absolutely not against the law to
> > stand on a public sidewalk or in a public street
> > and take a picture of somebody's house, their
> > rose bushes, their car, their ugly fence, their
> > goofy-looking mailbox, their body etc., etc.
> > (snip)
>
>
> Exactly right, Don. According to several court cases, a person in a
pubic
> place has no reasonable expectation of privacy. Likewise, property is not
> protected when photographed from a public place. In other words, as long
as
> you're not on private property, and what you're photographing can be seen
> from outside that property, you can photograph it.

Great Freudian slip re "pubic place". <huge grin>

Have you ever considered testing the universal truth of your assertion? How about spending a week or two at a playground, photographing only little girls, say ages 6 to 10. Let us know if you survive.

Ed
WB6WSN

5826. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 08:48:26 UTC
From: Gene Fuller <W4SZzzzzz@att.net>
Message-ID: <u5BBb.426759$0v4.20453322@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103292

Danny,

Sorry, please read more carefully.

Check out section 4. The units have both names and symbols. Names are not capitalized except at the beginning of a sentence. Symbols are capitalized if they are derived from a person's name.

Ohm is a person's name, but it is not a unit symbol. The unit <symbol> for resistance is capital omega. The correct unit <name> for resistance is ohm.

73,
Gene
W4SZ

Dan Richardson < wrote:
> On Tue, 09 Dec 2003 20:46:18 GMT, Gene Fuller <W4SZzzzzz@att.net>
> wrote:
>
>
>>Nope, it's actually ohms with a lower case oh, at least in the US.
>
>
> Not according to the referance you gave at
> http://www.physics.nist.gov/Pubs/SP811/contents.html
>
> Quote:
> 6.1.2 Capitalization
> Unit symbols are printed in lower-case letters except that:
> (a)
> the symbol or the first letter of the symbol is an upper-case letter
> when the name of the unit is derived from the name of a person...
>
> End quote.
>
> Ohm is a name of a person.
>
> Danny
>
>

5827. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 09:53:14 UTC
From: Dwight Stewart <stewartx@NOearthlinkSPAM.net>
Message-ID: <e2CBb.8509$7p2.5152@newsread2.news.atl.earthlink.net>
Source record: 103293
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

"Ed Price" wrote:
>
> Great Freudian slip re "pubic place". <huge grin>

Done all the time recently. I have a new desk with the keyboard too far off centered. As a result, typing mistakes have increased dramatically. In this case, that "Freudian slip" got right past my spelling checker.

> Have you ever considered testing the universal truth
> of your assertion? How about spending a week or
> two at a playground, photographing only little girls,
> say ages 6 to 10. Let us know if you survive.

Lets be realistic here, Ed. We're not talking about child porn - laws don't protect that. What we're talking about is photographs taken for legitimate purposes (art, advertising, travel, architecture, news, and so on).

Regardless, while I haven't photographed little girls specifically (and have no special desire to do so), I have dozens of images of kids at playgrounds, parks, and on the street, in my film library. Some were taken by me and some by my wife. Whatever the case, nobody has ever complained while either of us were taking those photographs.

Dwight Stewart (W5NET)

http://www.qsl.net/w5net/

5828. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 10:35:01 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210053501.12262.00000745@mb-m05.aol.com>
Source record: 103294

Whining Art, defender of wackos, cries:

>Look at bums
>comments about Tom one of the most knoweledgeable people in the field
>and bum comes along and states that Tom's page is full of errors.

The most "knoweledgeable people" attacked and ridiculed my posting (truth, reality) about the current in the antenna loading coils. I didn't take it laying down and defended the truth and reality. My argument was supported by others on this NG who contributed to factual discussion, as it should be. You should be "crying for me Argentina" and not for that technical impostor. Based on at least five times past experience, Tom ridicules others if they do not sing his wrong gospel. If he is proven to be wrong, then he goes QRT (that is quiet) and later emerges as a "guru" proclaiming new, corrected gospel. Proof is on the pages of reflectors in the past.
In your glorious career, you should have learned difference between someone pointing out "more errors" and "full of errors." Be careful what you accusing someone of.
Try to get this: if you have, know something and want opinions from "this group" then you present the problem, facts and stand your ground. You either find out that you are either right (and convince, educate others) or you were wrong (and learned something).
If you try to convince me (as per your patent) that reflector is a director, I will not swallow it.
If Tom and his cult followers want to believe that loading coil has the same current at both ends, more power to them, they can worship pages of his "gospel" and feel good about being wrong. I could care less and wouldn't cry that they do not "worship" me. I have a life outside of radio (itsa hobby/sport to me), I try to help others, but I could care less about "recognition" from those who don't get it.
You parading as the "suffering brother" of Chipster, says it all.

As they say, if you can't take the heat, stay out of the kitchen.

Enough of psychoanalysis, back to the antennas.

Yuri, da radio k3BU/m
who can't fix stupid

5829. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 10:42:03 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210054203.12262.00000746@mb-m05.aol.com>
Source record: 103295

>I wouldn't figure
>the 5% in the equation, you can always trim the extra off.
>
>Steve
>kb8viv
>

You can do it hard way, or the easy way. If you know approximate shortening factor, it will save you monkeying with the wire cutters and you could get right on the first try, which is more important when you building multielement wire antennas like quads.

If you like exercise with pliers, then by all means, take the spool of wire and start cutting :-)

73 Yuri

5830. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 10:58:05 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210055805.12262.00000747@mb-m05.aol.com>
Source record: 103296

>Yuri:
>
>You are answering a question that was not asked. Your answer is excellent if
>the question were: Is it necessary, when calculating element length, to
>consider the type of wire used?
>
>If you calculate based on insulated wire and then build it out of bare wire,
>it ain't going to work well either.
>
>Assuming one calculates for whatever radiating thingy one is using, it makes
>little difference whether that thingy is bare or insulated.
>
>Paul AB0SI

The question was:
"What are pros and cons of using insulated twisted pair wire for wire
antenna projects? (its what I have handy) Comments invited."

Lacking more specific question (didn't say white kind of "wire antenna
projects" resonant or random length), I pointed out "cons" - the effect of
insulation on calculation and modeling the antenna's physical length vs.
electrical. 5% shortening from insulation makes difference if you end up in 10m
ham band or 11m CB band, that is 1.4 MHz difference and that IS significant.

Inquirer can decide for himself if it is important for his case (making
resonant antennas) or not (non resonant, long wire antennas).

If I offended anybody's insulation, then I am sorry :-)

Yuri, K3BU

5831. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 11:27:39 UTC
From: "Edward A. Feustel" <efeustel@erols.com>
Message-ID: <3fd70332$0$14966$61fed72c@news.rcn.com>
Source record: 103297

"Fjx1" <fjx1@aol.comnospam> wrote in message
news:20031209232416.01786.00000508@mb-m20.aol.com...
>
> I need to put a hole in the house through new vinyl siding and would like
to
> know if anyone has a clean neat way to do it. Do they make feedthroughs
for
> cable as big as RG8? Any suggestions ?
>
> Thanks much.
>
> Gerry
>
> fjx1@aol.com
>
I bought plastic tubes from Radio Shack that are designed to go through
siding, sheathing, and insulation.
You can cut them off at the appropriate length. They have interior and
exterior covers that can be flashed to
the house and have a flange that seals tightly around coax from RG-6 up.
Ed, N5EI

5832. Re: G5RV junior question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 12:22:23 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <dr3etv8pucg75oo3bbpkf6g3krhq1tir6k@4ax.com>
Source record: 103298

On Tue, 9 Dec 2003 14:49:29 +1000, "Andrew Rich"
<andrew@tech-software.net> wrote:

>What are the dimensions of a G5RV jr (40-10m)
>
>with 300 ohm tv ribbon ?
>
>

to Answer your question 1/2 the size of an ordinary G5RV 51 foot
flat top and 15ft (approximately, depends on V.F. of line used) stub.

if you have room put up as much wire as possible and feed it with open
wire back to the tuner.. 88 feet works out quite well for 80-20 or 44
feet for 20- 10 .

73 Dave kc1di

5833. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 13:52:39 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031210085239.14429.00000483@mb-m14.aol.com>
Source record: 103299

Try the ARRL's RFI website for some ideas:

http://www.arrl.org/tis/info/rfigen.html
=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5834. Cable for HG-54HD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 13:59:00 UTC
From: JM <marasim@direcway.com>
Message-ID: <3fd726b4_1@127.0.0.1>
Source record: 103300

Can anyone advise me as to where I might purchase new cables for a Hy-gain HG-54HD crank-up tower. I noticed mine are beginning to rust on the top most portion of the tower. I have attempted to reach hy-gain but they just say we don't make them anymore.

Thanks for your help.

Jim
WA2IJA

5835. Re: Cable for HG-54HD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 15:35:11 UTC
From: Mikey <ki6pr@arrl.net>
Message-ID: <3fd5ebc3_1@newsfeed.slurp.net>
Source record: 103227

When you say you attempted to contact Hy-Gain, are you referring to the
old Hy-Gain, or the one currently owned by MFJ?

If they don't want to help you, you can try just buying the cable outright
from a hardware store, boating supply, construction supply, or farm supply
store. You'll have to figure the length, re-string the cable, and add the
appropriate hardware youself, but keep in mind that no tower manufacturer
will service or warranty old towers...

Good luck and please be careful!

73,
Mike KI6PR
El Rancho R.f., CA

"JM" wrote
> Can anyone advise me as to where I might purchase new cables for a Hy-gain
> HG-54HD crank-up tower. I noticed mine are beginning to rust on the top
> most portion of the tower. I have attempted to reach hy-gain but they
just
> say we don't make them anymore.
>
> Thanks for your help.
>
> Jim
> WA2IJA
>
>

5836. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 15:35:51 UTC
From: Alex Flinsch <alex@localhost.localdomain>
Message-ID: <slrnbtefbu.pkd.alex@homer.linux1.lan>
Source record: 103301

In article <20031209232416.01786.00000508@mb-m20.aol.com>, Fjx1 wrote:
>
> I need to put a hole in the house through new vinyl siding and would like to
> know if anyone has a clean neat way to do it. Do they make feedthroughs for
> cable as big as RG8? Any suggestions ?

I just drilled a hole thru the siding and mounted an surface mount outdoor electrical outlet box over the hole. There is a plastic shield over the outlet box, with large enough cutouts at the bottom forr the coax to pass thru. The passage into the box is large enough for 2 runs of RG8, and 2 of RG58.

When I sell the place and move to someplace where bigger and better antennas can be erected, I will just add an electrical outlet in the box. A simple 15 minute job, and the hole is covered.

5837. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 15:56:42 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <_mHBb.6944$mF2.1306@nwrdny02.gnilink.net>
Source record: 103302

Check this out from Radio Shack:
http://www.radioshack.com/category.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F008%5F005&Page=2

It's a long URL. If it wraps around on your page, it might not work. You'll have to go to their web site and look under Wire Management/Wiring Tools & Supplies. They also have a waterproofing caulk-tape somewhere on their site that you can use to seal behind these things

Joe
W3JDR
"Alex Flinsch" <alex@localhost.localdomain> wrote in message
news:slrnbtefbu.pkd.alex@homer.linux1.lan...
> In article <20031209232416.01786.00000508@mb-m20.aol.com>, Fjx1 wrote:
> >
> > I need to put a hole in the house through new vinyl siding and would like to
> > know if anyone has a clean neat way to do it. Do they make feedthroughs for
> > cable as big as RG8? Any suggestions ?
>
> I just drilled a hole thru the siding and mounted an surface mount outdoor
> electrical outlet box over the hole. There is a plastic shield over the
> outlet box, with large enough cutouts at the bottom forr the coax to pass
> thru. The passage into the box is large enough for 2 runs of RG8, and 2 of
> RG58.
>
> When I sell the place and move to someplace where bigger and better antennas
> can be erected, I will just add an electrical outlet in the box. A simple 15
> minute job, and the hole is covered.

5838. Re: Cable for HG-54HD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 16:44:04 UTC
From: KL=?ISO-8859-1?B?2A==?=S <kl0s@cox.net>
Message-ID: <BBFCB784.32851%kl0s@cox.net>
Source record: 103303

Jim -- don't have any recommendations but will be interested to see any answers you get. I've got the HG-52SS and did replace the cable set with one from Hy-Gain when they were still in business the first time.

I find it interesting that they continue to advertise as "Hy-Gain Antennas, Rotators & Towers" yet when you talk to them about towers all you get is "vaporware". For example, I just checked their web site and they at least are advertising replacement tower bases for the 52/37SS towers....'course the caveat is that they are "coming soon" [and have been for a LONG time].

Maybe if enough of us tower owners contacted them they'd consider making up some cable sets....I just KNEW I should have bought two sets when I had the chance!

Dino KLï¿½S/4

5839. Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 17:14:27 UTC
From: simon.hyland@aurora-uk.com
Message-ID: <7afd586a.0312100914.74ba5926@posting.google.com>
Source record: 103304

Hi,
I'm playing around with some 433MHz transmitter and receiver pairs. Ideally I would like the transmitter to transmit in a narrow directional beam, but I'm new to the art of radio waves and antenna design, so I was wondering if you guys would be able to help me with my project. I've read about a Yagi design for the antenna, I know it receives from one direction only, but does it transmit in just one direction too?

I thought I'd be able to basically stick the transmitter antenna in a tube, sealed at one end, line either the inside or outside of the tube with tin foil (or both) and it would transmit in whatever direction the open end was facing. So far my tests haven't been too conclusive but could that be poor setup on my part or is the idea fundamentally flawed?

Many thanks for your time,

Simon.

5840. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 17:21:56 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312100921.ae26540@posting.google.com>
Source record: 103305

Well there you have it Peter a reflection of the types of
people that follow you It seems that like minds attract
like people. You should be very happy with the company of the Doctor
and the bum their technical support, but remember the next time you
want to get on somebody's back you dom't always get a free ride.
Have a nice Xmas Hunk with that wonderful accomodating wife
you obviously have.
I will now retreat to the more academic side of things
with respect to antennas with the group where I can learn
which I find more interesting than personal derogatory
remarks pointed at individuals
Art

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031210053501.12262.00000745@mb-m05.aol.com>...
> Whining Art, defender of wackos, cries:
>
> >Look at bums
> >comments about Tom one of the most knoweledgeable people in the field
> >and bum comes along and states that Tom's page is full of errors.
>
> The most "knoweledgeable people" attacked and ridiculed my posting (truth,
> reality) about the current in the antenna loading coils. I didn't take it
> laying down and defended the truth and reality. My argument was supported by
> others on this NG who contributed to factual discussion, as it should be. You
> should be "crying for me Argentina" and not for that technical impostor. Based
> on at least five times past experience, Tom ridicules others if they do not
> sing his wrong gospel. If he is proven to be wrong, then he goes QRT (that is
> quiet) and later emerges as a "guru" proclaiming new, corrected gospel. Proof
> is on the pages of reflectors in the past.
> In your glorious career, you should have learned difference between someone
> pointing out "more errors" and "full of errors." Be careful what you accusing
> someone of.
> Try to get this: if you have, know something and want opinions from "this
> group" then you present the problem, facts and stand your ground. You either
> find out that you are either right (and convince, educate others) or you were
> wrong (and learned something).
> If you try to convince me (as per your patent) that reflector is a director, I
> will not swallow it.
> If Tom and his cult followers want to believe that loading coil has the same
> current at both ends, more power to them, they can worship pages of his
> "gospel" and feel good about being wrong. I could care less and wouldn't cry
> that they do not "worship" me. I have a life outside of radio (itsa hobby/sport
> to me), I try to help others, but I could care less about "recognition" from

> those who don't get it.
> You parading as the "suffering brother" of Chipster, says it all.
>
> As they say, if you can't take the heat, stay out of the kitchen.
>
> Enough of psychoanalysis, back to the antennas.
>
> Yuri, da radio k3BU/m
> who can't fix stupid

5841. Re: Website recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 17:30:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br7l7p$g4o$1@hercules.btinternet.com>
Source record: 103306

You are heading in the wrong direction.

By far the best places to browse are technical college and university libraries.

Also speak to your tutor about it. If he's any good he should have already advised you on references.

Reg

5842. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 17:35:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br7lgc$n2$1@titan.btinternet.com>
Source record: 103307

> Ohm is a name of a person.
>
==========

During which era did Mr Inch live?

5843. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 18:22:53 UTC
From: jder8745@aol.com
Message-ID: <20031210132253.26181.00000449@mb-m15.aol.com>
Source record: 103308

Someone sed,

"Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter would read Zo if connected to the end of an infinite line. He is right of course."

But the Zo of a line varies with frequency. How will the "ordinary ohmmeter" do the job at, say, 100 kHz?

73 de jack

5844. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 18:31:04 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312101031.7425ba46@posting.google.com>
Source record: 103309

fjx1@aol.comnospam (Fjx1) wrote in message
news:<20031209232416.01786.00000508@mb-m20.aol.com>...
> I need to put a hole in the house through new vinyl siding and would like to
> know if anyone has a clean neat way to do it. Do they make feedthroughs for
> cable as big as RG8? Any suggestions ?

Should be possible to use standard electrical fittings; half-inch
conduit should fit RG-8 just fine, and you can get all sorts of
bushings and seals for it. The R-S solution with flashing might be
better esthetically.

Reminds me, though, of long ago helping another teen put up a
vertical. He needed to get the RG-58 through the wall, so he went
inside with a .22 rifle and made a hole very quickly. I was surprised
how clean it was, and just the right size. (So another option is to
bore a hole just the right size, sloped down just a bit from the
inside, and caulk around the line once it's in. Beware of insulation
wrapping around the drill bit.)

Cheers,
Tom

5845. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 18:40:36 UTC
From: "Dan Richardson"
Message-ID: <j4qetv0okcd75nph2j97rsefiocm06p86t@4ax.com>
Source record: 103310

On Wed, 10 Dec 2003 17:35:08 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> Ohm is a name of a person.
>>
>=======================
>
>During which era did Mr Inch live?
>
>
Georg Simon Ohm

Born: 16 March 1789 in Erlangen, Bavaria

5846. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 18:56:39 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD76C67.D060A15B@cwis.net>
Source record: 103311

Pete,
From your point of view, the first step is to make sure
your transmitter is 'clean'. From your neighbor's point
of view the first step is to complain to the person causing
the interference, if possible. Sounds like both of you have
done that. The second step is to complain to the service
provider (cable, telephone, power, etc.), it's their
responcibility
to provide 'clean' service to the user. (That responcibility
only
extends as far as the service entrance in most cases. From
there
to the modem, TV, whatever, is usually the user's
responcibility.)
RFI isn't ~that~ unusual so the provider should know what to do
about it. If you have 'problems' with the provider, if the
provider
isn't reasonable at all, then the next step is to complain to
your state's utilities commission. It's their responcibility to
make sure the provider is doing what they are supposed to do.
In the mean time, or in addition to what the provider does,
your neighbor can install RFI devices on ~his~ portion of the
cable/power line/whatever. The 'trick' is in knowing where
'their'
portion ends and 'his' portion begins. (I'm sure the provider
will
let him know where that point is! LOL)
It 'sounds' worse than it really is, but doing things
'properly'
is one of the 'keys'. A bunch of us have 'been there, done
that'
so you're not alone. Good luck...
'Doc

5847. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 19:17:55 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD77163.4D7C2B01@cwis.net>
Source record: 103312

Yuri,
The reason I can't agree with the 5% thing is that I haven't
measured it, not that the number is correct or not. There is
a difference in length when using insulated/noninsulated wire,
I just can't say exactly what that difference is.
Since any calculation is only going to be approximate
(depending
on how/where the antenna is mounted) trimming is almost always
going
to be required. Since that 'tweaking' would take care of the
difference in insulated/noninsulated wire, I just haven't
bothered
about figuring it. If you have, then good, I don't have a
problem
with that...
'Doc

5848. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 19:28:57 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <3FD773F7.9000506@frontiernet.net>
Source record: 103313

Fjx1 wrote:
> I need to put a hole in the house through new vinyl siding and would like to
> know if anyone has a clean neat way to do it. Do they make feedthroughs for
> cable as big as RG8? Any suggestions ?

I avoided the siding entirely by going in a crawl space vent and up
through a closet floor with 2 inch PVC pipe, using 45 deg bends with
straight pieces in between so I don't have to fight RG-8 through 90 deg
bends. I have five runs of RG-8 diameter through there, I might be able
to squeak (literally) another through if I use a lot of soap.

I should have used 3 inch. Or 4. 6.

W8LNA

5849. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 20:29:41 UTC
From: RADIOTWO <steveremovewright@ntlworld.com>
Message-ID: <VmLBb.538$526.2927@newsfep4-glfd.server.ntli.net>
Source record: 103314

Hope you have a Licence for this kind of thing

"Simon" <simon.hyland@aurora-uk.com> wrote in message
news:7afd586a.0312100914.74ba5926@posting.google.com...
> Hi,
> I'm playing around with some 433MHz transmitter and receiver pairs.
> Ideally I would like the transmitter to transmit in a narrow
> directional beam, but I'm new to the art of radio waves and antenna
> design, so I was wondering if you guys would be able to help me with
> my project. I've read about a Yagi design for the antenna, I know it
> receives from one direction only, but does it transmit in just one
> direction too?
>
> I thought I'd be able to basically stick the transmitter antenna in a
> tube, sealed at one end, line either the inside or outside of the tube
> with tin foil (or both) and it would transmit in whatever direction
> the open end was facing. So far my tests haven't been too conclusive
> but could that be poor setup on my part or is the idea fundamentally
> flawed?
>
> Many thanks for your time,
>
> Simon.

5850. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 20:55:47 UTC
From: alt <spamtrap@gwsn.com>
Message-ID: <nLLBb.642201$6C4.550636@pd7tw1no>
Source record: 103315

Simon wrote:

> Hi,
> I'm playing around with some 433MHz transmitter and receiver pairs.
> Ideally I would like the transmitter to transmit in a narrow
> directional beam, but I'm new to the art of radio waves and antenna
> design, so I was wondering if you guys would be able to help me with
> my project. I've read about a Yagi design for the antenna, I know it
> receives from one direction only, but does it transmit in just one
> direction too?

As a general rule, the recieve and transmit patters of an antenna will be the same. You may see some difference in propagation patterns due to frequency differences between TX and RX pairs, but those should be very minimal. The amount of difference will depend on the selectivity of the antenna.

> Simon.

--
Donovan Hill
VA7LNX

5851. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 21:28:22 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <WdMBb.358315$ao4.1194083@attbi_s51>
Source record: 103316

Question[s]: In the UK, is 433 MHz allocated to Amateur Radio? Simon, in other words, is a license required for operation on 433 MHz in the UK?

Observation[s]: A yagi receives from ALL directions but has a preferred direction where it has gain.

Yagis may not meet your requirements for narrow beam. A high gain Yagi may have a beamwidth of +/-10 degrees or more. A moderate gain Yagi will have a beamwidth of 30-40 degrees.

DD, W1MCE

Simon wrote:

> Hi,
> I'm playing around with some 433MHz transmitter and receiver pairs.
> Ideally I would like the transmitter to transmit in a narrow
> directional beam, but I'm new to the art of radio waves and antenna
> design, so I was wondering if you guys would be able to help me with
> my project. I've read about a Yagi design for the antenna, I know it
> receives from one direction only, but does it transmit in just one
> direction too?
>
> I thought I'd be able to basically stick the transmitter antenna in a
> tube, sealed at one end, line either the inside or outside of the tube
> with tin foil (or both) and it would transmit in whatever direction
> the open end was facing. So far my tests haven't been too conclusive
> but could that be poor setup on my part or is the idea fundamentally
> flawed?
>
> Many thanks for your time,
>
> Simon.

5852. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 21:36:14 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210163614.16110.00000491@mb-m22.aol.com>
Source record: 103317

One who Art calls Doctor writes:

> The reason I can't agree with the 5% thing is that I haven't
>measured it, not that the number is correct or not. There is
>a difference in length when using insulated/noninsulated wire,
>I just can't say exactly what that difference is.

I described what it is exactly as I measured it using #12 wire on a 10m 3 element quad. Calculated it with (cheap) EZNEC, I put it up, it ended up smack in CB band. Calculated the offset, for the red insulation I was using (helps to emit red hot electrons :-) it was 5%. Adjusted the length and bingo, right where I wanted it.

Expensive EZNEC using NEC4 can include insulation in calculations and provides more accurate results and it can be used to show the exact, more-less difference due to plastic coated wires (according to Roy d'Eznec).

So if you didn't measure it yet, everyone is going to call me a liar? :-) Maybe I should start taking bets? Haven't you guys learned to put a little trust in my 45 years of haming, beating contest records and generaly honest and being mostly right?

Yuri

5853. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 21:51:11 UTC
From: dplatt@radagast.org
Message-ID: <vtf5afbfhui1ea@corp.supernews.com>
Source record: 103318

>Thanks, Dave, for your detailed reply -- lots of good tips. You're right,
>of course. It really isn't my responsibility if the cable company is
>putting out equipment that can "listen in" on my HF transmissions. I'm sure
>my equipment is clean. Actually, before I go out and buy a collection of
>ferrites and suppressors, I think I'll just encourage my friend to complain
>to the cable company. They should be the ones fixing this.

And, if you're _exceptionally_ lucky, the cable company might actually
send out a tech who has the necessary amount of Clue in his van to
diagnose and fix it correctly.

I'll keep my fingers crossed for you.

>Or, am I being naive here. Could they make more trouble for me than it's
>worth even if I am "innocent."

Their equipment is almost certainly bearing a Part 15 certification,
which means that they don't have a leg to stand on... it "may not
interfere" with licensed radio services and "must accept" any
interference from same.

One additional thing I'd suggest: have your neighbor disconnect all
of his "inside" wiring from the cable/phone adapter, and plug a single
phone directly into the adapter. Ideally, use an old-style
non-electronic desk phone. Then, have him make a call, and try keying
down CW. If he still hears interference on the line, then the adapter
is certainly responsible.

In this case, he can use the magic words with the cable company:
"Interference is present at the demarc, with all inside wiring
disconnected." Legally, that means "It's your problem, come fix it!"

If the problem is present only when the house wiring is connected, the
issue may be a bit more sticky. It's still not _your_ fault (as the
radio operator), but there may be a question as to whether the fault
lies in the cable-company equipment (which is their responsibility) or
in the house wiring or equipment. Unfortunately, I suspect that the
basic fault lies in the cable equipment, but may only show up when the
inside wiring is connected because the inside wiring is acting as an
antenna. If your neighbor isn't paying for "inside wiring" service -
if he "owns" the inside wiring - then the cable company may try to
argue (lamely) that paying for the repair is his problem.

On the other hand, the cable company may know about the problem in
their equipment (from other cases) and may be willing to fix or
mitigate it without complaint. No way to know for sure unless you
(and he) make the call and try.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

5854. Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 21:56:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br84r0$23f$1@sparta.btinternet.com>
Source record: 103219

"There is nothing so frightening as somebody who knows he is right."

. . . . . Michael Faraday.

5855. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 22:14:45 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210171445.26181.00000468@mb-m15.aol.com>
Source record: 103220

>
>"There is nothing so frightening as somebody who knows he is right."
>
>. . . . . Michael Faraday.
>
>
>
>
>

So be scared!

5856. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 22:22:47 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FD79CB7.1DE340A3@cwis.net>
Source record: 103221

Yuri, the one 'Artfully' called "Tailgator",
You were on a roll and doing fine till you said 'contester'.
That's when you blew your credibility. Dang!
'Doc

PS - Are you 'Tailgator' #1 or #2? I have no idea of 'our'
ranking.

5857. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 22:37:04 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <v7udnSypvqOfAEqi4p2dnA@ctc.net>
Source record: 103222

>
> "Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter would
> read Zo if connected to the end of an infinite line. He is right of course."
>
> But the Zo of a line varies with frequency. How will the "ordinary ohmmeter"
> do the job at, say, 100 kHz?
>
> 73 de jack

YOu should get a lot of people calling BS on the Zo changing with frequency. It does not change at any reasonable frequency for the line. That is at least anything below 1 ghz for coax.

5858. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-10 23:58:56 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031210185856.14309.00000622@mb-m14.aol.com>
Source record: 103223

>
>Yuri, the one 'Artfully' called "Tailgator",
> You were on a roll and doing fine till you said 'contester'.
>That's when you blew your credibility. Dang!
> 'Doc
>
>PS - Are you 'Tailgator' #1 or #2? I have no idea of 'our'
> ranking.

That I dunno, this is why I operate contests so I can find my number. There is
no BS or peesychology there.
I still like to contest and my credit is good, I get lot of credit card offers.

Yuri, BUm BUm

5859. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 00:13:27 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312101613.52bd0e28@posting.google.com>
Source record: 103224

simon.hyland@aurora-uk.com (Simon) wrote in message
news:<7afd586a.0312100914.74ba5926@posting.google.com>...
> Hi,
> I'm playing around with some 433MHz transmitter and receiver pairs.
> Ideally I would like the transmitter to transmit in a narrow
> directional beam, but I'm new to the art of radio waves and antenna
> design, so I was wondering if you guys would be able to help me with
> my project. I've read about a Yagi design for the antenna, I know it
> receives from one direction only, but does it transmit in just one
> direction too?

Yes, antennas have the same directionality transmitting and receiving.
>
> I thought I'd be able to basically stick the transmitter antenna in a
> tube, sealed at one end, line either the inside or outside of the tube
> with tin foil (or both) and it would transmit in whatever direction
> the open end was facing. So far my tests haven't been too conclusive
> but could that be poor setup on my part or

---->is the idea fundamentally flawed?<----

Yes. You could do it, but you'd probably want a horn-shaped tube, and the diameter at the outer end would have to be large compared with the wavelength to do much good. You'll probably find the Yagi a lot easier to do, using common materials like some 3/4" PVC pipe with holes drilled through it, and ordinary 12-gauge or 10-gauge solid copper wire put through the holes. You can use bare wire or wire with insulation. The elements (wires) are only about 13-14 inches long, so wire like that will be stiff enough to hold its shape well when supported in the middle by the PVC (or a wood dowel, or...use your imagination for other ideas). You should be able to find construction ideas for Yagis on the web. You can scale the size with frequency (size1*freq1=size2*freq2), but be sure to scale the element diameters at least approximately, and not just the lengths and spacings. (Don't use an 0.1" diameter wire if the plans call for 0.5" at that frequency.)

Cheers,
Tom

5860. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 00:18:32 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br8d4osef1@hercules.btinternet.com>
Source record: 103225

Zo of ALL real, ordinary, transmission lines changes versus frequency over a very wide frequency range.

Zo ranges over lots of thousands of ohms at a few cyles of seconds, thousands of ohms at power frequencies, hundreds of ohms at audio frequencies, and from tens to a few hundred ohms from 100KHz up to as many GHz as you like.

Reg.

--
.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....
"Ralph Mowery" <rmowery@ctc.net> wrote in message
news:v7udnSypvqOfAEqi4p2dnA@ctc.net...
> >
> > "Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter
> would
> > read Zo if connected to the end of an infinite line. He is right of
> course."
> >
> > But the Zo of a line varies with frequency. How will the "ordinary
> ohmmeter"
> > do the job at, say, 100 kHz?
> >
> > 73 de jack
>
> YOu should get a lot of people calling BS on the Zo changing with
frequency.
> It does not change at any reasonable frequency for the line. That is at
> least anything below 1 ghz for coax.
>
>

5861. Re: current/inductance discusion

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 00:51:13 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <5cPBb.10265$Ho3.2031@newsread1.news.atl.earthlink.net>
Source record: 103226

Art:

Ahhh... Finally, I've figured out what you want!

You only want to participate in a NewsGroup where there appear *only*
the assertions of the posters... A NG from your own personal Nirvana,
where...

There are no questions, retorts, alternative or contrary views, etc...

You share much in common with Dr. Cohen, for such was Chip's wish as well.

Art, since the open and free USENET groups mostly operate according to the
principles of democracy and the scientific method, where there is a free and
open discussion devoid of threats, pleas and complaints of unfairness, this
present NG rec.radio.amateur.antenna is not really able to support your
desires.

What you *need* is a moderated newsgroup.

Specifically Ary, you need a NG which has a NG moderator who has been
trained to accomodate folks like yourself and the Chipster who desire to
make
unsubstantiated scientific assertions to an adoring and compliant audience
of non-experts.

The only problem you face in this is to find an accomodating and pliable NG
moderator to operate your group. Call it
rec.radio.amateur.antenna.assertions.only.

The moderator of r.r.a.a.o must be one who suppresses dissent and opposing
views
with appropriate vigour.
Sigh, you face a tough problem. I can only think of a few such worthies.
How about,
Osama bin Laden, B. Mousolinni, Mullah Omar, Ayatolla Khomeni, Sadam
Hussein,
A. Hitler, J. Stalin, the Grand Inquisition, or the Pope of Rome come to
mind.

Or... if you cannot recruit such a worthy to moderate a USENET NG for you,
perhaps
you could take the route that the Chipster took and start your own moderated
WWW
site where you moderated it yourself and only your own unsubstantiated
assertions and
worshipful supporters are posted!

Get real Art, the scientific method demands dissent! We don't need your
kind of
syncophantic types here!

--
Peter K1PO

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0312100921.ae26540@posting.google.com...
> Well there you have it Peter a reflection of the types of
> people that follow you It seems that like minds attract
> like people. You should be very happy with the company of the Doctor
> and the bum their technical support, but remember the next time you
> want to get on somebody's back you dom't always get a free ride.
> Have a nice Xmas Hunk with that wonderful accomodating wife
> you obviously have.
> I will now retreat to the more academic side of things
> with respect to antennas with the group where I can learn
> which I find more interesting than personal derogatory
> remarks pointed at individuals
> Art
>
> k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031210053501.12262.00000745@mb-m05.aol.com>...
> > Whining Art, defender of wackos, cries:
> >
> > >Look at bums
> > >comments about Tom one of the most knoweledgeable people in the field
> > >and bum comes along and states that Tom's page is full of errors.
> >
> > The most "knoweledgeable people" attacked and ridiculed my posting
(truth,
> > reality) about the current in the antenna loading coils. I didn't take
it
> > laying down and defended the truth and reality. My argument was
supported by
> > others on this NG who contributed to factual discussion, as it should
be. You
> > should be "crying for me Argentina" and not for that technical impostor.
Based
> > on at least five times past experience, Tom ridicules others if they do
not
> > sing his wrong gospel. If he is proven to be wrong, then he goes QRT
(that is
> > quiet) and later emerges as a "guru" proclaiming new, corrected gospel.
Proof
> > is on the pages of reflectors in the past.
> > In your glorious career, you should have learned difference between
someone
> > pointing out "more errors" and "full of errors." Be careful what you
accusing
> > someone of.

> > Try to get this: if you have, know something and want opinions from
"this
> > group" then you present the problem, facts and stand your ground. You
either
> > find out that you are either right (and convince, educate others) or you
were
> > wrong (and learned something).
> > If you try to convince me (as per your patent) that reflector is a
director, I
> > will not swallow it.
> > If Tom and his cult followers want to believe that loading coil has the
same
> > current at both ends, more power to them, they can worship pages of his
> > "gospel" and feel good about being wrong. I could care less and wouldn't
cry
> > that they do not "worship" me. I have a life outside of radio (itsa
hobby/sport
> > to me), I try to help others, but I could care less about "recognition"
from
> > those who don't get it.
> > You parading as the "suffering brother" of Chipster, says it all.
> >
> > As they say, if you can't take the heat, stay out of the kitchen.
> >
> > Enough of psychoanalysis, back to the antennas.
> >
> > Yuri, da radio k3BU/m
> > who can't fix stupid

5862. Re: Cable for HG-54HD

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 01:04:59 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fd7c4ff_4@news1.prserv.net>
Source record: 103228

Jim:

The cable used on crank-up towers is standard stranded galvanized steel cable of appropriate diameter. Most of the Home Improvement places sell it and the ferrules and crimping tools and thimbles. McMaster- Carr is a good source on the Internet. Also any of the off-road truck specialty shops have cable, but often not that small. Boat shops are another source. And, if you want to really spend money, go to an aircraft repair shop. Be aware stainless is not as strong as galvanized steel for the same diameter, and that there are several stranding schedules, so match the style when buying.

--
Crazy George
Remove N O and S P A M imbedded in return address
"JM" <marasim@direcway.com> wrote in message news:3fd726b4_1@127.0.0.1...
> Can anyone advise me as to where I might purchase new cables for a Hy-gain
> HG-54HD crank-up tower. I noticed mine are beginning to rust on the top
> most portion of the tower. I have attempted to reach hy-gain but they
just
> say we don't make them anymore.
>
> Thanks for your help.
>
> Jim
> WA2IJA
>
>

5863. Re: New program: RHO_SWR.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 01:36:14 UTC
From: pez <studentant@hotmail.com>
Message-ID: <br8hmt$ph9$1@nic.grnet.gr>
Source record: 103230

Dear Mr. Reg Edwards,

This sounds to me
as an exactly in the right time program, indeed!
And since at a first look
it gives the impression that supersedes
the COAXPAIR and RJELINE3 programs,
this fact by itself may serves as an excuse
so this time to submit, with your permission of course,
some comments I already concentrate from its study.

Sincerely yours,

pez
SV7BAX
TheDAG

5864. For Sale: Lafayette SWR/Power/Field Strength Meter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 01:36:27 UTC
From: wa8mea@hotmail.com
Message-ID: <8a260fb2.0312101736.10e809a7@posting.google.com>
Source record: 103229

For Sale: Lafayette 99-26452 SWR/Power/Field Strength meter. 100 watts. Telescopic whip for field strength readings. Nice collectors item. Excellent to almost mint condition. $10 plus $9.95 insured Priority Mail shipping. First e-mail gets it. 73 from Bill - WA8MEA - wa8mea@hotmail.com - NEAT STUFF at http://qth.com/dwm

5865. Re: Remote antenna/tuner recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 02:12:38 UTC
From: k9sqg@aol.com
Message-ID: <20031210211238.12363.00000623@mb-m05.aol.com>
Source record: 103231

Open wire feedline is an excellent alternative and is much lower loss than coax, especially at high SWRs. This way you can use a tuner in the shack.

73s,

Evan

5866. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 03:17:44 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <vNudnXPNXs36QEqiRVn-iw@ctc.net>
Source record: 103232

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:br8d4osef1@hercules.btinternet.com...
> Zo of ALL real, ordinary, transmission lines changes versus frequency over
a
> very wide frequency range.
>
> Zo ranges over lots of thousands of ohms at a few cyles of seconds,
> thousands of ohms at power frequencies, hundreds of ohms at audio
> frequencies, and from tens to a few hundred ohms from 100KHz up to as many
> GHz as you like.
> ---
> Reg.
>
>

Are we talking the same thing for Zo ? That a piece of say rg-8 (whatever
they want to call it now) that is 50 ohm coax is not 50 ohms over its normal
operating frequency range ?

5867. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 03:45:16 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <o7lftv0f45atd5ooqq5ro4h5bgb2p7ghac@4ax.com>
Source record: 103233

On Wed, 10 Dec 2003 06:27:39 -0500, "Edward A. Feustel"
<efeustel@erols.com> wrote:

>
>"Fjx1" <fjx1@aol.comnospam> wrote in message
>news:20031209232416.01786.00000508@mb-m20.aol.com...
>>
>> I need to put a hole in the house through new vinyl siding and would like
>to
>> know if anyone has a clean neat way to do it. Do they make feedthroughs
>for
>> cable as big as RG8? Any suggestions ?
>>
>> Thanks much.
>>
>> Gerry
>>
>> fjx1@aol.com
>>
>I bought plastic tubes from Radio Shack that are designed to go through
>siding, sheathing, and insulation.
>You can cut them off at the appropriate length. They have interior and
>exterior covers that can be flashed to
>the house and have a flange that seals tightly around coax from RG-6 up.
>Ed, N5EI
>

There are the tubes, 1/2" PVC conduit, and bulkhead connectors. They
look like a longgggg double female connector and are available up to
at least 6 inches in length. Bore a hole just big enough to fit the
thing through, add the proper nut and maybe washer on each side and
connect a PL-259 to each end.

Here I use large PVC conduit underground for the house to the tower
and 1 1/4 EMT (thin wall) in the shop. There I used two small
electrical boxes http://www.rogerhalstead.com/ham_files/boatanch.htm
shown at the bottom of the page. The majority of the 1 1/4 emt run
can be seen in the photos above those.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

5868. Tropducting=?weather?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 04:47:38 UTC
From: kc5cqa@yahoo.com
Message-ID: <3etftv0e8mdinvfoecguvqegl6c32hbsr8@4ax.com>
Source record: 103234

What "kind" of weather do you look for,or expect to result in tropo "ducting". Another way of askingt is,,,, I guess, what kind of 'terms' with the weatherman be using, when we can expect the '''right kind of long range two meter weather'''. thanks 73

5869. Re: RFI on Cable Phone System

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 04:58:09 UTC
From: Pete Holden <peter.holden@comcast.net>
Message-ID: <BPSBb.359870$275.1184684@attbi_s53>
Source record: 103235

Wow... Lot's of good advice here. Thank you all.

Pete

5870. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 06:12:03 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312102212.2b917665@posting.google.com>
Source record: 103236

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fcfcfc5$1_5@corp.newsgroups.com>...
> Mark Keith wrote:
> > Bravo. Pretty much sums it all up in a nutshell. No one has shown an
> > example of gross modeling error to date.
>
> What is the matter with the one I posted last week with phase-
> reversing coils as described by Kraus on page 824 of _Antennas_
> for-all_Applications_, third edition? If you missed it, look at
>
> http://www.qsl.net/w5dxp/current.htm

What example? I look at the page, and all I see is a current
distribution model for an antenna using stubs. ?? Where is the model
of the one using lumped inductance? I tried modeling a couple of
antennas myself using multiple 1/2 wave elements and inductance as
phasing coils just to test this out. But I used three elements instead
of four. I do not see any major change in current distribution when
compared to feeding all three with three separate sources. Minimum
current is at the ends of each section in both cases.
But I do see a bit less gain with the lumped inductance version, and
not quite as tight a pattern. This *might* be a point of error, but
I'd have to look more carefully into that. It's quite possible that
feeding with separate sources is superior in the real world, and it's
reflected in the model. But if this is an error in the model, I would
think that it only applies to arrays with lumped inductance used for
phasing coils. I very seriously doubt this error would apply to
modeling short coil loaded verticals. Or even large arrays that used
lumped inductance for loading, and not phasing purposes. Like I've
said, when I phase elements, I usually use separate sources to feed.
That way I can control the phase angle to whatever I want it to be.
MK

5871. Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 07:10:21 UTC
From: Mohd Nazry Bin Mustapa <nazry1@myjaring.net>
Message-ID: <br953s$25c$1@news6.jaring.my>
Source record: 103237

Anyone know how to make a simple lightning arrester (Homebrew) that really work in case of lightning.

5872. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 10:19:51 UTC
From: simon.hyland@aurora-uk.com
Message-ID: <7afd586a.0312110219.6735e075@posting.google.com>
Source record: 103238

Thanks alot for your quick replies guys,

As far as I know 433.92MHz is license exempt throughout Europe, if you know otherwise let me know, but I've seen it written on the suppliers website, so I'm inclined to believe them, plus I'm sure I used transmitters at that frequency for a university project, but that was a few years back, so I could be mistaken.

I'll look up the Yagi design, and see what I can build, would placing a yagi inside a horn shaped tube be worthwhile, to get the best of both worlds? or would a setup like that not benefit directional transmission, my thoughts here are if a horn shaped tube almost works and a Yagi antenna almost work, then together, they might give the results I'm looking for. In an ideal situation I'd like to get the transmission beam down to 1 degree, 10 degrees might be acceptable I'm not sure.

My final point is that I've also seen 868Mhz transmitters, assuming no license is required for these, could this frequency be used to create a directional transmission more easily than the 433MHz?

Thanks again and sorry for my ignorance,

Simon.

k7itm@aol.com (Tom Bruhns) wrote in message news:<3200347.0312101613.52bd0e28@posting.google.com>...
> simon.hyland@aurora-uk.com (Simon) wrote in message news:<7afd586a.0312100914.74ba5926@posting.google.com>...
> > Hi,
> > I'm playing around with some 433MHz transmitter and receiver pairs.
> > Ideally I would like the transmitter to transmit in a narrow
> > directional beam, but I'm new to the art of radio waves and antenna
> > design, so I was wondering if you guys would be able to help me with
> > my project. I've read about a Yagi design for the antenna, I know it
> > receives from one direction only, but does it transmit in just one
> > direction too?
>
> Yes, antennas have the same directionality transmitting and receiving.
> >
> > I thought I'd be able to basically stick the transmitter antenna in a
> > tube, sealed at one end, line either the inside or outside of the tube
> > with tin foil (or both) and it would transmit in whatever direction
> > the open end was facing. So far my tests haven't been too conclusive
> > but could that be poor setup on my part or
>

> ---->is the idea fundamentally flawed?<----
>
> Yes. You could do it, but you'd probably want a horn-shaped tube, and
> the diameter at the outer end would have to be large compared with the
> wavelength to do much good. You'll probably find the Yagi a lot
> easier to do, using common materials like some 3/4" PVC pipe with
> holes drilled through it, and ordinary 12-gauge or 10-gauge solid
> copper wire put through the holes. You can use bare wire or wire with
> insulation. The elements (wires) are only about 13-14 inches long, so
> wire like that will be stiff enough to hold its shape well when
> supported in the middle by the PVC (or a wood dowel, or...use your
> imagination for other ideas). You should be able to find construction
> ideas for Yagis on the web. You can scale the size with frequency
> (size1*freq1=size2*freq2), but be sure to scale the element diameters
> at least approximately, and not just the lengths and spacings. (Don't
> use an 0.1" diameter wire if the plans call for 0.5" at that
> frequency.)
>
> Cheers,
> Tom

5873. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 11:12:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br9jfc$iu3$1@hercules.btinternet.com>
Source record: 103239

Hang up "STOP" sign.

==========

> Anyone know how to make a simple lightning arrester (Homebrew) that really
> work in case of lightning.
>
>

5874. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 11:13:14 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <8jYBb.76782$m24.5525@fed1read02>
Source record: 103240

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:br84r0$23f$1@sparta.btinternet.com...
> "There is nothing so frightening as somebody who knows he is right."
>
> . . . . . Michael Faraday.
>
>

And Mike Faraday never met Mike Jackson.

Ed
WB6WSN

5875. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 11:51:14 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <XYSdnXaQnuajx0WiRVn-hA@crocker.com>
Source record: 103241

"Mohd Nazry Bin Mustapa" <nazry1@myjaring.net> wrote in message
news:br953s$25c$1@news6.jaring.my...
> Anyone know how to make a simple lightning arrester (Homebrew) that really
> work in case of lightning.
>
>
the most basic one is a spark gap. these have been used since the first
days of long telegraph lines. just position two sharp pointed metal pieces
a small distance apart, connect one side to the cable and the other to a
good ground. you want the distance as small as possible, but wide enough so
your normal transmission power doesn't create an arc.

NOTE: a lightning arrester WILL NOT WORK if you don't have a good ground.
IT IS NOT A REPLACEMENT FOR A GOOD GROUND SYSTEM! All a lightning arrester
does is limit the voltage difference between signal carrying wires and the
nearby ground it is connected to, you must properly connect all grounds
together to get any benefit from any kind of lightning arrester.

5876. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 11:56:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <br9m0u$8c3$1@titan.btinternet.com>
Source record: 103242

```
>
> "Reg Edwards" wrote in message
> > Zo of ALL real, ordinary, transmission lines changes versus frequency
over
> a
> > very wide frequency range.
> >
> > Zo ranges over lots of thousands of ohms at a few cyles of seconds,
> > thousands of ohms at power frequencies, hundreds of ohms at audio
> > frequencies, and from tens to a few hundred ohms from 100KHz up to as
many
> > GHz as you like.
> > ---
> > Reg.
> >
> >
>
> Are we talking the same thing for Zo ? That a piece of say rg-8 (
whatever
> they want to call it now) that is 50 ohm coax is not 50 ohms over its
normal
> operating frequency range ?
>
============================

What is your normal operating frequency range?

Here is Zo typical of cable similar to RG-58 versus frequency.

Nominal Zo = 50 ohms.
Degrees = Angle of Zo.

Freq Zo Degrees
------ ------- -------
10 Hz 3000 -45.0
100 Hz 950 -44.9
1000 Hz 301 -44.1
10 KHz 97 -36.4
100 KHz 54.2 -10.1
1 MHz 50.0 -2.6
10 MHz 48.4 -0.84
100 MHz 48.0 -0.26
1 GHz 47.8 -0.08

Superimposed on the above Zo vs F characteristics are manufacturing
reel-to-reel variations of 2 or 3 percent.
```

Reg, G4FGQ

5877. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 12:03:34 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <Z_CdnW4yVJK8wEWi4p2dnA@crocker.com>
Source record: 103243

"Simon" <simon.hyland@aurora-uk.com> wrote in message
news:7afd586a.0312110219.6735e075@posting.google.com...
> Thanks alot for your quick replies guys,
>
> As far as I know 433.92MHz is license exempt throughout Europe, if you
> know otherwise let me know, but I've seen it written on the suppliers
> website, so I'm inclined to believe them, plus I'm sure I used
> transmitters at that frequency for a university project, but that was
> a few years back, so I could be mistaken.
>
> I'll look up the Yagi design, and see what I can build, would placing
> a yagi inside a horn shaped tube be worthwhile, to get the best of
> both worlds? or would a setup like that not benefit directional
> transmission, my thoughts here are if a horn shaped tube almost works
> and a Yagi antenna almost work, then together, they might give the
> results I'm looking for. In an ideal situation I'd like to get the
> transmission beam down to 1 degree, 10 degrees might be acceptable I'm
> not sure.
>
> My final point is that I've also seen 868Mhz transmitters, assuming no
> license is required for these, could this frequency be used to create
> a directional transmission more easily than the 433MHz?
>

the higher the frequency the smaller the antenna is for the same effect.
yagi designs are nice but can be complex and interact with their
surroundings, so putting a yagi in a can is not a good idea without some
very careful and complex modelling. the simplest way to get a reasonable
beam pattern at uhf and above is probably a horn, though they must be built
reasonably well and fed with a proper feed system. if fed at the wrong
location or with the wrong type of element they can be as bad as just using
a random hunk of wire. another simple one is a corner reflector. the exact
design you need will depend on many factors including:
1. path length, obstructions, frequency(determine losses between tx and rx)
2. transmitter power and receiver sensitivity(how much signal can you get to
rx)
3. required s/n ratio(how much signal do you need to detect the data you
want to get)
4. rejecting interference sources(preventing received interference)
5. allowable sidelobes on transmit (preventing interference to others when
you transmit)

all these factor interact and can offset each other. i.e. if you can double
your transmitter power you can probably go with 3db lower gain in the tx
antenna, but not always, one tree in your path can almost totally block

signals at certain frequencies and be negligable on others, ect... go through your college library for books on rf communications system design, but don't expect it to be a simple formula to plug in, there are lots of variables and choices to make. it may also be that you are overdesigning, if the path is short with no obstructions and you have reasonable tx power many of the other factors can be ignored... but if you are pushing for distance or have a tough path then you may have to include more.

5878. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 12:07:44 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <k6ZBb.20240$8y1.99886@attbi_s52>
Source record: 103244

David Robbins wrote:
SNIP
>
> the most basic one is a spark gap. these have been used since the first
> days of long telegraph lines. just position two sharp pointed metal pieces
> a small distance apart, connect one side to the cable and the other to a
> good ground. you want the distance as small as possible, but wide enough so
> your normal transmission power doesn't create an arc.
SNIP

Remember, there is still a significant voltage across the spark gap
before it ignites and during conduction. A 1/16 inch, or a 1.5 mm, gap
will sustain ~1000 volts before igniting and support several hundreds of
volts during conduction.

The best solution, disconnect all antennas when not in use.

DD, W1MCE

5879. Re: Tropducting=?weather?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 13:16:18 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031211081618.04004.00000699@mb-m07.aol.com>
Source record: 103245

>
> What "kind" of weather do you look for,or expect to result in tropo
>"ducting". Another way of askingt is,,,, I guess, what kind of 'terms'
>with the weatherman be using, when we can expect the '''right kind of
>long range two meter weather'''. thanks 73
>

Generally when there is so called inversion, layer of air with different temperature (warmer) creating boundary, causing refraction of signals and entrapment in the duct. Check some VHF web sites, they will have more detailed info.
You can check my old article about ducting/conducting
http://members.aol.com/ve3bmv/bmvpropagation.htm

Yuri, K3BU, VE3BMV

5880. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 13:27:53 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vtgs9ncuuuh5f4@corp.supernews.com>
Source record: 103246

Hi Reg
Great minds think alike:
I recall a Chinese saying that goes something like:

"Respect those who seek the truth, distrust those who have found it."

73
H.
NQ5H

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:br84r0$23f$1@sparta.btinternet.com...
> "There is nothing so frightening as somebody who knows he is right."
>
> . . . . . Michael Faraday.
>
>

5881. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 14:46:58 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031211094658.15365.00000598@mb-m03.aol.com>
Source record: 103247

>Hi Reg
>Great minds think alike:
>I recall a Chinese saying that goes something like:
>
>"Respect those who seek the truth, distrust those who have found it."
>
>73
>H.
>NQ5H
>

So ehm, what's the point of seeking it?
really deep philosophy Eh?

Back to the insulated wire. If the wire exhibits the shortening factor from insulation, that ain't the truth?
So I should respect those who are seeking the answer, know not about it, question it because they never tried it, they read some stuff, but who knows?
Phoey on those who know it, did it, seen it, measured it, cut it. They should be distrusted?
Some "wisdom"! Carry on gentlemen of great minds, as Cecil once termed it "mental masturbation".
Back to nuts and volts.

Yuri,
da know nothing, seeking the truth after clearing my memories with FFFFs. Can I be trusted now?

5882. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 14:58:21 UTC
From: "H. Adam Stevens" <hstevens@totalaccessNOSPAM.net>
Message-ID: <vth1j8279ohja5@corp.supernews.com>
Source record: 103248

"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031211094658.15365.00000598@mb-m03.aol.com...
> >Hi Reg
> >Great minds think alike:
> >I recall a Chinese saying that goes something like:
> >
> >"Respect those who seek the truth, distrust those who have found it."
> >
> >73
> >H.
> >NQ5H
> >
>
>
> So ehm, what's the point of seeking it?
> really deep philosophy Eh?
>
> Back to the insulated wire. If the wire exhibits the shortening factor
from
> insulation, that ain't the truth?
> So I should respect those who are seeking the answer, know not about it,
> question it because they never tried it, they read some stuff, but who
knows?
> Phoey on those who know it, did it, seen it, measured it, cut it. They
should
> be distrusted?
> Some "wisdom"! Carry on gentlemen of great minds, as Cecil once termed it
> "mental masturbation".
> Back to nuts and volts.
>
> Yuri,
> da know nothing, seeking the truth after clearing my memories with FFFFs.
Can I
> be trusted now?

Actually I think Rumsfeld's recently honored exposition on what we know,
what we know we don't know, what we don't know we know, etc. ad nauseum was
just as much fun.

5883. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:03:42 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd887a5$1_7@corp.newsgroups.com>
Source record: 103249

Mark Keith wrote:
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fcfcfc5$1_5@corp.newsgroups.com>...
>
>>Mark Keith wrote:
>>>Bravo. Pretty much sums it all up in a nutshell. No one has shown an
>>>example of gross modeling error to date.
>>
>>What is the matter with the one I posted last week with phase-
>>reversing coils as described by Kraus on page 824 of _Antennas_
>>for-all_Applications_, third edition? If you missed it, look at
>>
>>http://www.qsl.net/w5dxp/current.htm
>
> What example? I look at the page, and all I see is a current
> distribution model for an antenna using stubs.

The example is four 1/2WL phased sections with "PHASE-REVERSING"
coils. The current is flowing into both ends of the coils at the
same time. Please show me an EZNEC model that allows current to
flow into both ends of the coil at the same time. You can model
that antenna using stubs but you cannot model that antenna using
lumped inductance. This is an example of an antenna that EZNEC
models with a "gross modeling error". With EZNEC, the current
never reverses phase as it must for that antenna to work properly.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5884. Re: Tropducting=?weather?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:07:13 UTC
From: gmz79@aol.comnospam
Message-ID: <20031211100713.14243.00000744@mb-m28.aol.com>
Source record: 103250

http://www.iprimus.ca/~hepburnw/tropo.html

KC*VIF
Greg Z
to thine own sound be true

5885. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:13:10 UTC
From: gmz79@aol.comnospam
Message-ID: <20031211101310.14243.00000745@mb-m28.aol.com>
Source record: 103251

> I'll look up the Yagi design, and see what I can build, would placing
> a yagi inside a horn shaped tube be worthwhile, to get the best of
> both worlds? or would a setup like that not benefit directional
> transmission, my thoughts here are if a horn shaped tube almost works
> and a Yagi antenna almost work, then together, they might give the
> results I'm looking for. In an ideal situation I'd like to get the
> transmission beam down to 1 degree, 10 degrees might be acceptable I'm
> not sure.
---
1 deg? That will be one long antenna!
Greg Z
to thine own sound be true

5886. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:14:09 UTC
From: jder8745@aol.com
Message-ID: <20031211101409.03883.00000680@mb-m07.aol.com>
Source record: 103252

Someone sed about the characteristic frequency of a transmission line::

"It does not change at any reasonable frequency for the line. That is at least anything below 1 ghz for coax."

The formula for Zo contains the frequency.

Look it up.

73 de Jack K9CUN

5887. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:17:33 UTC
From: jder8745@aol.com
Message-ID: <20031211101733.03883.00000681@mb-m07.aol.com>
Source record: 103253

Someone sed:

" Do you know of anyone that has an infinite length of transmission line? Or an infinite anything? :-)."

==========

Some of these threads are PRETTY LONG, approaching infinity???

73 de Jack, K9CUN

5888. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 15:29:22 UTC
From: jder8745@aol.com
Message-ID: <20031211102922.03883.00000683@mb-m07.aol.com>
Source record: 103254

Someone sed:

"So, the 300/75/50 ohm term, characteristic impedance, is the square root of L/C"

This is an *approximation* that is useful when complex arithmetic is over the capability of your calculator or if the imaginary components of the formula for Zo are negligible.

At the usual HF through UHF ham frequencies the imaginary components are negligible so the approximation suffices.

UNITS: 10-pF capacitor. 10-pF is hypenated when used as a modifier, i. e., adjective.

Others: 10-ft pole, 5-cent cigar, 2-dollar pistol, 12-V battery, 500-mile track.

73 de Jack, K9CUN

5889. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 17:47:17 UTC
From: K7JEB <k7jeb.remove_this@qsl.net>
Message-ID: <Y52Cb.36$J77.23@fed1read07>
Source record: 103255

```
>> "Mohd Nazry Bin Mustapa":
>> Anyone know how to make a simple lightning arrester
>> (Homebrew) that really work in case of lightning.

> "David Robbins":
> the most basic one is a spark gap. these have been
> used since the first days of long telegraph lines.
> just position two sharp pointed metal pieces a small
> distance apart, connect one side to the cable and the
> other to a good ground. you want the distance as small
> as possible, but wide enough so your normal transmission
> power doesn't create an arc.

The usual practice for radio antennas is to place
a series capacitor downstream (towards the radio
set) from the spark gap to dispense with the DC
and low-frequency components of the lightning strike.

In crude, fixed-pitch ASCII art, it would look like
this:
| |
Antenna >---------+--------| |-----------> To Radio
| | |
SPARK V Blocking
GAP ^ Capacitor
|
Ground >---------+---------------------->

The size of the capacitor is a compromise between not
disrupting the RF circuitry and coupling the low-frequecy
energy from the strike into the radio. Making the
capacitor reactance in the order of a few ohms at the
lowest operating frequency generally should work for
50-ohm coax.

Jim, K7JEB, Glendale, AZ
```

5890. MAKE 5000.00 PER WEEK

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 17:52:23 UTC
From: showtimehydros@aol.com
Message-ID: <20031211125223.12155.00000676@mb-m05.aol.com>
Source record: 103256

I REALLY GET BACK GOOD MONEY USING THE LAW OF GIVING AND RECEIVING!
I found this on a bulletin board and decided to try it. A little while back, I was browsing through newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $6.00! So I thought, Yeah right, this must be a scam, but like most of us, I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 6 names and address stated in the article. You then place your own name and address in the bottom of the list at #6, and post the article in at least 200 newsgroups. (There are thousands) No catch, that was it. So after thinking it over, and talking to a few people first, I thought about trying it. I figured: what have I got to lose except 6 stamps and $6.00, right? Then I invested the measly $6.00. Well GUESS WHAT!!... within 7 days, I started getting money in the mail! I was shocked! I figured it would end soon, but the money just kept coming in. In my first week, I made about $25.00. By the end of the second week I had made a total of over $1,000.00! In the third week I had over $10,000.00 and it's still growing. This is now my fourth week and I have made a total of just over $42,000.00 and it's still coming in rapidly. It's certainly worth $6.00, and 6 stamps, I have spent more than that on the lottery!! Let me tell you how this works and most importantly, why it works....Also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. I promise you that if you follow the directions exactly, that you will start making more money than you thought possible by doing something so easy! Suggestion: Read this entire message carefully! (print it out or download it.) Follow the simple directions and watch the money come in! It's easy. It's legal. And, your investment is only $6.00 (Plus postage)
IMPORTANT: This is not a rip-off; it is not indecent; it is not illegal; and it is virtually no risk - it really works!!!! If all of the following instructions are adhered to, you will receive extraordinary dividends.
PLEASE NOTE: Please follow these directions EXACTLY, and $50,000 or more can be yours in 20 to 60 days. This program remains successful because of the honesty and integrity of the participants. Please continue its success by carefully adhering to the instructions. You will now become part of the Mail Order business. In this business your product is not solid and tangible, it's a service. You are in the business of developing Mailing Lists. Many large corporations are happy to pay big bucks for quality lists. However, the money made from the mailing lists is secondary to the income which is made from people like you and me asking to be included in that list. Here are the 4 easy steps to success:
STEP 1: Get 6 separate pieces of paper and write the following on each piece of paper;PLEASE PUT ME ON YOUR MAILING LIST. Now get 6 US $1.00 bills and place ONE inside EACH of the 6 pieces of paper so the bill will not be seen through the envelope (to prevent thievery). Next, place one paper in each of the 6 envelopes and seal them. You should now have 6 sealed envelopes, each with a

piece of paper stating the above phrase, your name and address, and a $1.00 bill. What you are doing is creating a service. THIS IS ABSOLUTELY LEGAL! You are requesting a legitimate service and you are paying for it! Like most of us I was a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the U.S. Post Office (1-800-725-2161) and they confirmed that it is indeed legal! Mail the 6 envelopes to the following addresses:

#1) HICKS 1283 EVENING CANYON HENDERSON, NV 89014
#2) D. BROWN JR. 1839 GALVESTON STREET SAN DIEGO, CA 92110
#3) J. VEAL 2521 GROVE WAY #4 CASTRO VALLEY, CA 94546
#4) McGREGOR,14019 S.W. FRWY,STE.301-191, SUGARLAND,TX 77478
#5) J. COLE, 49 MABOU HILL RD. DEVILLE, LA 71328
#6) GOUKER, 4254 N.SELLAND AVE FRESNO, CA 93722
STEP 2: Now take the #1 name off the list that you see above, move the other names up by DELETING the numbers next to them and changing it to one down so...(6 becomes 5, 5 becomes 4, etc...) and add YOUR Name as number 6 on the list.
(THINK ABOUT THIS: - THE FURTHER YOUR NAME IS TO THE BOTTOM, THE MORE MONEY YOU WILL MAKE - MAKE SENSE HUH? - YOUR NAME STAYS IN CIRCULATION - DON'T THINK THAT YOU CAN HURRY THE PROCESS BY PUTTING YOUR NAME IN THE FIRST SLOT - YOU ARE ACTUALLY STOPPING YOUR NAME FROM BEING CIRCULATED OVER AND OVER.)
STEP 3: Change anything you need to, but try to keep this article as close to original as possible. Now, post your amended article to at least 200 newsgroups. (I think there are close to 24,000 groups) All you need is 200, but remember, the more you post, the more money you make! This is perfectly legal! If you have any doubts, refer to Title 18 Sec. 1302 & 1341 of the Postal lottery laws. Keep a copy of these steps for yourself and, whenever you need money, you can use it again, and again.
PLEASE REMEMBER that this program remains successful because of the honesty and integrity of the participants and by their carefully adhering to the directions. Look at it this way. If you are of integrity, the program will continue and the money that so many others have received will come your way.
NOTE: You may want to retain every name and address sent to you, either on a computer or hard copy and keep the notes people send you. This VERIFIES that you are truly providing a service. (Also, it might be a good idea to wrap the $1 bill in dark paper to reduce the risk of mail theft.)
So, as each post is downloaded and the directions carefully followed, six members will be reimbursed for their participation as a List Developer with one dollar each. Your name will move up the list geometrically so that when your name reaches the #1 position you will be receiving thousands of dollars in CASH!!! What an opportunity for only $6.00 ($1.00 for each of the first six people listed above) Send it now, add your own name to the list and you're in business!
---DIRECTIONS ----- FOR HOW TO POST TO NEWSGROUPS---------- Step 1) You do not need to re-type this entire letter to do your own posting. Simply put your cursor at the beginning of this letter and drag your cursor to the bottom of this document, and select 'copy' from the edit menu. This will copy the entire letter into the computer's memory.
Step 2) Open a blank 'notepad' file and place your cursor at the top of the

blank page. From the 'edit' menu select 'paste'. This will paste a copy of the letter into notepad so that you can add your name to the list.
Step 3) Save your new notepad file as a .txt file. If you want to do your postings in different settings, you'll always have this file to go back to.
Step 4) Use Netscape or Internet explorer and try searching for various newsgroups (on-line forums, message boards, chat sites, discussions.)
Step 5) Visit these message boards and post this article as a new message by highlighting the text of this letter and selecting paste from the edit menu. Fill in the Subject, this will be the header that everyone sees as they scroll through the list of postings in a particular group, click the post message button. You're done with your first one! Congratulations...THAT'S IT! All you have to do is jump to different newsgroups and post away, after you get the hang of it, it will take about 30 seconds for each newsgroup! **REMEMBER, THE MORE NEWSGROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 200** That's it! You will begin receiving money from around the world within days! You may eventually want to rent a P.O.Box due to the large amount of mail you will receive. If you wish to stay anonymous, you can invent a name to use, as long as the postman will deliver it. **JUST MAKE SURE ALL THE ADDRESSES ARE CORRECT.**
Now the WHY part: Out of 200 postings, say I receive only 5 replies (a very low example). So then I made $5.00 with my name at #6 on the letter. Now, each of the 5 persons who just sent me $1.00 make the MINIMUM 200 postings, each with my name at #5 and only 5 persons respond to each of the original 5, that is another $25.00 for me, now those 25 each make 200 MINIMUM posts with my name at #4 and only 5 replies each, I will bring in an additional $125.00! Now, those 125 persons turn around and post the MINIMUM 200 with my name at #3 and only receive 5 replies each, I will make an additional $626.00! OK, now here is the fun part, each of those 625 persons post a MINIMUM 200 letters with my name at #2 and they each only receive 5 replies, that just made me $3,125.00!!! Those 3,125 persons will all deliver this message to 200 newsgroups with my name at #1 and if still 5 persons per 200 newsgroups react I will receive $15,625,00! With an original investment of only $6.00! AMAZING! When your name is no longer on the list, you just take the latest posting in the newsgroups, and send out another $6.00 to names on the list, putting your name at number 6 again. And start posting again. The thing to remember is: do you realize that thousands of people all over the world are joining the internet and reading these articles everyday?, JUST LIKE YOU are now!! So, can you afford $6.00 and see if it really works?? I think so... People have said, "e;what if the plan is played out and no one sends you the money? So what! What are the chances of that happening when there are tons of new honest users and new honest people who are joining the internet and newsgroups everyday and are willing to give it a try? Estimates are at 20,000 to 50,000 new users, every day, with thousands of those joining the actual internet. Remember: play FAIRLY and HONESTLY and this will really work.
Happy money making !!!

5891. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 17:52:39 UTC
From: K7JEB <k7jeb.remove_this@qsl.net>
Message-ID: <%a2Cb.39$J77.21@fed1read07>
Source record: 103257

```
> | |
> Antenna >---------+--------| |-----------> To Radio
> | | |
> SPARK V Blocking
> GAP ^ Capacitor
> |
> Ground >---------+---------------------->
```

PS: The breakdown voltage of the capacitor should be
10 times that of the spark gap. For a 1KV spark gap,
that would give 10 KV.

JEB

5892. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 18:10:26 UTC
From: Gene Fuller <W4SZzzzzz@att.net>
Message-ID: <mq2Cb.180112$Ec1.6813982@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103258

JDer8745 wrote:

<snip>

>
> UNITS: 10-pF capacitor. 10-pF is hypenated when used as a modifier, i. e.,
> adjective.
>
> Others: 10-ft pole, 5-cent cigar, 2-dollar pistol, 12-V battery, 500-mile
> track.
>
> 73 de Jack, K9CUN

Partly correct.

The use of "10-picofarad capacitor" is preferred under the standard rules of English and the NIST style guide. The use of "10-pF capacitor" should be replaced by "10 pF capacitor" according to NIST.

See section 7.2 in http://www.physics.nist.gov/Pubs/SP811/contents.html

"Even when the value of a quantity is used in an adjectival sense, a space is left between the numerical value and the unit symbol. (This rule recognizes that unit symbols are not like ordinary words or abbreviations but are mathematical entities, and that the value of a quantity should be expressed in a way that is as independent of language as possible.)"

"When unit names are spelled out, the normal rules of English apply. Thus, for example, ï¿½a roll of 35-millimeter filmï¿½ is acceptable."

73,
Gene
W4SZ

5893. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 18:55:54 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <iPadnZbair5LIEWiRVn-vg@comcast.com>
Source record: 103259

"Simon" <simon.hyland@aurora-uk.com> wrote in message
news:7afd586a.0312110219.6735e075@posting.google.com...
In an ideal situation I'd like to get the
> transmission beam down to 1 degree, 10 degrees might be acceptable

Simon,

I suspect you are at least an order of magnitude too low in frequency to do this, and have an antenna that you can easily handle. I have a 430 MHz antenna with a 27 degree beam width, and it is 12 feet long. If this is line of sight, use infrared.

Tam/WB2TT

5894. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 21:04:37 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd8dc31_2@127.0.0.1>
Source record: 103261

Mark Keith wrote:

> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>>Mark Keith wrote:
>>>Bravo. Pretty much sums it all up in a nutshell. No one has shown an
>>>example of gross modeling error to date.
>>
>>What is the matter with the one I posted last week with phase-
>>reversing coils as described by Kraus on page 824 of _Antennas_
>>for-all_Applications_, third edition? If you missed it, look at
>>
>>http://www.qsl.net/w5dxp/current.htm
>
> What example? I look at the page, and all I see is a current
> distribution model for an antenna using stubs. ?? Where is the model
> of the one using lumped inductance?

Scroll on down. It's four 1/2WL array sections separated by a "phase
reversing coil".

> I tried modeling a couple of
> antennas myself using multiple 1/2 wave elements and inductance as
> phasing coils just to test this out. But I used three elements instead
> of four. I do not see any major change in current distribution when
> compared to feeding all three with three separate sources.

Turn on the <C>I feature, display the current phase, and you will
see the difference. With EZNEC's lumped coils, the currents in the
outside sections are 180 degrees out of phase with what they need
to be.

> But I do see a bit less gain with the lumped inductance version, and
> not quite as tight a pattern. This *might* be a point of error, but
> I'd have to look more carefully into that.

When you turn on the 'display current phase' feature, you will
see the difference. The currents in each 1/2WL sections are supposed
to be in phase. With EZNEC's lumped coils, they are out of phase no
matter what coil reactance is chosen. That's why there's more gain
using multiple sources. The errors are minimized using multiple sources.
--
73, Cecil, W5DXP

5895. Re: Kite antenna with ocean ground -- charge buildup?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 21:34:46 UTC
From: Jake Brodsky <frussle@erols.com>
Message-ID: <sunhtv02etcnf2mflv9tsbtr8qdj55242m@4ax.com>
Source record: 103262

On Tue, 02 Dec 2003 02:06:37 GMT, Ken <cprstn54zz@att.net> wrote:

>I will be running 28 ga. magnet wire along (& around) a 350 ft. kite
>line tied to a windborne kite -- for 160M work.
>
>The other leg will be bare copper wire that runs 50 ft to the ocean.

In case nobody's told you prior to this, don't use the wire alone to connect to the kite. Use conventional kite line (I use 100# test dacron) and support your antenna on the kite line.

Make sure your ground wire is plentiful and of a decently large gauge, just as you'd use at home. Sea water is a good conductor, but you still need surface area. If you're on board a ship, you're probably better off attaching to the ship's ground. However, every situation is different...

>I am not sure if this is a longwire antenna with counterpoise or a
>tilted vertical with ground plane.

Depends on how high an angle your kite flies :-) I have used a Stratoscoop III, a Jalbert Parafoil, and various box and delta kites. Of these, the Stratoscoop III is definitely the highest angle flier, but it's not a stable kite at those angles. The box kites and Delta kites proved most reliable, and the Parafoil pulled the hardest, though it flew at relatively low angles. I should have tinkered with the Parafoil, but I had other kites at the time, so I chose to use them instead.

>Anyhow, I have been told that the wind will cause static charge to
>build on the magnet wire and that a path to ground must be provided.
>
>1) Is this true?

YES. BEEN THERE, LEARNED IT THE HARD WAY. DON'T REPEAT MY MISTAKE.

>2) If it is true, would the problem be solved with, say, a 1,000 ohm
>resistor between the longwire and and saltwater ground leads at my
>tuner?

I used a 100 k Ohm resistor. The value can be pretty high as there is very little current. Later I used an RF choke with equal protection and equal success.

73, and have fun!

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

5896. AMATEUR RADIO GEAR WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 21:51:36 UTC
From: n2ion@aol.com
Message-ID: <20031211165136.01603.00000450@mb-m20.aol.com>
Source record: 103263

NOT USING YOUR ANTENNA ANYMORE?

IS YOUR RIG COLLECTING DUST?

LONG ISLAND MOBILE AMATEUR RADIO CLUB IS

LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR

EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW

BAND YAGIS LIKE THE MOSLEY TA-33 OR TA-33 JR, AND
VERTICALS, RADIOS, ROHN TOWERS OR VARIOUS CRANKUP
TOWERS TO USE FOR EMERGENCY COMMUNICATION AND
FIELD DAY.

IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL

GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A

WORTHY CAUSE.

EMAIL AND LET US KNOW WHAT YOU HAVE!

THANKS IN ADVANCE

5897. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 21:56:40 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <brap6s$4l2e$1@news3.infoave.net>
Source record: 103264

When putting up an antenna, do you use different Zo coax for 2 Vs. 80 meters
to account for frequency change?

The Zo is constant for all practical purposes below Giga Hz freqs.

"JDer8745" <jder8745@aol.com> wrote in message
news:20031210132253.26181.00000449@mb-m15.aol.com...
> Someone sed,
>
> "Reg, G4FGQ observed on these pages long ago that an ordinary ohmmeter
would
> read Zo if connected to the end of an infinite line. He is right of
course."
>
> But the Zo of a line varies with frequency. How will the "ordinary
ohmmeter"
> do the job at, say, 100 kHz?
>
> 73 de jack

5898. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 22:02:22 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <braphk$4iu4$1@news3.infoave.net>
Source record: 103265

As most of us do not transmit in the audio range, your own data shows a range of 50 to 47.8 Ohms for normal ham use. Close enough for government work, at least as far as I am concerned..

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:br9m0u$8c3$1@titan.btinternet.com...
> >
> > "Reg Edwards" wrote in message
> > > Zo of ALL real, ordinary, transmission lines changes versus frequency
> over
> > a
> > > very wide frequency range.
> > >
> > > Zo ranges over lots of thousands of ohms at a few cyles of seconds,
> > > thousands of ohms at power frequencies, hundreds of ohms at audio
> > > frequencies, and from tens to a few hundred ohms from 100KHz up to as
> many
> > > GHz as you like.
> > > ---
> > > Reg.
> > >
> > >
> >
> > Are we talking the same thing for Zo ? That a piece of say rg-8 (
> whatever
> > they want to call it now) that is 50 ohm coax is not 50 ohms over its
> normal
> > operating frequency range ?
> >
> ============================
>
> What is your normal operating frequency range?
>
> Here is Zo typical of cable similar to RG-58 versus frequency.
>
> Nominal Zo = 50 ohms.
> Degrees = Angle of Zo.
>
> Freq Zo Degrees
> ------ ------- -------
> 10 Hz 3000 -45.0
> 100 Hz 950 -44.9
> 1000 Hz 301 -44.1
> 10 KHz 97 -36.4

> 100 KHz 54.2 -10.1
> 1 MHz 50.0 -2.6
> 10 MHz 48.4 -0.84
> 100 MHz 48.0 -0.26
> 1 GHz 47.8 -0.08
>
> Superimposed on the above Zo vs F characteristics are manufacturing
> reel-to-reel variations of 2 or 3 percent.
> ----
> Reg, G4FGQ
>
>

5899. Re: Quotation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 22:04:44 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031211170444.21697.00000421@mb-m23.aol.com>
Source record: 103266

>
>No offense intended Yuri, but if you have to ask the question, you don't
>understand the concept. Think about it a while. :-)
>
>--
>73, Bill W6WRT
>
>
>
No of fence taken.
I thnik and thnik and still dnot untersdand con what?
OK, I am see-king, where is it?

BUm

5900. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 22:05:00 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <brapml$4l98$1@news3.infoave.net>
Source record: 103267

Jack, with all due respect, you need a hobby...

"JDer8745" <jder8745@aol.com> wrote in message
news:20031211102922.03883.00000683@mb-m07.aol.com...
> Someone sed:
>
> "So, the 300/75/50 ohm term, characteristic impedance, is the square root
of
> L/C"
>
> This is an *approximation* that is useful when complex arithmetic is over
the
> capability of your calculator or if the imaginary components of the
formula for
> Zo are negligible.
>
> At the usual HF through UHF ham frequencies the imaginary components are
> negligible so the approximation suffices.
>
> UNITS: 10-pF capacitor. 10-pF is hypenated when used as a modifier, i.
e.,
> adjective.
>
> Others: 10-ft pole, 5-cent cigar, 2-dollar pistol, 12-V battery, 500-mile
> track.
>
> 73 de Jack, K9CUN

5901. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 22:38:12 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <ylydncVEP54qcEWiRVn-iw@ctc.net>
Source record: 103268

> > "Reg Edwards" wrote in message
> > > Zo of ALL real, ordinary, transmission lines changes versus frequency
> over
> > a
> > > very wide frequency range.
> > >
> > > Zo ranges over lots of thousands of ohms at a few cyles of seconds,
> > > thousands of ohms at power frequencies, hundreds of ohms at audio
> > > frequencies, and from tens to a few hundred ohms from 100KHz up to as
> many
> > > GHz as you like.
> > > ---
> > > Reg.
> > >
> > >
> >
> > Are we talking the same thing for Zo ? That a piece of say rg-8 (
> whatever
> > they want to call it now) that is 50 ohm coax is not 50 ohms over its
> normal
> > operating frequency range ?
> >
> ============================
>
> What is your normal operating frequency range?
>
> Here is Zo typical of cable similar to RG-58 versus frequency.
>
> Nominal Zo = 50 ohms.
> Degrees = Angle of Zo.
>
> Freq Zo Degrees
> ------ ------- -------
> 10 Hz 3000 -45.0
> 100 Hz 950 -44.9
> 1000 Hz 301 -44.1
> 10 KHz 97 -36.4
> 100 KHz 54.2 -10.1
> 1 MHz 50.0 -2.6
> 10 MHz 48.4 -0.84
> 100 MHz 48.0 -0.26
> 1 GHz 47.8 -0.08
>
> Superimposed on the above Zo vs F characteristics are manufacturing

> reel-to-reel variations of 2 or 3 percent.
> ----
> Reg, G4FGQ
>

Think I must have missed the point about REAL transmission lines. Trying to keep up with too many discussions at one time. I was thinking of the simple formular where frequency is not mentioned. I do know about the problem of making the coax exectally the same all the time where even in the same reel of coax you can get into suckout problems due to slight variations in the coax.

>

5902. Re: AMATEUR RADIO GEAR WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 22:43:58 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <w4ydnWmOrrKnbkWiRVn-uA@crocker.com>
Source record: 103169

"N2ION" <n2ion@aol.com> YELLED AT THE TOP OF HIS LUNGS:
news:20031211165136.01603.00000450@mb-m20.aol.com...

<LOUD SNIP>

If i buy you a new keyboard will you stop yelling?

5903. Re: "Fluxuated" Still Around?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 23:09:18 UTC
From: Day Brown <daybrown@hypertech.net>
Message-ID: <3FD8F91E.3CD05FA3@hypertech.net>
Source record: 103260
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

Fluxuated wrote:
>
> What about you getting your Auntie Pregnant?
>
> Lets hear something constructive from your pie hole?
>
> "Alex" <Alex@aol.com> wrote in message
> news:N5mdnY_rhNhaMiOiRVn-iQ@comcast.com...
> > I haven't seen that moron "Fluxuated" post here for a while. Jeez what a
> > dumb ass!
> >
> > Well I guess that anyone that "doing" his sister, can't be too bright!
Well, have you seen the video of adult actresses whose physical
attributes were altered by morphing software so that she looks
pubescent? Izzat child porn? No child was used to make it. It comes from
Copenhagen, where the age of consent is 12. They dont think it is child
pornography, so why are they wrong? By what standard of measure is their
culture in worse shape than ours? There must be some...

-----== Posted via Newsfeed.Com - Unlimited-Uncensored-Secure Usenet News==----
http://www.newsfeed.com The #1 Newsgroup Service in the World! >100,000 Newsgroups
---= 19 East/West-Coast Specialized Servers - Total Privacy via Encryption =---

5904. Re: New program: RHO_SWR.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 23:13:49 UTC
From: pez <studentant@hotmail.com>
Message-ID: <bratnufll1@nic.grnet.gr>
Source record: 103170

Dear Mr. Reg Edwards,

Firstly, I have to correct myself:
Definitely, RHO_SWR does not supersedes
the COAXPAIR and RJELINE3a programs.

Secondly,
in what is following,
which seems to me as a correction to an obviously misprint,
take once again into account please,
that English is not my native language...

Program: RHO_SWR.EXE/ 49,576 bytes

"M(ore notes)"

Lines from the Top of the 1st M(ore notes) Screen:
---
[2] beteen -to- between
[2] permi- -to- perm-
[3] ttivity -to- ittivity

Lines from the Bottom of the 1st M(ore notes) Screen:
---
[2] indication -to- indicate (?)
[2] flow -to- [be canceled as pleonasm]
[6] flowing -as- [above 2]
[8] flowing -as- [above 2]
[9] flowing -as- [above 2]

Lines from the Top of the 2nd M(ore notes) Screen:
---
[2] value. -to- [be canceled as it is repeated from the end of the previous line]
[4] nepers -to- nepers/mile (?)
[5] radians -to- radians/mile (?)

Lines from the Bottom of the 2nd M(ore notes) Screen:
---
[6] of -to- [be canceled as it is repeated from the end of the previous line]

Finally,
could you tell me please what is the meaning of "TLI"?

Sincerely yours,

pez
SV7BAX
TheDAG

5905. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 23:19:45 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3FD8FB11.67DA2499@shaw.ca>
Source record: 103171

w4jle wrote:
>
> Jack, with all due respect, you need a hobby...
>

He was just getting his 2-cents worth in! :-)
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5906. Re: MAKE 5000.00 PER WEEK

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-11 23:21:19 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <3FD8FB6F.963DF974@shaw.ca>
Source record: 103172

ShowTimeHydros wrote:
>
> I REALLY GET BACK GOOD MONEY USING THE LAW OF GIVING AND RECEIVING!
> I found this on a bulletin board and decided to try it....

Yeah! Well maybe as soon as I get my shack squared away!

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my very special website at http://members.shaw.ca/finkirv4/
Visit my CFSRS/CFIOG ONLINE OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

5907. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 02:02:29 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <Vk9Cb.509255$Tr4.1410946@attbi_s03>
Source record: 103173

There's no such thing. It's going to be a bit of work and money to do
anything effective.
"Mohd Nazry Bin Mustapa" <nazry1@myjaring.net> wrote in message
news:br953s$25c$1@news6.jaring.my...
> Anyone know how to make a simple lightning arrester (Homebrew) that really
> work in case of lightning.
>
>

5908. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 02:06:03 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <fo9Cb.313114$Dw6.1063394@attbi_s02>
Source record: 103174

Where do you get a one megavolt capacitor?

"K7JEB" <k7jeb.remove_this@qsl.net> wrote in message
news:Y52Cb.36$J77.23@fed1read07...
>
> >> "Mohd Nazry Bin Mustapa":
> >> Anyone know how to make a simple lightning arrester
> >> (Homebrew) that really work in case of lightning.
>
> > "David Robbins":
> > the most basic one is a spark gap. these have been
> > used since the first days of long telegraph lines.
> > just position two sharp pointed metal pieces a small
> > distance apart, connect one side to the cable and the
> > other to a good ground. you want the distance as small
> > as possible, but wide enough so your normal transmission
> > power doesn't create an arc.
>
> The usual practice for radio antennas is to place
> a series capacitor downstream (towards the radio
> set) from the spark gap to dispense with the DC
> and low-frequency components of the lightning strike.
>
> In crude, fixed-pitch ASCII art, it would look like
> this:
> | |
> Antenna >---------+--------| |-----------> To Radio
> | | |
> SPARK V Blocking
> GAP ^ Capacitor
> |
> Ground >---------+---------------------->
>
> The size of the capacitor is a compromise between not
> disrupting the RF circuitry and coupling the low-frequecy
> energy from the strike into the radio. Making the
> capacitor reactance in the order of a few ohms at the
> lowest operating frequency generally should work for
> 50-ohm coax.
>
> Jim, K7JEB, Glendale, AZ
>
>

5909. FS: TRI-EX MANUAL

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 02:19:40 UTC
From: dt <NOSPAM@nospam.net>
Message-ID: <3d9itv4ev078ithgpn5ijpevv5fk3501rm@4ax.com>
Source record: 103175

FS: TRI-EX MANUAL

Not quite an antenna, but...

Service manual for a Tri-EX LM-470D motorized 72' tower.

Covers specs, installation, base, tilt over assembly, motor,
control box, accessories, maintenance, recbaling instructions, parts
list, etc. It is approximately 70 pages in good condition.

$15, postpaid.

73
Dan (K0DAN)
NOSPAMk0dan@arrl.net

5910. Re: Fractals (was current/inductance discusion)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 03:40:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312111940.122ba78e@posting.google.com>
Source record: 103176

k4wge@arrl.net (k4wge) wrote in message snip

the first reported fractal small
> antenna that improves the features of some classical antennas in terms
> of bandwidth, resonance frequency and radiation resistance. Whether
> such antennas are bounded to the fundamental limits on small antennas
> is still a topic under investigation.

Sir, I found this interesting reading especially the fact that Fractals
are now made commercialy
.However the last sentence above above peeked my interest,
What exactly is meant in its entirety the following statement
" the fundermental limits on small antennas"?

TIA
Art

>
> 1998. The Fractal Team from the Electromagnetics & Photonics
> Engineering group (UPC), in cooperation with FractusTM the Fractal
> AntennasTM company from the Sistemas Radiantes F.Moyano S.A. group,
> develope the first commercial multiband fractal shape antennas for GSM
> + DCS cellular phone systems.

5911. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 04:12:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312112012.57296bf3@posting.google.com>
Source record: 103177

gwatts <gwatts@frontiernet.net> wrote in message
news:<3FD773F7.9000506@frontiernet.net>...
> Fjx1 wrote:
> > I need to put a hole in the house through new vinyl siding and would like to
> > know if anyone has a clean neat way to do it. Do they make feedthroughs for
> > cable as big as RG8? Any suggestions ?
>
> I avoided the siding entirely by going in a crawl space vent and up
> through a closet floor with 2 inch PVC pipe, using 45 deg bends with
> straight pieces in between so I don't have to fight RG-8 through 90 deg
> bends. I have five runs of RG-8 diameter through there, I might be able
> to squeak (literally) another through if I use a lot of soap.
>
> I should have used 3 inch. Or 4. 6.
>
> W8LNA

Yes I am glad I put a 4inch dia pipe thru the Portland stone on the
house.
After you put in a few coax lines, rotor cable and various control
lines for experiments it starts to get full. I also use a 90 degree
elbow on the outside which is just pushed on and the elbow has
insulation foam sprayed inside to keep the damp and insects out
Art

5912. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 04:48:48 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <QMbCb.505587$HS4.3932921@attbi_s01>
Source record: 103178

Simon wrote:
> Thanks alot for your quick replies guys,
>
>SNIP

In an ideal situation I'd like to get the
> transmission beam down to 1 degree, 10 degrees might be acceptable I'm
> not sure.
>

Simon, About 10 years ago I worked on a 1 degree beamwidth antenna [gain equals something around 45 dB] for a satellite ground station. It was 12 feet in diameter and the frequency range was 24 GHz!!

A simple scaling of that dimension yields 12*(24,000/433)= 665 feet diameter!!

Are you sure you really want/need that narrow a beamwidth or an antenna with more than 40 dB gain?

DD, W1MCE

5913. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 05:04:12 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312112104.49156b81@posting.google.com>
Source record: 103179

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
>
> Scroll on down. It's four 1/2WL array sections separated by a "phase
> reversing coil".

I see a diagram, but no pattern plots or current distribution plots.
I'm curious to see how your's compared to mine. So far, after juggling
many different coil inputs, about the best gain I can get broadside is
3.54 dbi. "three 1/2 wave elements set end to end as a single wire
with the coils in the proper places on the wire ends" With separate
sources, I can get nearly 5 dbi. One note...End to end 1/2 waves is
not an optiumum spacing for max gain...
>
> > I tried modeling a couple of
> > antennas myself using multiple 1/2 wave elements and inductance as
> > phasing coils just to test this out. But I used three elements instead
> > of four. I do not see any major change in current distribution when
> > compared to feeding all three with three separate sources.
>
> Turn on the <C>I feature, display the current phase, and you will
> see the difference. With EZNEC's lumped coils, the currents in the
> outside sections are 180 degrees out of phase with what they need
> to be.

I wasn't using eznec...
>
> > But I do see a bit less gain with the lumped inductance version, and
> > not quite as tight a pattern. This *might* be a point of error, but
> > I'd have to look more carefully into that.
>
> When you turn on the 'display current phase' feature, you will
> see the difference.

Again, wasn't using eznec, but I looked in eznec for that feature and
couldn't find it. Is it in the demo version?
The currents in each 1/2WL sections are supposed
> to be in phase. With EZNEC's lumped coils, they are out of phase no
> matter what coil reactance is chosen.

Dunno, mine seem to be fairly well in phase. But not as good a
pattern or as much gain as using separate sources and elements. But
being as the overall current distribution seems little changed either
way, I'm not going to speculate on the reason at this point. With the
separate source antenna, I placed the elements as close together as
possible in order to be close to the loaded version in total length.

That's why there's more gain
> using multiple sources. The errors are minimized using multiple sources.

This is quite possible. But I still don't think this would cause noticable error when modeling short coil loaded antennas, or arrays where the coil didn't act as a phasing device. Surely not a short mobile whip. I doubt even with complex arrays if all the coils are for loading purposes only. Sure, there may be some error, but not much anyone can do about it, unless they design a new modeling engine. I would think any error would be a db or less in most cases. Not really worth worrying about. Or to me anyway...:/ When phasing elements, I prefer separate sources anyway. And when designing mobile antennas, I don't model them.
I calculate in terms of efficiency. The appx pattern and current distribution is a given...
Seriously speaking...I think you can take Reg's vertload program, and get as close as you would ever need to get as far as designing a mobile whip, or short loaded vertical. It will tell you the best appx place for the coil, the effects of wire dia, coil dia, coil length, adding lower masts, adding upper stingers, ground loss, etc, etc, about as well as you will ever need to use for designing such an antenna. And if you feed it an accurate ground loss number, you know your appx efficiency. After farting around with it a couple of years, it seems to be pretty accurate comparing it to the real world. And it's not even zipped up... MK

5914. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 08:03:49 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <rppitv03oeh8cjj3fi4f4jf6rqmsr5a78r@4ax.com>
Source record: 103180

On Wed, 10 Dec 2003 19:28:57 GMT, gwatts <gwatts@frontiernet.net>
wrote:

>Fjx1 wrote:
>> I need to put a hole in the house through new vinyl siding and would like to
>> know if anyone has a clean neat way to do it. Do they make feedthroughs for
>> cable as big as RG8? Any suggestions ?
>
>I avoided the siding entirely by going in a crawl space vent and up
>through a closet floor with 2 inch PVC pipe, using 45 deg bends with
>straight pieces in between so I don't have to fight RG-8 through 90 deg

You might find, depending on the radius that a very short straight
piece between the 45s will work better than a long one. The idea being
once you start the bend it is of the proper radius to make the second
45 as well. If the cable has to straighten and then bend again it
takes more force to pull it through.

>bends. I have five runs of RG-8 diameter through there, I might be able
>to squeak (literally) another through if I use a lot of soap.

It won't squeak with soap <:-)) If you can find some wire pulling
soap...the yucky looking yellow stuff you can darn near fill the
conduit. I'm running two LMR-400s and a RG6 through 1 1/4 emt with
lots of room to spare. The cable comes up the outside wall of the
shop, into a 16 inch 1 1/4 emt stub into a exterior box, a 90 degree
turn then through a 2" stub to an inside box a 270 degree loop and
out into a 16 foot horizontal run of 1 1/4 emt to the south, through a
sweep L to 5 feet vertical, a sweep L to an 18 foot horizontal run to
the east. http://www.rogerhalstead.com/ham_files/boatanch.htm
Applicable photos near the bottom

I think I could easily get two and quite likely 3 more LMR-400 cables
in there even though it would be snug.
I do have a couple more photos that show the first two portions of the
conduit run, but at 3:00 in the morning, I think I may wait till
tomorrow to add them..

>
>I should have used 3 inch. Or 4. 6.

The 4" is definitely easier. <:-))

Although it works well, I need to completely reorganize the cables
from the tower to the house and in the basement. I think the basement
end will be by far the easiest. Course, once I get them organized and
neat, probably nothing will work. I did that once with a contest

style station...Organized all the cables behind the desk which had individual stations set up to run 160 through 10 (before the WARC bands) and I had RF getting from one station into another. I don't think I could operate any of them without a problem. It took me two weeks to get it straightened out.

http://www.rogerhalstead.com/ham_files/cablebox.htm
shows the cables coming into the basement as well as the bulkhead with 4 of the PolyPhasers. The conduit is sealed with a "soft" expandable foam rather than the rigid stuff. It's easier to get out and puts far less stress on the cables and conduit.
>
I'd have preferred a grounded panel outside, but as the conduit comes in underground that was not an option, or at least no an easy one.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

>W8LNA

5915. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 08:14:47 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <eotitvol214hcu9rstu1numd7622bj1kjo@4ax.com>
Source record: 103181

On Wed, 10 Dec 2003 13:17:55 -0600, 'Doc <w5lz@cwis.net> wrote:

>
>
>Yuri,
> The reason I can't agree with the 5% thing is that I haven't
>measured it, not that the number is correct or not. There is
>a difference in length when using insulated/noninsulated wire,
>I just can't say exactly what that difference is.

Since the environment in which the antenna is mounted/hung influences
the resonant frequency, I've never been able to see any difference
between insulated and bare copper wire.

As the things have never come out according to the formula, "for me"
I just "cut long and trim to fit".

I put up two 75 meter half wave sloping dipoles. They were cut
identical and even used the same make and model of balun. The coax
cable was the same length (LMR-400). Both were mounted at the same
height with the ends the same distance from the tower and ran at the
same angle. One ran to the NE to within about 30 feet of some trees.
The other ran to the south west over an open yard. Both worked well,
but there was between a 50 to 75 KHz difference in the resonant
frequency. The one over the open yard being the higher.

I didn't prune them as I use a line tuner to get the full band
coverage any way.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

> Since any calculation is only going to be approximate
>(depending
>on how/where the antenna is mounted) trimming is almost always
>going
>to be required. Since that 'tweaking' would take care of the
>difference in insulated/noninsulated wire, I just haven't
>bothered
>about figuring it. If you have, then good, I don't have a
>problem
>with that...
> 'Doc

5916. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 09:58:26 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a42cb9aed3c6a51989690@news-server.socal.rr.com>
Source record: 103182
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <5Dayb.252403$mZ5.1876750@attbi_s54>, NoSpamPlease@aol.com
says...
> Why does it have to be about damn property values?

Fairly simple, actually:

If your property value increases, your equity increases. If you have
more equity, then there's more value that you can borrow against.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

5917. Re: Outwitting Home Owner Associations/Condo Associations Regarding Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 09:58:28 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a42cc8382a78612989691@news-server.socal.rr.com>
Source record: 103183
Cross-posted to: rec.radio.amateur.antenna,rec.radio.scanner,rec.radio.shortwave

In article <bqbajj$hn5$1@news1.kornet.net>, brendad@shinbiro.com says...
> For starters, most hams that put up towers with elaborate antenna systems
> would take them down when they moved (unless they became a silent key),
> because these things are not petty investments, they cost a lot of money.
> Some installations cost more than a new mid-sized car.

True. I've seen some pretty elaborate antenna farms, even here in
suburban Orange County, CA -- some even in my neighborhood. (Only part
of our neighborhood is condos, the rest being single-family residences
(houses), and the latter have some pretty nice antenna installations.)

> The installation of
> the tower itself is held to much higher standard by law than the house
> itself is.

Sad but true.

> And again, unlike someone who puts up an old car on blocks, or paints their
> home in rainbow glow paint, hams perform a public service. There currently
> exists a rule within the FCC that disallows municipalities preventing
> amateur operators from erecting antennas, and a similar rule for CC&R's is
> in the works.

At least, we hope it's still "in the works." How long has that been
rattling around the halls of Congress now, two years? Any bets on which
comes on the scene first in the US: a code-free amateur radio service,
or a PRB-1 bill to cover CC&Rs?

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

5918. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 09:58:31 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a42cdd0d5a717cf989692@news-server.socal.rr.com>
Source record: 103184

In article <YXKyb.54773$0L4.1901664@phobos.telenet-ops.be>,
wilynospam@vt4.net says...
>
> I just started on hf bands and i usiing now a FD4 from Fritzel and I hear
> all goods things about the G5RV.
> Is that so, works it's also great on 10 and 15m?
> I have not to much space for a full size beam but a mini beam works also
> good I think. But most of beginners started with a wire like a G5RV???
> If I buy a G5RV is that with a Balun or without a balun what's the best??

I have a "shorty" G5RV -- the full-length version goes to 80m, and
there's one for 160, but mine only goes 40m to 10m -- which does a
fairly decent job. It's not mounted in the best of places, due to the
need for me to be somewhat stealthy at my condo. I also run only QRP
power levels, mainly to mitigate the risk of interference complaints
among the neighbors, and have managed to make more than my share of
contacts using 5w on phone from 20 to 10 meters during contests like the
recent ARRL Sweepstakes. Hopefully conditions (and available operating
time) will be good for 10m this month for the ARRL 10m Contest.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

5919. How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 14:19:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brcios$3qd$1@sparta.btinternet.com>
Source record: 103185

With millions of other subscribers world-wide, I am receiving as many as 250 spam messages daily, many generated by viruses in other people's computers.

99 perecent of this attrocious rubbish originates in the United States of America, the land of the free.

Can't you get Bush to do something about it?

I can do no better than speed-read the subject lines and dump everything unless the subject matter is OBVIOUSLY something of interst to me.

SWR or Old Wives is OK

Female or male teenagers at my time of life are not.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

5920. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 14:20:58 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FD9D0AC.19C868B0@uwe.ac.uk>
Source record: 103186

K7JEB wrote:
>
> > | |
> > Antenna >---------+--------| |-----------> To Radio
> > | | |
> > SPARK V Blocking
> > GAP ^ Capacitor
> > |
> > Ground >---------+---------------------->
>
> PS: The breakdown voltage of the capacitor should be
> 10 times that of the spark gap. For a 1KV spark gap,
> that would give 10 KV.
>
> JEB

2uF at 10kV, quite a capacitor. That would be 6 ohms or so on topband. As I understand it, there is nothing that can work if a direct lightening strike occurs. We are talking megavolts and thousands of amps. Way beyond anything an amateur could build. The best we can hope for is to dissipate charge build up on the aerial and ensure that there is no more than a kilovolt or so at the input to the rig caused by the (field) effects of a nearby strike. A spark gap that can conduct a lightening strike would be the size of a small truck.

The only way to make sure you have a working station after a lightening strike on your aerials is to take out good insurance.

vy 73

Andy, M1EBV

5921. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 14:49:09 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FD9D746.B5ABEBC1@uwe.ac.uk>
Source record: 103187

Reg Edwards wrote:
>
> > Ohm is a name of a person.
> >
> ========================
>
> During which era did Mr Inch live?

Wasn't he at Cambridge with Furlong,
Yard, Chain and a Polish guy called
Rod Perch? I think that was the group
that first discovered length, or was
it distance? ;-)

(Actually derived from Latin, uncia, an ounce.)

In fact the SI units don't have a fixed rule for
capitalisation. When the unit is spelt out it should
not be capitalised - ohm, kelvin, farad - to avoid
confusion with the scientist. The abbreviation or
symbol should be capitalised for all those named
after people and for litre - Hz, L, V. The ohm is
normally written with a capital omega or written
in full as 'ohm'. Ohm at the beginning of a sentence
is capitalised.

See http://www.poynton.com/PDFs/Writing_SI_units_(USL).pdf

vy 73

Andy, M1EBV

5922. Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 15:04:19 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <i3mjtvco842e1tpukca74nno8sdsh979st@4ax.com>
Source record: 103188

Is there a general rule as to the optimum way copper should be
distributed on a longwire antenna for maximum propagation? E.g.,
should the first half be heavier gauge than the second half? How much
heavier?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

5923. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 15:37:36 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031212103736.15398.00000823@mb-m04.aol.com>
Source record: 103189

>
>Since the environment in which the antenna is mounted/hung influences
>the resonant frequency, I've never been able to see any difference
>between insulated and bare copper wire.
>
>As the things have never come out according to the formula, "for me"
>I just "cut long and trim to fit".
>

Nothing wrong with that, trimming and fine tuning to accomodate the
surroundings.

>I put up two 75 meter half wave sloping dipoles. They were cut
>identical and even used the same make and model of balun. The coax
>cable was the same length (LMR-400). Both were mounted at the same
>height with the ends the same distance from the tower and ran at the
>same angle. One ran to the NE to within about 30 feet of some trees.
>The other ran to the south west over an open yard. Both worked well,
>but there was between a 50 to 75 KHz difference in the resonant
>frequency. The one over the open yard being the higher.
>

This is 1.3% difference, which I would attribute to capacitance from the trees,
ground variation or something in the vicinity. I would guess that the one
closer to the trees was lower in frequency. I tune my 160 m mobile L loaded
antenna by changing the loading wire slope or distance of the end from the
hood.

>I didn't prune them as I use a line tuner to get the full band
>coverage any way.
>

That is fine. The only problem with "plastic" shortening is when you are trying
to build say quad multielement antennas and those 5% can be really annoying. It
is better to know about it and compensate before taking the knife to operate on
the wires. Regular EZNEC can not accomodate "plastic" wires and it is
dissapointing to go through the effort of putting the monster up, only to find
it resonates in the CB band instead of middle of 10m.

>Roger Halstead (K8RI & ARRL life member)

Yuri, K3BU

5924. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 15:38:16 UTC
From: richardharrison@webtv.net
Message-ID: <25751-3FD9E0E8-6@storefull-2317.public.lawson.webtv.net>
Source record: 103191

Mohd Nazry Mustapa wrote:
"Anyone know how to make a simple lightning arrester (Homebrew) that really work in case of lightning?"

I`ve found shorted (folded) antennas are less susceptible to lightning overload than are open-circuit antennas.

A folded VHF monopole fed by coax and well grounded at the tower top is nearly immune to lightning.

Coax, inside, rejects common-mode propagation of lightning energy. Coax, outside, needs good grounding to make a good path around (bypass for) protected equipment.

The equipment needs direct low-impedance grounding so that most surge energy is dropped across the coax, not the equipment.
Coils of extra coax may be used to raise the impedance of the outside of the coax.

Equipment is still vulnerable to excess differential voltage on the power wires. Perhaps, excess common-mode voltage too. Manufacturers make brute-force L-C pi-network low-pass filters for each power wire connected to the equipment. These can be homebrewed if desired. They are important in delaying the surge on the power source lines to give time for the arresters time to spark across, giving protection to the equipment. Arresters need to be fast acting and placed to protect line-to-line and line to ground. These low-pass filters and arrestors are suitable for power and control wires, not for antenna wires in most cases. I`ve used lots of gas tubes on audio and control lines but never on a coax cable where I believe they are superfluous.

I`ve used tower lighting RF chokes for the inductor in the low-pass powerline filters to get the needed current carrying capability, and various breakdown devices on the input and outpur of the filter. MOV`s work well. They are fast and cheap but may require replacement at times.

Power lines are susceptible to dangerous surges. Filters reduce the bandwidth of energy that must be handled by the suppressor, just as the folded antenna or short-circuit 1/4-wave stub across an antenna limits the bandwidth of lightning energy that it has to accept.

Lightning and other related surges are just enormous noises. They can be suppressed with the same techniques used with weaker noise. The equipment must be sturdy to endure a lightning strike. Arresters may be compared to sturdy noise clippers.

Best regards, Richard Harrison, KB5WZI

5925. Re: Current in antenna loading coils controversy (long)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 15:39:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fd9e153_2@127.0.0.1>
Source record: 103190

Mark Keith wrote:
> I see a diagram, but no pattern plots or current distribution plots.
> I'm curious to see how your's compared to mine. So far, after juggling
> many different coil inputs, about the best gain I can get broadside is
> 3.54 dbi. "three 1/2 wave elements set end to end as a single wire
> with the coils in the proper places on the wire ends" With separate
> sources, I can get nearly 5 dbi. One note...End to end 1/2 waves is
> not an optiumum spacing for max gain...

That difference in gain is because one cannot model a phase reversing
coil with a lumped inductive reactance. A workaround is needed and
yours is to use multiple sources. Mine is to use inductive stubs.

> Again, wasn't using eznec, but I looked in eznec for that feature and
> couldn't find it. Is it in the demo version?

I'm using DOS EZNEC 2.0 but I assume 3.0 has the same features. On
2.0 a <Ctrl-I> changes the current display from magnitude only to
magnitude and phase.

> Dunno, mine seem to be fairly well in phase. But not as good a
> pattern or as much gain as using separate sources and elements. But
> being as the overall current distribution seems little changed either
> way, I'm not going to speculate on the reason at this point.

That's the point. The current distribution is NOT the same either way.
I'm pretty sure you are displaying the current magnitude, not the
current phase. Given that the EZNEC lumped inductive reactance cannot
reverse the phase, the phases will always be 180 degrees apart in
adjacent 1/2WL sections and will not result in maximum gain or
minimum beamwidth.

> This is quite possible. But I still don't think this would cause
> noticable error when modeling short coil loaded antennas, or arrays
> where the coil didn't act as a phasing device.

If I remember correctly, all you asked for was an example where EZNEC
didn't provide the correct results. Antennas using phasing coils is
that example. The lumped inductive reactance will not model a phasing
coil. It's not a big deal since there exist workarounds. I'm going to
try a parallel inductance and capacitance and see what happens to the
phase of the currents in EZNEC.
--
73, Cecil, W5DXP

5926. Anyone have a secret to finding that Free tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 16:42:23 UTC
From: "R. Scott" <washingtonham@yahoo.com>
Message-ID: <3FD9EFEF.371701DE@yahoo.com>
Source record: 103194

Thought I would bring this up just for giggles. As I try to save up
for tower plus shipping plus yada yada, I got to thinking about it. HOW
does on find the free ones. Ive ran into and this is no lie 10 guys
over
the last 5 or so years that picked the towers they have for litteraly
FREE.

I asked what they did and most said they just came across it.

Last guy I talked too, a county hunter in Idaho (as I was giving out
counties)
when I stopped by his house for a hand shake took me to see his NEW
tower.

He got it from a ham in Nevada. COST, The price to rent a trailer and
pay
for gas and meals for his friend to tow it down and pick up the tower.

So, How does one find these :).

Talk about a different subject :D :D

Rick N7HJ

5927. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 17:53:22 UTC
From: pez <studentant@hotmail.com>
Message-ID: <brcvb6uq1@nic.grnet.gr>
Source record: 103192

Dear Mr. Cecil Moore,

I am terribly sorry but
I am not so sure that
I am in position to follow your argument,
except perhaps that
the equation

| ...
| |b1|^2 = |s11*a1|^2 + |s12*a2|^2 + 2*s11*a1*s12*a2
| ...

needs a modification to
the third term on its right hand side,
in which,
instead of

2*s11*a1*s12*a2

we have to set

2*Re{[s11*a1]*Conjg[s12*a2]}

Therefore,
I can only guess that
this subtle distinction is the source of the trouble
because this is maybe due to
the sure existence of two,
after Kurokawa,
different physical meanings
for the same physical phenomenon.

And finally,
unfortunately enough,
it seems that there are
maybe more than a finite number
of possible such physical meanings
for the same physical phenomenon...

Sincerely yours,

pez
SV7BAX
TheDAG

5928. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 18:25:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fda087c_2@127.0.0.1>
Source record: 103193

pez wrote:
> Dear Mr. Cecil Moore,
>
> I am terribly sorry but I am not so sure that
> I am in position to follow your argument,
> except perhaps that the equation
>
> | ...
> | |b1|^2 = |s11*a1|^2 + |s12*a2|^2 + 2*s11*a1*s12*a2
> | ...
>
> needs a modification to
> the third term on its right hand side,
> in which, instead of
>
> 2*s11*a1*s12*a2
>
> we have to set
>
> 2*Re{[s11*a1]*Conjg[s12*a2]}

That is taken care of by the cosine of the angle between
a1 and a2. Note no magnitude bars around that term in my
equation. a1*a2 is phasor multiplication, a1*a2*cos(theta).

> Therefore,
> I can only guess that
> this subtle distinction is the source of the trouble
> because this is maybe due to the sure existence of two,
> after Kurokawa, different physical meanings
> for the same physical phenomenon.
>
> And finally, unfortunately enough,
> it seems that there are maybe more than a finite number
> of possible such physical meanings for the same physical phenomenon...

What I was trying to point out is the similarities between
Dr. Best's QEX article term, 2*sqrt(P1)*sqrt(P2)*cos(theta),
In _Optics_, Hecht's interference term 2*sqrt(I1*I2)*cos(theta),
and the above 2*s11*s12*a1*a2(cos theta) term. Seems to me, they
are all interference terms. If (0 deg <= theta < 90 deg) then the
interference is constructive. If (90 deg < theta <= 180 deg) then
the interference is destructive.
--
73, Cecil, W5DXP

5929. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 19:00:53 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FDA1065.F0CFD1E7@uci.edu>
Source record: 103196

Cecil Moore wrote:
> What I was trying to point out is the similarities between
> Dr. Best's QEX article term, 2*sqrt(P1)*sqrt(P2)*cos(theta),
> In _Optics_, Hecht's interference term 2*sqrt(I1*I2)*cos(theta),
> and the above 2*s11*s12*a1*a2(cos theta) term. Seems to me, they
> are all interference terms. If (0 deg <= theta < 90 deg) then the
> interference is constructive. If (90 deg < theta <= 180 deg) then
> the interference is destructive.
> --
> 73, Cecil, W5DXP

(a + b) * (a + b) = a^2 + 2ab + b^2

Wow, I made my own "interference term"!

73 de jk

5930. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 19:03:34 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fda1128_2@127.0.0.1>
Source record: 103195

Reg Edwards wrote:
> I can do no better than speed-read the subject lines and dump everything
> unless the subject matter is OBVIOUSLY something of interst to me.

Reg, does your software involving loading coils take distributed
coil capacitance into account? Is there some rule of thumb involved?
--
73, Cecil, W5DXP

5931. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 19:45:42 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <GVoCb.37962$fJ1.16124@newssvr29.news.prodigy.com>
Source record: 103197

"Reg Edwards" wrote in message
> With millions of other subscribers world-wide, I am receiving as many as
250
> spam messages daily, many generated by viruses in other people's
computers.

> 99 percent of this atrocious rubbish originates in the United States of
> America, the land of the free.

> Can't you get Bush to do something about it?

Very Funny! In the States most of the Spam comes from your side of the
pond, or from .TW or China! They relay it through someone else!
Blocking helps some, but nothing works for all if it!

5932. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 20:04:06 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fda1f92_2@127.0.0.1>
Source record: 103198

Jim Kelley wrote:

> Cecil Moore wrote:
>>What I was trying to point out is the similarities between
>>Dr. Best's QEX article term, 2*sqrt(P1)*sqrt(P2)*cos(theta),
>>In _Optics_, Hecht's interference term 2*sqrt(I1*I2)*cos(theta),
>>and the above 2*s11*s12*a1*a2(cos theta) term. Seems to me, they
>>are all interference terms. If (0 deg <= theta < 90 deg) then the
>>interference is constructive. If (90 deg < theta <= 180 deg) then
>>the interference is destructive.
>
> (a + b) * (a + b) = a^2 + 2ab + b^2
>
> Wow, I made my own "interference term"!

Yep, assuming those are phasor voltages normalized to the
square root of Z0, you sure did. That's one of the advantages
of an s-parameter analysis. With the voltages normalized to
the square root of Z0, the square of any voltage equals
V^2/Z0 = power.

a^2 would be P1, b^2 would be P2, and 2ab would equal to
2*sqrt(P1)*sqrt(P2)*cos(theta) [phase angle between a and b]
--
73, Cecil, W5DXP

5933. Re: Fractals (was current/inductance discusion)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 20:07:06 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312121207.7c3583f5@posting.google.com>
Source record: 103199

k4wge@arrl.net (k4wge) wrote in message news:<7b671b4e.0312120640.6a17a344@posti

Thank you for that. Hopefully I can get to them via the internet
as I am relly looking forward to reading about small antenna limits
and what they are based upon
Best regards
Art

ng.google.com>...
> aunwin@insightbb.com (Art Unwin KB9MZ) wrote in message
news:<85ed38d.0312111940.122ba78e@posting.google.com> What exactly is meant in its
entirety the following statement
> > " the fundermental limits on small antennas"?
> >
> > TIA
> > Art
>
> A couple more links on limits:
>
> October 2003: Presentation on fundamental limits and tradeoffs between
> the physical size of an antenna and its gain, efficiency and bandwidth
>
> http://www.antennasonline.com/ast_conf_program.htm
>
>
> Are fractal dipolar radiators subject to the same fundamental limits of
> Euclidean ones?
>
> http://hawk.iszf.irk.ru/URSI2002/GAabstracts/papers/p0908.pdf
>
>
> Other links:
>
> Article about fractal and other miniature antennas --
>
> http://www.az-ww.com/2003pdfs/Tsaipresentation2003.pdf
>
>
> An amusing caution regarding patents --
>
> http://www.cst.de/company/news/press/02_press/applied_cover_10_02.pdf
>
>
> Here is another view of patents for fractals --
>

> http://www.elektroda.pl/eboard/ftopic12305.html

5934. Re: Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 20:16:55 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1a43ec45fa2c59cf989741@newsstand.cit.cornell.edu>
Source record: 103200

In article <i3mjtvco842e1tpukca74nno8sdsh979st@4ax.com>,
cprstn54zz@att.net says...
> Is there a general rule as to the optimum way copper should be
> distributed on a longwire antenna for maximum propagation? E.g.,
> should the first half be heavier gauge than the second half? How much
> heavier?
>
> Ken KC2JDY
>
I looked into this a couple of years ago. There are two factors;
DC ohmic resistance and RF skin effect. I found three different
huristic formulas for RF skin effect in ARRL handbook, ITT Radio
Engineers Hndbk and a book I found in the Cornell Engineering Library
stacks. They agreed within a factor of 2^-2. The numbers I ran
indicated that for power >1 kw and Freq >30 mhz 16 guage AWG harddrawn
stranded would outperform 14 gauge solid or copperweld except for
tensile strength and was all the copper it would be economic to use.
Between 10 Mhz and 50 Mhz the use of tubing gives mechanical design
advantages but doesn't gain you a lot of electrical performance. The
higher the freq the more significant skin effect becomes. For long
antenna wires at low freq the tensile strength issue could be more
important than skin effect indicating it would be better to use quality
copperweld or solid harddrawn. 17 guage AWG copperweld electric fence
wire performs badly. It's very cheap, but the copper plating depth is
shallower than the skin effect depth and the steel core is grainy,
brittle, and rusts thru quickly at any stress fracture.
In theory the gauge of the wire could be heavier at current nodes
on the antenna, but in practice I doubt it would be worth the trouble to
join sections of different gauges. I certainly wouldn't want to bother
with a tapered wire. ;-] 73 KC2LVQ

5935. Re: Anyone have a secret to finding that Free tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 20:48:55 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fda2c90_3@news1.prserv.net>
Source record: 103201

1. Look for small businesses who have abandoned their 'dispatch' radio systems for cell phones or leased trunking gear.

2. Look for simply abandoned towers. There is a huge 160 foot self supporting tower, which would take a couple hundred dollars of crane time and a long trailer to remove, sitting about 5 miles from my house. My wife will not allow me to contact the new property owners, but I suspect that mentioning the word liability to them would get me the tower for the taking. Apparently it was erected by someone for an independent paging site just before cellular hit, but the base and hut are now overgrown with trees to the point that entry into the fence is literally impossible without a chain saw.

3. Check QST for silent keys in your vicinity.

4. Look for cable TV head ends which have been rendered moot by satellite and fiber.

--
Crazy George
Remove N O and S P A M imbedded in return address
"R. Scott" <washingtonham@yahoo.com> wrote in message
news:3FD9EFEF.371701DE@yahoo.com...
> Thought I would bring this up just for giggles. As I try to save up
> for tower plus shipping plus yada yada, I got to thinking about it. HOW
> does on find the free ones. Ive ran into and this is no lie 10 guys
> over
> the last 5 or so years that picked the towers they have for litteraly
> FREE.
>
> I asked what they did and most said they just came across it.
>
> Last guy I talked too, a county hunter in Idaho (as I was giving out
> counties)
> when I stopped by his house for a hand shake took me to see his NEW
> tower.
>
> He got it from a ham in Nevada. COST, The price to rent a trailer and
> pay
> for gas and meals for his friend to tow it down and pick up the tower.
>
>
> So, How does one find these :).
>
> Talk about a different subject :D :D

>
>
>
> Rick N7HJ

5936. Re: Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 21:42:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brdcnkfmc1@sparta.btinternet.com>
Source record: 103202

> Is there a general rule as to the optimum way copper should be
> distributed on a longwire antenna for maximum propagation? E.g.,
> should the first half be heavier gauge than the second half? How much
> heavier?
>
==========

There is only one general rule. The wire MUST be thick enough to withstand the longitudinal tension due to its own weight and the amount of sag in the middle. Otherwise propagation will suddenly cease.

Tapered copper wire, to match diameter to the current distribution along antenna wires (one band only), is available only by special order for space exploration and defence purposes. If it WAS available, for a given amount of copper, the improvement in signal strength would amount to less than 1/140th of an S-unit. The same improvement could be achieved with an enormous cost saving just by changing wire gauge from 18 to 14 awg.

Reg, G4FGQ

5937. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 22:17:36 UTC
From: pez <studentant@hotmail.com>
Message-ID: <brdeq6$h5u$1@nic.grnet.gr>
Source record: 103203

Dear Mr. Cecil Moore,

I think now I understand the notation.
If

| ...
| a1*a2 is phasor multiplication, a1*a2*cos(theta)
| ...

then s11*a1*s12*a2
is s11*a1*s12*a2*cos(phi)

which has the same meaning as the

Re{[s11*a1]*Conjg[s12*a2]}

and the only thing which remains
is the specification of the phi range of values.

I think also,
I grasped your point of view
for the existence of a deeper, common, base between
these different physical phenomena,
with which anyone hardly disagrees.

Finally,
I would ask you to tell me please,
the reference details to
Dr. Best's QEX article and Hecht's _Optics_.

Thanking you in advance,

pez
SV7BAX
TheDAG

5938. Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 22:30:13 UTC
From: Macman <golf4pints@hotmail.com>
Message-ID: <l86dneDD8_wf3EeiRVn-hQ@comcast.com>
Source record: 103204

I have the good ole sling shot wire antenna configuration. I picked up a new SWR meter, hooked it up according to the directions, and the needle didn't budge when checking SWR's.

The power indicator is fine, just not even a 'wiggle' on the needle for SWR reading.
Bum meter?

5939. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 22:43:01 UTC
From: jder8745@aol.com
Message-ID: <20031212174301.21847.00000549@mb-m19.aol.com>
Source record: 103205

Someone sed:

"So, the 300/75/50 ohm term, characteristic impedance, is the square root of
L/C"
==========

Not always!

73 de Jack, K9CUN

5940. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 23:01:14 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <WPKdnT4qe7Am1UeiRVn-sw@crocker.com>
Source record: 103206

"Macman" <golf4pints@hotmail.com> wrote in message
news:l86dneDD8_wf3EeiRVn-hQ@comcast.com...
> I have the good ole sling shot wire antenna configuration. I picked up a
> new SWR meter, hooked it up according to the directions, and the needle
> didn't budge when checking SWR's.
>
> The power indicator is fine, just not even a 'wiggle' on the needle for
SWR
> reading.
> Bum meter?
>
>
>
probably... check on a different frequency or band to be sure... or just
disconnect the antenna and see what it does.

5941. Re: Anyone have a secret to finding that Free tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 23:26:38 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fda4f0a_3@corp.newsgroups.com>
Source record: 103207

Bill Turner wrote:
> I haven't done it myself, but a friend of mine says when he sees a
> suitable one, he just walks up and asks if they want it taken down for
> free. Gets a lot of turn downs, but once in a while.....

A similar approach apparently works on single ladies. A friend of mine had a line that went something like: "How would you like to wake up in the morning in bed with me?" I asked what was his batting average with a corny line like that. He said, "About 2%." When I asked why he settled for such a low average, he said, "I ask 50 ladies per night!"
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5942. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 23:45:57 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <brdjb0$k66$1@news.service.uci.edu>
Source record: 103208

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fda1f92_2@127.0.0.1...
> Jim Kelley wrote:
> > (a + b) * (a + b) = a^2 + 2ab + b^2
> >
> > Wow, I made my own "interference term"!
>
> Yep, assuming those are phasor voltages normalized to the
> square root of Z0, you sure did.

> a^2 would be P1

I call the a^2 term Cecil. :-)

73 jk

5943. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-12 23:59:53 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <kelktv0o1lc4crt2bmli9bl28kpm4ghkrp@4ax.com>
Source record: 103209

On Fri, 12 Dec 2003 19:45:42 GMT, "Roger Gt" <Xenot@pacbell.net>
wrote:

>
>"Reg Edwards" wrote in message
>> With millions of other subscribers world-wide, I am receiving as many as
>250
>> spam messages daily, many generated by viruses in other people's
>computers.
>
>> 99 percent of this atrocious rubbish originates in the United States of
>> America, the land of the free.
>
>> Can't you get Bush to do something about it?
>
>Very Funny! In the States most of the Spam comes from your side of the
>pond, or from .TW or China! They relay it through someone else!
>Blocking helps some, but nothing works for all if it!
>

Yep, here in the US we are busy as beavers making Chinese, Korean and
Brazilian (Portugese) spam. On the other hand, the Commonwealth of
Virginia indicted two North Carolina men for violating VAs anti-spam
law. One has been arrested and extradited and the other is
surrendering.

Russ

5944. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 00:06:16 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <mrlktvkol6vh9tkft7uofmsncmll4s0c17@4ax.com>
Source record: 103211

On Fri, 12 Dec 2003 17:30:13 -0500, "Macman" <golf4pints@hotmail.com>
wrote:

>I have the good ole sling shot wire antenna configuration. I picked up a
>new SWR meter, hooked it up according to the directions, and the needle
>didn't budge when checking SWR's.
>
>The power indicator is fine, just not even a 'wiggle' on the needle for SWR
>reading.
>Bum meter?

Every HF antenna here will go 1:1 "some where" although a couple of
them require a tuner to get there. OTOH, Yes, at least on my 75 and
40 meter half waves, the 20, 15, and 10 meter tribander as well as the
AV640 on the shop will hit 1:1 some where in the desired band without
a tuner.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers
>
>

5945. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 00:24:01 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <vtkn3ut5t1fv75@corp.supernews.com>
Source record: 103210

1:1 is possible, I've seen it, but reverse the connections to be sure.
H.
NQ5H

"Macman" <golf4pints@hotmail.com> wrote in message
news:l86dneDD8_wf3EeiRVn-hQ@comcast.com...
> I have the good ole sling shot wire antenna configuration. I picked up a
> new SWR meter, hooked it up according to the directions, and the needle
> didn't budge when checking SWR's.
>
> The power indicator is fine, just not even a 'wiggle' on the needle for
SWR
> reading.
> Bum meter?
>
>
>

5946. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 02:43:44 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <A1vCb.36162$8y1.153876@attbi_s52>
Source record: 103212

Effective lightning protection can be done in the amatuer station for a reasonable cost. Most though, don't do so.
"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message news:3FD9D0AC.19C868B0@uwe.ac.uk...

> As I understand it, there is nothing that can work if
> a direct lightening strike occurs.

5947. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 02:50:58 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <s4vCb.1022$qq.381@bignews1.bellsouth.net>
Source record: 103213

Steve,
If yu can handle a full sized one 102' and you'll be very happy. Now you can build it yourself OR you can buy one from various vendors. Me I decided to "stay as true to G5RV's article" and bought a G5RV from W7FG.com as it is tru ladder line and actually is only two wires from the PL259 connector to the end. simple and it works. http://www.w7fg.com/ant.htm

G5RV 80 - 10 Meters (102 Feet)
With 31 feet of Ladder Line.....$35
Requires Coax from supplied UHF Male connector to equipment.

Lloyd KD4HTW

"Steve Silverwood" <kb6ojs@arrl.net> wrote in message news:MPG.1a42cdd0d5a717cf989692@news-server.socal.rr.com...
> In article <YXKyb.54773$0L4.1901664@phobos.telenet-ops.be>,
> wilynospam@vt4.net says...
> >
> > I just started on hf bands and i usiing now a FD4 from Fritzel and I hear
> > all goods things about the G5RV.
> > Is that so, works it's also great on 10 and 15m?
> > I have not to much space for a full size beam but a mini beam works also
> > good I think. But most of beginners started with a wire like a G5RV???
> > If I buy a G5RV is that with a Balun or without a balun what's the best??
>
> I have a "shorty" G5RV -- the full-length version goes to 80m, and
> there's one for 160, but mine only goes 40m to 10m -- which does a
> fairly decent job. It's not mounted in the best of places, due to the
> need for me to be somewhat stealthy at my condo. I also run only QRP
> power levels, mainly to mitigate the risk of interference complaints
> among the neighbors, and have managed to make more than my share of
> contacts using 5w on phone from 20 to 10 meters during contests like the
> recent ARRL Sweepstakes. Hopefully conditions (and available operating
> time) will be good for 10m this month for the ARRL 10m Contest.
>
> --
>
> -- //Steve//
>
> Steve Silverwood, KB6OJS
> Fountain Valley, CA
> Email: kb6ojs@arrl.net

5948. Re: Which aplifier will give me the strongest TV signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 03:36:30 UTC
From: numeric <numeric@att.net>
Message-ID: <2PvCb.445134$0v4.20779048@bgtnsc04-news.ops.worldnet.att.net>
Source record: 103214
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Alex Batson wrote:

> I think echos are doing me in. I have plenty of signal stregnth but it's
> quite difficult getting my HDTV receiver to think it has enough signal to
> build a picture. Let say I point to station "X", which is UHF. It's analog
> signal is OK (some snow, but viewable, but with a few ghosts or echos..)
> The same station X broadcasts HDTV from the same mast, but I can't get it.

8VSB digital transmissions can be received even in a strong multipath environment; but there is a limit and also depend upon the receiver's ability to handle multipath. It is not unusual to receive crystal clear digital pictures even though the analog signal, close in frequency and transmitted from the same tower site, is severely distorted by multipath.

Keep in mind that many digital TV broadcasters are operating under an STA (special temporary authority) from the FCC. They are not running full power and they often use a directional antenna mounted at a height much lower then for their analog signal. One digital broadcaster in my area, as an example, is running 130 watts ERP with their antenna at 89 feet. I guess that that qualifies for commercial TV QRP operation ;)

5949. Re: Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 03:57:13 UTC
From: Bibby <m.bibby@comcast.net>
Message-ID: <t6wCb.36635$8y1.156688@attbi_s52>
Source record: 103215

Reg, fantastic, you've said it as well as it could be said. But do you really need 14 awg? Wouldn't 16 awg do?

Malcolm

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:brdcnkfmc1@sparta.btinternet.com...
> > Is there a general rule as to the optimum way copper should be
> > distributed on a longwire antenna for maximum propagation? E.g.,
> > should the first half be heavier gauge than the second half? How much
> > heavier?
> >
> ============================
>
> There is only one general rule. The wire MUST be thick enough to withstand
> the longitudinal tension due to its own weight and the amount of sag in the
> middle. Otherwise propagation will suddenly cease.
>
>
> Tapered copper wire, to match diameter to the current distribution along
> antenna wires (one band only), is available only by special order for space
> exploration and defence purposes. If it WAS available, for a given amount
> of copper, the improvement in signal strength would amount to less than
> 1/140th of an S-unit. The same improvement could be achieved with an
> enormous cost saving just by changing wire gauge from 18 to 14 awg.
> ---
> Reg, G4FGQ
>
>

5950. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 04:00:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fda8f43_8@corp.newsgroups.com>
Source record: 103216

CW wrote:
> Effective lightning protection can be done in the amatuer station for a
> reasonable cost. Most though, don't do so.

My costs have always been reasonable - I unplug the antenna
when not in use. I don't use it during thunderstorms. I have
lived in extreme lightning areas with zero problems.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5951. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 04:11:01 UTC
From: kashe@rahul.net
Message-ID: <fa4ltv4b8er2qqbe8vdj8v98dijbm0pstg@4ax.com>
Source record: 103217

On Fri, 12 Dec 2003 08:03:49 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:
>It won't squeak with soap <:-)) If you can find some wire pulling
>soap...the yucky looking yellow stuff you can darn near fill the
>conduit.

In case it's of any use, one example of the yellow yucky stuff
is the fourth item down on:
http://www.gardnerbender.com/Products/prod_list/pages/conduitfish.html

5952. Constructing a 6m dipole balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 04:56:04 UTC
From: VE3PMK <no.spam@go.away.spam.org>
Message-ID: <BC000613.4EF7%no.spam@go.away.spam.org>
Source record: 103218

I picked up two 6m mobile fiberglass whip antennas recently and my plan is to use a short piece of 2" aluminum channel stock with a couple of C clamps and make a mast mountable dipole.

The question: Without buying a commercial unit, how should I connect it to the feeding coax? I could go direct-connect, but I think a balun is needed. Therefore, can I get away with 'n' turns of coax on a 'x' inch cylindrical form? If so, what are the values for n and x ? I'll be feeding it woth ether 9913, 9914, or RG214, depending on what I'm running low on when the day arrives. Thanks in advance for any advice offered.

Pat
VE3PMK

5953. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 05:32:07 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <f19ltvg8ema7n0bkcbptnjq72li130a6uj@4ax.com>
Source record: 103069

On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:

|
|Every HF antenna here will go 1:1 "some where" ...

Not so.

5954. Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 06:20:16 UTC
From: news <trowley@pacbell.net>
Message-ID: <AcyCb.70757$4S4.13845@newssvr25.news.prodigy.com>
Source record: 103070

Does anyone have a good source for calculating the length of linear loads for a shortened 40 meter Vertical? I'm experimenting with a 20' vertical and a pair of 10' parallel lines moved the resonant point near the 7 Mhz band. Any suggestions?

5955. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 06:51:52 UTC
From: kashe@rahul.net
Message-ID: <4odltvshmfrpldobo5mohp37cpslmkri7g@4ax.com>
Source record: 103071

On Fri, 12 Dec 2003 14:19:08 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>With millions of other subscribers world-wide, I am receiving as many as 250
>spam messages daily, many generated by viruses in other people's computers.
>
>99 perecent of this attrocious rubbish originates in the United States of
>America, the land of the free.
>
>Can't you get Bush to do something about it?

No, we were hoping The Queen could kill it at the shoreline
for you.

Frankly most of my spam comes from Brazil.

5956. Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 09:49:51 UTC
From: Per Enocson <per.enocson@telia.com>
Message-ID: <3hBCb.41875$dP1.162372@newsc.telia.net>
Source record: 103072

My 165 m horizontal loop, which is up about 14 meters and has sort of rhombic shape, is a great antenna, also for DX.

Currently, I feed it at a corner with a length of (approx 12 m) 50 ohm RG 58 coax and enjoy a good SWR at my tx end (1:2 or less) on 160, 17 and 10 m. On other bands, SWR is much higher, which is easily fixed with my automatic ATU (Elecraft KAT 100). I realize I may have some losses on these bands, but try to comfort myself with the fact that the coax feed is quite short.

I now plan to go QRO, using a PA delivering 5-600 watts. I have a good old Heathkit SA 2060 tuner, capable of a kw, with either unbalanced or balanced (4:1 voltage balun) outputs.Here are a couple of the questions I am asking myself:

1. Should I stick to coax feed or switch to ladder line? (reduce losses, secure power handling capability)?

2. If I switch to ladder line, I prefer no taking it into the schack (afraid of RFI and computer problems, also unpractical). How should I arrange switching from ladder line to coax outside the schack window, to minimize losses and "play it safe" when it comes to the balun specification. What type of balun and what ratio should it have (1:1 better than 4:1)? Which particular baluns/suppliers do you suggest?

3. Or, at the end of the day, would I be better off, from a loss point of view, with sticking to coax while upgrading the coax to higher power handling capability(I have some nice, thick RG 11 lying around here, it is 75 ohms though). The "loop skywire" in the ARRL Antenna Book advices us to avoid baluns.....

I realize that there is no simple answer to these questions, and am very grateful for any advice from the group.

Thank you and happy holidays!

Per SM0WRA

5957. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 09:49:52 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FDAE0C0.4C018731@cwis.net>
Source record: 103073

Roger Halstead wrote:
>

> As the things have never come out according to the formula, "for me"
> I just "cut long and trim to fit".
>

Hmm. Bet that 5% probably had something to do with that,
huh? And
the "check -n- chop" tuning method is probably the most common.
Works
too.
I would also suspect that the difference between
insulated/noninsulated
lengths is frequency sensitive. I've never had an 80 meter
antenna be 'off'
by something on the order of 5-6 feet, unless It was my fault
when doing the
measuring. I have had antennas for higher bands be 'off' by
something like
5%, though (even allowing for my 'elastic' yardstick)...
'Doc

5958. Re: Calculus not needed (was: Reflection Coefficient Smoke Clears a Bit)

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 10:48:06 UTC
From: pez <studentant@hotmail.com>
Message-ID: <breqpa$9q$1@nic.grnet.gr>
Source record: 103074

Dear Professor David or Jo Anne Ryeburn,

Finally,
I accomplished the study
of this most interesting article...

But, with your permission,
I can not resist to notice that
the key-point of the surprising,
at least to me, introduction
of an ellipse at step (3),
it looks somehow artificial
and in some way opposite
to the intentions of the introduction:

| ...
| don't believe in using calculus
| whenever simple geometry and/or algebra
| makes it unnecessary.
| A proof that avoids calculus can be meaningful for
| those who don't know calculus,
| or who haven't used it for a while
| ...

In all other respects
and as far as I could say something more,
then it is, at least for me,
a perfect argument, indeed!

Sincerely yours,

pez
SV7BAX
TheDAG

5959. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 10:53:27 UTC
From: Alexander Schewelew <dl1pbd@gmx.de>
Message-ID: <brer2b$2ihie$1@ID-34767.news.uni-berlin.de>
Source record: 103075

Hi!
> G5RV 80 - 10 Meters (102 Feet)
> With 31 feet of Ladder Line.....$35
> Requires Coax from supplied UHF Male connector to equipment.

and symmetrical ATU .....$???

5960. Re: Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 11:37:29 UTC
From: KC1DI <kc1di@arrl.net>
Message-ID: <p0ultvo8ssan1j95s1j9abgd77b4ac31lh@4ax.com>
Source record: 103076

On Sat, 13 Dec 2003 09:49:51 GMT, "Per Enocson"
<per.enocson@telia.com> wrote:

>My 165 m horizontal loop, which is up about 14 meters and has sort of
>rhombic shape, is a great antenna, also for DX.
>
>Currently, I feed it at a corner with a length of (approx 12 m) 50 ohm RG
>58 coax and enjoy a good SWR at my tx end (1:2 or less) on 160, 17 and 10
>m. On other bands, SWR is much higher, which is easily fixed with my
>automatic ATU (Elecraft KAT 100). I realize I may have some losses on these
>bands, but try to comfort myself with the fact that the coax feed is quite
>short.
>
>I now plan to go QRO, using a PA delivering 5-600 watts. I have a good old
>Heathkit SA 2060 tuner, capable of a kw, with either unbalanced or balanced
>(4:1 voltage balun) outputs.Here are a couple of the questions I am asking
>myself:
>
>1. Should I stick to coax feed or switch to ladder line? (reduce losses,
>secure power handling capability)?
>
>2. If I switch to ladder line, I prefer no taking it into the schack (afraid
>of RFI and computer problems, also unpractical). How should I arrange
>switching from ladder line to coax outside the schack window, to minimize
>losses and "play it safe" when it comes to the balun specification. What
>type of balun and what ratio should it have (1:1 better than 4:1)? Which
>particular baluns/suppliers do you suggest?
>
>3. Or, at the end of the day, would I be better off, from a loss point of
>view, with sticking to coax while upgrading the coax to higher power
>handling capability(I have some nice, thick RG 11 lying around here, it is
>75 ohms though). The "loop skywire" in the ARRL Antenna Book advices us to
>avoid baluns.....
>
>I realize that there is no simple answer to these questions, and am very
>grateful for any advice from the group.
>
>Thank you and happy holidays!
>
>Per SM0WRA

I also use a 160 m loop that this up 10 m here much the same as
yours.. I feed mine with 75 ohm coax to a 1:1 Choke balun just out
side the shack maybe 10 feet of coax then balanced line the rest of
the way it works great for me. I've in the past fed it with open wire

all the way to the tuner in the shack. But as you mentioned if gave me troubles with unwanted RFI pickup from computer monitors ETC. I've also fed it all the way with Coax (75 ohm] and that worked quite well except on 12 & 10 meters .. So I guess what I'm saying is if the Coax run is fairly short say 20 feet or so you won't notice a big difference except maybe on 12 and 10 meters while feeding it with open wire or coax.. The big loops just seem to work great. Good luck with yours and all the best for the holidays.
73 Dave KC1DI

>

5961. Re: Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 11:41:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bretsk$7ra$1@hercules.btinternet.com>
Source record: 103077

Malcolm said -
> But do you
> really need 14 awg?
> Wouldn't 16 awg do?

==========

Yes, but you wouldn't be saving so much by NOT using tapered copper wire. It's a mind-boggling matter of economics. If tapered wire WAS manufacturable I'm sure there would be a mad rush by suckers with more money than sense to buy Specially Tapered Low-loss G5RV's including the transmission line.

Actually, for a complete professsional design, the distribution of current along the antenna wire should be taken into account when considering wire diameter. It affects radiating efficiency. Only hot-spots need be considered.

Working backwards, take an 80m 1/2-wave dipole using 20 awg enamelled copper magnet wire (my favourite stuff). At 3.75 MHz the resistance of 20 awg copper wire is 0.206 ohms per metre. Overall end-to-end dipole resistance = 8.24 ohms.

Now take a 1 KW transmitter. The current AT THE DIPOLE CENTER = Sqrt(1000/70) = 3.74 amps.

Radiating efficiency = 140/(140+8.24)*100 = 94.4 percent, where 140 = 2*70 is end-to-end distributed radiation resistance.

At the dipole centre the power dispated in the middle 1-metre length of wire = 3.74^2 * 0.206 = 2.88 watts corresponding to 73 milliwatts per inch of wire. If you have a brain-surgeon's sensitive finger tips this will feel slightly warm and nothing to worry about.

A radiating efficiency of 94.4 percent corresponds to an undetectable loss of 1/25th of an S-unit relative to perfection and no sleep need be lost on this account either.

The foregoing implies that antenna wire diameter depends more on wind speeds, ice formation, and the cost of the pair of masts needed to support it. Recently educated Ph.D's having difficulty with arithmetic may leave the hard bits for later reading.

Reg, G4FGQ

5962. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 11:52:49 UTC
From: KC1DI <kc1di@arrl.net>
Message-ID: <8pultv07oossrl6baj0hrllbhiuqvj2lqd@4ax.com>
Source record: 103078

On Fri, 12 Dec 2003 14:19:08 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>With millions of other subscribers world-wide, I am receiving as many as 250
>spam messages daily, many generated by viruses in other people's computers.
>
>99 perecent of this attrocious rubbish originates in the United States of
>America, the land of the free.
>
>Can't you get Bush to do something about it?
>
>I can do no better than speed-read the subject lines and dump everything
>unless the subject matter is OBVIOUSLY something of interst to me.
>
>SWR or Old Wives is OK
>
>Female or male teenagers at my time of life are not.
>---
>...
>Regards from Reg, G4FGQ
>For Free Radio Design Software go to
>http://www.btinternet.com/~g4fgq.regp
>...
>
Isn't Spam just plain a pain.. our Server here use a company named
Postini (do a google search) contact your Local server and tell them
you would like this feature to be added.. Postini filters all my
incoming mail and stops 98 percent of the spam before it's downloaded
to my computer. It also has Virus checking so the 200 or so viruses
i've been getting each week have been stopped before it's downloaded
on my machines. It would be a worthwhile investment even if I had to
pay a little extra for the service. Instead of looking through tons
of email to determine what is spam, I just go to the message center
and look a the list of blocked headers and tell it to deliver only the
ones I want .. or I can read the message there first.

Check it out.

Also most of the spam I'm receiving here seems to originate from China
or the far east. But most of the viruses unfortunately are coming
(mostlikely unknown to the actual person,) from other hams in the U.S.
who just won't keep their machines virus programs updated. I long ago
stopped reporting them cause it did no good and just used up too much
of my time.. Just block them now..

Cheers ,
73 Dave

5963. Re: Constructing a 6m dipole balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 12:44:13 UTC
From: Adam 9A4QV <alicajic.adam@pu.hinet.hr>
Message-ID: <brf1e7$k98$1@ls219.htnet.hr>
Source record: 103079

What you need is "current balun". Like you said, a few turns of feeding coax
will be ok, or a few ferite barrels on the coax close to the dipole.
Center of coax connect to one and the shield on the other wip.
This will work for shure.

"VE3PMK" <no.spam@go.away.spam.org> wrote in message
news:BC000613.4EF7%no.spam@go.away.spam.org...
> I picked up two 6m mobile fiberglass whip antennas recently and my plan is
> to use a short piece of 2" aluminum channel stock with a couple of C
clamps
> and make a mast mountable dipole.
>
> The question: Without buying a commercial unit, how should I connect it to
> the feeding coax? I could go direct-connect, but I think a balun is
needed.
> Therefore, can I get away with 'n' turns of coax on a 'x' inch cylindrical
> form? If so, what are the values for n and x ? I'll be feeding it woth
> ether 9913, 9914, or RG214, depending on what I'm running low on when the
> day arrives. Thanks in advance for any advice offered.
>
>
> Pat
> VE3PMK
>

5964. Re: Measuring radiation resistance

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 12:51:34 UTC
From: peg@slingshot.co.nz
Message-ID: <62069f15.0312130451.2d59b45a@posting.google.com>
Source record: 103080
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> Perhaps you didn't see the earlier posts on the subject. The frequency
> is 40Mhz (radio control band) and the tx output stage as it stands
> puts out maximum power of 475mW with a 140 ohm resistor as load. I
> only *need* 50mW ERP., however, so can stand to see quite a bit of
> loss from an inefficient antenna. The antenna I will be using is a
> telescopic whip - exactly the same set-up as you see with model
> vehicle radio control transmitters- which is what it is, in fact.
> It ain't rocket science.
> Someone out there must know the radiation resistance of such a
> telescopic whip (which has a ground plane of just around 16 square
> inches contained within the remote control handset) and the best way
> to couple it to a PA with a 140 ohm output impedance?

Google "electrically short"

5965. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:04:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <27ECb.337130$Dw6.1119477@attbi_s02>
Source record: 103081

To a first approximation ... YES. In the context of providing a simple explanation, an introductory level explanation, as in the context of the original question ... YES.

In the interest of more advanced analysis:

Zo = SQRT[[R + jwL]/[G + jwC]]

In a lossless line that converges to SQRT [L/C].

DD

JDer8745 wrote:

> Someone sed:
>
> "So, the 300/75/50 ohm term, characteristic impedance, is the square root of
> L/C"
> ==========
>
> Not always!
>
> 73 de Jack, K9CUN

5966. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:25:50 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031213082550.13641.00000720@mb-m10.aol.com>
Source record: 103082

>
>Does anyone have a good source for calculating the length of linear loads
>for a shortened 40 meter Vertical? I'm experimenting with a 20' vertical
>and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
>band. Any suggestions?
>
>

More elegant and efficient solution is to use loading coil placed abour 2/3 up
the radiator. Best is to use top loading with hat or wire.

Yuri, K3BU

5967. Re: Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:29:11 UTC
From: k9sqg@aol.com
Message-ID: <20031213082911.26088.00000572@mb-m15.aol.com>
Source record: 103083

I use window line to feed my horizontal loop and have found that it can be fed into the shack quite easily. Next year I'm going to try true open wire line and see how it works out.

As to RFI in the shack, I have none. Generally, with a loop, the currents in the open wire line will be of equal amplitude but of opposite phase; hence no radiation. While I don't have a computer, I do use a Macintosh which does everything a computer does only easier, and it has had no problems running while I'm using legal limit power through the feedline which is only two feet from the Macintosh.

In terms of recommeded priority, I'd say use open wire line or window line to feed the loop, second best would be to use a balun at the antenna, and third would be to use a remote tuner where the feedline enters the home, and finally a remote tuner at the antenna feedpoint.

But you have to decide for yourself what is important to you in terms of performance, cost, convenience, appearance, etc.

Best of luck and 73s,

Evan

5968. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:36:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brf4ktopr1@hercules.btinternet.com>
Source record: 103084

To provide some idea of the magnitude of what the waffling is about -

A thick layer of insulation over an antenna wire is just
uniformly-distributed capacitance loading. As with ALL transmission lines,
an increase in capacitance per unit length results in a reduction in the
propagation velocity and a reduction in the resonant length.

Capacitance increase depends on wire diameter, diameter over insulation, and
permittivity of the insulating material. The velocity factor due to
insulation thickness in the case of a long, straight, antenna wire, can be
estimated as follows.

d = wire diameter.
D = diameter over insulation.
h = height above ground.
K = permittivity of insulation.

K can vary from 2.5 to 6 depending on material.

Calculate A = K*Ln(4*h/d)
Calculate B = K*Ln(4*h/D)
Calculate C = Ln(D/d)

Then VF = Sqrt(A / (B + C))

Decrease in antenna length due to insulation = (1 - VF)*100 percent.

And unless the insulation thickness is like 1" diameter coax with the braid
stripped off, for ordinary HF wire antennas at ordinary heights the pruning
will be lost in all the other things which might need a teeny bit of
pruning. As Roger advises "cut long and trim to fit". In practice, if a
tuner is in circuit, after taking the obligatory end-effect into account,
then I would guess pruning is seldom needed on simple wire antennas.

Reg, G4FGQ

5969. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:50:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brf5fsogb1@sparta.btinternet.com>
Source record: 103085

The G5RV works better by removing all the coax and taking open-wire line of any convenient length all the way back to the shack. Dipole length can be increased by as much as 40 feet with benefit.

5970. Re: Longwire gauge?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 13:54:02 UTC
From: Bibby <m.bibby@comcast.net>
Message-ID: <_RECb.539114$Fm2.512586@attbi_s04>
Source record: 103086

Very good. Furthermore, following your ideas, the diameter of the wire at
a current anti-node could be infinitely thin!

Malcolm

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bretsk$7ra$1@hercules.btinternet.com...
> Malcolm said -
> > But do you
> > really need 14 awg?
> > Wouldn't 16 awg do?
>
> ==========
>
> Yes, but you wouldn't be saving so much by NOT using tapered copper wire.
> It's a mind-boggling matter of economics. If tapered wire WAS
manufacturable
> I'm sure there would be a mad rush by suckers with more money than sense
to
> buy Specially Tapered Low-loss G5RV's including the transmission line.
>
>
> Actually, for a complete professsional design, the distribution of current
> along the antenna wire should be taken into account when considering wire
> diameter. It affects radiating efficiency. Only hot-spots need be
> considered.
>
>
> Working backwards, take an 80m 1/2-wave dipole using 20 awg enamelled
copper
> magnet wire (my favourite stuff). At 3.75 MHz the resistance of 20 awg
> copper wire is 0.206 ohms per metre. Overall end-to-end dipole resistance
=
> 8.24 ohms.
>
>
> Now take a 1 KW transmitter. The current AT THE DIPOLE CENTER =
> Sqrt(1000/70) = 3.74 amps.
>
>
> Radiating efficiency = 140/(140+8.24)*100 = 94.4 percent, where 140 = 2*70
> is end-to-end distributed radiation resistance.
>
>
> At the dipole centre the power dispated in the middle 1-metre length of

wire
> = 3.74^2 * 0.206 = 2.88 watts corresponding to 73 milliwatts per inch of
> wire. If you have a brain-surgeon's sensitive finger tips this will feel
> slightly warm and nothing to worry about.
>
>
> A radiating efficiency of 94.4 percent corresponds to an undetectable loss
> of 1/25th of an S-unit relative to perfection and no sleep need be lost on
> this account either.
>
>
> The foregoing implies that antenna wire diameter depends more on wind
> speeds, ice formation, and the cost of the pair of masts needed to support
> it. Recently educated Ph.D's having difficulty with arithmetic may leave
> the hard bits for later reading.
> ----
> Reg, G4FGQ
>
>
>
>
>
>
>
>
>

5971. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 14:05:23 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <mn6mtvssnvsccf121sukkdfpjme7jmforh@4ax.com>
Source record: 103087

On 10 Dec 2003 04:24:16 GMT, fjx1@aol.comnospam (Fjx1) wrote:

>
>I need to put a hole in the house through new vinyl siding and would like to
>know if anyone has a clean neat way to do it. Do they make feedthroughs for
>cable as big as RG8? Any suggestions ?
>

I brought mine up from ground level at the corner of the house
and ran it up underneath (inside) the piece of vinyl the covers
the corner. Then ran it behind the siding to the point where
it enters the structure, and hooked to a right-angle adapter
(from Radio Shack) and went through the wall. Can't even tell
the coax is there.

If you do it this way, you'll obviously have to "unhook" one
piece of siding from the one below in order to run the coax.
There's a special tool for this, which you might be able to
borrow from a siding installer. Or, it can be done almost
as easily using a screwdriver and some stout fingers. Getting
the siding loose is pretty easy - putting it back together is
a bit tougher until you get the hang of it.

-fb-

5972. Re: Traveling Waves, Power Waves,..., Any Waves,...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 14:43:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdb25da$1_7@corp.newsgroups.com>
Source record: 103088

pez wrote:
> I would ask you to tell me please, the reference details to
> Dr. Best's QEX article and Hecht's _Optics_.

Optics by Eugene Hecht, fourth edition, ISBN 81-7808-617-4

"Wave Mechanics of Transmission Lines, Part 3", Dr. Steven R. Best,
VE9SRB, _QEX_, Nov/Dec 2001
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

5973. Re: the "300/75/50 ohms" of TV ribbon, coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 14:54:35 UTC
From: jder8745@aol.com
Message-ID: <20031213095435.01665.00000829@mb-m18.aol.com>
Source record: 103089

"In a lossless line that converges to SQRT [L/C]."

There is no such thing as a lossless line. The formula becomes SQRT(L/C) as the frequency increases, but the losses don't go away. In fact losses of TLs increase as frequency increases. Nice graphs of this in the Handbook.

73 de jack, K9CUN

5974. Re: Poor quality low + High TV channels? How much dB in Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 15:01:16 UTC
From: numeric <numeric@att.net>
Message-ID: <0RFCb.189963$Ec1.7032381@bgtnsc05-news.ops.worldnet.att.net>
Source record: 103090
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave

lbbs wrote:
> My low channels and high channels are coming in week (I especially would
> like to improve channel 49). I like in a small city of 130,000
> population. We have Toronto aprox 40 miles north and Buffalo 40 miles
> south of us. I would to find a way to improve my TV signal. One of the
> things I would like to try is put a preamp on the antenna, but not sure what
> dB rating to use so I don't over amplify my signal (I don't want to improve
> some channels at the expense of other good channels). Any ideas?
>
>

The right pre-amp mounted at the antenna will make a noticeable
improvement regardless of the antenna age or design. Obviously though,
the better the antenna the better the result. The most important
considerations are pre-amp output capability and noise figure. For UHF
TV, select a pre-amp with a 2db noise figure or less and about a 15db
gain or more. This will improve your overall noise figure below the
typical TV tuner noise figure of 6 db and over come the coax line loss.
The output capability is a function of pre-amp design and db gain. The
preamp amplifies many channels at the same time and a strong TV signal
or multiple weaker signals, even though you might be watching another
channel, will overload the preamp if the preamp db gain is too high. I
have found that the Channel Master 7777 VHF/UHF pre-amp works depending
upon location. The output capability ffor this pre-amp is not really
good; but works for my current location, south east Florida. I get TV
reception ranging from 17 to 110 miles distant from the transmitters,
using a Winegard HD9095 UHF only antenna. The antenna is on a
telescoping mast and the height can be varied from 12 to about 40 feet.
On the other hand, when I was in the NYC area only 12 miles distant from
the WTC (prior to 9/11) overload with this pre-amp was a problem. I was
trying to receive WTNH-DT digital about 80 miles distant and the preamp
got clobbered from the very powerful NYC TV stations.

>
> Also, what about cleaning up the connection at the antenna, by cutting off
> the end
> that is corroded and reconnecting it to the antenna? Or just cleaning the
> connection with sand paper?
>

Try cleaning the feed point contacts the best you can. I have found that
cleaning more then that results in little value. Usually something
breaks and you end up with a pile of junk.

5975. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 15:08:27 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <LXFCb.613$xH2.481241@news1.news.adelphia.net>
Source record: 103091

Reg Edwards wrote:
> The G5RV works better by removing all the coax and taking open-wire line of
> any convenient length all the way back to the shack. Dipole length can be
> increased by as much as 40 feet with benefit.

Not much of a G5RV then is it, Reg?

- Mike KB3EIA -

5976. Re: Anyone have a secret to finding that Free tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 15:16:42 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fdb2ac7.234882453@news.galilei.com>
Source record: 103092

Hi Rick

The best tower I ever had was a freestanding foldover commercial highway light tower which I got for free, when they were replacing them with breakaway towers.

In my case, I was just in the right place at the right time. The truck hauling them away hit its maximum load and there was one left, the tallest, that he couldn't take. I offered to take it!

Getting it home was my biggest problem!
It required two escort vehicles and an overload transportation permit, plus a couple of drivers that knew how to manouver a LONG item around a couple of tight corners. It was 92 feet tall with the base removed, 97 feet with the mounting base.
We had to cut about 4 feet off of the top in order to make one of the required turns, which also helped later to keep it in my backyard in it's folded down position.
The permit was only something like 32 bucks, the drivers were free (fellow hams), but we spent something like 50 bucks on the required plaqards, signs, flags and reflectors the county required.

TTUL
Gary

5977. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 15:16:54 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <G3GCb.620$xH2.483292@news1.news.adelphia.net>
Source record: 103093

Reg Edwards wrote:

> With millions of other subscribers world-wide, I am receiving as many as 250
> spam messages daily, many generated by viruses in other people's computers.
>
> 99 perecent of this attrocious rubbish originates in the United States of
> America, the land of the free.

hmm, most of my spam originates from members of newsgroups that have a computer infected with Swen virus. The rest appears to originate in the far east.

Which brings up the thought: Guys and Gals, check out your computer to see if it is infected! If you are using a Winbox, using Outlook in one of it's incarnations, Internet Explorer, and haven't updated for a couple years, guess what?

- Mike KB3EIA -

5978. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 18:04:36 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <UwICb.619$mC1.143@newsread1.news.atl.earthlink.net>
Source record: 103094

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:brcios$3qd$1@sparta.btinternet.com...
> With millions of other subscribers world-wide, I am receiving as many as
250
> spam messages daily, many generated by viruses in other people's
computers.
>
> 99 perecent of this attrocious rubbish originates in the United States of
> America, the land of the free.
>
> Can't you get Bush to do something about it?
>
> I can do no better than speed-read the subject lines and dump everything
> unless the subject matter is OBVIOUSLY something of interst to me.
>
> SWR or Old Wives is OK
>
> Female or male teenagers at my time of life are not.
> ---
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

Congress is considering just such a law. Unfortunatly they all went home
for the holidays.

Keep a stiff upper lip. I went to Earthlink. Stopped them cold.

Dan/W4NTI

5979. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 20:03:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brfrap$ik8$1@titan.btinternet.com>
Source record: 103095

Mike sed,
> Not much of a G5RV then is it, Reg?
>

Exactly !

For all-round, multi-directional, multi-elevation, multi-band working, DX and local, there is nothing better than a random length dipole with a random-length high-Zo feedline, which is what most people want and which will conveniently fit into your backyard, plus a simple home-made 1:1 choke balun on a ferrite ring from your junk box, plus a tuner of some sort.

Without any coax the G5RV fits in there somewhere. A sentiment with which that grand old English gentleman himself, Louis Varney, would whole-heartedly agree. Are you hearing me Louis wherever you are? Three dots for Yes.

Reg, G4FGQ

5980. vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 20:29:32 UTC
From: kc5cqa@yahoo.com
Message-ID: <msrmtv8jfqkjf1u3htfdk3q1uubqus3c3s@4ax.com>
Source record: 103096

I have checked a few references, but I would really like
to 'hear from experienced ears', soooo, the question.
If you setup two situations alike, such as two same autos, same
amount of power, same db gain on mobil/base antennas , what would be
the difference in the 'distance of one band over the other'. If two
meters 'talked' farther,,,,,,,,,,,, than 440mhz. what would likely be
the amount.
I live 'out in the boonies', and thru the base antenna 'reach out'
and connect with the cities repeaters, and I '''see/hear''' very
little difference in the range (those located close to each other) of
such repeaters, (two meters/440). This along with other factors has
lead to this question.
In the past, the 'minor tests' that I have conducted did not really
prove that much. I, at home/base talking to my yl and switching
between 'bands', this was not all that scientific, and all I concluded
was 'the bands' were similar in abilities. ???? Sooo, feel that others
have 'been there,done that',,,,, and had more in lighten results.
thanks in advance. 73 cl.

5981. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 20:31:56 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <0HKCb.726$xH2.567333@news1.news.adelphia.net>
Source record: 103097

Reg Edwards wrote:

> Mike sed,
>
>>Not much of a G5RV then is it, Reg?
>>
>
> ----------
>
> Exactly !
>
> For all-round, multi-directional, multi-elevation, multi-band working, DX
> and local, there is nothing better than a random length dipole with a
> random-length high-Zo feedline, which is what most people want and which
> will conveniently fit into your backyard, plus a simple home-made 1:1 choke
> balun on a ferrite ring from your junk box, plus a tuner of some sort.

Hard to disagree, xince that's what I use!

> Without any coax the G5RV fits in there somewhere. A sentiment with which
> that grand old English gentleman himself, Louis Varney, would
> whole-heartedly agree. Are you hearing me Louis wherever you are? Three
> dots for Yes.

There seem to be many different antennae called G5RV. I wonder when the
G5RV vertical will come out? ;^)

- Mike KB3EIA -

5982. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 21:02:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brfupe$9rt$1@sparta.btinternet.com>
Source record: 103098

> hmm, most of my spam originates from members of newsgroups that have a
> computer infected with Swen virus. The rest appears to originate in the
> far east.
>
> Which brings up the thought: Guys and Gals, check out your computer to
> see if it is infected! If you are using a Winbox, using Outlook in one
> of it's incarnations, Internet Explorer, and haven't updated for a
> couple years, guess what?
>
========================

I object to having to pay extra for a service which may improve for a while but soon begins to become unreliable again.

There is evidence that control is now being exerted by 'the powers that be'.

USA citizens report the stuff comes mainly from the Far East or Brazil. And also complain about Europe.

I get none from Europe and none from the UK, Most now comes from America.

But a few months back, when mine came mostly from the Far East, over a short period of a few days the Far East stuff fell to a very low level and was of a somwhat different nature. The Far East stuff always had a genuine high quality commercial adverising content. Now the American stuff is 90% pornograhic.

But throughout these changes in source and type of content, which cannot be explained by random statistical variations, the total volume has continued to increase.

Who are the 'powers that be'. ?

They who own and control the World's communications services, data, speech, TV, newspapers, broadcasting, satellite, Internet, will rule the Earth.

Where is Big Brother's master computer located? Who's finger's are on the keyboard?

5983. Re: vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 21:04:40 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <I9LCb.11937$m83.3296@fed1read01>
Source record: 103099

Take a look at this one:
http://www.artscipub.com/simpleton/simp.range.html
--
73 From The Wilderness Keyboard
<kc5cqa@yahoo.com> wrote in message
news:msrmtv8jfqkjf1u3htfdk3q1uubqus3c3s@4ax.com...
> I have checked a few references, but I would really like
> to 'hear from experienced ears', soooo, the question.
> If you setup two situations alike, such as two same autos, same
> amount of power, same db gain on mobil/base antennas , what would be
> the difference in the 'distance of one band over the other'. If two
> meters 'talked' farther,,,,,,,,,,,, than 440mhz. what would likely be
> the amount.
> I live 'out in the boonies', and thru the base antenna 'reach out'
> and connect with the cities repeaters, and I '''see/hear''' very
> little difference in the range (those located close to each other) of
> such repeaters, (two meters/440). This along with other factors has
> lead to this question.
> In the past, the 'minor tests' that I have conducted did not really
> prove that much. I, at home/base talking to my yl and switching
> between 'bands', this was not all that scientific, and all I concluded
> was 'the bands' were similar in abilities. ???? Sooo, feel that others
> have 'been there,done that',,,,, and had more in lighten results.
> thanks in advance. 73 cl.

5984. Re: Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 21:05:54 UTC
From: Per Enocson <per.enocson@telia.com>
Message-ID: <SaLCb.41929$dP1.162728@newsc.telia.net>
Source record: 103100

Thank you Evan! I guess I should give the balanced line a try before counting it out. What kind of antenna tuner do you use and how do you connect your balanced line to it? Through a balun or not?

73 s de Per SM0WRA

"K9SQG" <k9sqg@aol.com> skrev i meddelandet news:20031213082911.26088.00000572@mb-m15.aol.com...
> I use window line to feed my horizontal loop and have found that it can be fed
> into the shack quite easily. Next year I'm going to try true open wire line
> and see how it works out.
>
> As to RFI in the shack, I have none. Generally, with a loop, the currents in
> the open wire line will be of equal amplitude but of opposite phase; hence no
> radiation. While I don't have a computer, I do use a Macintosh which does
> everything a computer does only easier, and it has had no problems running
> while I'm using legal limit power through the feedline which is only two feet
> from the Macintosh.
>
> In terms of recommeded priority, I'd say use open wire line or window line to
> feed the loop, second best would be to use a balun at the antenna, and third
> would be to use a remote tuner where the feedline enters the home, and finally
> a remote tuner at the antenna feedpoint.
>
> But you have to decide for yourself what is important to you in terms of
> performance, cost, convenience, appearance, etc.
>
> Best of luck and 73s,
>
> Evan

5985. Re: Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 21:09:09 UTC
From: Per Enocson <per.enocson@telia.com>
Message-ID: <VdLCb.41930$dP1.162757@newsc.telia.net>
Source record: 103101

Dave,

Excellent help for me. I will try both ways (experimenting is a fun part of
our hobby). Could you describe your 1:1 current choke balun to me?

Thanks, 73 de Per SM0WRA
"KC1DI" <kc1di@arrl.net> skrev i meddelandet
news:p0ultvo8ssan1j95s1j9abgd77b4ac31lh@4ax.com...
> On Sat, 13 Dec 2003 09:49:51 GMT, "Per Enocson"
> <per.enocson@telia.com> wrote:
>
> >My 165 m horizontal loop, which is up about 14 meters and has sort of
> >rhombic shape, is a great antenna, also for DX.
> >
> >Currently, I feed it at a corner with a length of (approx 12 m) 50 ohm
RG
> >58 coax and enjoy a good SWR at my tx end (1:2 or less) on 160, 17 and
10
> >m. On other bands, SWR is much higher, which is easily fixed with my
> >automatic ATU (Elecraft KAT 100). I realize I may have some losses on
these
> >bands, but try to comfort myself with the fact that the coax feed is
quite
> >short.
> >
> >I now plan to go QRO, using a PA delivering 5-600 watts. I have a good
old
> >Heathkit SA 2060 tuner, capable of a kw, with either unbalanced or
balanced
> >(4:1 voltage balun) outputs.Here are a couple of the questions I am
asking
> >myself:
> >
> >1. Should I stick to coax feed or switch to ladder line? (reduce losses,
> >secure power handling capability)?
> >
> >2. If I switch to ladder line, I prefer no taking it into the schack
(afraid
> >of RFI and computer problems, also unpractical). How should I arrange
> >switching from ladder line to coax outside the schack window, to minimize
> >losses and "play it safe" when it comes to the balun specification. What
> >type of balun and what ratio should it have (1:1 better than 4:1)? Which
> >particular baluns/suppliers do you suggest?
> >
> >3. Or, at the end of the day, would I be better off, from a loss point of

> >view, with sticking to coax while upgrading the coax to higher power
> >handling capability(I have some nice, thick RG 11 lying around here, it
is
> >75 ohms though). The "loop skywire" in the ARRL Antenna Book advices us
to
> >avoid baluns.....
> >
> >I realize that there is no simple answer to these questions, and am very
> >grateful for any advice from the group.
> >
> >Thank you and happy holidays!
> >
> >Per SM0WRA
>
> I also use a 160 m loop that this up 10 m here much the same as
> yours.. I feed mine with 75 ohm coax to a 1:1 Choke balun just out
> side the shack maybe 10 feet of coax then balanced line the rest of
> the way it works great for me. I've in the past fed it with open wire
> all the way to the tuner in the shack. But as you mentioned if gave
> me troubles with unwanted RFI pickup from computer monitors ETC. I've
> also fed it all the way with Coax (75 ohm] and that worked quite well
> except on 12 & 10 meters .. So I guess what I'm saying is if the Coax
> run is fairly short say 20 feet or so you won't notice a big
> difference except maybe on 12 and 10 meters while feeding it with open
> wire or coax.. The big loops just seem to work great. Good luck with
> yours and all the best for the holidays.
> 73 Dave KC1DI
>
> >
>

5986. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-13 21:19:03 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdb82a6$1_6@corp.newsgroups.com>
Source record: 103102

Reg Edwards wrote:
> For all-round, multi-directional, multi-elevation, multi-band working, DX
> and local, there is nothing better than a random length dipole with a
> random-length high-Zo feedline, ...

My non-random length high-Z0 feedline is better, Reg, i.e., NO tuner losses.
--
73, Cecil http://www.qsl.net/w5dxp

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5987. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 00:24:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brgajh$56m$1@sparta.btinternet.com>
Source record: 103103

> My non-random length high-Z0 feedline is better, Reg, i.e., NO tuner
losses.
> --
> 73, Cecil http://www.qsl.net/w5dxp

==========

Cec, I'm very sorry to say your variable length high-Zo line never reduces SWR down to 1-to-1 as perceived by the transmitter. It's like having a tuner with only one knob on it.

Of course, your particular PA may have a tuned tank or pi-match in which case you will have reduced the so-called SWR meter to nonsense for which you deserve congratulations.

But if the long, thin, twin-wire feedline in your ingenious Z-matcher has a higher resistance than the shorter, fat, single wire wound around the tuner coil it replaces then you still have some explaining to do.

On the other hand, considering the economic pro's and con's, and the poverty-stricken state of radio amateurs world wide, you undoubtably have a winner. ;o)

Your's, Reg, G4FGQ

5988. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 01:19:55 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312131719.4be48683@posting.google.com>
Source record: 103104

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message

Cecil, I have experience on the bands on 20 thru 10, but less
than a couple of dozen chats on the other bands in as many years.
Yesterday I scanned 80 and heard a spanish station but the East coast
were piling on him. The point I am mentioning it is that my antenna is
also horisontal polarised on the top of the tower. So I went to
top band and scanned it for DX but heard NONE even tho the band was
busy.
I decided to key up and had a few contacts at around 1000 miles
and with less with 30 watts and got very good reports.

Is this about normal for your G5RV which is also horizontally
polarised? I have never had a G5RV or a verticle for that matter
The noise level was around S8 to S9 and this just represented
the conditions for just last night. Transmission line is 7/8 coax
Antenna SWR 1:1 @ 65 feet
Regards
Art

news:<3fcb8f8d_1@corp.newsgroups.com>...
> Willy wrote:
> > I just started on hf bands and i usiing now a FD4 from Fritzel and I hear
> > all goods things about the G5RV.
> > Is that so, works it's also great on 10 and 15m?
>
> Nope, it's not very good on 10m and 15m. It is especially bad on 30m.
> It works well on 80m, 40m, and 20m with a tuner. EZNEC says it also
> works well on 12m. A G5RV is not an all-HF-band antenna but I have
> an all-HF-band antenna on my web page.

5989. Re: Horizontal loop - balun or no balun ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 01:28:46 UTC
From: KC1DI <kc1di@arrl.net>
Message-ID: <35fntv0mnfeli1b5r5ac51lc716kqh2bg3@4ax.com>
Source record: 103105

It's a W2DU type. with beads slipped over the coax.
73 dave

On Sat, 13 Dec 2003 21:09:09 GMT, "Per Enocson"
<per.enocson@telia.com> wrote:

>Dave,
>
>Excellent help for me. I will try both ways (experimenting is a fun part of
>our hobby). Could you describe your 1:1 current choke balun to me?
>
>Thanks, 73 de Per SM0WRA
>"KC1DI" <kc1di@arrl.net> skrev i meddelandet
>news:p0ultvo8ssan1j95s1j9abgd77b4ac31lh@4ax.com...
>> On Sat, 13 Dec 2003 09:49:51 GMT, "Per Enocson"
>> <per.enocson@telia.com> wrote:
>>
>> >My 165 m horizontal loop, which is up about 14 meters and has sort of
>> >rhombic shape, is a great antenna, also for DX.
>> >
>> >Currently, I feed it at a corner with a length of (approx 12 m) 50 ohm
>RG
>> >58 coax and enjoy a good SWR at my tx end (1:2 or less) on 160, 17 and
>10
>> >m. On other bands, SWR is much higher, which is easily fixed with my
>> >automatic ATU (Elecraft KAT 100). I realize I may have some losses on
>these
>> >bands, but try to comfort myself with the fact that the coax feed is
>quite
>> >short.
>> >
>> >I now plan to go QRO, using a PA delivering 5-600 watts. I have a good
>old
>> >Heathkit SA 2060 tuner, capable of a kw, with either unbalanced or
>balanced
>> >(4:1 voltage balun) outputs.Here are a couple of the questions I am
>asking
>> >myself:
>> >
>> >1. Should I stick to coax feed or switch to ladder line? (reduce losses,
>> >secure power handling capability)?
>> >
>> >2. If I switch to ladder line, I prefer no taking it into the schack
>(afraid
>> >of RFI and computer problems, also unpractical). How should I arrange

>> >switching from ladder line to coax outside the schack window, to minimize
>> >losses and "play it safe" when it comes to the balun specification. What
>> >type of balun and what ratio should it have (1:1 better than 4:1)? Which
>> >particular baluns/suppliers do you suggest?
>> >
>> >3. Or, at the end of the day, would I be better off, from a loss point of
>> >view, with sticking to coax while upgrading the coax to higher power
>> >handling capability(I have some nice, thick RG 11 lying around here, it
>is
>> >75 ohms though). The "loop skywire" in the ARRL Antenna Book advices us
>to
>> >avoid baluns.....
>> >
>> >I realize that there is no simple answer to these questions, and am very
>> >grateful for any advice from the group.
>> >
>> >Thank you and happy holidays!
>> >
>> >Per SM0WRA
>>
>> I also use a 160 m loop that this up 10 m here much the same as
>> yours.. I feed mine with 75 ohm coax to a 1:1 Choke balun just out
>> side the shack maybe 10 feet of coax then balanced line the rest of
>> the way it works great for me. I've in the past fed it with open wire
>> all the way to the tuner in the shack. But as you mentioned if gave
>> me troubles with unwanted RFI pickup from computer monitors ETC. I've
>> also fed it all the way with Coax (75 ohm] and that worked quite well
>> except on 12 & 10 meters .. So I guess what I'm saying is if the Coax
>> run is fairly short say 20 feet or so you won't notice a big
>> difference except maybe on 12 and 10 meters while feeding it with open
>> wire or coax.. The big loops just seem to work great. Good luck with
>> yours and all the best for the holidays.
>> 73 Dave KC1DI
>>
>> >
>>
>

5990. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 01:52:04 UTC
From: Lloyd Mitchell <lloydm75@hotmail.com>
Message-ID: <jkPCb.9559$C24.4204@bignews5.bellsouth.net>
Source record: 103106

You know I've been watching the posts in this group for over a year now and no matter what anyone says you guys always have a negative to say about somebody elses antenna. So may you have a Happy Christmas.

I have attached the writeup from "ol' G5RV himself that was posted on several websites.

Here is the original article and I still believe that the antenna I described is very close if not in fact the same construction.

http://www.qsl.net/aa3px/g5rv.htm

Lloyd KD4HTW

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:brgajh$56m$1@sparta.btinternet.com...
>
> > My non-random length high-Z0 feedline is better, Reg, i.e., NO tuner
> losses.
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
>
> ==========
>
> Cec, I'm very sorry to say your variable length high-Zo line never reduces
> SWR down to 1-to-1 as perceived by the transmitter. It's like having a
> tuner with only one knob on it.
>
>
> Of course, your particular PA may have a tuned tank or pi-match in which
> case you will have reduced the so-called SWR meter to nonsense for which
you
> deserve congratulations.
>
>
> But if the long, thin, twin-wire feedline in your ingenious Z-matcher has
a
> higher resistance than the shorter, fat, single wire wound around the
tuner
> coil it replaces then you still have some explaining to do.
>
>
> On the other hand, considering the economic pro's and con's, and the
> poverty-stricken state of radio amateurs world wide, you undoubtably have
a
> winner. ;o)

> ---
> Your's, Reg, G4FGQ
>
>

5991. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 02:24:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdbca39_7@corp.newsgroups.com>
Source record: 103107

Reg Edwards wrote:
> Cec, I'm very sorry to say your variable length high-Zo line never reduces
> SWR down to 1-to-1 as perceived by the transmitter. It's like having a
> tuner with only one knob on it.

50 ohm SWR's on all HF bands are less than 1.6:1. The SWR on the ladder-
line is always between 7.5:1 and 19:1 so only one "knob" is needed.
--
73, Cecil http://www.qsl.net/w5dxp

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5992. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 02:32:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdbcc28$1_7@corp.newsgroups.com>
Source record: 103108

Art Unwin KB9MZ wrote:
> Is this about normal for your G5RV which is also horizontally
> polarised?

Art, I had a G5RV in AZ a few years ago. I had expected an all-HF-band antenna but that's not what I got. So I studied it to find out what was wrong. It was designed before the WARC bands and works well on 80m, 40m, and 20m. At the height of the sunspot cycle, you can work the world on 10m with a coat hanger and ten watts so the losses on 10m may not be important. But EZNEC says the SWR on 10m is about 50-60:1.

I don't use a G5RV any more but I remember most of the data I collected. Why it works well on 80m and 40m is illustrated on my web page.
--
73, Cecil http://www.qsl.net/w5dxp

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5993. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 02:39:56 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdbcdde_7@corp.newsgroups.com>
Source record: 103109

Lloyd Mitchell wrote:
> You know I've been watching the posts in this group for over a year now and
> no matter what anyone says you guys always have a negative to say about
> somebody elses antenna.

That proves that no antenna is perfect for everyone.

> I have attached the writeup from "ol' G5RV himself that was posted on
> several websites.
>
> Here is the original article and I still believe that the antenna I
> described is very close if not in fact the same construction.
>
> http://www.qsl.net/aa3px/g5rv.htm

What he left out is the SWR on the coax which is a killer on 30m,
17m, and 10m according to EZNEC.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

5994. Re: How to contact..spam.....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 02:56:09 UTC
From: Jerry <spamhater@spamhater.com>
Message-ID: <3FDBD148.BDACED17@spamhater.com>
Source record: 103110

Problem is many US companies have the spam created here in us and the
sent to the internet from servers located overseas so they are untouchable
from us laws etc..

You are correct, many people have unprotected computers with outdated
o/s and or no virus software.

Example is at my university they processed a weeks worth of email in 24 hours
due to that nasty virus that was going around a few months ago. Our mainframe
ftp server gets requests from almost every pc on the campus that is infected,
campus net can't or won't pull the plug on their ip address.

Best thing I can suggest is check out following sites and get protected.

http://grc.com lots of info no charge and learn how to protect your pc.

http://www.lavasoftusa.com/ no charge ad aware v 6.0
finds and then removes many types of spy ware and ad tracking software that
is installed when you visit websites (without your knowledge or permission !)

73

>
> >
> > 99 perecent of this attrocious rubbish originates in the United States of
> > America, the land of the free.
> >
> > Can't you get Bush to do something about it?
> >
> > I can do no better than speed-read the subject lines and dump everything
> > unless the subject matter is OBVIOUSLY something of interst to me.
> >
> > SWR or Old Wives is OK
> >
> > Female or male teenagers at my time of life are not.
> > ---
> > ....
> > Regards from Reg, G4FGQ
> > For Free Radio Design Software go to
> > http://www.btinternet.com/~g4fgq.regp
> > ....
> >
> >
>
> Congress is considering just such a law. Unfortunatly they all went home
> for the holidays.

>
> Keep a stiff upper lip. I went to Earthlink. Stopped them cold.
>
> Dan/W4NTI

5995. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 03:22:21 UTC
From: news <trowley@pacbell.net>
Message-ID: <MHQCb.71189$4C1.30918@newssvr25.news.prodigy.com>
Source record: 103111

Thanks - I guess I should have added some background

I've tried top loading and it works but is unwieldy. I'm working on an variant of the St Louis vertical which does use a loading coil (at the bottom) Since this antenna starts with the assumption that a light weight portable mast will be used, a top load solution puts too much stress on the weak top whip of the pole. For example, the calculation of a top load cylinder is about 13" long by13" wide. I built on out of light weight aluminum window screen and it worked but dragged the top down.

By contrast, using a length of 450 ohm ladder line, I hoped to build an easily transportable antenna with a better SWR range than the SLV. I'm iterating on the solution but still looking for some analytic approach.

Tom
W2TER

Back to my
"Yuri Blanarovich" <k3bu@aol.comnoSaddam> wrote in message
news:20031213082550.13641.00000720@mb-m10.aol.com...
> >
> >Does anyone have a good source for calculating the length of linear loads
> >for a shortened 40 meter Vertical? I'm experimenting with a 20' vertical
> >and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
> >band. Any suggestions?
> >
> >
>
> More elegant and efficient solution is to use loading coil placed abour
2/3 up
> the radiator. Best is to use top loading with hat or wire.
>
> Yuri, K3BU

5996. Question about antenna plug on handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 03:50:09 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031213225009.19282.00000777@mb-m13.aol.com>
Source record: 103112

Hello all. I recently uncovered an old TRC-208 CB handheld. There's a spot on the side for an external antenna, but the plug looks like a modern day A/V plug you'd find on a TV or VCR. Anyone know what this type plug is called? It's definately not an RCA plug and not anything modern, like a BNC, Mini-UHF or SO-239. I can get a picture of it if needed.

=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-

73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5997. Re: Question about antenna plug on handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 04:05:52 UTC
From: nospam <nospam@nospam.org>
Message-ID: <BC014BD0.4F6F%nospam@nospam.org>
Source record: 103113

old motorola ? the type that you still find on the back of some scanners?

5998. Re: Question about antenna plug on handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 04:55:17 UTC
From: vhfradiobuff@aol.comspamme
Message-ID: <20031213235517.26181.00000712@mb-m15.aol.com>
Source record: 103114

>old motorola ? the type that you still find on the back of some scanners?

The kind you're refering to is an RCA jack, I think. From the looks of the plug, it appears the end of the coax would have to look like the cables you plug into your TV or VCR's A/V jacks.
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
73! de Andy KC2SSB - WPYI880 (GMRS)
Beachwood, NJ USA! Grid FM29vw
http://vhfradiobuff.tripod.com

5999. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 05:05:29 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <4nrntvspdp56rqumi63jkqi1cvtsudkq8k@4ax.com>
Source record: 103115

On Sat, 13 Dec 2003 04:11:01 GMT, kashe@rahul.net wrote:

>On Fri, 12 Dec 2003 08:03:49 GMT, Roger Halstead
><mynewsat@rogerhalsteaddot.com> wrote:
>>It won't squeak with soap <:-)) If you can find some wire pulling
>>soap...the yucky looking yellow stuff you can darn near fill the
>>conduit.
>
>
> In case it's of any use, one example of the yellow yucky stuff
>is the fourth item down on:
>http://www.gardnerbender.com/Products/prod_list/pages/conduitfish.html

I get a link failure on this one.
We used to use the stuff in industry to put the proverbial 10# in a 5#
bag.

I remember seeing a row of electricians (with hammers) beating on a
rigid conduit, particularly at any bends, with two guys pullin' two
soaping, and one feeding. Those cables were never going to come out
of that conduit.

Even though they are not a "tight" fit, I use soap on the bundle of
cables in the underground conduit from the tower to the basement.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6000. Re: Directional Radio Transmitter

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 05:08:55 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <9vrntvgl3a3olmfq304t7oo875nhg2h3f8@4ax.com>
Source record: 103116

On Wed, 10 Dec 2003 21:28:22 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Question[s]: In the UK, is 433 MHz allocated to Amateur Radio? Simon, in
>other words, is a license required for operation on 433 MHz in the UK?
>
>Observation[s]: A yagi receives from ALL directions but has a preferred
>direction where it has gain.
>
>Yagis may not meet your requirements for narrow beam. A high gain Yagi
>may have a beamwidth of +/-10 degrees or more. A moderate gain Yagi will
>have a beamwidth of 30-40 degrees.

I would add that unless the antennas are relatively close anything
much narrower can be a real bi...er... bear to align. It can be done,
but one degree (if you could get it) would be a nightmare. With that
kind of beam width you'd most likely have to worry about elevation as
well as azmuth.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

>
>DD, W1MCE
>
>Simon wrote:
>
>> Hi,
>> I'm playing around with some 433MHz transmitter and receiver pairs.
>> Ideally I would like the transmitter to transmit in a narrow
>> directional beam, but I'm new to the art of radio waves and antenna
>> design, so I was wondering if you guys would be able to help me with
>> my project. I've read about a Yagi design for the antenna, I know it
>> receives from one direction only, but does it transmit in just one
>> direction too?
>>
>> I thought I'd be able to basically stick the transmitter antenna in a
>> tube, sealed at one end, line either the inside or outside of the tube
>> with tin foil (or both) and it would transmit in whatever direction
>> the open end was facing. So far my tests haven't been too conclusive
>> but could that be poor setup on my part or is the idea fundamentally
>> flawed?
>>

>> Many thanks for your time,
>>
>> Simon.

6001. Re: vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 05:30:09 UTC
From: Mike <m*150@lycos.co.uk>
Message-ID: <BzSCb.2884$526.19440@newsfep4-glfd.server.ntli.net>
Source record: 103117

Hello,

Out in the open, with no obstructions there will be little difference. The only good thing about UHF is high gain antennas that are a lot smaller, so that can help. For hills and mountains you would be better on 70MHz, it does tend to cover an area better than 2m. In a town centre go for 70cm. Not knowing where you are it's difficult to advise. Repeaters are so high anyway it wouldn't be noticable.

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:I9LCb.11937$m83.3296@fed1read01...
> Take a look at this one:
> http://www.artscipub.com/simpleton/simp.range.html
> --
> 73 From The Wilderness Keyboard
> <kc5cqa@yahoo.com> wrote in message
> news:msrmtv8jfqkjf1u3htfdk3q1uubqus3c3s@4ax.com...
> > I have checked a few references, but I would really like
> > to 'hear from experienced ears', soooo, the question.
> > If you setup two situations alike, such as two same autos, same
> > amount of power, same db gain on mobil/base antennas , what would be
> > the difference in the 'distance of one band over the other'. If two
> > meters 'talked' farther,,,,,,,,,,,, than 440mhz. what would likely be
> > the amount.
> > I live 'out in the boonies', and thru the base antenna 'reach out'
> > and connect with the cities repeaters, and I '''see/hear''' very
> > little difference in the range (those located close to each other) of
> > such repeaters, (two meters/440). This along with other factors has
> > lead to this question.
> > In the past, the 'minor tests' that I have conducted did not really
> > prove that much. I, at home/base talking to my yl and switching
> > between 'bands', this was not all that scientific, and all I concluded
> > was 'the bands' were similar in abilities. ???? Sooo, feel that others
> > have 'been there,done that',,,,, and had more in lighten results.
> > thanks in advance. 73 cl.
>
>

6002. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 07:38:30 UTC
From: Michael Wuensche <dl8fbh@dl8fbh.ampr.org>
Message-ID: <brh41m$a53$1@dl8fbh.ampr.org>
Source record: 103118

Reg Edwards <g4fgq.regp@zzzbtinternet.com> wrote:

> With millions of other subscribers world-wide, I am receiving as many as 250
> spam messages daily, many generated by viruses in other people's computers.

This is no reason using such a silly Reply-To not conformable to any RFC
Reply-To: "Reg Edwards" <g4fgq,regp@ZZZbtinternet,com>

Michael

6003. Re: What's the cleanest, safest way to run coax through vinyl siding?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 10:29:06 UTC
From: kashe@rahul.net
Message-ID: <creotv4t5rci8htbqc3o01lvdca6udhvbr@4ax.com>
Source record: 102969

On Sun, 14 Dec 2003 05:05:29 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:

>On Sat, 13 Dec 2003 04:11:01 GMT, kashe@rahul.net wrote:
>
>>On Fri, 12 Dec 2003 08:03:49 GMT, Roger Halstead
>><mynewsat@rogerhalsteaddot.com> wrote:
>>>It won't squeak with soap <:-)) If you can find some wire pulling
>>>soap...the yucky looking yellow stuff you can darn near fill the
>>>conduit.
>>
>>
>> In case it's of any use, one example of the yellow yucky stuff
>>is the fourth item down on:
>>http://www.gardnerbender.com/Products/prod_list/pages/conduitfish.html
>
>I get a link failure on this one.

I backed up node by node to just http://www.gardnerbender.com
and got ...

Error
FW-1 at tank: Failed to connect to the WWW server.

... at each step. I suspect their server is whacked at the moment. I
originally got there by using the basic link and drilling down, but
that doesn't work now.

>We used to use the stuff in industry to put the proverbial 10# in a 5#
>bag.
>
>I remember seeing a row of electricians (with hammers) beating on a
>rigid conduit, particularly at any bends, with two guys pullin' two
>soaping, and one feeding. Those cables were never going to come out
>of that conduit.

I once heard some installers at work chuckling about a guy who
was using a hydraulic puller on the leader when the trailing cables
got hung up. Apparently the conduit toward the puller end started
changing shap a bit. Real mess to replace.

>Even though they are not a "tight" fit, I use soap on the bundle of
>cables in the underground conduit from the tower to the basement.
>
>Roger Halstead (K8RI & ARRL life member)
>(N833R, S# CD-2 Worlds oldest Debonair?)

>www.rogerhalstead.com
>Return address modified due to dumb virus checkers

6004. W5GI Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 11:43:41 UTC
From: Jayne Medley <kjm52@blomand.net>
Message-ID: <brhidc$8euh$1@news3.infoave.net>
Source record: 102970

Any one out ther built one that is using it ? What do you think about it ?

6005. Weather caps

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 12:20:00 UTC
From: Scott Livingston <bscout@charter.net>
Message-ID: <vtol2ivqnds63@corp.supernews.com>
Source record: 102971

It's past time for me to replace the trap end caps on my Cushcraft A3S antenna..The ones that came on the antenna seem awfully thin and flimsy and before ordering replacements from the mfg, I wonder if there is there a better replacement out there? What do you guys use? Thanks in advance.
Scott

6006. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 13:28:43 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <v9potvkagkn1bv777j9fqdsmavtfurgqtu@4ax.com>
Source record: 102972

Oddly enough, the full sized one I have, in addition to OK performance
on 80/75, 40 and 20 works better than anything else I've tried on 17.
It really does do poorly on 30,15,12 and 10 though. Go figure...

6007. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 15:25:22 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdc8142$1_3@corp.newsgroups.com>
Source record: 102973

Jim Leder wrote:
> Oddly enough, the full sized one I have, in addition to OK performance
> on 80/75, 40 and 20 works better than anything else I've tried on 17.
> It really does do poorly on 30,15,12 and 10 though. Go figure...

At the higher frequencies, small variations in design and environment can cause large shifts in characteristics due to the shorter wavelengths involved. For instance, if the dipole is a little longer than 102 ft, the series-section transformer is a little longer than 30 ft with a relatively low VF, the G5RV antenna system's resonant point will shift a lot on the higher bands. Also, installing the G5RV in an inverted-V configuration can change things considerably on the higher bands. I'm glad it works well for you on 17m. That's a neat band.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6008. Re: Question about antenna plug on handheld

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 16:21:11 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fdc9052_3@news1.prserv.net>
Source record: 102974

The connector you are describing is the one called RCA (plugs and jacks).
The Motorola is larger, and the socket looks like a 5/16" hole about 3/4"
deep, with the center pin even deeper than that. The RCA socket protrudes
out about a quarter to 3/8 inch and is also around 5/16" dia.

--
Crazy George
Remove N O and S P A M imbedded in return address
"VHFRadioBuff" <vhfradiobuff@aol.comspamme> wrote in message
news:20031213235517.26181.00000712@mb-m15.aol.com...
> >old motorola ? the type that you still find on the back of some scanners?
>
> The kind you're refering to is an RCA jack, I think. From the looks of the
> plug, it appears the end of the coax would have to look like the cables
you
> plug into your TV or VCR's A/V jacks.
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
> 73! de Andy KC2SSB - WPYI880 (GMRS)
> Beachwood, NJ USA! Grid FM29vw
> http://vhfradiobuff.tripod.com

6009. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 16:35:27 UTC
From: Seth Thompson <bimbo@wasua.com>
Message-ID: <3fdc9155$1_2@newsgate.singtel.com.hk>
Source record: 102976

They do show minimal specs, not a isotropic map like you may be used to

for ham antenna adds but 12db, 30 degree angle of radiation Its fed with
type N-male

connector. up to 50 watts input power 1:5.1 avg SWR @2.5 Ghz

choice of feedline of course would be up to you but I wanted to get the

thing up and running so for test purposes I used 20 feet of old RG-58

30 mw input and have it pointed at my ISP 4.5 miles away that's how I

get 1.5 Mb internet service

--
Rex Geissinger KA6SQM
Microsoft Core Group
)
"Joel Kolstad" <JKolstad71HatesSpam@Yahoo.Com> wrote in message
news:bqpktbrii1@news.oregonstate.edu...
> Jon Gauthier <jon.gauthier@spam.killer> wrote:
> > I'll assume you do... The Pringles can antennas do work very nicely -
> > they have an effective gain of 14-18dB. OTOH, they're Pringles cans -
> > i.e., mylar- or aluminum-coated cardboard. If you want something a bit
> > more substantial, check out http://www.cantenna.com. For $20 bucks, it's
> > a better bargain than growing your own...
>
> It certainly looks well-constructed, but I'd have a lot more confidence in
> Cantenna's products if they had measured (or even simulated) radiation
> patterns and calculations. They also don't mention their feed arrangement
> which could make a huge difference in actual performance.
>
> ---Joel Kolstad
>
>

6010. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 16:40:03 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0312140840.7287df84@posting.google.com>
Source record: 102975

Here are a couple of articles I found.

http://www.qsl.net/pa3hbb/arframe.htm
http://www.arrl.org/tis/info/pdf/0207040.pdf

The last link is for a 40 meter linear loaded dipole, but I think the
formulas should work.
GL es 73,
Terry, WK0F

"news" <trowley@pacbell.net> wrote in message
news:<AcyCb.70757$4S4.13845@newssvr25.news.prodigy.com>...
> Does anyone have a good source for calculating the length of linear loads
> for a shortened 40 meter Vertical? I'm experimenting with a 20' vertical
> and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
> band. Any suggestions?

6011. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 17:42:40 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <ki1Db.3976$xH2.827539@news1.news.adelphia.net>
Source record: 102977

Cecil Moore wrote:

> Reg Edwards wrote:
>
>> For all-round, multi-directional, multi-elevation, multi-band
>> working, DX
>> and local, there is nothing better than a random length dipole with a
>> random-length high-Zo feedline, ...
>
>
> My non-random length high-Z0 feedline is better, Reg, i.e., NO tuner
> losses.

My XYL took a look at that setup, and informed me that that was the
lowest on her list of "allowables" ! 8^)

- Mike KB3EIA -

6012. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 17:52:23 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <rr1Db.3997$xH2.829271@news1.news.adelphia.net>
Source record: 102978

Lloyd Mitchell wrote:

> You know I've been watching the posts in this group for over a year now and
> no matter what anyone says you guys always have a negative to say about
> somebody elses antenna. So may you have a Happy Christmas.

Prolly because there *is* something negative to be said about any
antenna out there!

And the G5RV is an adequate antenna for what it was designed for. Some
zealot's started turning in to something that it was not.

- Mike KB3EIA -

6013. Re: How to contact..spam.....

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 18:11:45 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <BJ1Db.4044$xH2.834816@news1.news.adelphia.net>
Source record: 102979

Jerry wrote:

> Problem is many US companies have the spam created here in us and the
> sent to the internet from servers located overseas so they are untouchable
> from us laws etc..
>
> You are correct, many people have unprotected computers with outdated
> o/s and or no virus software.
>
> Example is at my university they processed a weeks worth of email in 24 hours
> due to that nasty virus that was going around a few months ago. Our mainframe
> ftp server gets requests from almost every pc on the campus that is infected,
> campus net can't or won't pull the plug on their ip address.
>
> Best thing I can suggest is check out following sites and get protected.
>
> http://grc.com lots of info no charge and learn how to protect your pc.
>
> http://www.lavasoftusa.com/ no charge ad aware v 6.0
> finds and then removes many types of spy ware and ad tracking software that
> is installed when you visit websites (without your knowledge or permission !)

Another couple things that are important IMO. Get ZoneAlarm. And then as an added protection, get a Proxy server such as Proxomitron. (free, so I'll forgive the strange name)

I have another firewall on my D-Link router, so I'm running two firewalls, and a proxy server.

The proxy eliminates all ad's from a website that don't originate from that website, which is a big source of spyware. It kills popups too, and several other annoying things such as converts blinkies to bold type, kills nosey Javascripts, does selective cookie accept/refusal and lots of other handy configurable things.

The only downside is that when you go to a site that has lots of the intrusive stuff on it, (and it is an education to see which sites do this) it will take a little longer to load the page.

Remember, Mister Website is NOT your friend!

Now what I want is a mailreader that will refuse all exe's, bat's, etcetera and leave them on the server, never to reach my machine. (no, I will not use Outlook in any shape or form) I haven't looked too hard, anyone know of some good ones?

- Mike KB3EIA -

6014. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 18:27:04 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdcabd7_3@corp.newsgroups.com>
Source record: 102980

Mike Coslo wrote:
> My XYL took a look at that setup, and informed me that that was the
> lowest on her list of "allowables" ! 8^)

My XYL (at the time) said she would move from CA to AZ only if I would
give up ham radio. She's still in CA now married to a non-ham. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6015. Wanted Antenna for HT

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 22:06:44 UTC
From: Don L <ve6ci@cablerocket.com>
Message-ID: <3fdce561$0$32586$2c56edd9@news.cablerocket.com>
Source record: 102981

I have a Yaesu FT411E handheld and I am looking for a antenna for it.

Thanks

6016. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-14 22:33:26 UTC
From: brianburke@juno.com
Message-ID: <f45722ac.0312141433.24048ac7@posting.google.com>
Source record: 102982

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<brcios$3qd$1@sparta.btinternet.com>...
> With millions of other subscribers world-wide, I am receiving as many as 250
> spam messages daily, many generated by viruses in other people's computers.
>
> 99 perecent of this attrocious rubbish originates in the United States of
> America, the land of the free.
>
> Can't you get Bush to do something about it?
>
> I can do no better than speed-read the subject lines and dump everything
> unless the subject matter is OBVIOUSLY something of interst to me.
>
> SWR or Old Wives is OK
>
> Female or male teenagers at my time of life are not.
> ---
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....

Reg, you must have a point. Apparently it's not antennas.

What has happened to you?

6017. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 00:55:26 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a464bd4b9e3a4e5989694@news-server.socal.rr.com>
Source record: 102983

In article <s4vCb.1022$qq.381@bignews1.bellsouth.net>, lloydm75
@hotmail.com says...
> Steve,
> If yu can handle a full sized one 102' and you'll be very happy. Now you can
> build it yourself OR you can buy one from various vendors. Me I decided to
> "stay as true to G5RV's article" and bought a G5RV from W7FG.com as it is
> tru ladder line and actually is only two wires from the PL259 connector to
> the end. simple and it works. http://www.w7fg.com/ant.htm
>
> G5RV 80 - 10 Meters (102 Feet)
> With 31 feet of Ladder Line.....$35
> Requires Coax from supplied UHF Male connector to equipment.

Believe me, if I could I would! But I'm in a condo and I don't have a
great deal of real estate in which to put up a decent-length antenna.
I'm having to content myself with 40-10 on the G5RV and a 2m vertical
for VHF operations. Hopefully I will be able to change over to a better
G5RV configuration soon, plus some beams for VHF and UHF, but that's a
ways down the road.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6018. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 02:57:21 UTC
From: news <trowley@pacbell.net>
Message-ID: <lq9Db.39418$Qu1.7119@newssvr29.news.prodigy.com>
Source record: 102984

I saw both these articles but they are still both fairly weak on theory.

K4VX's article was what inspired me to try using a ladder line. He apparently tried several lengths in NEC and then built an antenna from that result. I've done that as well and it gives you a good start but doesn't expose the theory of calculating the loads.

Reid's article starts with a very simple model. He makes the load length equal to the "missing" length of the radiator! Then he complicates the analysis with a top hat which he uses to create an "adjustment". That apparently got close and then he pruned till he got resonance in the range he wanted. It wasn't clear how the size of the top hat relates to the length of the load.

The ARRL Antenna book has great analysis of the calculation for top hats but no similar analysis for linear loads - at least I didn't find any.

Any help appreciated

"Terry Ashland" <t_ashland@yahoo.com> wrote in message
news:6e6aeba9.0312140840.7287df84@posting.google.com...
> Here are a couple of articles I found.
>
> http://www.qsl.net/pa3hbb/arframe.htm
> http://www.arrl.org/tis/info/pdf/0207040.pdf
>
> The last link is for a 40 meter linear loaded dipole, but I think the
> formulas should work.
> GL es 73,
> Terry, WK0F
>
>
>
> "news" <trowley@pacbell.net> wrote in message
news:<AcyCb.70757$4S4.13845@newssvr25.news.prodigy.com>...
> > Does anyone have a good source for calculating the length of linear
loads
> > for a shortened 40 meter Vertical? I'm experimenting with a 20'
vertical
> > and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
> > band. Any suggestions?

6019. Re: vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 03:36:26 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fdd2e88_3@news1.prserv.net>
Source record: 102985

Chuck:

The basic equation for path attenuation is Attn. = 36.6 + 20 log F(MHz) + 20 log d (miles) (in dB).*

The log function dilutes the effect of frequency change, so tripling the frequency from 147 MHz to 441 MHz increases the loss by 20 log 3 ~ 10 dB. If the UHF antenna gain is increased by 5 dB on each end it is a wash. A 20 foot long DB-224 antenna has 6 dB of gain on 144, and a 20 foot long DB-410 has 10 dB of gain on 440, so the overall loss going from VHF to UHF with comparative size antennas is about 2 dB. Not really noticeable except under marginal conditions. Mobile antennas on VHF run from unity to 3 dB, and UHF run from unity to 6 dB, so the system loss difference for base to mobile can be from 3 dB to 5 dB, which approaches noticeable, but not remarkable. Distance difference will be in the same category, hard to notice. UHF tends to diffract better, so it will go "over the hill" a little further. while VHF will go a little further on flat ground. There is no one exact answer for which works better. Give me an exact path description and I can calculate loss, but paths of the same length with different profiles will vary greatly.

Another rule of thumb is doubling antenna elevation at VHF produces about 6 dB gain, so my antenna on top of my monster truck roof will work 6 dB better than the one on your motorcycle.

That what you are looking for?

* ITT Handbook, Chapter 28 in most recent editions.
--
Crazy George
Remove N O and S P A M imbedded in return address

6020. apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 04:17:50 UTC
From: "j.beltz" <j.beltz@insightbb.com>
Message-ID: <OBaDb.549665$Tr4.1495835@attbi_s03>
Source record: 102986

i live in an single story first floor apartment,
any ideas on an 80-10 meter antenna indoors only,
thanks jack

6021. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 05:39:42 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <uehjrb-crs.ln@p400bob.lse.com.au>
Source record: 102988

2 magloops? I have seen various designs for loops under 1 metre in diameter

Cheers VK2YQA

> i live in an single story first floor apartment,
> any ideas on an 80-10 meter antenna indoors only,
> thanks jack

--

(The reply address is broken. Put bcnoop in front of the at!)

6022. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 09:20:02 UTC
From: HIGHQ <highq@nospam.net>
Message-ID: <vtqv60lv33gs84@news.supernews.com>
Source record: 102987

Brian wrote:
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<brcios$3qd$1@sparta.btinternet.com>...
>
>>With millions of other subscribers world-wide, I am receiving as many as 250
>>spam messages daily, many generated by viruses in other people's computers.
>>
>>99 perecent of this attrocious rubbish originates in the United States of
>>America, the land of the free.
>>
>>Can't you get Bush to do something about it?
>>
>>I can do no better than speed-read the subject lines and dump everything
>>unless the subject matter is OBVIOUSLY something of interst to me.
>>
>>SWR or Old Wives is OK
>>
>>Female or male teenagers at my time of life are not.
>>---
>>.....
>>Regards from Reg, G4FGQ
>>For Free Radio Design Software go to
>>http://www.btinternet.com/~g4fgq.regp
>>.....
>
>
> Reg, you must have a point. Apparently it's not antennas.
>
> What has happened to you?

He's gone off one of his pills. See this post:

Path:
sn-us!sn-xit-05!sn-xit-09!supernews.com!newsfeed.ision.net!ision!news.belwue.de!feed.news.
tiscali.de!uninett.no!newsfeed1.eu.ignite.net!newsr1.ipcore.viaginterkom.de!btnet-peer1!bt
net-feed5!btnet!news.btopenworld.com!not-for-mail
From: "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com>
Newsgroups: sci.electronics.design
Subject: Re: Saddam captured- What will Democrats do now?
Date: Sun, 14 Dec 2003 22:50:51 +0000 (UTC)
Organization: Private individual
Lines: 23
Message-ID: <bripga$gm5$1@titan.btinternet.com>
References: <118afaeb.0312140821.58fc1484@posting.google.com>
Reply-To: "Reg Edwards" <g4fgq,regp@ZZZbtinternet,com>

NNTP-Posting-Host: host217-44-14-200.range217-44.btcentralplus.com
X-Trace: titan.btinternet.com 1071442251 17093 217.44.14.200 (14 Dec
2003 22:50:51 GMT)
X-Complaints-To: news-complaints@lists.btinternet.com
NNTP-Posting-Date: Sun, 14 Dec 2003 22:50:51 +0000 (UTC)
X-Newsreader: Microsoft Outlook Express 6.00.2800.1158
X-MSMail-Priority: Normal
X-Priority: 3
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1165
Xref: sn-us sci.electronics.design:402870

That Saddam's body is still alive (or so we are told) and now in the hands of the CIA is of no consequence whatsoever.

Where are the so-called propagandised weapons of mass destruction, 45 minutes launching time, which were Government's lying excuses for occupying the country, once again in a period of 15 years, deliberately and intentionally sending it back with missiles and splinter-bombs to the stone age?

The whole world knows where the weapons of mass destruction are to be found.

But these are trivial matters.

The Western multi-nationals, conglomerates, corporations, banks, have now successfully achieved their short-term objectives of completing control over the Middle Eastern oil fields and regions through which the pipelines to American power stations, plastics industries and guzzling petrol tanks have to be fed.

What, and in which region, are the next financial and military objectives of Big Brother ? But isn't it quite obvious?

6023. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 11:38:09 UTC
From: "M. J. Powell" <mike@pickmeremere.demon.co.uk>
Message-ID: <iWXzM6Jh0Z3$Ewpy@pickmere.demon.co.uk>
Source record: 102989

In message <OBaDb.549665$Tr4.1495835@attbi_s03>, j.beltz
<j.beltz@insightbb.com> writes
>i live in an single story first floor apartment,
>any ideas on an 80-10 meter antenna indoors only,
>thanks jack

Can you get at the roof space?

Mike
--
M.J.Powell

6024. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 12:20:36 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fdda46e.397097515@news.galilei.com>
Source record: 102990

Hi Jack

I lived in an apartment for several years, NO ANTENNAS OF ANY KIND ALLOWED. Inside or outside. They provided a TV antenna hookup, lousy, but they provided it, so we couldn't even have rabbit ears.

Yet I had quite an antenna farm, and no one was the wiser about it.

Dipoles are fairly easy to disguise as something else. But I had a 160 meter dipole in plain sight and no one paid a bit of attention to it. Only because of the steps I took previously to draw attention away from it as an antenna, to something else, like a kite caught in a tree and this was the string to it.
Antenna's in flower pots, and the coax to them inside of a garden hose, etc.
Where there is a will, there is a way (and/or relatives), depending upon the type of will, hi hi.....

The easiest antenna I installed inside, was simply using self-adhesive copper foil, like aluminum burglar window foil, but only made of copper. You can get this at almost any stained glass supplier.
Stick it to the ceiling, in the corners and then paint over it, it becomes invisible. I caulked over mine lightly before painting.

I even made a little stationary mini-beam on one wall using this copper foil. It couldn't be rotated, but it pointed in the direction I needed it to, to hit a distant 6 meter repeater with my HT.
After I found out it worked so well, I spackled over it and repainted the wall, it was completely invisible except for a BNC connector just above the baseboard, which was easily removed when I moved.

TTUL
Gary

6025. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 14:38:29 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <84hrtv4j4e9svggsrn6lg32a5hsf9hl0va@4ax.com>
Source record: 102991

On Mon, 15 Dec 2003 04:17:50 GMT, "j.beltz" <j.beltz@insightbb.com>
wrote:

>i live in an single story first floor apartment,
>any ideas on an 80-10 meter antenna indoors only,
>thanks jack
>

If you can park close to your apartment, a mobile antenna on your car,
with a temporary line running out to your car, could be a possibility.

If you can put a short, angled whip in your window, look at the Barker
& Williamson AP-10A. (www.bwantennas.com) Many years ago, I had good
luck running one from a 3rd story window. Good for 40 through 2
meters.

Otherwise, you could string up dipoles for the higher HF bands in your
apartment.

For the outdoors, suppliers like www.thewireman.com have #26 black
insulated antenna wire, which is nearly invisible against the sky, and
RG-174 coax, which is only 1/8" thick -- though it could be tricky
stringing anything up on an apartment ground.

Finally, when your lease is up, you might look into a house rental :-)

Bob
k5qwg

6026. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 15:40:39 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fddd659$1_5@corp.newsgroups.com>
Source record: 102992

j.beltz wrote:
> i live in an single story first floor apartment,
> any ideas on an 80-10 meter antenna indoors only,

I've always wanted to try hardware cloth or copper screen
on the floor and ceiling with a vertical copper pipe in
the middle of the room. Are you married? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6027. Relm WHS450 UHF (450-480)MHZ RADIO NR For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 15:44:23 UTC
From: Compsimple <compsimple@hotmail.com>
Message-ID: <rFkDb.27355$Dt6.622835@twister.tampabay.rr.com>
Source record: 102993
Cross-posted to: in.ham-radio,rec.ham-radio,rec.ham-radio.packet,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.digital.misc

For Sale no reserve. see ebay link below. This radio cost almost $500

and has never been used.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3065770970

6028. Re: Anyone have a secret to finding that Free tower.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:07:16 UTC
From: "R. Scott" <washingtonham@yahoo.com>
Message-ID: <3FDDDC34.1F0E5B93@yahoo.com>
Source record: 103125

Thanks one and all for the great replies.

Out to scour the earth for that elusive tower now :D

Rick N7HJ

6029. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:09:38 UTC
From: Ken Bessler <kg0wxIHATESPAM@yahoo.com>
Message-ID: <brkmc2$41jm4$1@ID-213023.news.uni-berlin.de>
Source record: 102994

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fddd659$1_5@corp.newsgroups.com...
> j.beltz wrote:
> > i live in an single story first floor apartment,
> > any ideas on an 80-10 meter antenna indoors only,
>
> I've always wanted to try hardware cloth or copper screen
> on the floor and ceiling with a vertical copper pipe in
> the middle of the room. Are you married? :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>

Oh, damn! Cecil is gay?

6030. Antenna propigation

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:14:01 UTC
From: Earthlink <Kedrid@kedrid.com>
Message-ID: <d5lDb.5344$Pg1.4949@newsread1.news.pas.earthlink.net>
Source record: 102995

I just picked up a new antenna, and I got a " DX - LB plus " 100' all band.. for HF..
I am going to connect it to a FT - 901DM radio.. But I am having trouble installing it..
The salesman told me it has to be a straight shot, or an inverted " V " ??
I was going to install it on the roof top as more of an " L " w/ one leg going almost directly North / south,
and one leg going almost directly east / west.. I was told it wouldn't really work, I would get "unpredictable radiation patterns ".

Can anyone give me any Ideas what would happen if I did put it up as more of an " L " or " V " on its side? rather then a straight
up n down inverted " V " or a straight line I got the 100" where I live, but it would go under power lines.. I know thats 1) not safe,
and 2) just not a good Idea... I have 2 masts up now. w/ 70' span, if I drop off the roof it would be more dogg legged, and more of an "L " still anyway..well in " L " w/ a kink ;) haha.. I thought it was going to be an easy install. I am sure putting it together and up will be.. its finding a place to install 100' in 1 shot, or getting it from crossing power lines thats seems to be a trick..

Anyway I wanna see if it will work, and how to predict radiation patterns installed uncoventionaly..

6031. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:25:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdde0f0_2@corp.newsgroups.com>
Source record: 102996

Ken Bessler wrote:

> "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
>>I've always wanted to try hardware cloth or copper screen
>>on the floor and ceiling with a vertical copper pipe in
>>the middle of the room. Are you married? :-)
>
> Oh, damn! Cecil is gay?

Nope, but even if I were, I'll bet I would still be living
alone. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

6032. Re: vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:33:37 UTC
From: richardharrison@webtv.net
Message-ID: <6956-3FDDE261-355@storefull-2315.public.lawson.webtv.net>
Source record: 102997

KC5CQA wrote:
"In the past, the minor tests that I have conducted did not really prove that much."

That might imply that there isn`t much to prove. You might infer that VHF and UHF transmission ranges are similar.

One fact is that communication is a case of signal versus noise. Path attenuation acts on both signal and noise. At UHF, signals may be weaker, but noise is weaker too.

Harmonics of strong signals some times compete with the signal you would like to receive. The 5th harmonic production is usually inherently weaker than the 3rd, etc. This can make UHF signals usable in some cases when VHF signals are not.

UHF may be reflected or blocked by smaller obstacles then VHF, but UHF also penetrates and propagates through smaller spaces.

Antenna gain is more feasible at UHF.

Consider TV coverage, UHF channels versus VHF channels. The difference in coverage is small..

In the good old days, increasing the frequency often meant decreasing equipment performance. Solutions have now been found to many UHF equipment problems.

Best regards, Richard Harrison, KB5WZI

6033. Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 16:45:33 UTC
From: Mike Sims <msimsNOSPAM!!!@nospam.ci.victorville.ca.us>
Message-ID: <MPG.1a47850a896918f989681@news.twtelecom.net>
Source record: 102998

I'm trying to do a point to point 802.11b connection to two friends houses. This will be my 5th personal installation for wireless point to point. I have trees in the way on both sides, and need a cost effective way to get these antennas up 50 feet.

Does anyone have any suggestions for accomplishing this?

Thank You,

Mike Sims

6034. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 17:00:33 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FDDEA91.ABEF33@uwe.ac.uk>
Source record: 102999

CW wrote:
>
> Effective lightning protection can be done in the amatuer station for a
> reasonable cost. Most though, don't do so.
> "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> news:3FD9D0AC.19C868B0@uwe.ac.uk...
>
> > As I understand it, there is nothing that can work if
> > a direct lightening strike occurs.

How? How do you deal with thousands of amps? It's for certain sure that
a simple spark gap will be blown to kingdom come in the first millisecond,
so what happens in the next millisecond? and the one after.....

I think your method must be untried, untested and 'whistling in the dark'.

Andy, M1EBV

6035. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 17:04:32 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FDDEB80.BB963C7E@uwe.ac.uk>
Source record: 103000

Cecil Moore wrote:
>
> CW wrote:
> > Effective lightning protection can be done in the amatuer station for a
> > reasonable cost. Most though, don't do so.
>
> My costs have always been reasonable - I unplug the antenna
> when not in use. I don't use it during thunderstorms. I have
> lived in extreme lightning areas with zero problems.
>

All good stuff, Cecil, but I'd say that was lightening avoidance
not protection. I still don't believe there is an effective method
of lightening protection for an amateur station that will accept a
direct strike and survive. Even your method would probably result
in a fried antenna ;-) Hope you never find out!

vy 73

Andy, M1EBV

6036. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 19:36:04 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <E2oDb.58116$8y1.228622@attbi_s52>
Source record: 103001

If it weren't possible, millions of dollars of radio equipment would go up in smoke every year. There are places that, if you have a tower, you WILL get hit on a regular basis. If you would like to know something about it, do a search on this group for Gary Coughman. Also, take a look at the Polyphaser web site. Before you start accusing someone of not knowing what they are talking about, you would be well advised to ensure that it is not you that is ignorant.

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
news:3FDDEA91.ABEF33@uwe.ac.uk...
> CW wrote:
> >
> > Effective lightning protection can be done in the amatuer station for a
> > reasonable cost. Most though, don't do so.
> > "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> > news:3FD9D0AC.19C868B0@uwe.ac.uk...
> >
> > > As I understand it, there is nothing that can work if
> > > a direct lightening strike occurs.
>
> How? How do you deal with thousands of amps? It's for certain sure that
> a simple spark gap will be blown to kingdom come in the first millisecond,
> so what happens in the next millisecond? and the one after..........
>
> I think your method must be untried, untested and 'whistling in the dark'.
>
> Andy, M1EBV

6037. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 19:37:48 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <i4oDb.4226$Fg.2511@lakeread01>
Source record: 103002

According to ON4UN - linear loading can be made virtually loss free (pg 9-39). Can't do that with coils.

He suggests making the linear load stub 30% longer than the missing portion of 1/2 wavelength. (page 8-13) Then trim and try.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"news" <trowley@pacbell.net> wrote in message
news:AcyCb.70757$4S4.13845@newssvr25.news.prodigy.com...
>
> Does anyone have a good source for calculating the length of linear loads
> for a shortened 40 meter Vertical? I'm experimenting with a 20' vertical
> and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
> band. Any suggestions?
>
>

6038. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 19:51:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fde113f_6@corp.newsgroups.com>
Source record: 103003

Andy Cowley wrote:
> All good stuff, Cecil, but I'd say that was lightening avoidance
> not protection. I still don't believe there is an effective method
> of lightening protection for an amateur station that will accept a
> direct strike and survive. Even your method would probably result
> in a fried antenna ;-) Hope you never find out!

I've been back in Texas for about 5 years now and the only thing
that has gotten fried was a five-foot-tall live oak tree, the
shortest thing around. Go figure. It's still struggling to stay
alive with half its branches dead and a burn mark down the trunk.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6039. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 20:23:26 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FDE183E.F42F8DB4@cwis.net>
Source record: 103004

Buy a tower?
'Doc

6040. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 20:56:45 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <gs7stvg98en5slo7fdkdmrfaagqsnjdiep@4ax.com>
Source record: 103006

On Fri, 12 Dec 2003 14:19:08 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>With millions of other subscribers world-wide, I am receiving as many as 250
>spam messages daily, many generated by viruses in other people's computers.
>
>99 perecent of this attrocious rubbish originates in the United States of
>America, the land of the free.
>
>Can't you get Bush to do something about it?

No. Talk to his lap dog.

Bob
k5qwg

>
>I can do no better than speed-read the subject lines and dump everything
>unless the subject matter is OBVIOUSLY something of interst to me.

Changing to a new email address, and setting my ISP's spam filter on
medium high, eliminated most of my spam. I get 2 o 3 a week.

>
>SWR or Old Wives is OK
>
>Female or male teenagers at my time of life are not.
>---
>...
>Regards from Reg, G4FGQ
>For Free Radio Design Software go to
>http://www.btinternet.com/~g4fgq.regp
>...
>

6041. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 20:58:03 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <Nc2dnbM7yfD8vUOi4p2dnA@crocker.com>
Source record: 103005

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
news:3FDDEA91.ABEF33@uwe.ac.uk...
> CW wrote:
> >
> > Effective lightning protection can be done in the amatuer station for a
> > reasonable cost. Most though, don't do so.
> > "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> > news:3FD9D0AC.19C868B0@uwe.ac.uk...
> >
> > > As I understand it, there is nothing that can work if
> > > a direct lightening strike occurs.
>
> How? How do you deal with thousands of amps? It's for certain sure that
> a simple spark gap will be blown to kingdom come in the first millisecond,
> so what happens in the next millisecond? and the one after..........
>
> I think your method must be untried, untested and 'whistling in the dark'.
>
> Andy, M1EBV

lightning doesn't go on for milliseconds, 50 micro-seconds is a relatively
long stroke. 30kA can go through a 12ga copper wire with no damage for
10-20 microseconds. in most cases there will actually be very little
voltage between wires of a coax or twin lead just because their insulation
will break down or the feedpoint of the antenna will arc over... both are
naturally occuring spark gaps that actually work very well to protect
equipment from direct strikes. assuming of course the tower and feedline
have good grounds. where people have problems is they don't ground the
shield of the coax to a single point ground along with the power lines, so
they get differential voltages between grounds that has no place to go but
through the equipment. properly grounded installations with relatively
small arresters to limit voltage on the center conductor of the coax
relative to the shield are very effective. for tube type receivers a simple
spark gap is adequate, for transistorized stuff you may need lower voltage
protection and should probably get something commercially made for the job.

6042. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 21:20:38 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <GApDb.40219$5K.21284@newssvr29.news.prodigy.com>
Source record: 103007

"David Robbins" <noone@nowhere.com> wrote in message
news:Nc2dnbM7yfD8vUOi4p2dnA@crocker.com...
>
> "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> news:3FDDEA91.ABEF33@uwe.ac.uk...
> > CW wrote:
> > >
> > > Effective lightning protection can be done in the amateur station for
a
> > > reasonable cost. Most though, don't do so.
> > > "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> > > news:3FD9D0AC.19C868B0@uwe.ac.uk...
> > >
> > > > As I understand it, there is nothing that can work if
> > > > a direct lightening strike occurs.
> >
> > How? How do you deal with thousands of amps? It's for certain sure that
> > a simple spark gap will be blown to kingdom come in the first
millisecond,
> > so what happens in the next millisecond? and the one after.....
> >
> > I think your method must be untried, untested and 'whistling in the
dark'.
> >
> > Andy, M1EBV
>
> lightning doesn't go on for milliseconds, 50 micro-seconds is a relatively
> long stroke. 30kA can go through a 12ga copper wire with no damage for
> 10-20 microseconds. in most cases there will actually be very little
> voltage between wires of a coax or twin lead just because their insulation
> will break down or the feedpoint of the antenna will arc over... both are
> naturally occurring spark gaps that actually work very well to protect
> equipment from direct strikes. assuming of course the tower and feedline
> have good grounds. where people have problems is they don't ground the
> shield of the coax to a single point ground along with the power lines, so
> they get differential voltages between grounds that has no place to go but
> through the equipment. properly grounded installations with relatively
> small arresters to limit voltage on the center conductor of the coax
> relative to the shield are very effective. for tube type receivers a
simple
> spark gap is adequate, for transistorized stuff you may need lower voltage
> protection and should probably get something commercially made for the
job.
>

I've seen a common spark plug used to provide a spark gap for antennas. Setting the gap to about .05 inches will conduct much of the current away from the down stream circuitry. Some have suggested a few turns of the Coax after the gap will provide enough inductance to deter conduction past the gap, but I haven't pursued that to establish it as fact. There is also the problem of causing an impedance mismatch with an inductance in the line. The gap being smaller than the spacing of the coax would seem to be enough to minimize damage.

6043. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 21:53:34 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <3FDE2D5E.7030705@psu.edu>
Source record: 103008

'Doc wrote:
>
> Buy a tower?
> 'Doc

I wish I'd thought of that! 8^)

- Mike KB3EIA -

6044. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 21:57:48 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <9fbstvs51r2goc5rv1nood940bvlnhqisj@4ax.com>
Source record: 103009

On Mon, 15 Dec 2003 08:45:33 -0800, Mike Sims
<msimsNOSPAM!!!@nospam.ci.victorville.ca.us> wrote:

>I'm trying to do a point to point 802.11b connection to two friends
>houses. This will be my 5th personal installation for wireless point to
>point. I have trees in the way on both sides, and need a cost effective
>way to get these antennas up 50 feet.
>
>Does anyone have any suggestions for accomplishing this?
>
>Thank You,
>
>Mike Sims

Radio Shack makes a 36' push-up pole for $69. If that won't do it,
call Texas Towers in Dallas -- see their web site for phone #.

Bob
k5qwg

6045. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 22:33:27 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312151433.5b0ff2ed@posting.google.com>
Source record: 103010

Andy Cowley <andy.cowley@uwe.ac.uk> wrote in message
> As I understand it, there is nothing that can work if a direct lightening >strike occurs.
We are talking megavolts and thousands of amps.
> Way beyond anything an amateur could build.

Sure, but for only a short duration. There is plenty the average ham
can do to reduce damage.

> The best we can hope for is to dissipate charge build up on the
> aerial

Useless....Not much hope in that tactic.

and ensure that there is no more than a kilovolt or so at
> the input to the rig caused by the (field) effects of a nearby
> strike.

Actually, I think just a run of coax itself will reduce the potential
to a few hundred volts before it gets to the rig.

A spark gap that can conduct a lightening strike would
> be the size of a small truck.

A 10 gauge wire can safely conduct a lightning strike to ground. But
you must have a good low resistance connection to ground. If not, the
wire will be burnt toast.
>
> The only way to make sure you have a working station after a
> lightening strike on your aerials is to take out good insurance.

Insurance won't do any good for the existing gear. Proper setup to
avoid damage, or disconnecting is a better idea. I take strikes around
here all the time. Two were direct strikes to my mast in the last 4
years. I had no damage at all to anything, and I was sitting 15 ft
from the base of the mast both times at this puter. Didn't flinch at
all. MK

6046. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 22:39:31 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312151439.7e5fd560@posting.google.com>
Source record: 103011

Andy Cowley <andy.cowley@uwe.ac.uk> wrote in message I still don't believe there is an effective method
> of lightening protection for an amateur station that will accept a
> direct strike and survive.

There is, but most hams don't do it. Costs money, and everything has to be set up just right. It's done the same way all other 24 hour radio/tv stations, etc do it. How many commercial radio stations have you heard that go off the air when lightning strikes their tower? Not many I bet. We would never have reliable broadcast TV in this town if that were the case.. :/ MK

6047. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 22:46:46 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312151446.690e8b6a@posting.google.com>
Source record: 103012

"CW" <clinton.magers@comcast.net> wrote in message
news:<E2oDb.58116$8y1.228622@attbi_s52>...
> If it weren't possible, millions of dollars of radio equipment would go up
> in smoke every year. There are places that, if you have a tower, you WILL
> get hit on a regular basis. If you would like to know something about it, do
> a search on this group for Gary Coughman. Also, take a look at the
> Polyphaser web site. Before you start accusing someone of not knowing what
> they are talking about, you would be well advised to ensure that it is not
> you that is ignorant.

Actually, it's Gary Coffman. But good advice...

http://groups.google.com/groups?hl=en&lr=&ie=ISO-8859-1&q=gary+coffman+lightning&btnG=Google+Search&meta=

for a start... Should be enough to read for a few hours...

MK

6048. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 22:53:39 UTC
From: Ken Bessler <kg0wxIHATESPAM@yahoo.com>
Message-ID: <brle1i$4qq2t$1@ID-213023.news.uni-berlin.de>
Source record: 103013

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fdde0f0_2@corp.newsgroups.com...
> Ken Bessler wrote:
>
> > "Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote:
> >>I've always wanted to try hardware cloth or copper screen
> >>on the floor and ceiling with a vertical copper pipe in
> >>the middle of the room. Are you married? :-)
> >
> > Oh, damn! Cecil is gay?
>
> Nope, but even if I were, I'll bet I would still be living
> alone. :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

LOL! Poor Cecil..... :-)

Ken

6049. Re: vhf/uhf difference???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 22:54:25 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <mMadneZUNK79oEOiRVn-gg@ctc.net>
Source record: 103014

> Consider TV coverage, UHF channels versus VHF channels. The difference
> in coverage is small..
>
> In the good old days, increasing the frequency often meant decreasing
> equipment performance. Solutions have now been found to many UHF
> equipment problems.
>
> Best regards, Richard Harrison, KB5WZI
>

Not sure about the TV stations but I was thinking they can run more ERP than the VHF stations.

In the 'good old days' it was difficult to build a receiver that was as sensitive at 440 as it was at 150 mhz and power was harder to generate also. With solid state there is very little differance in the devices sensitivity up to atleast 1ghz and maybe higher than it is at 30 mhz. Power in the range of 100 watts is easy in the solid state units also now.
For the last few years it seems that many ham rigs have about 35 watts on 440 and 50 watts on 2 meters. Mainly in solid state gain blocks. Not that much differance .

6050. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 23:18:15 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <rrfstv0rr77b3p56rho0sdg77udlpdhqbh@4ax.com>
Source record: 103015

On Mon, 15 Dec 2003 13:51:49 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Andy Cowley wrote:
>> All good stuff, Cecil, but I'd say that was lightening avoidance
>> not protection. I still don't believe there is an effective method
>> of lightening protection for an amateur station that will accept a
>> direct strike and survive. Even your method would probably result
>> in a fried antenna ;-) Hope you never find out!
>
>I've been back in Texas for about 5 years now and the only thing
>that has gotten fried was a five-foot-tall live oak tree, the
>shortest thing around. Go figure. It's still struggling to stay
>alive with half its branches dead and a burn mark down the trunk.

My system gets hit about 3 times a year. So far I've only lost the
front end out of a 2-meter rig and some coax. Since installing the
new tower I've not lost any radio gear, but I did get one computer
fried.

http://www.rogerhalstead.com/ham_files/tower.htm
shows the tower and antennas, but not the ground system.

There are currently 30, 8' ground rods and over 600 feet of bare #2
copper tying the whole works together.

Unfortunately we had to have some septic work done. When digging out
the tank they hooked the ground system. Pulled out a section of the
basement wall and cracked a whole bunch of it. The wall is
temporarily repaired, but we are going to have to replace the entire
wall this coming season.

IF you have a fast connection the view from the top of the tower
http://www.rogerhalstead.com/ham_files/tower.htm panorama.
It's over 19 megs and would take forever on dial up.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6051. Omni directional beam :-(??????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 23:26:45 UTC
From: "Johnny V. Mullins" <jvm333@alltel.net>
Message-ID: <_qrDb.29$Nq.0@fe10>
Source record: 103016

Hey gang, I gotta problem here with a with a 27 kHz. Maco Comet / Y Quad
.....

I bought a new Maco Comet. After assembly, I attached it to a ten ft.section
of tower and a 10 ft piece of thin wall pipe for final adjustments.

Overnight the wind bent the pipe and allowed the director elements to hit
the ground and bend them , so I downloaded the assembly instructions for a
Maco Y Quad and built " it " back in " that " configuration (by the specs)
to use until I decided what I want to do.
Now here's the problem. I've mounted the Y Quad on the same section of tower
with a new section of pipe and a rotor.

The SWR is around 1.5 to 1, but ..... the antenna seems to make
little or no difference in the direction it's turned or what polarity is
being used ?????????? Its like a "copy stick" (omni directional)

Now I need to add this .... This antenna is temporarily located 28
ft.east of a 55 ft, steel tower that has three scanner antennas and a UHF TV
antenna. Also, a tier of three guy wires from the tower are no more than 25
ft, away from, and above it.

Also, several years ago had a "MoonRaker" on this tower and the directivity
and polarity were great !!!!!! just to let you know my location is OK, and
not to suggest that I expect the directivity to equal the MoonRaker

OK. What's the opinion of the group ?? And .... what suggestions ??

I could try a location (for testing and adjustments) farther from the
tower, it'd just be a lotta work, but I don't want the antenna put on top of
my tower the way it performs now :-(

Johnny

6052. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 23:32:13 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <hfgstvkbi2p9j8fesaj6h0fibfapi5erbb@4ax.com>
Source record: 103017

On 15 Dec 2003 14:33:27 -0800, nm5k@wt.net (Mark Keith) wrote:

>Andy Cowley <andy.cowley@uwe.ac.uk> wrote in message
>> As I understand it, there is nothing that can work if a direct lightening >strike occurs. We are talking megavolts and thousands of amps.
>> Way beyond anything an amateur could build.
>
>Sure, but for only a short duration. There is plenty the average ham
>can do to reduce damage.
>
>> The best we can hope for is to dissipate charge build up on the
>> aerial
>
>Useless....Not much hope in that tactic.
>
> and ensure that there is no more than a kilovolt or so at
>> the input to the rig caused by the (field) effects of a nearby
>> strike.
>
>Actually, I think just a run of coax itself will reduce the potential
>to a few hundred volts before it gets to the rig.
>
> A spark gap that can conduct a lightening strike would
>> be the size of a small truck.
>
>A 10 gauge wire can safely conduct a lightning strike to ground. But
>you must have a good low resistance connection to ground. If not, the
>wire will be burnt toast.
>>
>> The only way to make sure you have a working station after a
>> lightening strike on your aerials is to take out good insurance.
>
>Insurance won't do any good for the existing gear. Proper setup to
>avoid damage, or disconnecting is a better idea. I take strikes around
>here all the time. Two were direct strikes to my mast in the last 4
>years. I had no damage at all to anything, and I was sitting 15 ft
>from the base of the mast both times at this puter. Didn't flinch at

All my antenna systems ground to the tower. The tower is thouroughly
grounded into a network of ground rods and #2 bare copper.

The cables come into the house through underground conduit where they
are again grounded and run through PolyPhasers.
http://www.rogerhalstead.com/ham_files/cablebox.htm

I need to add some photos that show the grounding at the tower base. Each leg is grounded through an 8' ground rod and the bare #2 radiates out from there for a minimum of 80 feet with ground rods spaced about 8 to 16 feet, depending on what's in the way.

There are crossing cables that also bond the cables and one run that parallels the conduit into the house with at least 5 ground rods along its length. It also ties into the old ground system for the original 90 foot tower. All joints are Cad Welded except the tie to the tower legs which use cable clamps to attach the cable to the leg. Then the cable is gracefully bent at the base to curve out to the first ground rod in the series.

It took a direct hit late this past summer with no harm to any equipment. I say direct hit as my neighbor happened to be looking at the tower when the strike hit. He was impressed. <:-))
I just tell the neighbors it's the neighborhood lightening rod and after that I think they believe me.

http://www.rogerhalstead.com/ham_files/tower.htm The view (third row from the bottom) is from the back yard of the above neighbor near our lot line.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

>all. MK

6053. Re: antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 23:46:10 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brlh42$7b9$1@hercules.btinternet.com>
Source record: 103018

The guns are silent.

"All quiet on the Western Front."

Isn't it amazing that a lil' drop of 'rithmetic has a greater smoothing
effect than "pouring OIL on troubled waters" ?

==========

Reg wrote -

A thick layer of insulation over an antenna wire is just
uniformly-distributed capacitance loading. As with ALL transmission lines,
an increase in capacitance per unit length results in a reduction in the
propagation velocity and a consequent reduction in the resonant length.

Capacitance increase depends on wire diameter, diameter over insulation, and
permittivity of the insulating material. The velocity factor VF due to
insulation thickness in the case of a long, straight, antenna wire, can be
estimated as follows.

d = wire diameter.
D = diameter over insulation.
h = height above ground.
K = permittivity of insulation.

K can vary from 2.5 to 6 depending on material.

Calculate A = K*Ln(4*h/d)
Calculate B = K*Ln(4*h/D)
Calculate C = Ln(D/d)

Then VF = Sqrt(A / (B + C))

Decrease in antenna length due to insulation = (1 - VF)*100 percent.

And unless the insulation thickness looks like 1" diameter coax with the
braid stripped off, for ordinary HF wire antennas at ordinary heights the
pruning will be lost in all the other things which might need a teeny bit of
pruning. As Roger advises "cut long and trim to fit". In practice, if a
tuner is in circuit, after taking the obligatory end-effect into account,
then I would guess pruning is seldom needed on simple wire antennas at
ordinary heights.
> ----
> Reg, G4FGQ

6054. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-15 23:57:49 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <1UrDb.552149$HS4.4191094@attbi_s01>
Source record: 103119

Wasn't sure about the name. Figured somebody would correct me if I was
wrong. Thanks.

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0312151446.690e8b6a@posting.google.com...
> "CW" <clinton.magers@comcast.net> wrote in message
news:<E2oDb.58116$8y1.228622@attbi_s52>...
> > If it weren't possible, millions of dollars of radio equipment would go
up
> > in smoke every year. There are places that, if you have a tower, you
WILL
> > get hit on a regular basis. If you would like to know something about
it, do
> > a search on this group for Gary Coughman. Also, take a look at the
> > Polyphaser web site. Before you start accusing someone of not knowing
what
> > they are talking about, you would be well advised to ensure that it is
not
> > you that is ignorant.
>
> Actually, it's Gary Coffman. But good advice...
>
>
http://groups.google.com/groups?hl=en&lr=&ie=ISO-8859-1&q=gary+coffman+lightning&btnG=Goog
le+Search&meta=
>
> for a start... Should be enough to read for a few hours...
>
> MK

6055. Re: Omni directional beam :-(??????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 00:03:48 UTC
From: jgboyles@aol.com
Message-ID: <20031215190348.29517.00000266@mb-m02.aol.com>
Source record: 103120

>Hey gang, I gotta problem here with a with a 27 kHz. Maco Comet / Y Quad

Don't take this the wrong way, but this is an amateur radio antenna newsgroup. I for one, and I'm sure others don't a Maco Comet/Y Quad, or Moonraker from a hole in the ground. If you could describe the configuration of the antenna I'm sure there are plenty here who could help. I'm guessing it's a cubical quad of sorts, but don't know.
73 Gary N4AST

6056. Flex-Weave Inverted L

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 00:36:11 UTC
From: Joe Guthart <jguthart@comcast.net>
Message-ID: <%rsDb.401062$275.1271817@attbi_s53>
Source record: 103121

I've got a Inverted L antenna that I've used for about the last 18 months for SW that just broke due to high wind conditions. I typically soldered a feed line at one end of the 70 feet or so of wire. I've noticed that with a antenna wire product called Flex-Weave, it claims that you can just tie a not to an insulator because it was so flexible. I was wondering if I could just go a few time around the end insulator and utilize the wire as its own feed in an Inverted L fashion all as one piece of continuous wire without having to go through the action of soldering a feed line? Hopefully someone will understand this...please advise. Thanks.

6057. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 01:07:22 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <lmmstvcrc2n4i0s18k3sl7rvdncm9c7iu1@4ax.com>
Source record: 103122

On Mon, 15 Dec 2003 15:57:48 -0600, Bob Miller
<bxmiller@texas.netNOSPAM> wrote:

>On Mon, 15 Dec 2003 08:45:33 -0800, Mike Sims
><msimsNOSPAM!!!@nospam.ci.victorville.ca.us> wrote:
>
>>I'm trying to do a point to point 802.11b connection to two friends
>>houses. This will be my 5th personal installation for wireless point to
>>point. I have trees in the way on both sides, and need a cost effective
>>way to get these antennas up 50 feet.

Is it legal?

Roger (K8RI)

>>
>>Does anyone have any suggestions for accomplishing this?
>>
>>Thank You,
>>
>>Mike Sims
>
>Radio Shack makes a 36' push-up pole for $69. If that won't do it,
>call Texas Towers in Dallas -- see their web site for phone #.
>
>Bob
>k5qwg
>

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6058. Re: Flex-Weave Inverted L

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 02:53:11 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <ngsstv0v95a4us5931fkq21mfml803cpio@4ax.com>
Source record: 103123

On Tue, 16 Dec 2003 00:36:11 GMT, "Joe Guthart" <jguthart@comcast.net>
wrote:

>I've got a Inverted L antenna that I've used for about the last 18 months
>for SW that just broke due to high wind conditions. I typically soldered a
>feed line at one end of the 70 feet or so of wire. I've noticed that with
>a antenna wire product called Flex-Weave, it claims that you can just tie a
>not to an insulator because it was so flexible. I was wondering if I could
>just go a few time around the end insulator and utilize the wire as its own
>feed in an Inverted L fashion all as one piece of continuous wire without
>having to go through the action of soldering a feed line? Hopefully someone
>will understand this...please advise. Thanks.
>

Yes, you can do that, and it will work just fine. On the other hand,
you can do the same with plain old sranded copperweld, hard-drawn,
or whatever (don't tie a knot, just wrap it a couple of times), and
save some money over the flexweave.

Flexweave seems to be very soft copper - if you do your antenna
with copperweld or hard-drawn, it'll stay up in the air longer.

-fb-

6059. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 03:27:23 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031215222723.01786.00000760@mb-m20.aol.com>
Source record: 103124

>
>According to ON4UN - linear loading can be made virtually loss free (pg
>9-39). Can't do that with coils.

Why not? You can get less ohmic losses from less wire (tubing) in the coil than from the stub. We just went through long argument about current in the loading coils. People that replaced loading stubs with loading coils in say KLM 3 el. 80m antennas, found better efficiency and improvement on the pattern. Reality, not a "calculated truth" :-)

>Radio K4ia

Yuri, K3BU

6060. Re: Omni directional beam :-(??????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 03:57:20 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FDE82A0.6B3676CA@cwis.net>
Source record: 103126

Johnny,
It's a little confusing, but it sounds like you didn't
rebuild
the antenna as it was designed. If so, then I'd recommend that
you
re-do it as it was intended, not as something else.
Will it being near the tower and guys, etc., affect the
antenna?
Yes. How, and how much? Beats me, not enough information to
tell.
'Doc

6061. No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 03:57:39 UTC
From: k3bu@aol.comnoSaddam
Message-ID: <20031215225739.01786.00000761@mb-m20.aol.com>
Source record: 103127

It was a great news to hear that my "noSaddam" addition to my aol address became reality. If this helped in any way, then I am changing it to "noBinLaden" and we will see how long will that take to materialize.

So my future post will have that change in my no spam measure.

73 Yuri, K3BU@AOLnoBinLaden

6062. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:00:32 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FDE8360.6486C2AC@cwis.net>
Source record: 103128

Ken Bessler wrote:

> LOL! Poor Cecil..... :-)
>
> Ken

Lets see. Half the cost of food. Half the cost of just
about everything, especially toilet paper! I would think it
would be "not so poor Cecil"...
'Doc

6063. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:05:24 UTC
From: k3bu@aol.comnoBLaden
Message-ID: <20031215230524.01786.00000762@mb-m20.aol.com>
Source record: 103129

>
>73 Yuri, K3BU@AOLnoBinLaden
>

oops, AOL will allow only 10 more letters, so it is noBLaden

BUmmer

6064. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:19:41 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fde8842_2@corp.newsgroups.com>
Source record: 103130

Yuri Blanarovich wrote:
>>According to ON4UN - linear loading can be made virtually loss free (pg
>>9-39). Can't do that with coils.
>
> Why not? You can get less ohmic losses from less wire (tubing) in the coil than
> from the stub. We just went through long argument about current in the loading
> coils. People that replaced loading stubs with loading coils in say KLM 3 el.
> 80m antennas, found better efficiency and improvement on the pattern. Reality,
> not a "calculated truth" :-)

Yep, completely understandable since the resistance of a coil goes up
proportional to the number of turns and the inductance of a coil goes
up (nearly) proportional to the square of the number of turns.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6065. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:24:24 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fde895c$1_2@corp.newsgroups.com>
Source record: 103131

'Doc wrote:
> Lets see. Half the cost of food. Half the cost of just
> about everything, especially toilet paper!

Ain't it the truth? My XYL absolutely refused to use corn cobs.
'Course, she was not a Texan.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6066. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:50:21 UTC
From: alt <spamtrap@gwsn.com>
Message-ID: <hawDb.720207$pl3.211618@pd7tw3no>
Source record: 103132

Gary V. Deutschmann, Sr. wrote:

> Hi Jack
>
> I lived in an apartment for several years, NO ANTENNAS OF ANY KIND
> ALLOWED. Inside or outside. They provided a TV antenna hookup,
> lousy, but they provided it, so we couldn't even have rabbit ears.

> TTUL
> Gary

Things like that (and not being allowed to put my bicycle on the deck) are why I won't move into a strata-complex.

--
Donovan Hill

6067. MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 04:56:46 UTC
From: ktunks@earthlink.net
Message-ID: <248764dd.0312152056.7ede0009@posting.google.com>
Source record: 103133

If any one is interested, I posted my first impressions of my MFJ 974H tuner on eham.net

6068. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 06:03:52 UTC
From: news <trowley@pacbell.net>
Message-ID: <cfxDb.40364$bM6.37788@newssvr29.news.prodigy.com>
Source record: 103134

Humm.. So my actual experimental experience is that using a 14' strip of
450 ohm ladder line configured be the linear load resonates a 20' vertical
radiator vertical where the top of the ladder line is close to the top of
the radiator. By contrast if you spread the top of the linear load by 3 '
and taper it down the mast , only 10' 6' of load lines on either side is
necessary. Its not surprising that changing the width of the two load lines
changes the resonate frequency, but its counter intuitive the spreading then
requires a shorter line to achieve the same result.

BTW the 14' version also has <= 1.5:1 SWR on both the 20 and 10 meter bands
as well

Still trying to understand the theory
73
Tom
W2TER

"Craig Buck" <k4ia@cox.net> wrote in message
news:i4oDb.4226$Fg.2511@lakeread01...
> According to ON4UN - linear loading can be made virtually loss free (pg
> 9-39). Can't do that with coils.
>
> He suggests making the linear load stub 30% longer than the missing
portion
> of 1/2 wavelength. (page 8-13) Then trim and try.
> --
> Radio K4ia
> Craig "Buck"
> Fredericksburg, VA USA
> FISTS 6702 cc 788 Diamond 64
>
>
> "news" <trowley@pacbell.net> wrote in message
> news:AcyCb.70757$4S4.13845@newssvr25.news.prodigy.com...
> >
> > Does anyone have a good source for calculating the length of linear
loads
> > for a shortened 40 meter Vertical? I'm experimenting with a 20'
vertical
> > and a pair of 10' parallel lines moved the resonant point near the 7 Mhz
> > band. Any suggestions?
> >
> >
>
>

6069. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 08:16:30 UTC
From: Charles & Mambo <Duckman@gfy.self>
Message-ID: <3FDEBF74.4050309@gfy.self>
Source record: 103135

Yuri Blanarovich wrote:
> It was a great news to hear that my "noSaddam" addition to my aol address
> became reality. If this helped in any way, then I am changing it to
> "noBinLaden" and we will see how long will that take to materialize.

Interesting. You didn't happen to have a "noWMD" or a "noAlQaedaconnection"
addition to your aol address, too, did ya?

6070. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 10:28:05 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312160228.5f575d33@posting.google.com>
Source record: 103136

k3bu@aol.comnoSaddam (Yuri Blanarovich) wrote in message
news:<20031215225739.01786.00000761@mb-m20.aol.com>...
> It was a great news to hear that my "noSaddam" addition to my aol address
> became reality. If this helped in any way, then I am changing it to
> "noBinLaden" and we will see how long will that take to materialize.
>
> So my future post will have that change in my no spam measure.
>
> 73 Yuri, K3BU@AOLnoBinLaden

I hope it works. I've always considered Bin Doo-Doo the worse of the
two. By far. Sodamn Insane is a piker. A sorry piker, but a piker none
the less. Bin Doo-Doo wants to kill all of us yankee infidel bastards.
And all of our yankee infidel sisters and mothers too. And he'll try
again before too long if we don't snag the sorry bastard and string
him up in the nearest tree of suitable height. I never could see going
to Iraq without first finishing the more serious job in Afghanistan.
Bush and Co. needs to get their priorities straight. They are letting
the *real* bad guy slip away. Or it would seem anyway. :(MK

6071. 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 11:28:47 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-FF79B0.05290216122003@newssvr23-ext.news.prodigy.com>
Source record: 103137

Several years ago I had an Inverted-L but the wire (RG-58 coax) kept breaking and I am thinking about putting up a new version. This time I am thinking about using the hard (really hard) wire used by the telepone company for pole to house connections. It comes with two conductors. Rather than stripping the wire I am thinking about just tying the ends together and make it one conductor. In my old antenna I did the same thing by shorting the RF-58. I plan to feed it with coax from the bottom of the tower (center conductor to the telephone wire conductor and shield to the ground wires).

Comments on the use of the telephone wire and feeding will be appreciated.

Dick, aa5vu

ps: The old antenna came from a CQ article years ago about a coax antenna with special shorting. The special shorting did not work so I just made it a single conductor (coax and shiel). It let me do a WAS without an amp so it worked.

6072. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 11:40:45 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vttrogh19sfc0f@corp.supernews.com>
Source record: 103138

... and here is the URL:
http://www.eham.net/reviews/detail/3673#26218

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Carlos42" <ktunks@earthlink.net> wrote in message
news:248764dd.0312152056.7ede0009@posting.google.com...
> If any one is interested, I posted my first impressions of my MFJ 974H
> tuner on eham.net

6073. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 13:41:57 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fdf0bce$0$281$ba620e4c@reader3.news.skynet.be>
Source record: 103139

May I suggest you to put "NoTAX"

73 de ON5MJ - Jacques

6074. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 13:53:56 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <3FDF1054.1D27104D@uwe.ac.uk>
Source record: 103140

David Robbins wrote:
>
> "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> news:3FDDEA91.ABEF33@uwe.ac.uk...
> > CW wrote:
> > >
> > > Effective lightning protection can be done in the amatuer station for a
> > > reasonable cost. Most though, don't do so.
> > > "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> > > news:3FD9D0AC.19C868B0@uwe.ac.uk...
> > >
> > > > As I understand it, there is nothing that can work if
> > > > a direct lightening strike occurs.
> >
> > How? How do you deal with thousands of amps? It's for certain sure that
> > a simple spark gap will be blown to kingdom come in the first millisecond,
> > so what happens in the next millisecond? and the one after.....
> >
> > I think your method must be untried, untested and 'whistling in the dark'.
> >
> > Andy, M1EBV
>
> lightning doesn't go on for milliseconds, 50 micro-seconds is a relatively
> long stroke. 30kA can go through a 12ga copper wire with no damage for
> 10-20 microseconds. in most cases there will actually be very little
> voltage between wires of a coax or twin lead just because their insulation
> will break down or the feedpoint of the antenna will arc over... both are
> naturally occuring spark gaps that actually work very well to protect
> equipment from direct strikes. assuming of course the tower and feedline
> have good grounds. where people have problems is they don't ground the
> shield of the coax to a single point ground along with the power lines, so
> they get differential voltages between grounds that has no place to go but
> through the equipment. properly grounded installations with relatively
> small arresters to limit voltage on the center conductor of the coax
> relative to the shield are very effective. for tube type receivers a simple
> spark gap is adequate, for transistorized stuff you may need lower voltage
> protection and should probably get something commercially made for the job.

I had not realised that the current was so 'spikey' I was aware that the
duration of a stroke, including restrikes, was of the order of a second
for large strikes.

I found this info:
0.2 MA for 200 uS, then ~10 kA for another 200 uS, then 300-500 A for ~0.75
seconds. This followed by an average of 3 to 4 (max 26) restrikes at 0.1 MA

(possibly decaying to 25 kA) for 200 uS for a big stroke.

There is a MIL standard for this - MIL-STD-464.

If your Coax breaks down then you have a PD in the tens of kV range for common coax and arc over in solid dielectric is permanently damaging.

Sorry if I mislead anyone but we don't really suffer badly from lightning in G-land.

Here are some interesting links.

http://www.weighing-systems.com/TechnologyCentre/Lightning1.pdf
http://www.lightningsafety.com/nlsi_lhm/NFP_780.html
http://www.mil-std-464.com/
http://www.kolacki.com/MIL-STD-464.htm

I'm a little wiser now. Thanks

vy 73

Andy, M1EBV

6075. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 14:26:31 UTC
From: richardharrison@webtv.net
Message-ID: <4541-3FDF1617-592@storefull-2318.public.lawson.webtv.net>
Source record: 103141

Yuri, K3BU quoted K4IA:
"According to ON4UN-linear loading can be made virtually loss free (pg 9-39)."

ON4UN does say that but the page is different in my copy of "Low-Band DXing". Mine is the 2nd edition. On page 9-39 are SWR curves versus frequency for the vertical top-hat loaded antenna on page 9-37.

Perhaps a better idea of "linear loading" may be seen in Fig 9-27 on page 9-19 of edition no.2. The subscript reads:

"Since no coils are used in this form of loading (a zig-zag in the radiator length), linear loading cam be used with almost no loss."

Best regards, Richard Harrison, KB5WZI

6076. Yaesu FC-1000 Tuner Assistnace Required

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 14:35:25 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <pLEDb.7787$8Y4.332805@read2.cgocable.net>
Source record: 103142
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Picked up this Used FC-1000 Automatic Long Wire Tuner and need some coaching.

The Yaesu FC-1000 Automatic Long Wire Tuner was designed to be used with the FT-747GX/ FT-757GX Series Transceivers in that the Freq being used is fed to the Tuner via a cable.

Has anyone had any experience useing this tuner "Stand Alone" without the "matching" Transceiver feeding Freq Data to it? OR has any more Technical Info on its operation? I would like to try to use the tuner with other Transceivers

I am sure there were a number of these units sold into Amateur Service and/or Marine use.
I am presently using an FT-100D with ATAS-120 Screwdriver in my Explorer.

I have the manaul with schematics, and will probably find the answers to my questions EVENTUALLY...just looking to speed up the process ! !

Thank You for any replies
73...Norm VE3CZI

6077. Re: 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 14:45:26 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <aUEDb.37176$Dt6.755936@twister.tampabay.rr.com>
Source record: 103143

hey richard
unless you already own that wire i would suggest going to homedepot and
getting a 500 foot spool of 12 ga insulated wire it is only about
15-20 and its stranded wire so it will take the stress and strain
better than a solid wire would
good luck
BTW i am putting up a similar antenna 1/4 wave for 160 inverted L feed
at the ground center radiator going up 40 feet along the tower then 83
feet to a support and about 8-16 ground radials
73

6078. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 15:33:51 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fdf2535.495600328@news.galilei.com>
Source record: 103144

alt <spamtrap@gwsn.com> verbositized:

>Gary V. Deutschmann, Sr. wrote:
>
>> Hi Jack
>>
>> I lived in an apartment for several years, NO ANTENNAS OF ANY KIND
>> ALLOWED. Inside or outside. They provided a TV antenna hookup,
>> lousy, but they provided it, so we couldn't even have rabbit ears.
>
>> TTUL
>> Gary
>
>Things like that (and not being allowed to put my bicycle on the deck) are
>why I won't move into a strata-complex.
>
>--
>Donovan Hill

Hi Donovan

I had no choice, it was company owned for temporary out of town
workers. The temporary just happen to last close to 5 years of and
on.

What do you do when you move into a subdivision with no restrictions
regarding antenna's and then later they add them?

TTUL
Gary

6079. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 15:39:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brn8v6$pb9$1@sparta.btinternet.com>
Source record: 103145

"Lloyd Mitchell" wrote -
> You know I've been watching the posts in this group for over a year now
and
> no matter what anyone says you guys always have a negative to say about
> somebody elses antenna. So may you have a Happy Christmas.
>
==========

Hi Lloyd,

The G5RV is complained about by experienced antenna users and professional engineers, not because of the TRUE all-round performance the G5RV, from one band to another, but because the propaganda performance claims of G5RV salesmen is a load of old-wives' rubbish.

Remove the lossy coax and the G5RV is no better or worse than any other random length HF dipole, with any other random length of high impedance feedline. It is of course no longer a G5RV. So who cares? Mr Varney would agree with these sentiments.

A very merry Xmas holiday to you and your family. And indeed to all other readers of these walls. But this Xmas try not to forget the terrible conditions, incessant bombing with USA-manufactured weapons of mass destruction, and USA-imposed economic sanctions, under which the Iraqi and other middle-eastern people have struggled to survive for the last 12 years. Millions have already died. And no signs of alleviation of the slaughter is in sight.

Reg, G4FGQ

6080. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 15:39:20 UTC
From: richardharrison@webtv.net
Message-ID: <27942-3FDF2728-500@storefull-2311.public.lawson.webtv.net>
Source record: 103146

Mark Keith wrote:
"I`ve always considered Bin Doo-Doo the worse of the two."

It`s a nose-to-nose contest. Bin Forgotten hurt the U.S. by the 9-11 attack. Saddam is our former ally against our enemies who overthrew our client, The Shah of Iran, and held Americans hostage until Carter left office.

Bush and Co. have priorities based on re-election. Saddam supported Palestinians with rewards to families of suicide bombers in Israel. Bush wants Israeli supporters to again fund his election campaign. Saddam first, made perfect sense to Bush.

Strong European forces on the ground during the 20th century did not pacify the region. American forces in the 21st century may succeed where British and others failed.

It did not work in Viet Nam. French were evicted, then when the U.S. tried to stop the Marxists, the U.S. was beaten too. If the Russians and Chinese don`t support the Radical Muslims (a good bet) the U.S. may be able to bring peace to the Middle-East.

Best regards, Richard Harrison, KB5WZI

6081. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 16:18:16 UTC
From: richardharrison@webtv.net
Message-ID: <1006-3FDF3048-67@storefull-2312.public.lawson.webtv.net>
Source record: 103147

Mark Keith wrote:
"There is plenty the average ham can do to reduce damage."

True, and the ham needs a good ground anyway. Most commercial radio installations operate 24-7 and are nearly unaffected by lightning. Protection comes from common-sense lay out and usually does not include many expensive arresters.

One arrester salesman said his business was exemplified by the story of a bar patron who had a pipe on a lanyard about his neck.

Bartender asked about the thing pending from his neck. Client said it was an elephant whistle. Bar tender asked why? as no elephants were to be found in the environs.

Bar patron says: See, it works doesn`t it?

Best regards, Richard Harrison, KB5WZI

6082. Re: cushcraft R7000 CT-1

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 16:45:27 UTC
From: sheer <->
Message-ID: <3fdf36a9_2@news.vo.lu>
Source record: 103148

"PieroIK2VTJ" <ik2vtjnonvogliospam@ardf.it> wrote in message
news:bnjnsk$ua0fr$1@ID-83989.news.uni-berlin.de...
>
>
> "Kevin Gunther" <beeltee@optonline.net> ha scritto nel messaggio
> news:Tnanb.15052$ox.1574008@news4.srv.hcvlny.cv.net...
> > I have the CT-1 trap for an R7000 by cushcraft. This is the 10/12 meter
> > trap
> > . The aluminum tube is broken at the bottom. It is only about 2" long
> now.
> > The trap is still in good condx I would guess.
> >
> > If anyone needs this trap, e-mail me direct and it is yours. I think $5
> > should cover shipping.
> >
>
> Open the trap, change the tube, close the trap and ask 15$ for it! :-)
> (If only the tube is bent, the trap is still good.)
> --
>
> 73 de IK2VTJ, Piero.
> http://www.ardf.it
> Togli/Remove 'nonvogliospam' dall'indirizzo/from address
>
sheer1@pt.lu

6083. Re: 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 16:45:39 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-4DBE36.10455516122003@newssvr22-ext.news.prodigy.com>
Source record: 103149

In article <aUEDb.37176$Dt6.755936@twister.tampabay.rr.com>,
Dennis Kaylor <k4oxg@tampabay.rr.com> wrote:

> hey richard
> unless you already own that wire i would suggest going to homedepot and
> getting a 500 foot spool of 12 ga insulated wire it is only about
> 15-20 and its stranded wire so it will take the stress and strain
> better than a solid wire would
> good luck
> BTW i am putting up a similar antenna 1/4 wave for 160 inverted L feed
> at the ground center radiator going up 40 feet along the tower then 83
> feet to a support and about 8-16 ground radials
> 73
>

Sounds exactly like what I have in mind. I already have the wire and it is hard stuff. You have to cut it with a hack saw! I am trying to find out what length I used the last time becase the stuff is bad news to adjust. The last time I was on 160 I buried radials all over the place and hope they are still working.

6084. Thanks for the 'input',cl

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 20:27:47 UTC
From: kc5cqa@yahoo.com
Message-ID: <slmutv8enabr2h8ksdnocnm0g00pbn9ngm@4ax.com>
Source record: 103150

Just wanted to make sure I had thanked everyone for their
'input' about antenna, tropo. Much appreciated. cl. 73

6085. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 22:27:06 UTC
From: richardharrison@webtv.net
Message-ID: <27942-3FDF86BA-563@storefull-2311.public.lawson.webtv.net>
Source record: 103151

Reg Edwards wrote:
"But this Xmas try not to forget the terrible conditions, incessant bombing with USA-manufactured weapons of mass destruction, and USA-imposed economic sanctions----etc, etc, etc."

The intent has been minimization of deaths. We wanted to shock and awe our enemies by display of our fantastic weapons and lay seige with sanctions.

We have been successful. It will take a little longer to convince the defeated that it was just what they had always wanted.

It was the British which brewed this whole mess during the First World War. Britain was bankrupt and sought money from Jewish bankers by promising a new Jewish homeland.

Chaim Weizman in 1919 wrote:
"I think that the God of Israel is with us. Both God in heaven and Balfour in England viewed with favour the establishment in Palestine of a national home for the Jewish people."

Britain drew the boundaries in the Middle East following the 1920 San Remo Conference. Churchill offered King Abdullah of Jordan, the area east of the Jordan River to keep peace between Britain and France. Abdullah`s brother, Feisal would regain power in Syria, which was under French control. Churchill tried to make the case for a Zionist state with Arab leaders.

Britain created the mess for the money. They were desperate because Victoria`s grandsons were at war in Europe. It was no more than Britain`s duty to help the USA to try to clean up the mess that Britain made at the end of WW-1.

Conflict between Arabs and Jews continued between the world wars. Churchill reiterated Balfour in WW-2, to again get money. Britain was broke again. Following WW-2, a flood of European Jews poured into Palestine. Britain reacted with a partition and an honest attempt to keep the peace.

The restraint of the British forces in Palestine was remarkable, considering the provocations from all sides. I often wondered why Britain just didn`t say: A pox on both your houses. Well, the Arab Middle East holds most of the world`s onshore oil, a prize that can`t be abandoned.

Best regards, Richard Harrison, KB5WZI

6086. Re: 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 22:35:19 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FDF88A7.8FCC96B2@cwis.net>
Source record: 103152

Dick,
That's some good stuff! Ought to last almost as long
as you do.
'Doc

6087. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 23:02:40 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdf8f75$1_5@corp.newsgroups.com>
Source record: 103153

Richard Harrison wrote:
> It was the British which brewed this whole mess during the First World
> War.

Actually, it was the British who brewed this whole mess by allowing
"The Colonies" to become independent. :-) The British are responsible
for creating the "American Super-Power". Lots of Anglo-Saxon "Edwards"
are involved in trying to civilize Iraq - lots of "Harrison's" and
"Moore's" also. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6088. Re: 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 23:06:16 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdf904d$1_5@corp.newsgroups.com>
Source record: 103154

'Doc wrote:
> That's some good stuff! Ought to last almost as long
> as you do.

Speaking of such - I hope everyone, "Lives long and prospers", -
even everyone who disagrees with me. :-) Merry Christmas!
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

6089. Kenwood TM-741A

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-16 23:24:10 UTC
From: Carl Domanico <vze2686b@verizon.net>
Message-ID: <uuMDb.707$LS.246@nwrdny01.gnilink.net>
Source record: 103155

Need Help with my Kenwood TM-741A Triband FM Mobile Radio.....I purchased the radio new some 12 years ago, with the 220MHz. Module Installed....The Radio Has 144 Mhz / 220Mhz / 440 Mhz.....For years the radio worked excellent....Then about 5 years ago I had lost the out put on 144 (two meters)... However , the other two bands functioned fine...220/440mhz... I sent the radio back to kenwood...and they indicated that the Driver Transistor Q23 2SD1902R on the two meter module was defective. This transistor is an inexpensive part...$ 3.05 ea. Anyway...It seems like the same problem occured the other day...all the symptoms seem the same...Can anyone shed some light on why this seems to happen often?? Also is it possible to replace this 2SD1902R transister with something capable of handling some what more power dissapation?? What ever happened to those motorola hep sustatutes?? Any and all info supplied here will be greatly appreciated....

Thanks
Carl
N2MFW

6090. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 00:13:41 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312161613.614421e1@posting.google.com>
Source record: 103156

richardharrison@webtv.net (Richard Harrison) wrote in message
>
> It`s a nose-to-nose contest.

The diktater of Iraq was much more of a threat locally to that region. He should fry for what he did to the people of that country. But he never really was much of a direct threat to us. Only in a few indirect ways...But Bin Doo-Doo is a direct threat who has already killed 1000's in this country and abroad. He has a proven track record against us directly. There is no doubt he plans to do it again. I think Pakistan, "I assume that is where he is", should play a stronger role in rooting him out. To me, it's almost like they are sheltering him. But he's holed up with a bunch of thugs that most in that area are afraid to mess with. He's probably doling out some $$$$ too to help sway some to his cause... MK

6091. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 00:24:20 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <UmNDb.574139$Fm2.536703@attbi_s04>
Source record: 103157

David Robbins wrote:

SNIP

>
> lightning doesn't go on for milliseconds,

SNIP.

More specific information. The continuing portion of a lightning stroke, values up to 600 amperes, can go on for almost 300 milliseconds. Reference, WS-118-41129, Paragraph 3.9.XX [XX= I forgot the sub paragraph], Lightning [USAF system specification for the WS-118 Missile].

There is a USAF model, released in 1982, that encompasses 90% of all USA lightning strokes. It is as follows:

Peak stroke; 0 to 100,000 amperes in 1 microsecond.
Peak decay; 100,000 amperes to 25,000 amperes in 25 microseconds
First tail; 25,000 amperes decaying to 600 amperes in 1 millisecond
Continuing current; 600 amperes constant for 300 milliseconds.

There may be up to 6 continuing strikes with amplitudes at 1/4 to 1/2 of the above.

50 micro-seconds is a relatively
> long stroke. 30kA can go through a 12ga copper wire with no damage for
> 10-20 microseconds. in most cases there will actually be very little
> voltage between wires of a coax or twin lead just because their insulation
> will break down or the feedpoint of the antenna will arc over

SNIP: Arcs can sustain 100s of volts in the dynamics of the arc [plasma or carbonized material].

... both are
> naturally occuring spark gaps that actually work very well to protect
> equipment from direct strikes. assuming of course the tower and feedline
> have good grounds. where people have problems is they don't ground the
> shield of the coax to a single point ground along with the power lines, so
> they get differential voltages between grounds that has no place to go but
> through the equipment.

SNIP: Great advice!

properly grounded installations with relatively
> small arresters to limit voltage on the center conductor of the coax
> relative to the shield are very effective. for tube type receivers a simple
> spark gap is adequate, for transistorized stuff you may need lower voltage

> protection and should probably get something commercially made for the job.

SNIP: for a high power solid state station, 1500 watts, the matched RMS voltage is 274 volts, the maximum peak to peak is 274*2.828 = 774 volts p-p.

Any surge device must accommodate the high RMS voltage and yet the receiver/transceiver front end must tolerate 774 volts p-p without damage.

My solution, disconnect the antennas, radio power lines, etc.

Deacon Dave, W1MCE

6092. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 00:28:33 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FDFA331.754DC9A1@uci.edu>
Source record: 103158

In another of his anti-American tirades, Reg Edwards wrote:

> But this Xmas try not to forget the terrible
> conditions, incessant bombing with USA-manufactured weapons of mass
> destruction, and USA-imposed economic sanctions, under which the Iraqi and
> other middle-eastern people have struggled to survive for the last 12 years.
> Millions have already died. And no signs of alleviation of the slaughter is
> in sight.
> ----
> Reg, G4FGQ

And in that same spirit, here's to you, Reg:

http://www.amishrakefight.org/gfy/

6093. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 00:49:55 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <TKNDb.574389$Fm2.536879@attbi_s04>
Source record: 103159

Cecil Moore wrote:

> Richard Harrison wrote:
>
>> It was the British which brewed this whole mess during the First World
>> War.
>
>
> Actually, it was the British who brewed this whole mess by allowing
> "The Colonies" to become independent. :-) The British are responsible
> for creating the "American Super-Power". Lots of Anglo-Saxon "Edwards"
> are involved in trying to civilize Iraq

SNIP: Oh Cecil, I have to take you to task! IRAQ has a very long history of being highly civilized and it predates the rise of Europe by over 4000 years. The history can be traced to Mesopotamia, 5000 years ago, the Sumerian civilization, the development of writing, Cuneiform [sp?][predates Egyptian writing], the legal code of Hammurabi, the basis of our 360 degree circle and related trigonometry, advances in mathematics that are still valid today, moral development that parallels the Judean epochs of the Flood, etc.

There is a very long history, that exceeds my 65 year old recollections from Ancient History 101 [ca, 1952], of the major civilizations of the mid/near east.

IRAQ is a very civilized country that has suffered under a schism in Islam [Sunni versus Sh'ia][a schism/politic similar to Catholic versus Protestant in Northern Ireland] and tyrannical leadership.

It will take years to resolve the bitter religious based differences. [In the USA some people are still holding positions that predate the US Civil War ca. 1861-1865.]

Now to get back on subject, does anyone know if IRAQi engineers and/or scientists have contributed to the advancement of the RF/antenna art?

Deacon Dave, W1MCE

6094. Re: Calculating linear load lengths

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 01:16:26 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031216201626.08055.00000921@mb-m16.aol.com>
Source record: 103160

>
>"Since no coils are used in this form of loading (a zig-zag in the
>radiator length), linear loading cam be used with almost no loss."
>
>Best regards, Richard Harrison, KB5WZI
>
>
>

I would speculate that the opinion that coils are more lossy is from the practice of using relatively thin wires for coils vs. heavier tubing or wire for the linear loading.
With linear loading, depending on its mounting or folding, it will do some RF cancellations and interacting with radiator, while coils are much "cleaner" in this respect.
Again, W6?? drastically improved loaded 3 el. KLM 80m beam (efficiency, pattern) by replacing linear loading with coils.
So maybe time to be more specific about what kind of coils vs. lin. loading.
Another subject for real life tests and measurements.

Yuri, K3BU

6095. Re: No Saddam

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 01:18:30 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031216201830.08055.00000922@mb-m16.aol.com>
Source record: 103161

>
>May I suggest you to put "NoTAX"
>
>73 de ON5MJ - Jacques
>
>
>

Duly noted, lets organize those no... on the list.
Lets catch the Usama Been Laden first, then we will satisfy all others :-)

Concentrate!

Yuri

6096. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 01:31:48 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312161731.12534b18@posting.google.com>
Source record: 103162

Richard, the local radio station has a line to ground with a large gap
which regularly arcs because of static build up. Most radio stations
go off the air momentarily when lightning strikes. Is it the static
arc that drives a disconnect relay for a few milli seconds and is this
used as a primary protector for lightning?

Regards
Art

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<1006-3FDF3048-67@storefull-2312.public.lawson.webtv.net>...
> Mark Keith wrote:
> "There is plenty the average ham can do to reduce damage."
>
> True, and the ham needs a good ground anyway. Most commercial radio
> installations operate 24-7 and are nearly unaffected by lightning.
> Protection comes from common-sense lay out and usually does not include
> many expensive arresters.
>
> One arrester salesman said his business was exemplified by the story of
> a bar patron who had a pipe on a lanyard about his neck.
>
> Bartender asked about the thing pending from his neck. Client said it
> was an elephant whistle. Bar tender asked why? as no elephants were to
> be found in the environs.
>
> Bar patron says: See, it works doesn`t it?
>
> Best regards, Richard Harrison, KB5WZI

6097. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 02:13:03 UTC
From: richardharrison@webtv.net
Message-ID: <27942-3FDFBBAF-612@storefull-2311.public.lawson.webtv.net>
Source record: 103163

Cecil, W5DXP wrote:
"Actually, it was the British who brewed this whole mess by allowing
"The Colonies" to become independent."

They didn`t want to allow independence. They were occupied with other affairs at the time and couldn`t devote full power to quashing the rebellion. The revolutionists had the situation analyzed correctly, though not comfortably so. They risked lives and fortunes in the revolt. An ancestor of mine signed the declaration of independence. He luckily escaped ill consequences.

Thank you Cecil for correcting my mistake in English, replacing "British which" with "British who".

Mesopotamia was the first civilized region on earth it appears. Had the good fortune of a lecture on this by a history professr who specialzes in this region on an outing at the British Museum a couple of years ago. The exhibits there must be the best. Many millennia later than the early flourishing of civilization in present day Iraq, the nation became a serious agressor and continuing threat to its neighbors, near and far.

Poison gas, anthrax, nuclear explosives, radiation, super range artillery, radiation, Scuds, other missiles, assassins, etc. aren`t injureous unless they are used. Saddam indisputably used poison gas, missiles, assassins, and had nuclear and biological weapon development programs.

Saddam tried to assassinate the elder Bush. Saddam paid rewards to families of the bombers of israelis. Saddam had to be stopped.

W lacked a lot in finesse but a 9-11 event is a reminder that someone else can decide the time is ripe to do you harm, ready or not.

Best regards, Richard Harrison, KB5WZI

6098. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 02:39:30 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brofl2sao1@titan.btinternet.com>
Source record: 103164

Dear Rich,

Your summing up of 20th century middle eastern warfare and the decay of the British Empire, on which the Sun never Sat but now has, is reasonably accurate. Thanks for your careful trouble. Between you and us, the aggressive character of the English-speaking and European peoples has resulted in the present worse-than-ever mess - Armagedon is at last upon us.

In previous centuries, before the internal combustion engine had been invented, so-called civilisation, originating in Ur, Babylon and along the Nile, had extended westwards as far as northern Spain and Vienna in central Europe. The weapons of mass destruction then were, in their time, Greek Fire, gunpowder, and biological weapons such as catapults to fling plague-diseased corpses over the walls of beseiged cities. The Inquisition has it's modern counterparts.

(The chemists of an independently originating civilisation in Eastern Asia had invented the chemically propelled sky-rocket but the peoples of that great land, having genes of a less aggressive nature, preferred to use it for pretty firework celebrations. Incidentally, Chinese metallurists had invented cast iron, 1000 years before the industrial revolution began in Europe in the small town of Ironbridge, in a gorge on the river Severn, just a few miles up the road from my QTH.)

All human decisions are made on the basis of what is already known. What is already known is History. History should be the most important subject taught in our educational institutions. At present, alongside geography, it is the most neglected. All we have are newspaper hacks, TV news-analysts, and the monitored dis-information Internet.

Some names in history -

Attilla the Hun.
Emperor Nero.
Ghengis Khan.
Napoleon Bonapart (Not tonight Josephine)
Adolph Hitler.
Joseph Little Uncle Stalin.
"Enora Gay"
George Self-confessed Crusader Bush.

You can add me if you like -
Reg G4FGQ Edwards.

--
.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:27942-3FDF86BA-563@storefull-2311.public.lawson.webtv.net...
> Reg Edwards wrote:
> "But this Xmas try not to forget the terrible conditions, incessant
> bombing with USA-manufactured weapons of mass destruction, and
> USA-imposed economic sanctions----etc, etc, etc."
>
> The intent has been minimization of deaths. We wanted to shock and awe
> our enemies by display of our fantastic weapons and lay seige with
> sanctions.
>
> We have been successful. It will take a little longer to convince the
> defeated that it was just what they had always wanted.
>
> It was the British which brewed this whole mess during the First World
> War. Britain was bankrupt and sought money from Jewish bankers by
> promising a new Jewish homeland.
>
> Chaim Weizman in 1919 wrote:
> "I think that the God of Israel is with us. Both God in heaven and
> Balfour in England viewed with favour the establishment in Palestine of
> a national home for the Jewish people."
>
> Britain drew the boundaries in the Middle East following the 1920 San
> Remo Conference. Churchill offered King Abdullah of Jordan, the area
> east of the Jordan River to keep peace between Britain and France.
> Abdullah`s brother, Feisal would regain power in Syria, which was under
> French control. Churchill tried to make the case for a Zionist state
> with Arab leaders.
>
> Britain created the mess for the money. They were desperate because
> Victoria`s grandsons were at war in Europe. It was no more than
> Britain`s duty to help the USA to try to clean up the mess that Britain
> made at the end of WW-1.
>
> Conflict between Arabs and Jews continued between the world wars.
> Churchill reiterated Balfour in WW-2, to again get money. Britain was
> broke again. Following WW-2, a flood of European Jews poured into
> Palestine. Britain reacted with a partition and an honest attempt to
> keep the peace.
>
> The restraint of the British forces in Palestine was remarkable,
> considering the provocations from all sides. I often wondered why
> Britain just didn`t say: A pox on both your houses. Well, the Arab
> Middle East holds most of the world`s onshore oil, a prize that can`t be

> abandoned.
>
> Best regards, Richard Harrison, KB5WZI
>

6099. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 03:39:56 UTC
From: richardharrison@webtv.net
Message-ID: <4541-3FDFD00C-676@storefull-2318.public.lawson.webtv.net>
Source record: 103165

Art, Kb9MZ wrote:
"---the local radio station has a line to ground with a large gap which regularly arcs because of static build up. Most stations go off the air momentarily when lightning strikes.'

AM broadcasters use unbalanced vertical radiators driven against a ground radial system.

The vertical radiator is nowdays the insulated tower irself. It sits on a base insulator, held erect by insulated guy wires. An arc-gap is fitted across the base insulator. This is either a pair of spheres or a pair of boomerang forms which are adjusted for a close spacing. Though galvanized, these gap fixtures get tower paint applications.

Towers often get direct lightning hits. The paint remains pristene in all the gaps I`ve seen. The arc to ground is always to the Faraday shield between the tower coupling coils. That picket fence between the coils is pock marked like the face of the moon from tower strikes. Splattered copper abounds.

You hear momentary disconnects during lightning strikes when listening to an AM station during this kind of storm. This is a defense mechanism. When lightning creates an arc, the conductive plasma path allows RF to continue feeding the ionization. This allows an arc to keep alive that the r-f is too feeble to strike for itself.

Transmitter output into the plasma short circuit is an overload capable of transmitter damage.

To counter the arc problem, the coax is d-c isolated with capacitors at the ends of the center conductor. The close-spaced coax usually gets an arc when the antenna system is overloaded. The coax has a high common-mode impedance.

A relay d-c power supply and a d-c relay coil are connected in series and this series combination is connected between the center conductor and coax shield.

An arc completes the d-c path for the relay coil. Relay activation is used to momentarily kill the transmitter, extinguishing the arc.

Best regards, Richard Harrison, KB5WZI

6100. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 05:05:58 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <XuRDb.9142$WQ3.8223@lakeread05>
Source record: 103166

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote > Here are some interesting links.
> http://www.weighing-systems.com/TechnologyCentre/Lightning1.pdf
> http://www.lightningsafety.com/nlsi_lhm/NFP_780.html
> http://www.kolacki.com/MIL-STD-464.htm

Excellent reading, thanks. And thanks to all who contributed. In all these informative discussions, the precautions seem to be centered only around towers. My HF antennas consist of 3 long wires and 1 dipole suspended from and between pine trees, all some 80' in the air. Of course disconnecting constantly in thunderstorm season works, but should the feedlines all be connected to a ground system outside at time of disconnect? Is grounding a dipole for instance just guaranteeing a fry job when there might have been only dielectric-puncture? The latter is certainly an easer repair. I would think grounding might help to disintegrate the Balun also - but you guys are clearly the experts so I look forward to your advice.

As far as rooftop antennas go, I now plan a much better down conductor system than the rado shack aluminum ground wires that probably melt just a wee bit slower than solder ;-)

Jack
Virginia Beach

6101. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 05:14:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fdfe689$1_4@corp.newsgroups.com>
Source record: 103168

Dave Shrader wrote:
> SNIP: Oh Cecil, I have to take you to task! IRAQ has a very long history
> of being highly civilized ...

Saddam Hussein's recent Iraqi "civilization" seemed fairly
uncivilized to me.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6102. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 05:14:55 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <jDRDb.9144$WQ3.3026@lakeread05>
Source record: 103167

"Wes Stewart" <n7ws@_arrl.net> wrote in message
news:f19ltvg8ema7n0bkcbptnjq72li130a6uj@4ax.com...
> On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
> <mynewsat@rogerhalsteaddot.com> wrote:
> |
> |Every HF antenna here will go 1:1 "some where" ...
>
> Not so.

I have a dipole that is 1:1 at both it's main length design frequency and the single fan dipole design frequency underneath it. Each began life 10% longer than design (formulas), one actually had to have a few inches added - and that was soldered when the line was still brand new. The other required shortening in 2" increments. Over a period of two months, the antenna still has "1:1" on those two design frequencies. Checked with reliable equipment besides the MFJ 962D tuner, which now rests on "Bypass" except for higher frequency diversions. This was designed and built for two frequencies only, and performs flawlessly in that respect.

So yes, achieving 1:1 SWR is not only possible, but nothing less was acceptable in the specific need I had for that antenna.

Jack
Virginia Beach

6103. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 05:52:47 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <PaSDb.9147$WQ3.5160@lakeread05>
Source record: 103019

Sorry if this doubles, it didn't show up after almost an hour the 1st time:

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote > Here are some interesting links.
> http://www.weighing-systems.com/TechnologyCentre/Lightning1.pdf
> http://www.lightningsafety.com/nlsi_lhm/NFP_780.html
> http://www.kolacki.com/MIL-STD-464.htm

Excellent reading, thanks. And thanks to all who contributed. In all these informative discussions, the precautions seem to be centered only around towers. My HF antennas consist of 3 long wires and 1 dipole suspended from and between pine trees, all some 80' in the air. Of course disconnecting constantly in thunderstorm season works, but should the feedlines all be connected to a ground system outside at time of disconnect? Is grounding a dipole for instance just guaranteeing a fry job when there might have been only dielectric-puncture? The latter is certainly an easer repair. I would think grounding might help to disintegrate the Balun also - but you guys are clearly the experts so I look forward to your advice.

As far as rooftop antennas go, I now plan a much better down conductor system than the rado shack aluminum ground wires that probably melt just a wee bit slower than solder ;-)

Jack
Virginia Beach

6104. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 06:38:42 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <bjsvtv4km5at3boig7ukcbga40pjbpnvq3@4ax.com>
Source record: 103020

On Wed, 17 Dec 2003 00:05:58 -0500, "Jack Painter" <223bthp@cox.net>
wrote:

>"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote > Here are some interesting
>links.
>> http://www.weighing-systems.com/TechnologyCentre/Lightning1.pdf
>> http://www.lightningsafety.com/nlsi_lhm/NFP_780.html
>> http://www.kolacki.com/MIL-STD-464.htm
>
>Excellent reading, thanks. And thanks to all who contributed. In all these
>informative discussions, the precautions seem to be centered only around
>towers. My HF antennas consist of 3 long wires and 1 dipole suspended from
>and between pine trees, all some 80' in the air. Of course disconnecting
>constantly in thunderstorm season works, but should the feedlines all be
>connected to a ground system outside at time of disconnect? Is grounding a
>dipole for instance just guaranteeing a fry job when there might have been
>only dielectric-puncture? The latter is certainly an easer repair. I would
>think grounding might help to disintegrate the Balun also - but you guys are
>clearly the experts so I look forward to your advice.
>
>As far as rooftop antennas go, I now plan a much better down conductor
>system than the rado shack aluminum ground wires that probably melt just a
>wee bit slower than solder ;-)
>
Although some have already addressed part of the issue with wire
antennas, I'll try to elaborate a bit without repeating...and will
probably fail...but...

Two things about ungrounded wire antennas and ungrounded verticals.
Static electricity (precipitation static) and lightening strikes
(nearby and direct hits)

BE it rain of snow and snow is particularly bad, just the
precipitation and build many thousands of volts on an antenna.
Some years back...wellllll...actually quite a few (back in 1966) I was
in the process of living in a mobile home while building a new home.

I had a 40 meter quarter was vertical set up about 100 feet from the
trailer. The station was used on the kitchen counter and stored in a
broom closet.

One evening as we st there watching television I heard a popping
noise. It was pretty loud. A bit of searching showed the noise to be
coming from the closet. When I opened the door I was greeted by a
blue white flash accompanied by a loud "pop". The static was arcing
across the PL259 with enough current that the arc was extending a good

half to one inch out from the connector and it put any ignition I've ever used to shame. That includes some pretty strong magnetos.

To top it off the thing was flashing every few seconds.
Now this was one of those things where the choke across the coax connector would have bled off the charge big as it was. A lightening arrestor (spark gap) would have kept the voltage down, but most likely would not have protected a receiver input without a choke across the connection.

Nearby lightening strikes do something similar for ungrounded antennas although they also induce a current in grounded ones as well.

Now we are getting into the realm where the choke across the terminals may not be enough to protect the rig and I'm assuming the rig is properly grounded. That a protective device across the input will protect the rig is some what problematic. It just depends on the strength of the induced voltage and current. OTOH, some protection is better than no protection.

Now as to direct hits to wire antennas and ungrounded verticals.
There are precautions to take such as cable routing and grounding of the shield at the base of the antenna and prior to entering the house/ham shack, but again these come with no guarantee.

Generally installations using a few wire antennas and ungrounded verticals are configured in such a way that the antennas can be disconnected. With these stations I would always disconnect and ground the coax. Then unplug the AC mains from the station.

I would resort to one other step which is to ground any other cables and even rotor cables if any exist.

The easiest way to ground a group of coax cables is to take three aluminum plates (or copper). clamp the plates together and drill them to take bulkhead connectors (the clamping only assures the connectors will properly align after the thing is assembled.) One plate is for the connectors going into the house, one is for the coax cable connectors from the antennas and the third is for the grounding.

I should really make one of these up and shoot some photos to show how well they can work.

At any rate, The plates can be configured several ways as long as it allows the user to unplug the cables from the antennas from the house and plug it into the grounding plate. The slip on PL-259 equivalents work very well for this.

The same thing can be done one cable at a time, but I find that with a rapidly approaching storm I'd not want to be spending time disconnecting one cable at a time and then reconnecting said cables to a grounded set of connectors.

I'd go so far as to attach a pair of rack panel handles to the one plate to allow for easy unplugging and reinserting it into the grounding receptacle. I's also ground the metal plate that holds the feed throughs into the house and install PolyPhasers for each line. it and the grounding receptacle both need to be thoroughly grounded and make no sudden or sharp turns in the cables.

Another tract would be to have all cables enter the house through a well grounded panel using bulkhead connectors and PolyPhaser.
By well grounded I don't mean tieing the plate to a single ground rod with a #8 wire, but rather bonding the plate to at least two 8' ground rods and connecting those to a grounding network. Even then in this kind of installation I'd consider disconnecting the cables and grounding them.

BTW, ground rods can be easy to install if you don't have rocky soils, by using a hydraulic drill. (Another thing I need to write up and photograph). Actually I have the photos. I just need to write up how to make and use one. Maybe soon.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers
>Jack
>Virginia Beach
>

6105. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 06:44:06 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <gkuvtv84hlkdv55qgk1rhrsq2cu7f4gn42@4ax.com>
Source record: 103021

On Fri, 12 Dec 2003 22:32:07 -0700, Wes Stewart <n7ws@_arrl.net>
wrote:

>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
><mynewsat@rogerhalsteaddot.com> wrote:
>
>|
>|Every HF antenna here will go 1:1 "some where" ...
>
>Not so.

I'd like to know how you can say that?

Have you measured all my antennas? You are welcome to come over and
check them out. Every one "according to my meter which is a Bird"
reaches 1:1 some where in the desired band. It may not be exactly the
frequency the formula predicted, but it'll be relatively close.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6106. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 14:58:25 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <m5q0uv8vt9j9askbvt6tu7nbjck281oojl@4ax.com>
Source record: 103022

On Wed, 17 Dec 2003 06:44:06 GMT, Roger Halstead
<mynewsat@rogerhalsteaddot.com> wrote:

|On Fri, 12 Dec 2003 22:32:07 -0700, Wes Stewart <n7ws@_arrl.net>
|wrote:
|
|>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
|><mynewsat@rogerhalsteaddot.com> wrote:
|>
|>|
|>|Every HF antenna here will go 1:1 "some where" ...
|>
|>Not so.
|
|I'd like to know how you can say that?

I can say it because it's true.
|
|Have you measured all my antennas?

No, but I've measured some of mine. Why just yesterday, I was out
measuring my vertical that started out as a Cushcraft AV-80. I'm
looking to use it on 40 meters. At resonance, at about 5.43 MHz, the
base impedance was 38.5 +j0. That's a 1.3:1 SWR.

And BTW that's a datum taken using a method described in HP
Application Note 77-3, "Measurement of Complex Impedance 1-1000 MHz."

You mistakenly believe that because an antenna *has a resonance* at
some frequency, its SWR is *1:1*. Not so, as shown above.

I have shown at least *one* example where you are wrong when you say
every antenna.

| You are welcome to come over and
|check them out.

No thanks. The weather here is much nicer for doing antenna work.

| Every one "according to my meter which is a Bird"
|reaches 1:1 some where in the desired band. It may not be exactly the
|frequency the formula predicted, but it'll be relatively close.
|
|Roger Halstead (K8RI & ARRL life member)
|(N833R, S# CD-2 Worlds oldest Debonair?)
|www.rogerhalstead.com
|Return address modified due to dumb virus checkers

|

6107. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 15:14:03 UTC
From: richardharrison@webtv.net
Message-ID: <23967-3FE072BB-8@storefull-2315.public.lawson.webtv.net>
Source record: 103024

Jack wrote:
"My HF antennas consist of 3 long wires and 1 dipole suspended from and between pine trees, all some 80 feet in the air."

I worked for years in a shortwave broadcasting plant. One building contained 12 transmitters, 8ea. 50KW, and 4ea 100 KW, plus several lower powered transmitters.

We had dozens of antennas which included several curtain antennas for each of 3 frequency ranges, low, medium, and high. The curtain array requires 4 towers for support. It has 4 dipoles in a radiating plane, all driven in-phase. It has 4 reflecting dipoles in a parallel plane directly behind the radiators. Height of the drive point of the array, its midpoint, was about 1-WL, or about 165 feet as I recall. That makes the tower height well over 300 ffeet at 6 MHz. For economy, the curtains for a particular frequency range are hung from a double row of towers which support curtains on both sides.

The transmission lines from nearly all antennas, curtains, rhombics, or whatever, are brought into a cross-bar switching area so that any transmitter can be connected to any antenna.

Transmission lines are all open-wire spaced at about 15 inches, or more, for a 600-ohm impedance if memory serves. Where the antenna line enters the switching area, boomerang arc gaps provide a flashover-point opportunity, line-to-line, and line to ground.This works.

Open wires, like coax, have a high common-mode impedance. This tends to make a gap more conducive than the transmission line. Use large ground wires to keep inductance and resistance low. This keeps voltage drop low and handles the kiloamps for the short period of the surge.

Best regards, Richard Harrison, KB5WZI

6108. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 15:18:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe0742d_1@corp.newsgroups.com>
Source record: 103023

Roger Halstead wrote:
> Wes Stewart <n7ws@_arrl.net> wrote:

>>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
>>|Every HF antenna here will go 1:1 "some where" ...
>>
>>Not so.
>
> I'd like to know how you can say that?
> Have you measured all my antennas?

Basic problem was the lack of a defined boundary for
"here". I figured it meant, "here in the US".
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6109. Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 17:38:19 UTC
From: jder8745@aol.com
Message-ID: <20031217123819.29482.00000419@mb-m02.aol.com>
Source record: 103025

Greetings,

I would like to hear from (ON THE LIST) anyone currently using a slinky antenna, either homebrew or the commercial variety.

Just tell me how you use it, on what bands, etc.

Thanks in advance. Let's say we cut the thread off at, say 10^4, responses.

73 de Jack, K9CUN

6110. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 18:03:46 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <ef61uvoanub6qq3svb8guf5h568hrqbdmq@4ax.com>
Source record: 103026

On Wed, 17 Dec 2003 09:18:30 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

|Roger Halstead wrote:
|> Wes Stewart <n7ws@_arrl.net> wrote:
|
|>>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
|>>|Every HF antenna here will go 1:1 "some where" ...
|>>
|>>Not so.
|>
|> I'd like to know how you can say that?
|> Have you measured all my antennas?
|
|Basic problem was the lack of a defined boundary for
|"here". I figured it meant, "here in the US".

I don't know what "here" meant for sure, but he said, "although a
couple of them require a tuner to get there", even "there" his
statement is incorrect.

6111. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 18:10:41 UTC
From: Mike Sims <msimsNOSPAM!!!@nospam.ci.victorville.ca.us>
Message-ID: <MPG.1a4a3bf9868a3727989683@news.twtelecom.net>
Source record: 103027

In article <3FDE183E.F42F8DB4@cwis.net>, w5lz@cwis.net says...
>
>
> Buy a tower?
> 'Doc

I'd love to, but I need to keep my cost under $250, and I don't know
where to buy them. I live in Hesperia, CA.

6112. Re: Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 18:18:03 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fe09cc6.591745890@news.galilei.com>
Source record: 103028

Hi Jack

I made a dipole using the smaller sized slinky's and it worked about the same as my other dipoles made of wire, but was a little shorter.

I just stretched a nylon line across the yard, fed through the slinky's. Used a PVC T-fitting between them and for the coax strain. Tied another small nylon line to the slinky at one end and permanently affixed the slinky at the other end. The loose end of the pulling line came into the shack through a window and I tied knots in the line to mark the tuned point of each band I worked. I used it quite successfully on 80, 40 & 20 meters. It did pick up more noise than a wire dipole does. But transmitted and received signal strengths were about the same.

TTUL
Gary

6113. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 18:25:17 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe09ff4$1_4@corp.newsgroups.com>
Source record: 103029

Mike Sims wrote:
> I'd love to, but I need to keep my cost under $250, and I don't know
> where to buy them. I live in Hesperia, CA.

If it's just *temporary*, you could obtain N ten foot TV sections from
Home Depot/Lowes and just guy them for the test. They are about one inch
in diameter and cost about $20 each. I use them for my bird house.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6114. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 20:14:40 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <j7e1uv4af0jjggr94m44scf5r7a4gri7kj@4ax.com>
Source record: 103030

What's all this got to do with the subject, 'Re: G5RV'?

Seems it's a bit off.....

6115. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 20:58:51 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <fs3Eb.41115$b8.7001@newssvr29.news.prodigy.com>
Source record: 103031

"Mike Sims" <msimsNOSPAM!!!@nospam.ci.victorville.ca.us> wrote in message
news:MPG.1a4a3bf9868a3727989683@news.twtelecom.net...
> In article <3FDE183E.F42F8DB4@cwis.net>, w5lz@cwis.net says...

> > Buy a tower?
> > 'Doc
> I'd love to, but I need to keep my cost under $250, and I don't know
> where to buy them. I live in Hesperia, CA.

Home Depot: Chain link rails are 21 feet long, three with standard
separator clamps will make a 63 foot length. Set four feet into a cement
anchor, guy well! Works for me!

Cost? about $150 plus guys!

6116. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 21:29:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brqhsb$8c2$1@sparta.btinternet.com>
Source record: 103032

Cec,

I thought you'd never ask. ;o)

Regarding solenoidal, single-layer, antenna loading coils -

Rule 1.

Inductance cannot change with frequency. With ANY coil, inductance between the end points depends solely on dimensions and number of turns. As you know, calculating formulae can be found almost anywhere. But to be very exact with a long coil, an appreciable fraction of a wavelength, add the inductance of a straight wire of the same length. After all, the coil may consist of less than one turn as occurs when a coarse helix of wire is pulled out straight. For a demonstration use program SOLNOID3. Read the notes.

Rule 2.

Self-capacitance of a multi-turn, fairly close-wound coil consists of two parts, Ca and Cb, both of which can be considered to be in shunt with the coil to form a parallel tuned circuit. The structure does in fact behave like this and has a measurable resonant frequency.

Ca is the same as the capacitance between the two halves of a dipole of the same overall length and diameter as the coil. Matters become very complicated as the spacing between turns increases

Cb is the capacitance between N adjacent turns ALL IN SERIES with each other. So as N increases the resultant fast becomes very small. As spacing between turns increases Cb decreases even faster. This is intuitively true.

All the above is calculable from dimensions. As is done in LOADCOIL and some other programs. I'm sure somebody will let me know if a significant error is found.

Sorry I am unable to provide references. I doubt if there are any. I have made measurements.

Why not ask Yuri ? He sounds like an expert.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

==========

"Cecil Moore" wrote
> Reg, does your software involving loading coils take distributed
> coil capacitance into account? Is there some rule of thumb involved?
> --
> 73, Cecil, W5DXP
>

6117. Re: Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 21:36:53 UTC
From: gmz79@aol.comnospam
Message-ID: <20031217163653.13675.00001012@mb-m10.aol.com>
Source record: 103033

A hf antenna that'l walk down stairs.
KC*VIF
Greg Z
to thine own sound be true

6118. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 21:39:45 UTC
From: gmz79@aol.comnospam
Message-ID: <20031217163945.13675.00001013@mb-m10.aol.com>
Source record: 103034

Mfj 50' telescoping mast $70 + guys and a sack of crete or two.

KC*VIF
Greg Z
to thine own sound be true

6119. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 21:55:02 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fe0d08d$0$2328$ba620e4c@reader3.news.skynet.be>
Source record: 103035

Reg,

If you place Napol�on Bonaparte beside Hitler and Stalin, I am not sure you know something about history. Of course you may consider metric system as another plague ;-))

73 de Jacques - ON5MJ

6120. Re: New program: RHO_SWR.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:16:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brqkkaeri1@sparta.btinternet.com>
Source record: 103036

Thank you Pez for the list of corrections needed in the text of the notes.

The program was a rush job to stop a war. No time for checking text.

Does anybody want his money back?

However I have thoroughly checked for correct mathematical functioning and
that the program does accurately serve its intended purpose - assisting
with plotting TRUE SWR along a transmission line.

TLI = "Transmitter Loading Indicator".

This is the new 21st century name for the so-called but mis-named SWR meter
which does NOT measure SWR and in any case there is no transmission line on
which SWR can be measured.

The TLI does in fact do what its name says - it indicates whether or not
the transmitter is correctly loaded.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

"pez" <studentant@hotmail.com> wrote in message
news:bratnufll1@nic.grnet.gr...
> Dear Mr. Reg Edwards,
>
> Firstly, I have to correct myself:
> Definitely, RHO_SWR does not supersedes
> the COAXPAIR and RJELINE3a programs.
>
> Secondly,
> in what is following,
> which seems to me as a correction to an obviously misprint,
> take once again into account please,
> that English is not my native language...
>
> Program: RHO_SWR.EXE/ 49,576 bytes
>
> "M(ore notes)"
>
> Lines from the Top of the 1st M(ore notes) Screen:
> --
> [2] beteen -to- between

> [2] permi- -to- perm-
> [3] ttivity -to- ittivity
>
> Lines from the Bottom of the 1st M(ore notes) Screen:
> ----------
> [2] indication -to- indicate (?)
> [2] flow -to- [be canceled as pleonasm]
> [6] flowing -as- [above 2]
> [8] flowing -as- [above 2]
> [9] flowing -as- [above 2]
>
> Lines from the Top of the 2nd M(ore notes) Screen:
> ----------
> [2] value. -to- [be canceled as it is repeated from the end of the
previous line]
> [4] nepers -to- nepers/mile (?)
> [5] radians -to- radians/mile (?)
>
> Lines from the Bottom of the 2nd M(ore notes) Screen:
> ----------
> [6] of -to- [be canceled as it is repeated from the end of the
previous line]
>
> Finally,
> could you tell me please what is the meaning of "TLI"?
>
> Sincerely yours,
>
> pez
> SV7BAX
> TheDAG
>
>

6121. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:19:17 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <shj1uvsvl724sarv9caenjmo42qv22a3jk@4ax.com>
Source record: 103037

On Wed, 17 Dec 2003 07:58:25 -0700, Wes Stewart <n7ws@_arrl.net>
wrote:

>On Wed, 17 Dec 2003 06:44:06 GMT, Roger Halstead
><mynewsat@rogerhalsteaddot.com> wrote:
>
>|On Fri, 12 Dec 2003 22:32:07 -0700, Wes Stewart <n7ws@_arrl.net>
>|wrote:
>|
>|>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
>|><mynewsat@rogerhalsteaddot.com> wrote:
>|>
>|>|
>|>|Every HF antenna here will go 1:1 "some where" ...
>|>
>|>Not so.
>|
>|I'd like to know how you can say that?
>
>I can say it because it's true.
>|
>|Have you measured all my antennas?

I think an important word has been missed. <:-))

>
>No, but I've measured some of mine. Why just yesterday, I was out
>measuring my vertical that started out as a Cushcraft AV-80. I'm
>looking to use it on 40 meters. At resonance, at about 5.43 MHz, the
>base impedance was 38.5 +j0. That's a 1.3:1 SWR.

What do your antennas have to do with mine?

>
>And BTW that's a datum taken using a method described in HP
>Application Note 77-3, "Measurement of Complex Impedance 1-1000 MHz."

I understand that.
>
>You mistakenly believe that because an antenna *has a resonance* at
>some frequency, its SWR is *1:1*. Not so, as shown above.
>
I don't think I used the word resonance any where in my post although
at the end I did refer to the antennas being cut according to formula
and the 1:1 point not being where the formula said it should.

>I have shown at least *one* example where you are wrong when you say
>*every antenna*.

Ummm...no you haven't.

Nor did I say every antenna. I said "Every HF antenna here",
paraphrased, "Every HF antenna at this location does show a 1:1 some
where in the band for which it's used".

I am speaking solely about the HF antennas at this location and was
careful to point that out. All have been checked with a Bird 43 watt
meter and each one has a point where it shows no reflected power.
Their heights and angles are such that they are non reactive at those
points, or at least as near as I can tell on a Palomar bridge and are
so close to 50 ohms I can't measure the difference.

So as the question was asked and the thread titled. "Is it possible to
have a 1:1 SWR", the answer is yes. If I can do it, so can someone
else. I didn't give any probabilities, but the odds are relatively
slim that any one throwing up a wire is going to be lucky and find it
1:1 with J=0. However if some one reads 1:1 on their bridge it
doesn't mean the bridge is necessarily bad.
I should also point out that the wire antennas here are relatively
high at an 45 degrees to horizontal. Probably not a typical
installation.

>
>| You are welcome to come over and
>|check them out.
>
>No thanks. The weather here is much nicer for doing antenna work.

Hey, it's nicer than when I put up the tribander. I think the chill
factor was 4 degrees that day.

Current conditions:
Temperature 29 ï¿½F / -2 ï¿½C
Windchill 17 ï¿½F / -8 ï¿½C
Humidity 69%
Dew Point 20 ï¿½F / -7 ï¿½C
Wind WNW at 17 mph / 27.4 km/h
Wind Gust -
Pressure 29.70 in / 1005 hPa (Steady)
Conditions Overcast
Visibility 10 miles / 16 kilometers
Clouds
(Above Ground Level) (FEW) : 2700 ft / 824 m
Overcast (OVC) : 6500 ft / 1983 m

It's a veritable heat wave. <:-)) Although we did have nearly two
inches of snow today.

>
>| Every one "according to my meter which is a Bird"

>|reaches 1:1 some where in the desired band. It may not be exactly the
>|frequency the formula predicted, but it'll be relatively close.

They are cut to formula plus a tad. Shortening equal amounts did not
put the 1:1 point at the same frequency on each of the 75 meter
antennas. However both do reach 1:1 with j=0 or as near as I can
measure. The Palomar bridge isn't exactly a precision instrument.

OTOH the AV-640 Hy-Gain multi band vertical reaches 1:1 (50 ohms and
J=0) at some point on every band 40 through 6. However I'm convinced
it's a perfectly matched dummy load on 20.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers
>|
>|Roger Halstead (K8RI & ARRL life member)
>|(N833R, S# CD-2 Worlds oldest Debonair?)
>|www.rogerhalstead.com
>|Return address modified due to dumb virus checkers
>|

6122. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:21:16 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <nll1uvc9vf1fptafjm4s8032ikvf9o9iqh@4ax.com>
Source record: 103038

On Wed, 17 Dec 2003 09:18:30 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Roger Halstead wrote:
>> Wes Stewart <n7ws@_arrl.net> wrote:
>
>>>On Sat, 13 Dec 2003 00:06:16 GMT, Roger Halstead
>>>|Every HF antenna here will go 1:1 "some where" ...
>>>
>>>Not so.
>>
>> I'd like to know how you can say that?
>> Have you measured all my antennas?
>
>Basic problem was the lack of a defined boundary for
>"here". I figured it meant, "here in the US".

Here as in http://www.rogerhalstead.com/ham_files/tower.htm which is
about 5 miles west of down town Midland MI. IE, my own installation.
<:-))

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6123. Re: Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:24:05 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031217172405.04203.00001188@mb-m29.aol.com>
Source record: 103039

There is another type of slinky antenna - Slinky Beverage, made out of bunch of slinkies (5 - 7) and stretched like a Beverage or Wave Antenna. Works well too in limited space. Check TopBand reflector archives if interested.

Yuri, K3BU

6124. Re: Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:27:43 UTC
From: Wedgew <wedgew@rochester.rr.com>
Message-ID: <zL4Eb.21988$UY6.5900@twister.nyroc.rr.com>
Source record: 103040

I put one up in my bedroom to listen to broadcast shortwave I am
surprized how well it picks seems better in the 20 to 40 meter bands I
am using a preselector (MFJ-956) The slinky is deployed with one leg
north south and the other east west each side about 12 feet. I startd
out with it connected to a grundig yb-400 then bought a used icom ic-71r
I got so interested that I enrolled ina class and just took the test 2
weeks ago and was issued KC2MGJ by the FCC I'm looking at 2m rigs
currently (costly hobby)
The slinky antenna performed better than I thought it would. almost as
good as my outdoor g5rv Jr. (63 ft)
73's de KC2MGJ

JDer8745 wrote:
> Greetings,
>
> I would like to hear from (ON THE LIST) anyone currently using a slinky
> antenna, either homebrew or the commercial variety.
>
> Just tell me how you use it, on what bands, etc.
>
> Thanks in advance. Let's say we cut the thread off at, say 10^4, responses.
>
> 73 de Jack, K9CUN

--
OK!
What GeNiuS pUt thE CaPlocK KEy
RiGhT NeXt to The Shft KEY?

Seek not to confound me as I am dim-witted and slow of study.

" Molon Labe!" ~Spartan General-King Leonidas

6125. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 22:49:32 UTC
From: Mike Sims <msimsNOSPAM!!!@nospam.ci.victorville.ca.us>
Message-ID: <MPG.1a4a7d5c2211b29b989684@news.twtelecom.net>
Source record: 103041

In article <20031217163945.13675.00001013@mb-m10.aol.com>, gmz79
@aol.comnospam says...
> Mfj 50' telescoping mast $70 + guys and a sack of crete or two.
>
> KC*VIF
> Greg Z
> to thine own sound be true
>

Where can I buy one of those? I started using 2.5" poles from a local
pipe shop, and I have one mast that is 21', and another that is 8 feet
with three feet down in the concrete. The problem is, I can't even add
10 feet to the mast because the joining point seemed too flexible when I
was trying to insert it ...

This 50' $70 solution sounds like the ticket to me.

6126. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 23:10:38 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312171510.28a45c14@posting.google.com>
Source record: 103042

I've put up PVC pipe to about 35 feet, using pretty simple guying. If you used more complicated guying and keep the wind load at the top very small, I'd think you could get to 50 feet that way. I used telescoping sections, 10 feet each of 2", 1-1/2", 1" and 3/4" as I recall, with a couple feet overlap at each junction. Use 20 foot sections and maybe start at 2-1/2", perhaps. You can use couplings turned on a lathe, glued to the bottom of each upper section, to make a nice sliding fit. Be sure to use enough guy points to keep the thing straight! Use UV-resistant materials if you want it to stay up for a while: electrical PVC conduit is generally sunlight-resistant.

You can also get telescoping fiberglass tubes (sold for quad antenna "spiders") that might get you to that sort of height, with guying and some ingenuity.

Cheers,
Tom

Mike Sims <msimsNOSPAM!!!@nospam.ci.victorville.ca.us> wrote in message news:<MPG.1a47850a896918f989681@news.twtelecom.net>...
> I'm trying to do a point to point 802.11b connection to two friends
> houses. This will be my 5th personal installation for wireless point to
> point. I have trees in the way on both sides, and need a cost effective
> way to get these antennas up 50 feet.
>
> Does anyone have any suggestions for accomplishing this?
>
> Thank You,
>
> Mike Sims

6127. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 23:34:50 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0312171534.4a55eb03@posting.google.com>
Source record: 103043

Dave Shrader wrote:
> SNIP
> SNIP
> SNIP: for a high power solid state station,
> 1500 watts, the matched RMS voltage is 274
> volts, the maximum peak to peak is 274*2.828
> = 774 volts p-p. Any surge device must
> accommodate the high RMS voltage and yet the
> receiver/transceiver front end must tolerate
> 774 volts p-p without damage.
> Deacon Dave, W1MCE

I gently disagree with your inclusion of the word receiver (with respect to tolerating 774 volts). That's why the T/R switch has an isolation spec that is much greater than 0dB. In receive mode the transceiver might be damaged by voltages much less than 774 volts.

To confirm, simply transmit 1500 watts into your receiver.

Your analysis is probably more-or-less valid for 1500 watt transmitters (or similar transceivers when transmitting).

Unfortunately, most transceivers have a very high duty cycle for being in receive mode.

6128. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 23:48:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <brqq0qppm1@titan.btinternet.com>
Source record: 103044

Dear Jacques,

Oh yes, I was perfectly aware Bonaparte was the odd man out.

I put him there to suggest to a minority of USA readers the possibility that
a similar sort of error might have occurred with George B.

Reg, G4FGQ

==========

> Reg,
>
> If you place Napol&#65533;on Bonaparte beside Hitler and Stalin, I am not sure
you
> know something about history. Of course you may consider metric system as
> another plague ;-))
>
> 73 de Jacques - ON5MJ
>
>

6129. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-17 23:54:38 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <9qq1uvocitovv2hhijf321hnsf50bk70m7@4ax.com>
Source record: 103045

On Wed, 17 Dec 2003 20:58:51 GMT, "Roger Gt" <Xenot@pacbell.net>
wrote:

>
>"Mike Sims" <msimsNOSPAM!!!@nospam.ci.victorville.ca.us> wrote in message
>news:MPG.1a4a3bf9868a3727989683@news.twtelecom.net...
>> In article <3FDE183E.F42F8DB4@cwis.net>, w5lz@cwis.net says...
>
>> > Buy a tower?
>> > 'Doc
>> I'd love to, but I need to keep my cost under $250, and I don't know
>> where to buy them. I live in Hesperia, CA.
>
>Home Depot: Chain link rails are 21 feet long, three with standard
>separator clamps will make a 63 foot length. Set four feet into a cement
>anchor, guy well! Works for me!

I went to a place that installs the fence and actually found the pipe
cheaper, BUT YMMV.

The nice thing about the steel tubing used for the fence is it is
quite a bit stronger than steel pipe. It won't bend (take a set) as
easily as galvanized water pipe, but OTOH it is more flexible
(springy)

You can also go to a steel supplier (we have several locally) and may
find even better prices. Notice I said *may*. I purchased two
lengths of 1 1/4 and one length of 2" (both with 1/4 inch wall) at
very reasonable prices. As to strength? It's what's holding all the
antennas. http://www.rogerhalstead.com/ham_files/Tower29.htm
The top arrays being 30 feet above the top of the tower.

However I do have to admit, when the wind gets close to 70 MPH it
looks like a bluegill rod that just tied into a monster Bass.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

>
>Cost? about $150 plus guys!
>

6130. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 01:00:50 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <6%6Eb.584866$Fm2.541870@attbi_s04>
Source record: 103046

You sniped his last staement. He concluded by this that no protection scheme
was going to help, other than disconecting, as that voltage would damage
the reciever.

"J. Harvey" <VE1BLL@rac.ca> wrote in message
news:8a615218.0312171534.4a55eb03@posting.google.com...
> Dave Shrader wrote:
> > SNIP
> > SNIP
> > SNIP: for a high power solid state station,
> > 1500 watts, the matched RMS voltage is 274
> > volts, the maximum peak to peak is 274*2.828
> > = 774 volts p-p. Any surge device must
> > accommodate the high RMS voltage and yet the
> > receiver/transceiver front end must tolerate
> > 774 volts p-p without damage.
> > Deacon Dave, W1MCE
>
> I gently disagree with your inclusion of the word receiver (with
> respect to tolerating 774 volts). That's why the T/R switch has an
> isolation spec that is much greater than 0dB. In receive mode the
> transceiver might be damaged by voltages much less than 774 volts.
>
> To confirm, simply transmit 1500 watts into your receiver.
>
> Your analysis is probably more-or-less valid for 1500 watt
> transmitters (or similar transceivers when transmitting).
>
> Unfortunately, most transceivers have a very high duty cycle for being
> in receive mode.

6131. Re: Website recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 01:04:39 UTC
From: niftydog@hotmail.com
Message-ID: <e28c5b43.0312171704.25dd614a@posting.google.com>
Source record: 103047

> You are heading in the wrong direction.

You are incorrectly assuming that I am relying entirely on the
internet for information.

> By far the best places to browse are technical college and university
> libraries.

A library you say?! Sheesh, why didn't I think of that!

> Also speak to your tutor about it. If he's any good he should have already
> advised you on references.

He is, damn good in fact; he has already referred us to about 6
relevant texts in the (small) college library. I have also raided the
local university library.

Reg, you've made assumptions about my research methods, stated the
bleeding obvious and insinuated that my tutor is not doing a good job.
None of which was at all helpful. Sadly, it's about as much as I
expect from Usenet these days.

All I'm asking for is some relevant websites.

6132. Re: Website recommendations

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 01:05:05 UTC
From: niftydog@hotmail.com
Message-ID: <e28c5b43.0312171705.655602a6@posting.google.com>
Source record: 103048

> You are heading in the wrong direction.

You are incorrectly assuming that I am relying entirely on the
internet for information.

> By far the best places to browse are technical college and university
> libraries.

A library you say?! Sheesh, why didn't I think of that!

> Also speak to your tutor about it. If he's any good he should have already
> advised you on references.

He is, damn good in fact; he has already referred us to about 6
relevant texts in the (small) college library. I have also raided the
local university library.

Reg, you've made assumptions about my research methods, stated the
bleeding obvious and insinuated that my tutor is not doing a good job.
None of which was at all helpful. Sadly, it's about as much as I
expect from Usenet these days.

All I'm asking for is some relevant websites.

6133. Re: Kenwood TM-741A

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 01:30:19 UTC
From: "Thomas C. Sefranek" <WA1RHP@ARRL.NET>
Message-ID: <vPydnU-U687Hnnyi4p2dnA@comcast.com>
Source record: 103049

The 741 classic failure....

The output module in the 2 meter section was NOT heat greased!
ALL the 741s I know of failed by cracking the alumna substrate on the power module,
due to over heating. The fix usually was to just bridge the cracks with solder.
After you remove the module, the cover pops off so you can get to the substrate.
Else, spend the cash for a new module and heat grease!

"Carl Domanico" <vze2686b@verizon.net> wrote in message news:uuMDb.707$LS.246@nwrdny01.gnilink.net...
> Need Help with my Kenwood TM-741A Triband FM Mobile Radio.....I purchased
> the radio new some 12 years ago, with the 220MHz. Module Installed....The
> Radio Has 144 Mhz / 220Mhz / 440 Mhz.....For years the radio worked
> excellent....Then about 5 years ago I had lost the out put on 144 (two
> meters)... However , the other two bands functioned fine...220/440mhz... I
> sent the radio back to kenwood...and they indicated that the Driver
> Transistor Q23 2SD1902R on the two meter module was defective. This
> transistor is an inexpensive part...$ 3.05 ea. Anyway...It seems like the
> same problem occured the other day...all the symptoms seem the same...Can
> anyone shed some light on why this seems to happen often?? Also is it
> possible to replace this 2SD1902R transister with something capable of
> handling some what more power dissapation?? What ever happened to those
> motorola hep sustatutes?? Any and all info supplied here will be greatly
> appreciated....
>
> Thanks
> Carl
> N2MFW
>

--
*
| __O Thomas C. Sefranek WA1RHP@ARRL.net
|_-\<,_ Amateur Radio Operator: WA1RHP
(*)/ (*) Bicycle mobile on 145.41, 448.625 MHz

http://hamradio.cmcorp.com/inventory/Inventory.html
http://www.harvardrepeater.org

6134. 80M Loop Antenna Quandry

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 02:04:12 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <3fe10872.29137452@nntp>
Source record: 103050

Built the loop at:

http://w1.859.telia.com/%7Eu85920178/antennas/frameant.htm

...but am having some problems with it; mainly, it seems resonant at 3.2-3.4 Mhz, and all "fixes" seem useless, including installing "spreaders" as the author suggests.

Pics of the finished loop/thing/dog are at:

http://www.moonlightsys.com/misc/

If anyone could take a minute and look at the *^$%^% thing, and see if anything obvious jumps out at them, I'd appreciate it. Maybe I've been looking at it too long to see the obvious. <sigh>

Thanks to the group in advance,

Lin/KJ6EF

[...please note that the variable tuning cap is disconnected in the pic, as we were trying to get some resonance readings on the loop. Also, the wire used is #8 Belden stranded/insulated. Frame is sched 40 PVC.]
For email responses, remove "nospam_".

6135. Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 02:41:31 UTC
From: tayl0rr@yahoo.com
Message-ID: <ff33c2c3.0312171841.52b7868e@posting.google.com>
Source record: 103051

Are there any reasonably priced <$300 Low power < 1 Watt SWR meters
that will cover 2.3ghz preferably up to 3.5ghz. Are there any
homebrew designs or modifications to existing meters?

Thanks
Rob
AG4WR

6136. Re: Need a cost efective tower BADLY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 03:34:07 UTC
From: gmz79@aol.comnospam
Message-ID: <20031217223407.26088.00000893@mb-m15.aol.com>
Source record: 103052

>Where can I buy one of those? I started using 2.5" poles from a local
>pipe shop, and I have one mast that is 21', and another that is 8 feet
>with three feet down in the concrete. The problem is, I can't even add
>10 feet to the mast because the joining point seemed too flexible when I
>was trying to insert it ...
>
>This 50' $70 solution sounds like the ticket to me.
>

---
http://www.randl.com/cgi-local/cart/cart.cgi?ID=11520&cart=moreinfo

You should be able to find a MFJ Distributor near you that will come close to
that price.

KC*VIF
Greg Z
to thine own sound be true

6137. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 07:29:39 UTC
From: whagen6@cs.com
Message-ID: <20031218022939.12131.00001180@mb-m05.news.cs.com>
Source record: 103053

an antenna has an impedence at the frequency it is being used at, and an impedence at its resonant frequency. If either of these impedences happen to be 50 ohms and the coax being used is 50 ohms, and the transciever is working at 50 ohms, then the swr is 1:1, and the swr is on the transmission line, not on the antenna.

The antenna does not have to have an impedence of 50 ohms at either the frequency being used at or at its resonant frequency, and these two freqeuncies could be the same, and the transmission line does not have to be at 50 ohms, and for that matter neither does the transciever. If any one of these is mismatched, then the swr is not 1:1.
An impedence transformer at the antenna-transmission line junction will transform a mismatch so there is no reflection on the transmission line, amd if this impedence is the same as that of the transmitter, then the swr is 1:1, if the impedence is not the same, then the swr is not 1:1 unless it is also transformed at the transmitter, and again the swr would be 1:1 on the transmission line, which is where the swr is, it is not on the antenna.

6138. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 07:38:19 UTC
From: alt <spamtrap@gwsn.com>
Message-ID: <LPcEb.746039$9l5.478556@pd7tw2no>
Source record: 103054

Gary V. Deutschmann, Sr. wrote:

> alt <spamtrap@gwsn.com> verbositized:
>
>>Gary V. Deutschmann, Sr. wrote:
>>
>>> Hi Jack
>>>
>>> I lived in an apartment for several years, NO ANTENNAS OF ANY KIND
>>> ALLOWED. Inside or outside. They provided a TV antenna hookup,
>>> lousy, but they provided it, so we couldn't even have rabbit ears.
>>
>>> TTUL
>>> Gary
>>
>>Things like that (and not being allowed to put my bicycle on the deck) are
>>why I won't move into a strata-complex.
>>
>>--
>>Donovan Hill
>
> Hi Donovan
>
> I had no choice, it was company owned for temporary out of town
> workers. The temporary just happen to last close to 5 years of and
> on.

I suspected not. Stratas are excellent examples of ruling by committee. The most rediculous rules get implemented like not being able to put my bicycle on the deck, even though it was the only thing on the deck and I was on the non-exposed side of the building where noone could really see it. But I got fined $125 for the priviledge.

> What do you do when you move into a subdivision with no restrictions
> regarding antenna's and then later they add them?
>

I won't move into a strata governed subdivision. Never. Never. Never. I don't need or want a bunch of people mettling in the way I keep my house and yard. It's, quite frankly, none of their business as long as what I do isn't a fire or other safety hazard.

But I'm also an asshole. :)

> TTUL
> Gary

--
Donovan Hill

6139. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 12:55:04 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fe1a1b0.31112750@news.galilei.com>
Source record: 103055

I wouldn't say you were that alt!

I have also lived where there were zero rules or laws about property or maintenance. That side of the fence is actually worse than having some moderate restrictions as to livestock, house color, outbuildings, etc. Lest you end up with a pig farmer upwind in a regal purple house with dayglow orange outbuildings constructed of old auto bodies.

It is so easy to disguise or hide most ham antenna's, except towers and yagi's of course, that it is not usually a problem for most hams.

I did have a 50 foot tower that was in place before the restrictions came into play and was thus grandfathered.
I was a little irked when I changed my house color without prior permission, considering the color was in their approved list already, and they called me on it. There was no fine, and the color scheme was approved as suitable. They had left no provisions for the common three color blend of painting which is quite prevelent in our area. All of their approved schemes consisted of only two colors.

TTUL
Gary

6140. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 14:20:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe1b80f_1@corp.newsgroups.com>
Source record: 103056

William F. Hagen wrote:
> an antenna has an impedence at the frequency it is being used at, and an
> impedence at its resonant frequency. If either of these impedences happen to be
> 50 ohms and the coax being used is 50 ohms, and the transciever is working at
> 50 ohms, then the swr is 1:1, and the swr is on the transmission line, not on
> the antenna.

One source of confusion is, on systems with both coax and ladder-line,
the SWR on the coax Vs the SWR on the ladder-line. A 12:1 SWR on 600
ohm ladder-line can result in a 50 ohm SWR of 1:1 without a tuner.
The ladder-line can be used as an impedance transformer.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6141. Loop Antenna Preamp

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 15:01:07 UTC
From: AL KA5JGV <ABurzynski@nojunk.satx.rr.com>
Message-ID: <TijEb.232354$do1.228972@twister.austin.rr.com>
Source record: 103057

What are the advantages of a differential fet preamp over a single-ended fet preamp? Does the diff amp have twice the output? Better SN ratio? Something else? It seems like more work to try and find the center of the loop, I'm just curious what the advantages are.

Thank you.

Al KA5JGV

http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

--

6142. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 16:02:56 UTC
From: denton <denton@oregontrail.net>
Message-ID: <brsil0$9jc$1@news.oregontrail.net>
Source record: 103058

Wonder how the efficiency compares to the old Johnson Matchboxes?
"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:vttrogh19sfc0f@corp.supernews.com...
> ... and here is the URL:
> http://www.eham.net/reviews/detail/3673#26218
>
> 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
> "Carlos42" <ktunks@earthlink.net> wrote in message
> news:248764dd.0312152056.7ede0009@posting.google.com...
> > If any one is interested, I posted my first impressions of my MFJ 974H
> > tuner on eham.net
>

6143. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 16:29:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe1d64b$1_8@corp.newsgroups.com>
Source record: 103059

denton wrote:
> Wonder how the efficiency compares to the old Johnson Matchboxes?

Is the MFJ link-coupled? I can't tell from the description.
Is there a published schematic?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6144. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 16:37:28 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fe1d788$0$2822$ba620e4c@reader0.news.skynet.be>
Source record: 103060

Cecil,

You can fibd the schematic (all the manual) on MFJ in PDF format.

73 de Jacques - ON5MJ

6145. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 16:54:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe1dc30$1_8@corp.newsgroups.com>
Source record: 103062

ON5MJ wrote:
> You can fibd the schematic (all the manual) on MFJ in PDF format.

Thanks, I should have noticed that. I don't see why this design
balances currents any better than an unbalanced tuner with a
balun on the output. Common mode currents flow straight through
the balanced part of the tuner until they encounter the unbalanced
choke-balun. If the two balanced currents were sampled and metered
and the capacitor tunings were all independent, then the currents
could stand a chance of being manually balanced.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6146. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 16:54:42 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312180854.1d520d5f@posting.google.com>
Source record: 103061

The freeware "RFSim99" will show you a design for microstrip or
stripline (or a couple others) for a directional coupler that should
work fine. Look under "Tools..component..coupler" in the pulldown
menus. It shouldn't be too hard to add a detector to each of the
coupled ports, using either a simple diode detector or a more
complicated one.

Cheers,
Tom

tayl0rr@yahoo.com (Robert) wrote in message
news:<ff33c2c3.0312171841.52b7868e@posting.google.com>...
> Are there any reasonably priced <$300 Low power < 1 Watt SWR meters
> that will cover 2.3ghz preferably up to 3.5ghz. Are there any
> homebrew designs or modifications to existing meters?
>
> Thanks
> Rob
> AG4WR

6147. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 17:42:18 UTC
From: bob <k6rtm@nospam.comcast.net>
Message-ID: <1812200309421855 73%k6rtm@nospam.comcast.net>
Source record: 103063

Another approach would be to use directional couplers and diode detectors to measure forward and reflected power. The combination of low power and f>2GHz means care is needed.

Try eBay, searching for "directional coupler" and also searching for "sma" to find things. It's amazing how much good RF stuff you can find on eBay.

If you want SWR, that means forward and reverse measurements and some slightly-more-than-minimal amount of calibration. Two directional couplers, two diodes. I did simple calibration for a similar problem using a SMA tee, putting two 50 ohm terminations on the tee to give a known mismatch.

If all you want is minimize-the-power-coming-back-in-my-face, one coupler and a diode should do it.

Depending on your measurement capabilities, you might want gain blocks between the coupler(s) and diode(s) -- lots of Mini Circuits stuff on eBay, and other "gain blocks" -- search for "sma amplifier". Might also want a circulator/isolator between your output gadget and the couplers

Analog Devices have a log amp (AD8361) good up to 2.5 GHz, which puts out an equivalent RMS signal. Evaluation boards are available (and highly recommended unless you're quite good at layout and fabrication at such frequencies) but go for $100. Take a look at the spec sheet http://www.analog.com/UploadedFiles/Data_Sheets/541602412AD8361_b.pdf and see if that will do it.

73--

--
Namaste-

6148. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 18:16:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <3FE1EF06.E46D1DAB@uci.edu>
Source record: 103065

Cecil Moore wrote:
>
> William F. Hagen wrote:
> > an antenna has an impedence at the frequency it is being used at, and an
> > impedence at its resonant frequency. If either of these impedences happen to be
> > 50 ohms and the coax being used is 50 ohms, and the transciever is working at
> > 50 ohms, then the swr is 1:1, and the swr is on the transmission line, not on
> > the antenna.

> One source of confusion is, on systems with both coax and ladder-line,
> the SWR on the coax Vs the SWR on the ladder-line. A 12:1 SWR on 600
> ohm ladder-line can result in a 50 ohm SWR of 1:1 without a tuner.
> The ladder-line can be used as an impedance transformer.

That lily really didn't need the gold paint job, Cecil.

But thanks for providing a source of confusion. How could we have a
good argument without one. :-)

73, Jim AC6XG

6149. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 18:37:55 UTC
From: tdonaly@aol.com
Message-ID: <20031218133755.21823.00000768@mb-m19.aol.com>
Source record: 103064

Gary wrote,
(snip)
> Lest you end up with a pig farmer upwind in a regal purple house
>with dayglow orange outbuildings constructed of old auto bodies.

What's wrong with that?
73,
Tom Donaly, KA6RUH

6150. please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 20:11:42 UTC
From: Edgar <edesign@sala.lt>
Message-ID: <brt1ls$78iol$1@ID-208708.news.uni-berlin.de>
Source record: 103066

please recommend any interesting sites for hand made SWL antennas

6151. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 20:40:29 UTC
From: richardharrison@webtv.net
Message-ID: <20200-3FE210BD-102@storefull-2316.public.lawson.webtv.net>
Source record: 103068

Reg, G4FGQ wrote:
"Oh yes, I was perfectly aware Bonaparte was the odd man out."

Napoleon Bonaparte, 1769-1821, wsa Corsican of Italian heiritage.

Napoleon may have been the greatest military leader of all time. He conquered most of Europe.

Napoleon graduated in 1785 at the age of 16 from the French Military Academy in Paris. He joined the artillery as a second lieutenant. As a captain assigned to quell a revolt against the Republic at Toulon, which had been aided and abetted by a British fleet, Napoleon replaced the wounded Republican artillery General, siezed the high ground, drove out the British fleet, and put down the rebellion. Napoleon was promoted to brigadier general at the age of 24.

In 1795, Napoleon saved the French revolutionary government by dispersing an insurgent mob in Paris. In 1796, he married Josephine. In 1796, Napoleon also was made commander of the French Army in Italy. He defeated, in succession, four Austrian generals, all of whom were commanding superior forces. Austria and its allies were forced to make peace. The resulting treaty provided that France keep its conquests. Napoleon founded The Cisalpine (Italian) Republic, sending millions of franc`s worth of treasure to The French Republic.

In 1798, to attack British trade with the East, Napoleon led an expedition into Ottoman-ruled Egypt, which he conquered. His French fleet, however, was destroyed by Admiral Horatio Nelson`s British Fleet.

Napoleon was stranded but undaunted. He reformed the Egyptian government and its laws. He abolished surfdom, feudalism, and guaranteed basic rights.

The U.S. and its allies won`t be stranded in Afghanistan and Iraq. They will, however, reform their governments and laws, keeping them under their gun barrels until perpetuation is assured.

Napolean after many exploits, confronted new opposing coalitions which ultimately defeated him.

You "Have to know when to hold them, and know when to fold them", as the old saying goes.

Best regards, Richard Harrison, KB5WZI

6152. Re: please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 20:44:16 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <fgoEb.7361$ti2.1492@lakeread03>
Source record: 103067

"Edgar" <edesign@sala.lt> wrote in message
news:brt1ls$78iol$1@ID-208708.news.uni-berlin.de...
> please recommend any interesting sites for hand made SWL antennas
>
>

http://members.fortunecity.com/xe1bef/accesories-antennas.htm

6153. Re: please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 21:12:31 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <3LoEb.28133$m83.221@fed1read01>
Source record: 102919

Try AC6V's Pages at URL:
http://ac6v.com/swl.htm#ANT

--
73 From The Wilderness Keyboard

"Edgar" <edesign@sala.lt> wrote in message
news:brt1ls$78iol$1@ID-208708.news.uni-berlin.de...
> please recommend any interesting sites for hand made SWL antennas
>
>

6154. Re: 160 Meter Inverted-L Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 22:48:12 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-ADFFFE.16483118122003@newssvr30-ext.news.prodigy.com>
Source record: 102920

I found a great web page today that describes exactly what I am planning
at

http://www.bloomington.in.us/~wh2t/invertedl.html

Any comments?

In article
<aa5vuNOSPAM-FF79B0.05290216122003@newssvr23-ext.news.prodigy.com>,
"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote:

> Several years ago I had an Inverted-L but the wire (RG-58 coax) kept
> breaking and I am thinking about putting up a new version. This time I
> am thinking about using the hard (really hard) wire used by the telepone
> company for pole to house connections. It comes with two conductors.
> Rather than stripping the wire I am thinking about just tying the ends
> together and make it one conductor. In my old antenna I did the same
> thing by shorting the RF-58. I plan to feed it with coax from the
> bottom of the tower (center conductor to the telephone wire conductor
> and shield to the ground wires).
>
> Comments on the use of the telephone wire and feeding will be
> appreciated.
>
> Dick, aa5vu
>
> ps: The old antenna came from a CQ article years ago about a coax
> antenna with special shorting. The special shorting did not work so I
> just made it a single conductor (coax and shiel). It let me do a WAS
> without an amp so it worked.

6155. Re: Loop Antenna Preamp

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 22:57:21 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312181457.633d29ad@posting.google.com>
Source record: 102921

If it's a low-frequency loop, the advantage of balance is that you get
better rejection of local (near-field) voltage-noise fields. It's
less likely to matter when you get above a couple MHz. There are
similar considerations if you are wanting to use it for
direction-finding work, and in that case it could be of interest to
higher frequencies. You don't necessarily have to ground the center
of the loop to make things balanced.

Cheers,
Tom

"AL KA5JGV" <ABurzynski@nojunk.satx.rr.com> wrote in message
news:<TijEb.232354$do1.228972@twister.austin.rr.com>...
> What are the advantages of a differential fet preamp over a single-ended fet
> preamp? Does the diff amp have twice the output? Better SN ratio? Something
> else? It seems like more work to try and find the center of the loop, I'm
> just curious what the advantages are.
>
> Thank you.
>
> Al KA5JGV
>
> http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
> http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
>
>
>
> --

6156. Re: 80M Loop Antenna Quandry

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-18 23:14:42 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312181514.3725da28@posting.google.com>
Source record: 102922

nospam_deepsea_77@yahoo.com (Space Charge) wrote in message
news:<3fe10872.29137452@nntp>...
> Built the loop at:
>
> http://w1.859.telia.com/%7Eu85920178/antennas/frameant.htm
>
> ...but am having some problems with it; mainly, it seems resonant at
> 3.2-3.4 Mhz, and all "fixes" seem useless, including installing
> "spreaders" as the author suggests.
>
> Pics of the finished loop/thing/dog are at:
>
> http://www.moonlightsys.com/misc/
>
> If anyone could take a minute and look at the *^$%^% thing, and see if
> anything obvious jumps out at them, I'd appreciate it. Maybe I've
> been looking at it too long to see the obvious. <sigh>
>
> Thanks to the group in advance,
>
> Lin/KJ6EF
>
> [...please note that the variable tuning cap is disconnected in the
> pic, as we were trying to get some resonance readings on the loop.
> Also, the wire used is #8 Belden stranded/insulated. Frame is sched
> 40 PVC.]

You need to have the cap hooked up. It's part of the circuit. If with
the cap, it's tuning low in the band, you need slightly less turns on
the loop. Might have to take a bit off. Maybe a 1/4-1/2 turn. Hard to
guestimate on that one. Just trim the loop until it's resonant where
you want it with the value cap you have.
MK

6157. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 01:28:49 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0312181728.717b9c07@posting.google.com>
Source record: 102923

"CW" wrote:
> You snipped his last statement. He concluded
> by this that no protection scheme was going
> to help, other than disconecting, as that
> voltage would damage the receiver.

You're right - I misinterpreted his statement. I failed to notice
that he intended the word 'must' to represent an impossible (or at
least difficult) requirement.

Regards.

6158. Re: Constructing a 6m dipole balun??

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 01:51:05 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fe25bd9_3@news1.prserv.net>
Source record: 102924

Pat:

I think HyGain used to recommend about 6 turns 6" in diameter of RG-8. I don't think you want to wind 9913 that small, and 214 won't bend that well, so go for 6 or 7 turns as small as you can conveniently coil the coax. In a solenoid, not scramble wound, BTW. Minimize the capacity coupling between the ends.
--
Crazy George
Remove N O and S P A M imbedded in return address
"VE3PMK" <no.spam@go.away.spam.org> wrote in message
news:BC000613.4EF7%no.spam@go.away.spam.org...
> I picked up two 6m mobile fiberglass whip antennas recently and my plan is
> to use a short piece of 2" aluminum channel stock with a couple of C
clamps
> and make a mast mountable dipole.
>
> The question: Without buying a commercial unit, how should I connect it to
> the feeding coax? I could go direct-connect, but I think a balun is
needed.
> Therefore, can I get away with 'n' turns of coax on a 'x' inch cylindrical
> form? If so, what are the values for n and x ? I'll be feeding it woth
> ether 9913, 9914, or RG214, depending on what I'm running low on when the
> day arrives. Thanks in advance for any advice offered.
>
>
> Pat
> VE3PMK
>

6159. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 05:13:43 UTC
From: ktunks@earthlink.net
Message-ID: <248764dd.0312182113.33738a1e@posting.google.com>
Source record: 102925

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fe1dc30$1_8@corp.newsgroups.com>...
> ON5MJ wrote:
> > You can fibd the schematic (all the manual) on MFJ in PDF format.
>
> Thanks, I should have noticed that. I don't see why this design
> balances currents any better than an unbalanced tuner with a
> balun on the output. Common mode currents flow straight through
> the balanced part of the tuner until they encounter the unbalanced
> choke-balun. If the two balanced currents were sampled and metered
> and the capacitor tunings were all independent, then the currents
> could stand a chance of being manually balanced.

Cecil,

Could you elaborate a little on this? I am really
not very knowledgeable on this subject. I thought that by having the
the balun on the input rather than the output you eliminated the
possibility of operating the balun beyond its design parameters.
I was told that by not having the balun look directly into
the antenna you avoided having it see drastic changes in
impedance that it was not capable of handling. Presumably this
condition does not exist as much with the balun looking directly
into the tuner as the impedance is not capable of changing beyond
the balun's design parameters. Again, let me know the validity
of this theory as I am not an expert in this field.

I gather that by having the four capacitors ganged in groups
two the chances of having the currents in each leg balanced are
eliminated. Also the lack of being able to meter the current in each
leg diminishes the chances of a totally balanced output.

So the question is how is the 974H better than my old MFJ
949E? I must say that at this stage,I can see no difference,
but I probably do not know enough to know how much I don't
know!(as we used to say in Nebraska).

Another question is why is a link tuner better in this situation?
(Tuning a balanced feedline antenna?)As I know of no link tuners
that are currently in production,what would you reccomend in this
situation?

Kent Tunks KC6LXR

6160. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 05:39:06 UTC
From: kashe@rahul.net
Message-ID: <nn35uvk236fdaiqh9d6qnpuo6cpr4cm37q@4ax.com>
Source record: 102926

On 18 Dec 2003 07:55:04 EST, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>... There was no fine, and the color scheme was
>approved as suitable. They had left no provisions for the common
>three color blend of painting which is quite prevelent in our area.
>All of their approved schemes consisted of only two colors.

Sheesh.

As the t-shirt says -- Is there a hyphen in "anal obsessive"?

6161. questions regarding full wave loop antenna (as a "loop skywire")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 06:15:50 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2003.12.19.06.15.50.728800@127.0.0.1>
Source record: 102927

ok,

I've read what I could on full wave loops, but the info I have is very
sketchy about the feedpoint connection.

1. do I need a balun?
2. can I use a hairpin matcher after a balun to resonate the antenna and
acheive proper impeadance?
so help is definitely requested here

you may contact me directly at n7zzt at hotmail dot come (you will have to
type this in as a normal e-mail as I am trying to reduce spam)

Eric Oyen
DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

6162. Grounds the easy way.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 08:35:19 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <trd5uvc0mlgu67hjc4ucgp2inu6k6a951s@4ax.com>
Source record: 102931

The page isn't finished as I don't have photos of the connections to the tower legs, or any of actually using the hydraulic drilling, but some may find it helpful. The connection images should be up in a week or so, but I may have to wait till spring to get some photos of the actual drilling process. Currently I'd have to thaw the ground before drilling and it'd make one whale of a mess.

BTW, the hydraulic drill works in clay and or sand. Even in sand it wets the sand enough that it doesn't normally fill in as soon as you pull the drill. I emphasize "doesn't usually".

http://www.rogerhalstead.com/ham_files/ground.htm

There are other ham related links on my home page.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6163. Re: questions regarding full wave loop antenna (as a "loop skywire")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 09:07:53 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE2BFE9.8BCA3786@cwis.net>
Source record: 102928

Eric,
What kinda feed line do you plan to use?
'Doc

6164. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 10:32:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bruk4g$am5$1@titan.btinternet.com>
Source record: 102929

Cecil,

There's a little check you can make on the accuracy of program SOLNOID3 regarding the self-resonant frequency of a solenoid.

The resonant frequency is due to the stray capacitance of the coil being in shunt with the inductance.

The program allows the length of a coil to be stretched out until it is as long as the wire it was wound with. Throughout the process, as L and C change with coil length, the self-resonant frequency is calculated.

Resonant frequency is calculated up to the point when the original N turns are stretched out into a straight length of wire. You can do a simple check using your space-man's pocket calculator.

Does the program-calculated resonant frequency coincide with the resonant frequency of the straight wire considered as a 1/2-wave dipole ?

Incidentally, when the coil is only partly stretched out, the program can be used to estimate the resonant frequency of "Slinky's". Never having had a Slinky I cannot say precisely how accurate this might be.

Happy Xmas to you and yours and all that sort of thing.

Reg.

6165. Rohn Tower help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 11:03:53 UTC
From: "Fred E. Lux" <flux@core.com>
Message-ID: <vu5ms4fhtm1u3e@corp.supernews.com>
Source record: 102930

Help! Just purchased a Rohn HDBX48 self supporting tower used. Previous owner did not have any documentation. I am looking for a copy of the information packet that came with this tower - loading specs, suggestions / instructions for erection, etc. I am more than willing to pay duplication fees and postage. Please reply via e-mail if you can help

tnx

Fred, WD8ITZ

6166. Re: Loop Antenna Preamp

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 11:56:29 UTC
From: "M. J. Powell" <mike@pickmeremere.demon.co.uk>
Message-ID: <oh7BB1Ltdu4$EwCW@pickmere.demon.co.uk>
Source record: 102932

In message <3200347.0312181457.633d29ad@posting.google.com>, Tom Bruhns
<k7itm@aol.com> writes
>If it's a low-frequency loop, the advantage of balance is that you get
>better rejection of local (near-field) voltage-noise fields. It's
>less likely to matter when you get above a couple MHz. There are
>similar considerations if you are wanting to use it for
>direction-finding work, and in that case it could be of interest to
>higher frequencies. You don't necessarily have to ground the center
>of the loop to make things balanced.

True. In fact, forcing a centre-tap earth (ground) on a loop puts two
earths on the tuned circuit if the loop is tuned with a 2-gang capacitor
with the frame earthed. Not always good. A mechanical centre-tap may not
be an electrical centre-tap, giving unwanted resonances at HF.

Mike
--
M.J.Powell

6167. Re: Rohn Tower help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 13:31:20 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <E4DEb.591617$HS4.4349565@attbi_s01>
Source record: 102933

"Fred E. Lux" <flux@core.com> wrote in message
news:vu5ms4fhtm1u3e@corp.supernews.com...
> Help! Just purchased a Rohn HDBX48 self supporting tower used. Previous
> owner did not have any documentation. I am looking for a copy of the
> information packet that came with this tower - loading specs, suggestions
/
> instructions for erection, etc. I am more than willing to pay duplication
> fees and postage. Please reply via e-mail if you can help
>
> tnx
>
> Fred, WD8ITZ

Fred -

Rohn sold the manufacturing of the "BX" series of towers to the Thomas
Shelby Company (East Hampstead, NH)
a couple of years ago.

They have a web site with all of the information you will require, please
contact them directly.
http://www.criticaltowers.com/BX%20Series%20Towers/Web%20Pages/BX%20Series%20Tower%20Page.
htm

W9GB

6168. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 14:05:23 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3fe30577.122164765@news.galilei.com>
Source record: 102934

tdonaly@aol.com (Tdonaly) verbositized:

>
>Gary wrote,
>(snip)
>> Lest you end up with a pig farmer upwind in a regal purple house
>>with dayglow orange outbuildings constructed of old auto bodies.
>
>What's wrong with that?
It clashes with your new red & blue stripped tin roof!

TTUL
Gary

6169. HAM STUFF WANTED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 14:13:11 UTC
From: n2ion@aol.com
Message-ID: <20031219091311.26022.00001314@mb-m06.aol.com>
Source record: 102935

NOT USING YOUR ANTENNA ANYMORE?

IS YOUR RIG COLLECTING DUST?

LONG ISLAND MOBILE AMATEUR RADIO CLUB IS

LOOKING FOR DONATIONS OF AMATEUR RADIO GEAR FOR

EMERGENCY COMMUNICATION. WE ARE LOOKING FOR LOW

BAND YAGIS LIKE THE MOSLEY TA-33 OR TA-33 JR, AND

VERTICALS, RADIOS, ROHN TOWERS OR VARIOUS CRANKUP

TOWERS TO USE FOR EMERGENCY COMMUNICATION AND

OUR FIELD DAY EFFORT.

IF YOU DONATE SOME EQUIPMENT TO OUR CLUB, YOU WILL

GET A GENEROUS TAX LETTER, AND YOU'LL BE HELPING A

WORTHY CAUSE.

EMAIL AND LET US KNOW WHAT YOU HAVE!

THANKS IN ADVANCE

6170. Re: please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 14:43:21 UTC
From: desmoface@aol.com
Message-ID: <20031219094321.26083.00001346@mb-m06.aol.com>
Source record: 102936

If you have the room, a beverage can't be beat for receiving...just do an internet search for "beverage antenna."

Steve
kb8viv

6171. Re: Grounds the easy way.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 14:44:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <l9EEb.10645$WQ3.4933@lakeread05>
Source record: 102937

"Roger Halstead" <mynewsat@rogerhalsteaddot.com> wrote >
http://www.rogerhalstead.com/ham_files/ground.htm
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair?)
> www.rogerhalstead.com

Roger, thank you very much for that great website!

Jack
Virginia Beach

6172. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 14:52:13 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312190652.1ce740d9@posting.google.com>
Source record: 102938

k
Look at Cebik's three part tutorial on Link coupling
Art

tunks@earthlink.net (Carlos42) wrote in message
news:<248764dd.0312182113.33738a1e@posting.google.com>...
> Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fe1dc30$1_8@corp.newsgroups.com>...
> > ON5MJ wrote:
> > > You can fibd the schematic (all the manual) on MFJ in PDF format.
> > >
> > Thanks, I should have noticed that. I don't see why this design
> > balances currents any better than an unbalanced tuner with a
> > balun on the output. Common mode currents flow straight through
> > the balanced part of the tuner until they encounter the unbalanced
> > choke-balun. If the two balanced currents were sampled and metered
> > and the capacitor tunings were all independent, then the currents
> > could stand a chance of being manually balanced.
>
> Cecil,
>
> Could you elaborate a little on this? I am really
> not very knowledgeable on this subject. I thought that by having the
> the balun on the input rather than the output you eliminated the
> possibility of operating the balun beyond its design parameters.
> I was told that by not having the balun look directly into
> the antenna you avoided having it see drastic changes in
> impedance that it was not capable of handling. Presumably this
> condition does not exist as much with the balun looking directly
> into the tuner as the impedance is not capable of changing beyond
> the balun's design parameters. Again, let me know the validity
> of this theory as I am not an expert in this field.
>
> I gather that by having the four capacitors ganged in groups
> two the chances of having the currents in each leg balanced are
> eliminated. Also the lack of being able to meter the current in each
> leg diminishes the chances of a totally balanced output.
>
> So the question is how is the 974H better than my old MFJ
> 949E? I must say that at this stage,I can see no difference,
> but I probably do not know enough to know how much I don't
> know!(as we used to say in Nebraska).
>
> Another question is why is a link tuner better in this situation?

> (Tuning a balanced feedline antenna?)As I know of no link tuners
> that are currently in production,what would you reccomend in this
> situation?
>
> Kent Tunks KC6LXR

6173. 450^ feedline for 1L 160 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 15:29:32 UTC
From: gmz79@aol.comnospam
Message-ID: <20031219102932.13604.00001162@mb-m10.aol.com>
Source record: 102939

I'm putting up a fullwave loop for 160m, fed with 450 ohm window line,
what are the feedline lenghts to avoid?

73
KC8VIF
Greg Z
to thine own sound be true

6174. Re: MFJ 974H Impressions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 16:13:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe323ba_2@127.0.0.1>
Source record: 102940

Carlos42 wrote:
> Could you elaborate a little on this? I am really
> not very knowledgeable on this subject. I thought that by having the
> the balun on the input rather than the output you eliminated the
> possibility of operating the balun beyond its design parameters.
> I was told that by not having the balun look directly into
> the antenna you avoided having it see drastic changes in
> impedance that it was not capable of handling. Presumably this
> condition does not exist as much with the balun looking directly
> into the tuner as the impedance is not capable of changing beyond
> the balun's design parameters. Again, let me know the validity
> of this theory as I am not an expert in this field.

I was a little bit too harsh on the MFJ design. For common-mode currents, the four capacitors are in a series-parallel configuration so that reactive impedance is in series with the impedance of the choke. That impedance can be estimated from the capacitor dial settings. We normally set the caps as close to maximum capacitance as possible which is minimum impedance (reactance) so this is (for me) an unknown in the common-mode equation. If that series reactance is low compared to the impedance of the choke, it won't have much effect on common-mode currents.

> I gather that by having the four capacitors ganged in groups
> two the chances of having the currents in each leg balanced are
> eliminated. Also the lack of being able to meter the current in each
> leg diminishes the chances of a totally balanced output.

The currents can be balanced by accident or due to a good design. My balanced tuner design (on the shelf) uses two series roller inductors and four parallel caps to ground that can be tuned independently to achieve a better balance. It is actually two pi-net tuners, one for each line.

> So the question is how is the 974H better than my old MFJ
> 949E? I must say that at this stage,I can see no difference,
> but I probably do not know enough to know how much I don't
> know!(as we used to say in Nebraska).

The series-parallel capacitive reactance assists the choke by an unknown amount so the 974H is better than the 949E. How much better needs to be measured or calculated. How much better could be negligible.

One might take the suggested settings in the 974H manual and calculate that common-mode series impedance.

> Another question is why is a link tuner better in this situation?
> (Tuning a balanced feedline antenna?)As I know of no link tuners
> that are currently in production,what would you reccomend in this
> situation?

A link essentially presents an open-circuit to common-mode currents
except for coil to coil capacitance which should result in a relatively
high common-mode impedance. Back in the good old days before coax was
readily available to hams, a lot of rigs were link coupled to open-wire
feedlines.
--
73, Cecil, W5DXP

6175. Re: How to contact me.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 16:20:21 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe3256a_2@127.0.0.1>
Source record: 102941

Reg Edwards wrote:
> The resonant frequency is due to the stray capacitance of the coil being in
> shunt with the inductance.

Hi Reg, that answers my question. I'm glad you didn't go the
"lumped" route. Do you have a program that calculates the delay
through a real-world coil?

> Incidentally, when the coil is only partly stretched out, the program can be
> used to estimate the resonant frequency of "Slinky's". Never having had a
> Slinky I cannot say precisely how accurate this might be.

Did you take into account that some Slinky's are made out of
plastic. :-)
--
73, Cecil, W5DXP

6176. Re: 450^ feedline for 1L 160 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 16:49:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe32c24_2@127.0.0.1>
Source record: 102942

greg z wrote:
> I'm putting up a fullwave loop for 160m, fed with 450 ohm window line,
> what are the feedline lenghts to avoid?

Just on 160m or on other HF bands? A fullwave loop has a
feedpoint impedance around 100 ohms plus or minus height
effects. That's an SWR of 4.5:1 on the window line giving
impedances between 100 ohms and 2000 ohms with reactance
magnitudes in the same ballpark. If your tuner will handle
those ranges, any feedline length will be OK. It's a lot
easier to avoid certain feedline lengths on 10m than on
160m. :-)
--
73, Cecil, W5DXP

6177. Re: Rohn Tower help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 17:00:07 UTC
From: Patrick Croft <mai@iquest.net>
Message-ID: <3FE32E97.9E7FCE23@iquest.net>
Source record: 102943

Thomas Shelby is in Ohio, not NH. The link W9GB provided is a dealer in
NH.

Contact T-S @ (419) 394-3377 or
Fax: (419) 394-4815

Toll free 888-868-8588
Toll free Fx: 888-868-8589

309 South Park Dr. St. Marys, OH. 45885

E-mail sales@thomasshelby.com

As for installation instructions you should be able to gain enough
details from any of the Rohn pre- 1996 consumer products catalogs. Its
not in my 1997 commercial one. I'd be surprised if a google search
didn't result in some answers.

Bests,
Patrick
W9GTA

"G.Beat" wrote:
>
> "Fred E. Lux" <flux@core.com> wrote in message
> news:vu5ms4fhtm1u3e@corp.supernews.com...
> > Help! Just purchased a Rohn HDBX48 self supporting tower used. Previous
> > owner did not have any documentation. I am looking for a copy of the
> > information packet that came with this tower - loading specs, suggestions
> /
> > instructions for erection, etc. I am more than willing to pay duplication
> > fees and postage. Please reply via e-mail if you can help
> >
> > tnx
> >
> > Fred, WD8ITZ
>
> Fred -
>
> Rohn sold the manufacturing of the "BX" series of towers to the Thomas
> Shelby Company (East Hampstead, NH)
> a couple of years ago.
>
> They have a web site with all of the information you will require, please
> contact them directly.
> http://www.criticaltowers.com/BX%20Series%20Towers/Web%20Pages/BX%20Series%20Tower%20Pag

e.htm
>
> W9GB

6178. loopant n QST where???

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 18:31:46 UTC
From: lorentzsonci@lycos.com
Message-ID: <skg6uvoinvmo5kmllgcdg6h2ghp0rougis@4ax.com>
Source record: 102944

I am looking for some comparson tests that I 'think' QST ran in one of their monthly magazines in
years past.. The test were on horz loop two meter and the like antennas. Over the years I have
collected a lot of the magazines, but stopped my subscription about a year and half ago.I hope
someone recalls in which mags the tests were conducted. thanks . cl.
"remove 'z' from email address

6179. Re: please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 18:31:46 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312191031.7ba26f8@posting.google.com>
Source record: 102945

desmoface@aol.com (Desmoface) wrote in message
news:<20031219094321.26083.00001346@mb-m06.aol.com>...
> If you have the room, a beverage can't be beat for receiving...just do an
> internet search for "beverage antenna."
>
> Steve
> kb8viv

That depends entirely on what he wants to listen to.
Not only for take off angle but also the direction
from which the signal is coming from
together with frequency.
The beverage is somewhat frqquency dependant because
of its rear nulls and lack of high angle reception
but it is also directive but unfortunately not rotatable.
Most overseas shortwave programs use frequencies
within thw 10 to 160 frequency spread so incoming angle
varies a whole lot
Art

6180. Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 18:50:07 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312191050.4deeeae9@posting.google.com>
Source record: 102946

Les who is in his late nineties has finally relented and
has moved to a nursing home.
Had the privelege one of have a hour long discussion
at his home on antennas. I suppose before he came along
the old saying of "every thing is known about antennas"
was probably banded about today as it was in his early days
and in part may be true except a lot of what is already known
has not been used to advantage. For that we need a person
of personal vision who is a do'r and not just a follower.
Happy holidays to all and that includes you Cecil.
Stick to your guns and what you believe in or be content
in just being a follower. Doing that does not prevent
true questioning people from 'getting along'
despite of differences.

Art

6181. Re: Rohn Tower help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 18:53:15 UTC
From: "Fred E. Lux" <flux@core.com>
Message-ID: <vu6ihdki0l8a54@corp.supernews.com>
Source record: 102947

Thanks for all the helpful information. Contacted Thomas Shelby Company and they are sending me the information that I need.

73

Fred, WD8ITZ

6182. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 19:23:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe35044_2@127.0.0.1>
Source record: 102948

Art Unwin KB9MZ wrote:
> Happy holidays to all and that includes you Cecil.
> Stick to your guns and what you believe in or be content
> in just being a follower. Doing that does not prevent
> true questioning people from 'getting along'
> despite of differences.

And Happy Holidays to you and all people of good will
everywhere (presumably, that excludes SH and OBL :-).

I have a bad habit that I am trying to break - I treat
a person the way he/she treats me. I tend to retaliate
in kind when someone insults my intelligence, education,
or experience. Unfortunately, that makes me completely
incompatible with people like me. :-)
--
73, Cecil, W5DXP

6183. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 20:07:07 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <rPIEb.8418$JD6.3540@lakeread04>
Source record: 102949

"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
news:3FD9D0AC.19C868B0@uwe.ac.uk...
> strike. A spark gap that can conduct a lightening strike would
> be the size of a small truck.
>
> The only way to make sure you have a working station after a
> lightening strike on your aerials is to take out good insurance.
>
> vy 73
>
> Andy, M1EBV

Nonsense. Every insulated AM broadcast station antenna has an arc gap at the base. How many stations get struck by lightning each year and keep on operating?

Pete

6184. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 20:44:29 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe36398_2@corp.newsgroups.com>
Source record: 102950

Uncle Peter wrote:
> Every insulated AM broadcast station antenna has an arc
> gap at the base. How many stations get struck by lightning each year
> and keep on operating?

1732?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6185. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 22:19:07 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE3795B.A7AFFC83@cwis.net>
Source record: 102951

Art,
The statement, "every thing is known about antennas", was no more true in Mr. Moxon's day, as it is now. I seriously doubt if you will find anyone on this NG that thinks "every thing is known about antennas". It's an opinion, and it's yours.
Happy Holidays...
'Doc

6186. Re: 450^ feedline for 1L 160 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 22:23:32 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE37A64.4A98A23C@cwis.net>
Source record: 102952

Greg,
With the information you provided, the only length of feed
line
that anyone can tell you to avoid is one where the ladder line
isn't
strong enough to hold up it's own weight.
'Doc

6187. fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 22:34:39 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <32LEb.83$9p3.43604105@newssvr11.news.prodigy.com>
Source record: 102953

hi

i've got a question about how wires to use when making
a fat conductor hf dipole(cage antenna)using wire equally
spaced around a circular form. ie target diameter is 8
inches, how many wires around the form, 4, 6, 8?

tnx

larry
kd5foy

6188. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 23:09:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <IyLEb.403342$Dw6.1252689@attbi_s02>
Source record: 102954

I would like to advise that an AM Broadcast station and an Amateur
station have at least one significant difference.

The AM Station is most likely running a vacuum tube amplifier at high
voltages with high voltage capacitors in the output stage. Also, they do
not have a solid state receiver connected to the same transmission line.
Therefore, they have a high tolerance to peak voltages.

Most Amateur stations, excluding members of the Kilowatt Alley Society,
have solid state finals and very sensitive solid state receiver circuits
that do not have KV level tolerance to transient voltages.

Conclusion, your argument is not totally valid!

Deacon Dave, W1MCE

Uncle Peter wrote:

> "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
> news:3FD9D0AC.19C868B0@uwe.ac.uk...
> > strike. A spark gap that can conduct a lightening strike would
>
>>be the size of a small truck.
>>
>>The only way to make sure you have a working station after a
>>lightening strike on your aerials is to take out good insurance.
>>
>>vy 73
>>
>>Andy, M1EBV
>
>
> Nonsense. Every insulated AM broadcast station antenna has an arc
> gap at the base. How many stations get struck by lightning each year
> and keep on operating?
>
> Pete
>
>

6189. Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-19 23:57:29 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031219185729.16291.00000803@mb-m22.aol.com>
Source record: 102955

Just got the 20th edition of ARRL Antenna Book and the "thing" about current in loading coils is perpetuated in it.
Actually, book contradicts itself. On page 16-4 Fig 7 shows rough current distribution with center loading, showing drop across the coil.
On page 16-7 Fig 10 "sticks" to no drop in current across the coil, proclaims "stretching" the current by the coil. The shaded area is back, it actually represents the current coming out of the coil, but the reality is lost in the formulas.
My experiments were grounded by lousy stormy weather and flu, mybe I get the web page spruced up.

Merry Christmas everybody, that includes Art!

Yuri

6190. Re: 450^ feedline for 1L 160 Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 00:07:32 UTC
From: k9sqg@aol.com
Message-ID: <20031219190732.21489.00000830@mb-m23.aol.com>
Source record: 102956

Depends on what bands you want to operate...

6191. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 00:46:30 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <GZMEb.153050$dl.6648560@twister.southeast.rr.com>
Source record: 102957

Hi Jack,

Take a look at the Par Electronics website. They make an end fed dipole for bands 20m and up that might fit your needs. I've tried one as a sloper from my deck and it seems to work well on 20m.

Good luck,

Bill, W4WNT

"j.beltz" <j.beltz@insightbb.com> wrote in message
news:OBaDb.549665$Tr4.1495835@attbi_s03...
> i live in an single story first floor apartment,
> any ideas on an 80-10 meter antenna indoors only,
> thanks jack
>
>

6192. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 00:53:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs06hm$ft27$1@news3.infoave.net>
Source record: 102958

While you will probably get any number of answers, I personally have always used 6. The best supports I have found are slices of 12" white plastic sewer pipe. You normally can get a scrap piece at your local utility company.

Make them 3/8" thick and put a hole every 60 degrees.

If you want to take a look at the effect of increasing wires or diameter, Reg has a program for cage dipoles that lets you determine the best setup for what your trying to accomplish.

Anecdotally, the cages are quieter (less electrical noise) than standard dipoles. Don't make this statement on here however, because 9 folks will jump out of the woodwork to tell you how wrong you are.

Good Luck!
"larry d clark" <buddycl@swbell.net> wrote in message
news:32LEb.83$9p3.43604105@newssvr11.news.prodigy.com...
> hi
>
> i've got a question about how wires to use when making
> a fat conductor hf dipole(cage antenna)using wire equally
> spaced around a circular form. ie target diameter is 8
> inches, how many wires around the form, 4, 6, 8?
>
> tnx
>
> larry
> kd5foy
>
>

6193. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 01:05:44 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312191705.5d908d5@posting.google.com>
Source record: 102959

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fe35044_2@127.0.0.1>...
> Art Unwin KB9MZ wrote:
> > Happy holidays to all and that includes you Cecil.
> > Stick to your guns and what you believe in or be content
> > in just being a follower. Doing that does not prevent
> > true questioning people from 'getting along'
> > despite of differences.
>
> And Happy Holidays to you and all people of good will
> everywhere (presumably, that excludes SH and OBL :-).
>
> I have a bad habit that I am trying to break - I treat
> a person the way he/she treats me. I tend to retaliate
> in kind when someone insults my intelligence, education,
> or experience. Unfortunately, that makes me completely
> incompatible with people like me. :-)

Why try to break it? Such people obviously want to
comunicate in a agressive and unsettling manner, so
you respond the same way or remain silent.
What really surprises me is some of the acrid statements
made by some experts to innocent non experts who then
fall apart when the table turns !
By the way, on the subject of lumped inductances, have you
found or know of a method to model link coupling ?
My tests using non linked coupled circuits sort of agreed
with computor programs (lumped spaced inductances) but
unfortunately that where it ends.
I sure would like to model a variometer which is a link
coupling but I don't see a way to do it.
Regards
Art

Regards
Art

6194. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 03:34:10 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe3c39e$1_7@corp.newsgroups.com>
Source record: 102960

Art Unwin KB9MZ wrote:
> By the way, on the subject of lumped inductances, have you
> found or know of a method to model link coupling ?
> My tests using non linked coupled circuits sort of agreed
> with computor programs (lumped spaced inductances) but
> unfortunately that where it ends.
> I sure would like to model a variometer which is a link
> coupling but I don't see a way to do it.

Cebik's web page has a pretty good treatment of mutual
(link) coupling at http://www.cebik.com/link/link0.html
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6195. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 03:49:12 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe3c725_7@corp.newsgroups.com>
Source record: 102961

Yuri Blanarovich wrote:

> Just got the 20th edition of ARRL Antenna Book and the "thing" about current in
> loading coils is perpetuated in it.
> Actually, book contradicts itself. On page 16-4 Fig 7 shows rough current
> distribution with center loading, showing drop across the coil.
> On page 16-7 Fig 10 "sticks" to no drop in current across the coil, proclaims
> "stretching" the current by the coil.

That's what happens when someone gets seduced by the steady-state model
and ignores the component forward and reflected waves.

What is important is the delay (phase shift) through the coil. That delay
can be measured in a circuit without reflections and then applied to a
network with reflections.

A little deductive reasoning should resolve the issue. Assume the current
is unchanged through the loading coil feeding a 6 ft stinger on 75m. That
6 ft stinger has a certain impedance. So if the current out of the coil
is high, the voltage out of the coil must also be proportionally high. That
would increase the voltage at the end of the stinger. Is the voltage at
the end of the 6 ft stinger very much higher than the voltage at the end
of a 1/4WL monopole driven by the same power?
--
73, Cecil http://www.qsl.net/w5dxp

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6196. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 03:51:26 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312191951.4e691a01@posting.google.com>
Source record: 102962

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<4541-3FDFD00C-676@storefull-2318.public.lawson.webtv.net>...
> Art, Kb9MZ wrote:
> "---the local radio station has a line to ground with a large gap which
> regularly arcs because of static build up. Most stations go off the air
> momentarily when lightning strikes.'
>
> AM broadcasters use unbalanced vertical radiators driven against a
> ground radial system.
>
>snip>
> Towers often get direct lightning hits. The paint remains pristene in
> all the gaps I`ve seen. The arc to ground is always to the Faraday
> shield between the tower coupling coils.

Can I assume then that broadcast coupling coils are always apart
to accomodate a faraday shield between them ? Is this an F,C,C, requirement?
Can't see how a Faraday shield can be used if they are link coupled
i.e. interleaved. I was contemplating an interleaf coupling until
I realised that I would have to do away with the Faraday shield !
Regards
Art

That picket fence between the
> coils is pock marked like the face of the moon from tower strikes.
> Splattered copper abounds.
>
> You hear momentary disconnects during lightning strikes when listening
> to an AM station during this kind of storm. This is a defense mechanism.
> When lightning creates an arc, the conductive plasma path allows RF to
> continue feeding the ionization. This allows an arc to keep alive that
> the r-f is too feeble to strike for itself.
>
> Transmitter output into the plasma short circuit is an overload capable
> of transmitter damage.
>
> To counter the arc problem, the coax is d-c isolated with capacitors at
> the ends of the center conductor. The close-spaced coax usually gets an
> arc when the antenna system is overloaded. The coax has a high
> common-mode impedance.
>
> A relay d-c power supply and a d-c relay coil are connected in series
> and this series combination is connected between the center conductor
> and coax shield.
>

> An arc completes the d-c path for the relay coil. Relay activation is
> used to momentarily kill the transmitter, extinguishing the arc.
>
> Best regards, Richard Harrison, KB5WZI

6197. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 03:54:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bs0h56sii1@sparta.btinternet.com>
Source record: 102964

> Anecdotally, the cages are quieter (less electrical noise) than standard
> dipoles. Don't make this statement on here however, because 9 folks will
> jump out of the woodwork to tell you how wrong you are.
>
==========

What few anecdotes I have read fail to say whether the noise is locally generated or is the more distant stuff which comes in with the wanted signals.

There is no possible reason why a fat wire will discriminate better between between signals and distant noise than a thin wire. To any antenna everything is just e.m waves. Receiving and radiating patterns, radiation resistance and efficiency are identical for both.

But local noise sources are within the near field of the antenna. Or the the antenna can be considered to be within the near fields of a lot of noise sources.

One end of the antenna can be nearer to some noise source(s) than the other end. So although the dipole may be accurately balanced relative to ground (almost certainly it isn't) it may be very unbalanced relative to the location of local nise sources.

The much greater capacitance of a fat antenna to ground, and to everything else, will shift the local receiving pattern. The fat antenna will also have a smaller capacitative reactance to ground and to everything else. Remember local noise is mainly due to its electric field and so the fat antenna, all other things remaining unchanged, will have a greater tendency to decouple itself from local electric noise fields.

The effect is not un-related to screened receiving loops. It will be more noticeable with decreasing frequency and with decreasing antenna sizes. It will not be noticeable at all at low noise receiving sites where the near-fields of the antenna and noise sources do not inter-react.

Reg, G4FGQ

6198. plans for vertical 2m/70cm like commercial diamond

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 03:58:54 UTC
From: Michael Parsons <gyrocfi@cedar-rapids.net>
Message-ID: <vu7hticessbga3@corp.supernews.com>
Source record: 102963

I want to build a dual band vertical with the performance and size of a commercial antenna such as a diamond. Less than 6' tall and lots of gain. Any help on finding instructions would be great. Feel free to send me plans with jpg files or web links to plan site.

Much Thanks,

Michael
gyrocfi@cedar-rapids.net

6199. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 04:24:36 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <3dj7uv00fo4b1r3fkq6j08rkbm25qanfb9@4ax.com>
Source record: 102966

On Fri, 19 Dec 2003 23:09:28 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>I would like to advise that an AM Broadcast station and an Amateur
>station have at least one significant difference.
>
>The AM Station is most likely running a vacuum tube amplifier at high
>voltages with high voltage capacitors in the output stage. Also, they do
>not have a solid state receiver connected to the same transmission line.
>Therefore, they have a high tolerance to peak voltages.

My tower gets hit on average about 3 times a year. In the last 19
years I've only lost the front end out of one receiver and had a piece
of heliax blown out about 30 feet from the top of the tower.

I rarely if ever, disconnect any equipment except the computers and
with those I worry about the phone lines more than the radio station.
In the same period I've lost three computers.

>
>Most Amateur stations, excluding members of the Kilowatt Alley Society,
>have solid state finals and very sensitive solid state receiver circuits
>that do not have KV level tolerance to transient voltages.

I have two KW amps hooked up to two different systems with 4 solid
state transceivers connected to the antennas. The HF rigs are
connected to the antennas through the relays in the KW amps. So the
receivers are always on the antennas except when transmitting.

Other than the amps everything here is solid state.

One of the antenna systems is near the bottom of
http://www.rogerhalstead.com/ham_files/tower.htm

here's a bit about the ground system:
http://www.rogerhalstead.com/ham_files/ground.htm
>
>Conclusion, your argument is not totally valid!

Works for me, or has so far.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

>
>Deacon Dave, W1MCE

>
>
>Uncle Peter wrote:
>
>> "Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
>> news:3FD9D0AC.19C868B0@uwe.ac.uk...
>> > strike. A spark gap that can conduct a lightening strike would
>>
>>>be the size of a small truck.
>>>
>>>The only way to make sure you have a working station after a
>>>lightening strike on your aerials is to take out good insurance.
>>>
>>>vy 73
>>>
>>>Andy, M1EBV
>>
>>
>> Nonsense. Every insulated AM broadcast station antenna has an arc
>> gap at the base. How many stations get struck by lightning each year
>> and keep on operating?
>>
>> Pete
>>
>>

6200. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 04:25:52 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031219232552.16110.00000954@mb-m22.aol.com>
Source record: 102965

>A little deductive reasoning should resolve the issue.

It strikes me that the "flat earth" er, equal current society arguing that coil MUST have the same current going in and out, must have a problem then with the extreme case of coil - stretched wire, which must have even more "samer" current at its ends. :-)
I like the statement on the cover of ARRL Antenna Book: "The ULTIMATE reference for Amateur Radio antennas, transmission lines and propagation"

Yuri

6201. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 04:34:02 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs0jft$3q1$1@news3.infoave.net>
Source record: 102967

Reg, I will pass on my observations. I had a pretty decent antenna farm on my 29 acre home stead in Georgia. two 75 meter antennas separated by at least a wavelength were A/B tested one a cage as described below. The other a single wire #14 gauge insulated wire. Working a fellow in South Africa from Manchester Georgia (60 miles South of Atlanta) we exchanged signal reports of 5 and 0
my S-meter was on the low peg on a Kenwood 870, switching to the wire he was lost in the noise which rose to a little over S1. I duplicated a reduction over and over again. None as dramatic as the ZS, but always noticeable.

I swapped feed lines to see if it had any effect, but the results favored the cage in every test I ever ran.

Been there, done that, got the t-shirt as far as theory is concerned. I simply pass on the observation as such and am convinced to the point I will never use anything other than a cage on 75. The enhanced bandwidth was greater than predicted by your program, but then again the antenna was lower than a 1/4 wave, and theory provides for increased bandwidth with a lower antenna.

My location was rural with the nearest neighbor over 1/2 a mile away. All my utilities were underground so the location was very quiet for near field.
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bs0h56sii1@sparta.btinternet.com...
> > Anecdotally, the cages are quieter (less electrical noise) than standard
> > dipoles. Don't make this statement on here however, because 9 folks will
> > jump out of the woodwork to tell you how wrong you are.
> >
> ================================
>
> What few anecdotes I have read fail to say whether the noise is locally
> generated or is the more distant stuff which comes in with the wanted
> signals.
>
>
> There is no possible reason why a fat wire will discriminate better
between
> between signals and distant noise than a thin wire. To any antenna
> everything is just e.m waves. Receiving and radiating patterns, radiation
> resistance and efficiency are identical for both.
>
>
> But local noise sources are within the near field of the antenna. Or the
the
> antenna can be considered to be within the near fields of a lot of noise

> sources.
>
>
> One end of the antenna can be nearer to some noise source(s) than the
other
> end. So although the dipole may be accurately balanced relative to ground
> (almost certainly it isn't) it may be very unbalanced relative to the
> location of local nise sources.
>
> The much greater capacitance of a fat antenna to ground, and to everything
> else, will shift the local receiving pattern. The fat antenna will also
> have a smaller capacitative reactance to ground and to everything else.
> Remember local noise is mainly due to its electric field and so the fat
> antenna, all other things remaining unchanged, will have a greater
tendency
> to decouple itself from local electric noise fields.
>
> The effect is not un-related to screened receiving loops. It will be more
> noticeable with decreasing frequency and with decreasing antenna sizes. It
> will not be noticeable at all at low noise receiving sites where the
> near-fields of the antenna and noise sources do not inter-react.
> ----
> Reg, G4FGQ
>
>
>
>
>
>
>

6202. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 04:52:29 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <g2l7uvge20rpsr0dn47gdlt5brjsrgid3f@4ax.com>
Source record: 102968

On Fri, 19 Dec 2003 15:07:07 -0500, " Uncle Peter"
<radioconnectionNO@cox.netSPAM> wrote:

>
>"Andy Cowley" <andy.cowley@uwe.ac.uk> wrote in message
>news:3FD9D0AC.19C868B0@uwe.ac.uk...
> > strike. A spark gap that can conduct a lightening strike would
>> be the size of a small truck.
Most damage comes from the voltage induced by nearby strikes
rather than direct hits, so the spark gap doesn't have to be a
monster.

Devices like PolyPhasers keep the voltage across the coax to a low
level. If they get poked too hard they short. If they get poked
really hard they blow apart. I had one short about a year ago, but
there was no damage to the equipment. OTOH the PolyPhaser is over $50.
Still, it was a good trade. The rig on that line is a TM-V7A and it
was on at the time of the strike.

>>
>> The only way to make sure you have a working station after a
>> lightening strike on your aerials is to take out good insurance.

In a way. It means you will eventually have a working station. OTOH
there are no guarantee, but it never hurts to move the odds in your
favor by using good grounding techniques and protective devices, or
throwing the coax out the window.

Roger Halstead (K8RI & ARRL life member)
(N833R, S/N CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers
>>
>> vy 73
>>
>> Andy, M1EBV
>
>Nonsense. Every insulated AM broadcast station antenna has an arc
>gap at the base. How many stations get struck by lightning each year
>and keep on operating?
>
>Pete
>

6203. S band antenna testing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 07:11:14 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <ICSEb.601435$Tr4.1574972@attbi_s03>
Source record: 102869

Ok here is my problem.

I would like to build an antenna for the S band. That is near 2500 MHz for those of us that are not knowing of the letter to frequency correlation. :-)

The difficulty is in testing the antenna to make certain that it will accept antenna power and not cause the transmitter grief while it is doing it. I know that I can't go to Radio Shack and buy their SWR bridge to do this testing. I have a friend that could help me in the 1200 MHz range but he does not have a spectrum analyzer that will go to 2500 MHz.

He suggested the possibility of taking a signal generator and feeding the antenna through a directional coupler. The return signal from the antenna would then be sent to the spectrum analyzer so that it could be monitored for a relative level and as the antenna was tuned closer to the proper impedance and the return loss went up the spectrum analyzer would read a lower and lower level.

Unfortunately we lack a directional coupler and a spectrum analyzer for these frequencies.

I just got an idea. We still need to come up with a directional coupler but if we can get a crystal detector that works up there we can monitor the relative power with an oscilloscope or a DVM.

I have a few more people in the area that I can ask about the directional coupler.

Does this look like a possible solution to anyone here? Or should I get a piece of waveguide suitable for this frequency and a crystal detector and calculate the VSWR by making the detector slide from one end of the waveguide to the other. I remember in tech school doing this at microwave frequencies to measure VSWR.

Any suggestions or ideas will be investigated to make this work and will be greatly appreciated.

Thanks in advance.

Al Butler
ka0ies

6204. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 09:33:12 UTC
From: Mike <m*150@lycos.co.uk>
Message-ID: <jHUEb.7032$FN.3716@newsfep4-winn.server.ntli.net>
Source record: 102870

Hello,

I must ask - WHO?

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0312191050.4deeeae9@posting.google.com...
> Les who is in his late nineties has finally relented and
> has moved to a nursing home.
> Had the privelege one of have a hour long discussion
> at his home on antennas. I suppose before he came along
> the old saying of "every thing is known about antennas"
> was probably banded about today as it was in his early days
> and in part may be true except a lot of what is already known
> has not been used to advantage. For that we need a person
> of personal vision who is a do'r and not just a follower.
> Happy holidays to all and that includes you Cecil.
> Stick to your guns and what you believe in or be content
> in just being a follower. Doing that does not prevent
> true questioning people from 'getting along'
> despite of differences.
>
>
> Art

6205. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 09:35:51 UTC
From: Mike <m*150@lycos.co.uk>
Message-ID: <RJUEb.7033$FN.1119@newsfep4-winn.server.ntli.net>
Source record: 102871

Hello,

Whoever this person is, does he know anything about "CFA" antennas then?

"'Doc" <w5lz@cwis.net> wrote in message news:3FE3795B.A7AFFC83@cwis.net...
>
>
> Art,
> The statement, "every thing is known about antennas", was no
> more true in Mr. Moxon's day, as it is now. I seriously doubt
> if you will find anyone on this NG that thinks "every thing is
> known about antennas". It's an opinion, and it's yours.
> Happy Holidays...
> 'Doc

6206. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 10:58:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bs1a05fqe1@sparta.btinternet.com>
Source record: 102872

W4ljе, just a few comments.

Two dipoles, spaced approx 1/2-wave apart, both broadside to the same signal, are coupled, perhaps closely. Depending on orientations, together they will form a crude, irregular beam with nulls. Switching the receiver from one to the other will have the effect of reversing beam direction relative to the direction of the signal.

If the noise is coming more or less uniformly from all directions there will be no effect on received noise level. Close coupling between the two elements means there is only one antenna.

The question to ask is - does the signal-to-noise ratio from the fat dipole improve because signal strength increases or because the noise level decreases relative to the thin dipole.

To compare antenna ability to discriminate against noise would it not be logical to keep away from signals and just check the two received noise levels?

I would be happier if the two antennas were spaced a few wavelengths apart.
....

As height decreases, specially below 1/4-wavelength, induced ground loss increases, antenna intrinsic bandwidth increases.

The feedline and the tuner can have at least as great an effect on system bandwidth as the antenna itself.

Reg, G4FGQ

--
....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....
"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bs0jft$3q1$1@news3.infoave.net...
> Reg, I will pass on my observations. I had a pretty decent antenna farm on
> my 29 acre home stead in Georgia. two 75 meter antennas separated by at
> least a wavelength were A/B tested one a cage as described below. The
other
> a single wire #14 gauge insulated wire. Working a fellow in South Africa
> from Manchester Georgia (60 miles South of Atlanta) we exchanged signal
> reports of 5 and 0
> my S-meter was on the low peg on a Kenwood 870, switching to the wire he

was
> lost in the noise which rose to a little over S1. I duplicated a reduction
> over and over again. None as dramatic as the ZS, but always noticeable.
>
> I swapped feed lines to see if it had any effect, but the results favored
> the cage in every test I ever ran.
>
> Been there, done that, got the t-shirt as far as theory is concerned. I
> simply pass on the observation as such and am convinced to the point I
will
> never use anything other than a cage on 75. The enhanced bandwidth was
> greater than predicted by your program, but then again the antenna was
lower
> than a 1/4 wave, and theory provides for increased bandwidth with a lower
> antenna.
>
> My location was rural with the nearest neighbor over 1/2 a mile away. All
my
> utilities were underground so the location was very quiet for near field.
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bs0h56sii1@sparta.btinternet.com...
> > > Anecdotally, the cages are quieter (less electrical noise) than
standard
> > > dipoles. Don't make this statement on here however, because 9 folks
will
> > > jump out of the woodwork to tell you how wrong you are.
> > >
> > ================================
> >
> > What few anecdotes I have read fail to say whether the noise is locally
> > generated or is the more distant stuff which comes in with the wanted
> > signals.
> >
> >
> > There is no possible reason why a fat wire will discriminate better
> between
> > between signals and distant noise than a thin wire. To any antenna
> > everything is just e.m waves. Receiving and radiating patterns,
radiation
> > resistance and efficiency are identical for both.
> >
> >
> > But local noise sources are within the near field of the antenna. Or the
> the
> > antenna can be considered to be within the near fields of a lot of noise
> > sources.
> >
> >
> > One end of the antenna can be nearer to some noise source(s) than the
> other

> > end. So although the dipole may be accurately balanced relative to
ground
> > (almost certainly it isn't) it may be very unbalanced relative to the
> > location of local nise sources.
> >
> > The much greater capacitance of a fat antenna to ground, and to
everything
> > else, will shift the local receiving pattern. The fat antenna will also
> > have a smaller capacitative reactance to ground and to everything else.
> > Remember local noise is mainly due to its electric field and so the fat
> > antenna, all other things remaining unchanged, will have a greater
> tendency
> > to decouple itself from local electric noise fields.
> >
> > The effect is not un-related to screened receiving loops. It will be
more
> > noticeable with decreasing frequency and with decreasing antenna sizes.
It
> > will not be noticeable at all at low noise receiving sites where the
> > near-fields of the antenna and noise sources do not inter-react.
> > ----
> > Reg, G4FGQ
> >
> >
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> >
> >
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>
>

6207. Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 12:06:56 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vu8equgh2r8546@corp.supernews.com>
Source record: 102873

I have 50 feet of rohn tower and want to put it up but
don't want to direction stick it into a concrete base, i'd
rather have either a hinge plate or a 5- foot section
(preferably) to put into the concrete, for I hear if you
direction shove tower into concrete it'll rust around the
bottom until it completely disintegrates where it makes
contact with the concrete (for whatever reason)....

does anybody know a retailer that sells these things?
I can't find them in the AES mag....

Clint
KB5ZHT

--

It's as if the diplomatic train has left the station and
clueless critics of this country are only now beginning
to realize, "Hey, that's my train!"

--Neil Cavuto, describing how america's enemies
are now suddenly congradulating us and expressing
"delight" at the capture of saddam, finally proving
we're doing the right thing and that we're succeeding...

----

45 Communist Goals for America

http://www.uhuh.com/nwo/communism/comgoals.htm

--

6208. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 13:31:27 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312200531.659ebf2b@posting.google.com>
Source record: 102874

'Doc <w5lz@cwis.net> wrote in message news:<3FE3795B.A7AFFC83@cwis.net>...
> Art,
> The statement, "every thing is known about antennas", was no
> more true in Mr. Moxon's day, as it is now. I seriously doubt
> if you will find anyone on this NG that thinks "every thing is
> known about antennas". It's an opinion, and it's yours.
> Happy Holidays...
> 'Doc

That statement was given to Hately by a University professor
when he presented the CFA. I have noticed since that most experts
on antennas appear to have the same attitude. Either that or
because of so many fake claims over the years feel it is a
safe bet to denounce or ridicule anything new.
I have spent the last ten years working on antennas and as you know
have written some up and even tho they are "new" they are pushed aside.
What it takes nowadays is for somebody to raise a lot of hoopla in
the press, make enticing claims and then put a price on it knowing
that people prefer to buy.
It is sad but it does seem that with an overload of written material
on antennas hams unconciously really feel that way
If I hear you on the top band I will give you a call on my
rotatable dipole which is not new.
Art.

6209. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 13:35:10 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312200535.369579ee@posting.google.com>
Source record: 102875

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:<3fe3c39e$1_7@corp.newsgroups.com>...
> Art Unwin KB9MZ wrote:
> > By the way, on the subject of lumped inductances, have you
> > found or know of a method to model link coupling ?
> > My tests using non linked coupled circuits sort of agreed
> > with computor programs (lumped spaced inductances) but
> > unfortunately that where it ends.
> > I sure would like to model a variometer which is a link
> > coupling but I don't see a way to do it.
>
> Cebik's web page has a pretty good treatment of mutual
> (link) coupling at http://www.cebik.com/link/link0.html

Yes, I pointed out Cebik link tutorial earlier this week
on another thread but it doesn't help with the computor modeling.
Art

6210. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 14:58:04 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE4637C.D3FE6E69@cwis.net>
Source record: 102876

Art Unwin KB9MZ wrote:

> That statement was given to Hately by a University professor
> when he presented the CFA. I have noticed since that most experts
> on antennas appear to have the same attitude. Either that or
> because of so many fake claims over the years feel it is a
> safe bet to denounce or ridicule anything new.

But we aren't talking about Hartely and the CFA antenna, and
the
only one who has made the statement, "every thing is known about
antennas",
on this NG is you.
There's another alternative in addition to the two 'reasons'
this
statement was made. That is, Mr. Hartely couldn't, or wouldn't
explain
his claims in a way acceptible and understandable to his
audience. The
audience's 'job' is to try to pick it apart, to find any 'holes'
in the
claim Mr. Hartely made. That's the usual and normal process for
proving,
or disproving 'new' ideas, it isn't criticism.
The same thing is true for your 'new' ideas (or anyone
else's). If you
can't or won't explain the process of how you got to your claim,
then you
haven't proved anything. You're only making assumptions and
want people
to accept them without proof.
You have three choices, quit, or prove your assumptions, or
continue
making unsupported claims.
'Doc

6211. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 15:01:57 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE46465.261E3DF3@cwis.net>
Source record: 102877

Clint,
Sounds like you're looking for a hinged base plate. Rohn
makes/made them, probably all tower manufacturers do. You
might try "Texas Towers", they may have one in stock, or any
of a number of others who handle Rohn products.
'Doc

6212. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 15:17:23 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <MFZEb.10737$WQ3.591@lakeread05>
Source record: 102878

"Clint" <rattlehead at computron dot net> wrote in message
news:vu8equgh2r8546@corp.supernews.com...
> I have 50 feet of rohn tower and want to put it up but
> don't want to direction stick it into a concrete base, i'd
> rather have either a hinge plate or a 5- foot section
> (preferably) to put into the concrete, for I hear if you
> direction shove tower into concrete it'll rust around the
> bottom until it completely disintegrates where it makes
> contact with the concrete (for whatever reason)....
>
> does anybody know a retailer that sells these things?
> I can't find them in the AES mag....
>
> Clint
> KB5ZHT
>

Clint

Rohn makes both fixed and hinged baseplates for the 25G
tower sections.

Look for the BPC25G and BPH25G items in the Texas Tower
website:

http://www.texastowers.com/rohn25g.htm

Pete
> --
>
>
> ------
>
> It's as if the diplomatic train has left the station and
> clueless critics of this country are only now beginning
> to realize, "Hey, that's my train!"
>
> --Neil Cavuto, describing how america's enemies
> are now suddenly congradulating us and expressing
> "delight" at the capture of saddam, finally proving
> we're doing the right thing and that we're succeeding...
>
> --------
>
> 45 Communist Goals for America
>

> http://www.uhuh.com/nwo/communism/comgoals.htm
>
> --
>
>

6213. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 15:25:49 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe46a69_2@corp.newsgroups.com>
Source record: 102879

Yuri Blanarovich wrote:
> I like the statement on the cover of ARRL Antenna Book: "The ULTIMATE reference
> for Amateur Radio antennas, transmission lines and propagation"

But Yuri, shouldn't an "ULTIMATE reference" contain both sides
of the issue? :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6214. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 16:34:53 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <NS_Eb.219915$Ec1.7857055@bgtnsc05-news.ops.worldnet.att.net>
Source record: 102880

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fe46a69_2@corp.newsgroups.com...
> Yuri Blanarovich wrote:
> > I like the statement on the cover of ARRL Antenna Book: "The
ULTIMATE reference
> > for Amateur Radio antennas, transmission lines and propagation"
>
> But Yuri, shouldn't an "ULTIMATE reference" contain both sides
> of the issue? :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

Was the previous edition of the ARRL Antenna Book the penultimate
reference?

Frank Dresser

6215. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 17:06:42 UTC
From: Gene Fuller <W4SZzzzzz@att.net>
Message-ID: <Ck%Eb.220007$Ec1.7862128@bgtnsc05-news.ops.worldnet.att.net>
Source record: 102881

Cecil,

If it is the "ultimate reference" there is no need for multiple points of view. Everything contained in the ultimate reference will be complete, correct, and indisputable.

Sorta like RRAA.

73,
Gene
W4SZ

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> I like the statement on the cover of ARRL Antenna Book: "The ULTIMATE
>> reference
>> for Amateur Radio antennas, transmission lines and propagation"
>
>
> But Yuri, shouldn't an "ULTIMATE reference" contain both sides
> of the issue? :-)

6216. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 18:01:06 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <y70Fb.605855$Tr4.1579072@attbi_s03>
Source record: 102882

Link coupling is possible with a Faraday shield on the link only.

The main tuning coils have a 'gap' of sufficient size to accommodate the link. The link is shielded.

Back in the 'olden days', 1955, I used a shielded link from B&W in a 40 meter home brew project [a pair of 807s in PP].

Deacon Dave, W1MCE
+ + +

6217. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 18:52:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5769uvs62r9iu2pno9ng3a6ua5v0o8n2en@4ax.com>
Source record: 102883

On 19 Dec 2003 19:51:26 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Can't see how a Faraday shield can be used if they are link coupled

Hi Art,

Nearly every power transformer on this planet uses a faraday shield
between link coupled circuits. Those that don't (and they got to be
dirt cheap from a garage shop operation) suffer from it too (as does
the user).

This is an old, old topic that Richard Harrison, KB5WZI, has
described, explained, discussed to considerable bandwidth that should
serve as a basis for your research in Google.

73's
Richard Clark, KB7QHC

6218. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 19:06:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ep69uvspc7qciodc3dnt204lg6q9scahgc@4ax.com>
Source record: 102884

On Fri, 19 Dec 2003 22:34:39 GMT, "larry d clark" <buddycl@swbell.net>
wrote:

>hi
>
>i've got a question about how wires to use when making
>a fat conductor hf dipole(cage antenna)using wire equally
>spaced around a circular form. ie target diameter is 8
>inches, how many wires around the form, 4, 6, 8?
>
>tnx
>
>larry
>kd5foy
>

Hi Larry,

An example design for one configuration may be found at:
http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm

As to your question about diameter and count of skirt wires, review:
http://www.qsl.net/kb7qhc/antenna/Discone/discone.htm
which, although relates to a discone, it serves to illustrate how the
"thickness" comes to bear on bandwidth.

Much of my other analysis simply suggests the more wires, the closer
approximation to the solid cylinder you are trying to build a skeleton
of. The question of how many is good enough should be evident that 16
certainly offers a good approximation, fewer, as revealed in my other
work brings a corresponding poorer approximation.

I've built physical models with up to 6 skirt wires, and although
useful, they did show resonances where the two links above reveal wide
banded behavior. One design was a 40M Discone, another a wideband
vertical dipole (hoping for 20-10M but probably closer to 15-10M).

73's
Richard Clark, KB7QHC

6219. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 19:07:05 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe49e47$1_2@corp.newsgroups.com>
Source record: 102885

Gene Fuller wrote:
> If it is the "ultimate reference" there is no need for multiple points
> of view. Everything contained in the ultimate reference will be
> complete, correct, and indisputable.

Guess there's no such thing as an "ultimate reference", eh?
Some physicists are questioning whether time really exists.
If time doesn't exist, then all of our something per second
measurements are bogus and current magnitude becomes moot.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6220. Re: S band antenna testing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 19:19:07 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312201119.44e706cd@posting.google.com>
Source record: 102886

Yes, it's quite possible to measure the return loss with a directional coupler. Yes, if you're dealing with a microwatt or so, it's quite possible to detect it with a simple diode detector. (Actually not terribly difficult to get down below 10 nanowatts.) Yes, it's even reasonable to make your own directional coupler. For example, if you download and install the free "RFSim99", you'll find in the pulldown menu under "tools>>component>>coupler" a little window that will show you the dimensions needed in microstrip or stripline (I believe the coupling shown assumes 1/4 wavelength of line...), or three other ways to do it that are more practical for lower frequencies. If you were really careful, you might even be able to mechanically cut a PC board to make the microstrip version.

Cheers,
Tom

Allan Butler <ka0ies@hotmail.com> wrote in message
news:<lCSEb.601435$Tr4.1574972@attbi_s03>...
> Ok here is my problem.
>
> I would like to build an antenna for the S band. That is near 2500 MHz for
> those of us that are not knowing of the letter to frequency correlation. :-)
>
> The difficulty is in testing the antenna to make certain that it will accept
> antenna power and not cause the transmitter grief while it is doing it. I
> know that I can't go to Radio Shack and buy their SWR bridge to do this
> testing. I have a friend that could help me in the 1200 MHz range but he
> does not have a spectrum analyzer that will go to 2500 MHz.
>
> He suggested the possibility of taking a signal generator and feeding the
> antenna through a directional coupler. The return signal from the antenna
> would then be sent to the spectrum analyzer so that it could be monitored
> for a relative level and as the antenna was tuned closer to the proper
> impedance and the return loss went up the spectrum analyzer would read a
> lower and lower level.
>
> Unfortunately we lack a directional coupler and a spectrum analyzer for
> these frequencies.
>
> I just got an idea. We still need to come up with a directional coupler
> but if we can get a crystal detector that works up there we can monitor
> the relative power with an oscilloscope or a DVM.
>
> I have a few more people in the area that I can ask about the directional
> coupler.

>
> Does this look like a possible solution to anyone here? Or should I get
> a piece of waveguide suitable for this frequency and a crystal detector
> and calculate the VSWR by making the detector slide from one end of the
> waveguide to the other. I remember in tech school doing this at microwave
> frequencies to measure VSWR.
>
> Any suggestions or ideas will be investigated to make this work and will
> be greatly appreciated.
>
> Thanks in advance.
>
> Al Butler
> ka0ies

6221. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 19:34:51 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fe4a421$0$17858$ba620e4c@reader5.news.skynet.be>
Source record: 102887

Thank you Richard for defending His genius.
I am living 15 km from the battle field of Waterloo and what is funny is that we celebrate Napol&#65533;on, not Wellington. The duke of Wellington was the winner but is rather forgotten. His museum there is as big as a coffee shop while Napol&#65533;on is displayed everywhere. Maybe because we never forgot that we were french before 1815. Now there is a lion in bronze made of gun-metal on a 45m hill at this place (but nobody is allowed to attach a G5RV on the top, ... on day I will try to find the frequency of resonance of the lion itself).

The only thing I would like to add is that we are to-day (december 20th) the 200th anniversary of the sale of the french Louisina by Napol&#65533;on to the United States of America. USA added 12 states and increased their surface by a factor of 2 in one hit of magic wand. It was the first step of the westward expansion. The price was not that high as USA paid only 400 million dollars (of to-day). Napol&#65533;on estimated he couldn't afford to maintain troops there and to administrate the country. So he decided to sell this area to Americans by friendship instead of being forced to give it for free to UK. This permitted to Americans not being surrounded by British troops.

Have a nice Christmas.

73 de Jacques - ON5MJ

6222. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 21:31:54 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs2f4n$13fs$1@news3.infoave.net>
Source record: 102888

The antennas were aligned end to end in a line. It doesn't matter, as I am convinced the cage works better. Simply having confidence in a setup sometimes works better than adding more power. You don't sound desperate trying to snag that rare DX because you are convinced he will hear you. :>)

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:bs1a05fqe1@sparta.btinternet.com...
> W4lje, just a few comments.
>
> Two dipoles, spaced approx 1/2-wave apart, both broadside to the same
> signal, are coupled, perhaps closely. Depending on orientations, together
> they will form a crude, irregular beam with nulls. Switching the receiver
> from one to the other will have the effect of reversing beam direction
> relative to the direction of the signal.
>
>
> If the noise is coming more or less uniformly from all directions there
will
> be no effect on received noise level. Close coupling between the two
> elements means there is only one antenna.
>
>
> The question to ask is - does the signal-to-noise ratio from the fat
dipole
> improve because signal strength increases or because the noise level
> decreases relative to the thin dipole.
>
>
> To compare antenna ability to discriminate against noise would it not be
> logical to keep away from signals and just check the two received noise
> levels?
>
>
> I would be happier if the two antennas were spaced a few wavelengths
apart.
> ....
>
> As height decreases, specially below 1/4-wavelength, induced ground loss
> increases, antenna intrinsic bandwidth increases.
>
> The feedline and the tuner can have at least as great an effect on system
> bandwidth as the antenna itself.
> ----
> Reg, G4FGQ

>
>
>
>
>
>
>
>
>
>
> --
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bs0jft$3q1$1@news3.infoave.net...
> > Reg, I will pass on my observations. I had a pretty decent antenna farm
on
> > my 29 acre home stead in Georgia. two 75 meter antennas separated by at
> > least a wavelength were A/B tested one a cage as described below. The
> other
> > a single wire #14 gauge insulated wire. Working a fellow in South Africa
> > from Manchester Georgia (60 miles South of Atlanta) we exchanged signal
> > reports of 5 and 0
> > my S-meter was on the low peg on a Kenwood 870, switching to the wire he
> was
> > lost in the noise which rose to a little over S1. I duplicated a
reduction
> > over and over again. None as dramatic as the ZS, but always noticeable.
> >
> > I swapped feed lines to see if it had any effect, but the results
favored
> > the cage in every test I ever ran.
> >
> > Been there, done that, got the t-shirt as far as theory is concerned. I
> > simply pass on the observation as such and am convinced to the point I
> will
> > never use anything other than a cage on 75. The enhanced bandwidth was
> > greater than predicted by your program, but then again the antenna was
> lower
> > than a 1/4 wave, and theory provides for increased bandwidth with a
lower
> > antenna.
> >
> > My location was rural with the nearest neighbor over 1/2 a mile away.
All
> my
> > utilities were underground so the location was very quiet for near

field.
> > "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> > news:bs0h56sii1@sparta.btinternet.com...
> > > > Anecdotally, the cages are quieter (less electrical noise) than
> standard
> > > > dipoles. Don't make this statement on here however, because 9 folks
> will
> > > > jump out of the woodwork to tell you how wrong you are.
> > > >
> > > ==========
> > >
> > > What few anecdotes I have read fail to say whether the noise is
locally
> > > generated or is the more distant stuff which comes in with the wanted
> > > signals.
> > >
> > >
> > > There is no possible reason why a fat wire will discriminate better
> > between
> > > between signals and distant noise than a thin wire. To any antenna
> > > everything is just e.m waves. Receiving and radiating patterns,
> radiation
> > > resistance and efficiency are identical for both.
> > >
> > >
> > > But local noise sources are within the near field of the antenna. Or
the
> > the
> > > antenna can be considered to be within the near fields of a lot of
noise
> > > sources.
> > >
> > >
> > > One end of the antenna can be nearer to some noise source(s) than the
> > other
> > > end. So although the dipole may be accurately balanced relative to
> ground
> > > (almost certainly it isn't) it may be very unbalanced relative to the
> > > location of local nise sources.
> > >
> > > The much greater capacitance of a fat antenna to ground, and to
> everything
> > > else, will shift the local receiving pattern. The fat antenna will
also
> > > have a smaller capacitative reactance to ground and to everything
else.
> > > Remember local noise is mainly due to its electric field and so the
fat
> > > antenna, all other things remaining unchanged, will have a greater
> > tendency

> > > to decouple itself from local electric noise fields.
> > >
> > > The effect is not un-related to screened receiving loops. It will be
> more
> > > noticeable with decreasing frequency and with decreasing antenna
sizes.
> It
> > > will not be noticeable at all at low noise receiving sites where the
> > > near-fields of the antenna and noise sources do not inter-react.
> > > ----
> > > Reg, G4FGQ
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> >
> >
>
>

6223. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 21:36:29 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs2fd5$13oq$1@news3.infoave.net>
Source record: 102889

And lest we forget, the "miracle antenna" of the 90's the FRACTAL. I am working on a co-phased fractal CFA that will be all the rage on 11 meters.

"Mike" <m*150@lycos.co.uk> wrote in message news:RJUEb.7033$FN.1119@newsfep4-winn.server.ntli.net...
> Hello,
>
> Whoever this person is, does he know anything about "CFA" antennas then?
>
> "'Doc" <w5lz@cwis.net> wrote in message news:3FE3795B.A7AFFC83@cwis.net...
> >
> >
> > Art,
> > The statement, "every thing is known about antennas", was no
> > more true in Mr. Moxon's day, as it is now. I seriously doubt
> > if you will find anyone on this NG that thinks "every thing is
> > known about antennas". It's an opinion, and it's yours.
> > Happy Holidays...
> > 'Doc
>
>

6224. Re: Rohn Tower help

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 21:46:55 UTC
From: "G.Beat" <now9spamgb@spam.comcast.net>
Message-ID: <ir3Fb.5771$VB2.8014@attbi_s51>
Source record: 102890

"Patrick Croft" <mai@iquest.net> wrote in message
news:3FE32E97.9E7FCE23@iquest.net...
> Thomas Shelby is in Ohio, not NH. The link W9GB provided is a dealer in
> NH.
>
> Contact T-S @ (419) 394-3377 or
> Fax: (419) 394-4815
>
> Toll free 888-868-8588
> Toll free Fx: 888-868-8589
>
> 309 South Park Dr. St. Marys, OH. 45885
>
> E-mail sales@thomasshelby.com
>
>
> As for installation instructions you should be able to gain enough
> details from any of the Rohn pre- 1996 consumer products catalogs. Its
> not in my 1997 commercial one. I'd be surprised if a google search
> didn't result in some answers.
>
> Bests,
> Patrick
> W9GTA
>

Unfortunately, Thomas Shelby still does not have a functional web site
(Under Construction):
http://www.thomasshelby.com

w9gb

6225. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 21:51:10 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs2g8o$141s$1@news3.infoave.net>
Source record: 102891

Art, all of our conversations have been cordial, with that in mind may I respectfully suggest the following:

Nay Sayers - Screw em all but 7, six for pallbearers and 1 for a cadence caller.

Build the antenna, write up a paper on it and send it to all the pubs. Those that are the biggest critics never get on the air anyway, so they would never buy one.

Set a price and offer them for sale, explaining that a production run will commence with order X and if it is not reached the money will be returned.

Donate one to the next DX expedition to Lower Slobovia , you can then claim that it received nothing less than a 5/9 world wide. If all else fails, scale it to 11 meters and sell it as a 96dB gain "skip talking" antenna.

Find a local shop that will be willing to work with you on building it. Point out you need a good price on the low number of units, and if they give it to you, you will stick with them on production runs.

Spend time marketing the antenna instead of arguing with the so called genius crowd in this news group. Your ulcer will calm down, you can then make enough money to hire someone to take the newsgroup abuse for you. Good luck in 2004 with your antenna.

73 Fred W4JLE

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message news:85ed38d.0312200531.659ebf2b@posting.google.com...
> That statement was given to Hately by a University professor
> when he presented the CFA. I have noticed since that most experts
> on antennas appear to have the same attitude. Either that or
> because of so many fake claims over the years feel it is a
> safe bet to denounce or ridicule anything new.
> I have spent the last ten years working on antennas and as you know
> have written some up and even tho they are "new" they are pushed aside.
> What it takes nowadays is for somebody to raise a lot of hoopla in
> the press, make enticing claims and then put a price on it knowing
> that people prefer to buy.
> It is sad but it does seem that with an overload of written material
> on antennas hams unconciously really feel that way
> If I hear you on the top band I will give you a call on my
> rotatable dipole which is not new.
> Art.

6226. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 22:23:36 UTC
From: tdonaly@aol.com
Message-ID: <20031220172336.19782.00000683@mb-m01.aol.com>
Source record: 102892

Jacques wrote,
>
>Thank you Richard for defending His genius.
>I am living 15 km from the battle field of Waterloo and what is funny is
>that we celebrate Napolï¿½on, not Wellington. The duke of Wellington was the
>winner but is rather forgotten. His museum there is as big as a coffee shop
>while Napolï¿½on is displayed everywhere. Maybe because we never forgot that
>we were french before 1815. Now there is a lion in bronze made of gun-metal
>on a 45m hill at this place (but nobody is allowed to attach a G5RV on the
>top, ... on day I will try to find the frequency of resonance of the lion
>itself).
>
>The only thing I would like to add is that we are to-day (december 20th) the
>200th anniversary of the sale of the french Louisina by Napolï¿½on to the
>United States of America. USA added 12 states and increased their surface by
>a factor of 2 in one hit of magic wand. It was the first step of the
>westward expansion. The price was not that high as USA paid only 400 million
>dollars (of to-day). Napolï¿½on estimated he couldn't afford to maintain
>troops there and to administrate the country. So he decided to sell this
>area to Americans by friendship instead of being forced to give it for free
>to UK. This permitted to Americans not being surrounded by British troops.
>
>Have a nice Christmas.
>
>73 de Jacques - ON5MJ
>

Wellington didn't win that battle, Blï¿½cher did. According to Victor Hugo,
Wellington even had the gall to criticize the quality of his own troops
afterward.
73,
Tom Donaly, KA6RUH

6227. antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:00:17 UTC
From: pdrunen@aol.com
Message-ID: <20031220180017.04241.00001424@mb-m29.aol.com>
Source record: 102893

Hi Group,

A friend of mine let me borrow one of those MFJ antenna analizier with the reads out of the R and X component.

Now if I have a reading of 40 R and 35 X then if I put a cap across the coax with an impedance of 35 ohm it should cancel out the inductive reactance and I should only see the 40 ohm resistive?

Paul

6228. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:12:16 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <pnl9uvgvi7gcs7g48k1lir907mscl7ee9n@4ax.com>
Source record: 102894

On Sat, 20 Dec 2003 13:07:05 -0600, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> wrote:

>Gene Fuller wrote:
>> If it is the "ultimate reference" there is no need for multiple points
>> of view. Everything contained in the ultimate reference will be
>> complete, correct, and indisputable.
>
>Guess there's no such thing as an "ultimate reference", eh?
>Some physicists are questioning whether time really exists.
>If time doesn't exist, then all of our something per second
>measurements are bogus and current magnitude becomes moot.

Every thing is relative.

You can measure in handsprings per furlong as long as at least two
people can agree on the terms.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers

6229. Re: Les Moxon

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:23:14 UTC
From: "Peter O. Brackett" <no_such_address@ix.netcom.com>
Message-ID: <CR4Fb.6554$wL6.2340@newsread1.news.atl.earthlink.net>
Source record: 102895

Fred:

[snip]
"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bs2g8o$141s$1@news3.infoave.net...
:
:
> Spend time marketing the antenna instead of arguing with the so called
> genius crowd in this news group. Your ulcer will calm down, you can then
> make enough money to hire someone to take the newsgroup abuse for you.
Good
> luck in 2004 with your antenna.
>
> 73 Fred W4JLE
[snip]

Touche'

The *only* validation of a new idea occurs when someone *buys* it.

If you can't sell it, an idea or invention ain't worth nothing!

Proslytising on a USENET NG, as Art continues to do, proves nothing and will
not gain him
or anyone else anything!

If Art can *sell* his patented invention to someone, *anyone*, then it's
valuable and worthwhile,
otherwise it's just so much shxx like 98% of all patented inventions.

Invention and discovery are *nothing*, *zilch*, *nada*, if no one buys!

Art is just a whiner and complainer, he will never *sell* his ideas or
inventions by
crying... sheesh... what a loser! He just can't or... won't sell!

--
Peter K1PO
Indialantic By-the-Sea, FL

6230. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:38:21 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fe4ec26$0$6515$ba620e4c@reader3.news.skynet.be>
Source record: 102900

Thanks Tom for this precision. But Bl�cher has no museum at all in Waterloo. The only one on the side of the winners, is the one of Wellington. I didn't know that Wellington criticized his own troops. Victor Hugo was probably the greatest french writer but he was very much Napol�on minded, so ... ".("Waterloo, morne plaine"). He even called many years later Napol�on III, "Napol�on-le-petit". Also, sometimes schools are not honnest. Bl�cher was prussian and after WW2, when I was at elementary school, it was not well accepted to dress germans with the clothes of winners.
And I was a bit confused also by the fact that since 1815, Belgium pays a fee to the family of Wellington (I know it's very few now because the value of money has dropped but it still exists because there was a signature on a piece of paper). I sincerely thought that he was the winner, because he administrated France from 1815 to 1818 during the occupation period.

73 de Jacques - ON5MJ

6231. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:50:37 UTC
From: jgboyles@aol.com
Message-ID: <20031220185037.03883.00001521@mb-m07.aol.com>
Source record: 102896

>A friend of mine let me borrow one of those MFJ antenna analizier

>Now if I have a reading of 40 R and 35 X then if I put a cap across the coax
>with an impedance of 35 ohm it should cancel out the inductive reactance and
>I
>should only see the 40 ohm resistive?

The MFJ analyzer does not give the sign of the jX component of the impedance.
If the jX component is 35 ohms inductive reactance, then 35 ohms capacitive
reactance will cancel. The instruction manual says it's up to you to figure
the sign of jX.
In general, if you increase frequency and jX decreases, jX is capacitive.
Converse, inducutive.
73 Gary N4AST

6232. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-20 23:57:11 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <TOudnePNNeNGfHmi4p2dnA@crocker.com>
Source record: 102897

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20031220180017.04241.00001424@mb-m29.aol.com...
> Hi Group,
>
> A friend of mine let me borrow one of those MFJ antenna analizier with the
> reads out of the R and X component.
>
> Now if I have a reading of 40 R and 35 X then if I put a cap across the
coax
> with an impedance of 35 ohm it should cancel out the inductive reactance
and I
> should only see the 40 ohm resistive?
>
>
> Paul
>

unless the x is already capacitive, in which case it will get larger. that
thing doesn't tell the sign of the reactance only its magnitude.

6233. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 00:05:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Ws5Fb.412148$Dw6.1275486@attbi_s02>
Source record: 102898

As JG says: vary the frequency to determine the sign of X.

Increasing frequency and decreasing X means it is Capacitive Reactance.

Increasing frequency and increasing X means it is Inductive Reactance.

DD, W1MCE
+ + +

JGBOYLES wrote:

>>A friend of mine let me borrow one of those MFJ antenna analizier
>
>
>>Now if I have a reading of 40 R and 35 X then if I put a cap across the coax
>>with an impedance of 35 ohm it should cancel out the inductive reactance and
>>I
>>should only see the 40 ohm resistive?
>
>
> The MFJ analyzer does not give the sign of the jX component of the impedance.
> If the jX component is 35 ohms inductive reactance, then 35 ohms capacitive
> reactance will cancel. The instruction manual says it's up to you to figure
> the sign of jX.
> In general, if you increase frequency and jX decreases, jX is capacitive.
> Converse, inducutive.
> 73 Gary N4AST

6234. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 00:35:24 UTC
From: jgboyles@aol.com
Message-ID: <20031220193524.03883.00001525@mb-m07.aol.com>
Source record: 102899

> that thing doesn't tell the sign of the reactance only its magnitude.

David,
That thing! My most treasured piece of ham test gear. For the $180 I gave for the 259B 4 years ago, it has given me the most enjoyment and info in my 40 years of this hobby. For the amount of money, it does a lot. We are amateurs, right?

73 Gary N4AST

6235. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 00:49:57 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <8nq9uvs3dukh3i3trtm1rbuv07h10rtcjk@4ax.com>
Source record: 102901

On 20 Dec 2003 23:00:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:

|Hi Group,
|
|A friend of mine let me borrow one of those MFJ antenna analizier with the
|reads out of the R and X component.
|
|Now if I have a reading of 40 R and 35 X then if I put a cap across the coax
|with an impedance of 35 ohm it should cancel out the inductive reactance and I
|should only see the 40 ohm resistive?

No. The reading you have is an impedance. Impedances are given in
series form. If you shunt this with -j35, you should read 30.6 -j35

If you want to tune out the reactance, put your -j35 capacitor in
series with the load.

6236. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 01:46:46 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fe4feaa_3@news1.prserv.net>
Source record: 102902

Clint
Just to set the record straight and try to put the brakes on another urban legend.

I can tell you from experience that the experience you describe is not common, and when it does occur, it is due to incompetent installation. Like pouring the cement first and then adding the tower, as I believe you intend.

I have some Rohn 25G which is 40+ years old. It was stuck in cement for 25 years in the first location, until I torched it off to move it. The part that was still in the cement was still sound and intact.

It is now in the second location, where it has been for 15+ years, and no rust has appeared at the point where it goes into the cement.

There are two things necessary to get this result.
1. The top of the cement must be crowned so water doesn't form a puddle, but drains off.
2. The bottom of the hole must have a layer of sand for the inside of the legs to drain into so they don't get plugged with cement and hold water. Tape over the unused bolt holes is a good idea as part of that.
And, to be complete, prepare the hole, add the sand, locate the tower in the hole using temporary braces above ground, then pour the cement.

A number of years back, I removed a surplus Rohn 45G tower which had been in place for about 15 years, with a very small (~200#) cement base containing no reinforcing. The cement was poured in a shallow limestone cavity, and I was able to lift it out and then break the cement away from the tower legs. The galvanizing inside the cement was over 90% intact, but the bare places had only a surface coating of rust, and I expect it would have stood at least another 15 years before any significant corrosion damage occurred. The cement was not crowned, as the installation was temporary, and that likely contributed to the corrosion. That and the limestone held water also. +

To make a permanent (60 years +) installation, coat the part of the tower which is to go in the cement with bituminous cement and wrap that with corrosion resistant tape. This is the technique which was used to put galvanized conduit in cement below grade for years before PVC was approved. It is also recommended for guy anchor rods. There is a long documented history of the success of this method in the electrical industry. It is still used in some locations, and the materials are still sold by electrical suppliers.

--
Crazy George

Remove N O and S P A M imbedded in return address
"Clint" <rattlehead at computron dot net> wrote in message
news:vu8equgh2r8546@corp.supernews.com...
> I have 50 feet of rohn tower and want to put it up but
> don't want to direction stick it into a concrete base, i'd
> rather have either a hinge plate or a 5- foot section
> (preferably) to put into the concrete, for I hear if you
> direction shove tower into concrete it'll rust around the
> bottom until it completely disintegrates where it makes
> contact with the concrete (for whatever reason)....
>
> does anybody know a retailer that sells these things?
> I can't find them in the AES mag....
>
> Clint
> KB5ZHT
>
> --
>
>
> ------
>
> It's as if the diplomatic train has left the station and
> clueless critics of this country are only now beginning
> to realize, "Hey, that's my train!"
>
> --Neil Cavuto, describing how america's enemies
> are now suddenly congradulating us and expressing
> "delight" at the capture of saddam, finally proving
> we're doing the right thing and that we're succeeding...
>
> --------
>
> 45 Communist Goals for America
>
> http://www.uhuh.com/nwo/communism/comgoals.htm
>
> --
>
>

6237. info. Wanted on ft-901dm

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 03:15:05 UTC
From: lee <quietkey2003NOSPAM@netscape.net>
Message-ID: <Ze8Fb.765124$6C4.56789@pd7tw1no>
Source record: 102903

Hi, everyone. I on the hunt for some information around the final
tubes for a ft-901dm. When I power up the unit, one of the tubes(closer to
the
front) starts to glow very red(heater of course) compared to the other tube.
I've tested both tubes before they were installed and both passed(no shorts,
etc.).

So I'm asking for some help from the tubers in the community on this
one.

thanks for looking,

Lee
quietkey2003nospam@netscape.net

6238. Re: Loading Coils in 20th ARRL Antenna Book

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 03:47:10 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0312201947.156e86fe@posting.google.com>
Source record: 102904

Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
> Some physicists are questioning whether time really exists.
> If time doesn't exist, then all of our something per second
> measurements are bogus and current magnitude becomes moot.

Time as we deal with it, is a man made measurement system. Time in itself is infinite. So in a way, it doesn't exist. I imagine the earliest notice of "time" was noticing the sun rises and sets at a regular period. An "hour" could have been anything. But the sun/moon/seasons led to the basic time structure we now use. The measurements are not bogus to us because they are compared to our man made reference system. But they might be bogus to an alien from another galaxy who knows of no such reference... :/ MK

6239. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 04:36:50 UTC
From: tdonaly@aol.com
Message-ID: <20031220233650.09478.00001037@mb-m17.aol.com>
Source record: 102905

Jacques wrote;
>
>
>Thanks Tom for this precision. But Bli¿½cher has no museum at all in Waterloo.
>The only one on the side of the winners, is the one of Wellington. I didn't
>know that Wellington criticized his own troops. Victor Hugo was probably the
>greatest french writer but he was very much Napoli¿½on minded, so ...
>".("Waterloo, morne plaine"). He even called many years later Napoli¿½on III,
>"Napoli¿½on-le-petit". Also, sometimes schools are not honnest. Bli¿½cher was
>prussian and after WW2, when I was at elementary school, it was not well
>accepted to dress germans with the clothes of winners.
>And I was a bit confused also by the fact that since 1815, Belgium pays a
>fee to the family of Wellington (I know it's very few now because the value
>of money has dropped but it still exists because there was a signature on a
>piece of paper). I sincerely thought that he was the winner, because he
>administrated France from 1815 to 1818 during the occupation period.
>
>73 de Jacques - ON5MJ

Bli¿½cher arrives in the nick of time and Wellington gets the credit. Oh well,
life
isn't fair. Scientists, mathematicians and others sometimes get shorted by
history because the historians are confused. Some contributors to this
newsgroup
like to complain about Heaviside's treatment by the historians. Just write
something
about "Maxwell's equations" some time and watch what happens.
73,
Tom Donaly, KA6RUH

6240. Re: questions regarding full wave loop antenna (as a "loop skywire")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 07:35:10 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2003.12.21.07.35.10.406770@127.0.0.1>
Source record: 102906

On Fri, 19 Dec 2003 03:07:53 -0600, 'Doc wrote:

>
>
> Eric,
> What kinda feed line do you plan to use?
> 'Doc
well,
I was considering either a coax feedline (I have lots of that) or perhaps a 1/4 wave stub of window line (I have some of that as well) and then feed it with a balun at the far end of the window wire stub. just an idea. I'd rather see as close an impeadance match to the 50 ohm line as possible. given the feedpoint at a loop is somewhere around 100 Ohms.... well, I am not sure if a quarter-wave open wire line would work or not.

BTW, this loop will be resonant in the 40 meter band and also at 10 (given its setup). I'm not going to bother to wait for the FCC to get of its ass and decide on the code/no-code issue. I am taking code classes right now and plan to upgrade within 3-5 months..

Meanwhile, any other suggestions would be helpful..

Eric
DE N7ZZT
n7zzt at hotmail dot com

--
the difference between intelligence and stupidity is that intelligence has its limits.

6241. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 07:40:25 UTC
From: richardharrison@webtv.net
Message-ID: <2897-3FE54E69-143@storefull-2314.public.lawson.webtv.net>
Source record: 102907

Jacques, ON5MJ wrote:
"USA added 12 states and increased their size by a factor of 2 in one hit of magic wand."

The Louisiana Purchase from France was the most important item in the territorial growth of the USA. Jefferson wasn`t sure that it was even legal according to the US constitution when he bought the territory, but he was sure that it was necessary, so he did it anyway.

Thomas Jefferson succeeded Benjamin Franklin as minister to France in 1785. Jefferson sympathized with the French Revolution.

Jefferson was a reluctant candidate for President in 1796, and became Vice-President in the Adams administration as runner-up due to the election law at the time. In 1800, Jefferson was elected President. He sent the U.S. Navy to the Mediterranean to dispose of the Barbary pirates who were harrassing American commerce. I think the term "To the shores of Tripoli" in the Marine Hymn comes from that action. As the Marines say, "when it absolutely has to be done, the Marines are ready."

Jefferson acquired the Louisana Territory from Napoleon in 1803. He sent Lewis & Clark in 1804-1806 overland to Oregon to examine the purchase and claim it for the U.S.A.. The explorers did a magnificent job.

During Jefferson`s second Presidential Term, he devoted much of his energy to keeping the U.S.A. clear of the Napoleonic Wars, though both England and France interfered with the neutral rights of American merchant ships.

The Louisiana Purchase was essential in creation of a powerful nation spreading from the Atlantic to the Pacific. Jefferson, the purchaser, died at 83 years of age on July 4, 1826, anniversary of the Declaration of Independance of 1776 which Jefferson mostly wrote. He usually was the brightest bulb on the tree.

Merry Christmas and best regards, Richard Harrison, KB5WZI

6242. Re: S band antenna testing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 08:23:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <25jauv88vieeebs1qifa8t4bi64329u8ts@4ax.com>
Source record: 102908

On Sat, 20 Dec 2003 07:11:14 GMT, Allan Butler <ka0ies@hotmail.com>
wrote:

>Ok here is my problem.
>
>I would like to build an antenna for the S band. That is near 2500 MHz for
>those of us that are not knowing of the letter to frequency correlation. :-)
>
>The difficulty is in testing the antenna to make certain that it will accept
>antenna power and not cause the transmitter grief while it is doing it. I
>know that I can't go to Radio Shack and buy their SWR bridge to do this
>testing. I have a friend that could help me in the 1200 MHz range but he
>does not have a spectrum analyzer that will go to 2500 MHz.
>
>He suggested the possibility of taking a signal generator and feeding the
>antenna through a directional coupler. The return signal from the antenna
>would then be sent to the spectrum analyzer so that it could be monitored
>for a relative level and as the antenna was tuned closer to the proper
>impedance and the return loss went up the spectrum analyzer would read a
>lower and lower level.
>
>Unfortunately we lack a directional coupler and a spectrum analyzer for
>these frequencies.
>
>I just got an idea. We still need to come up with a directional coupler
>but if we can get a crystal detector that works up there we can monitor
>the relative power with an oscilloscope or a DVM.
>
>I have a few more people in the area that I can ask about the directional
>coupler.
>
>Does this look like a possible solution to anyone here? Or should I get
>a piece of waveguide suitable for this frequency and a crystal detector
>and calculate the VSWR by making the detector slide from one end of the
>waveguide to the other. I remember in tech school doing this at microwave
>frequencies to measure VSWR.
>
>Any suggestions or ideas will be investigated to make this work and will
>be greatly appreciated.
>
>Thanks in advance.
>
>Al Butler
>ka0ies

Hi Al,

You are going in the right direction. One problem (or two) is that the Spectrum Analyzer is wholly unnecessary (overkill, especially when it doesn't cover the frequency of interest). You have nearly answered that with the crystal detector, unfortunately that is the second problem.

A slotted line is the classic solution, which is both cheaper and more effective. It allows you to control the variables and move in the direction you are only vaguely outlining above (using a detector). You may choose to go another path (directional couplers and what-not), but the following issues remain to be acknowledged and answered:

A crystal detector is going to be wholly useless in measuring return power, you would have to couple too much energy into the probe and that would considerably upset the VSWR (or return loss) you were attempting to measure. In short, it would turn out to be a massive mismatch in its own right; basically you would be measuring the problem you introduced instead of the load.

The correct method, and it is vastly more sensitive AND accurate, is to use the crystal detector "lightly" coupled to the load (through a slot or between the lines) to detect the standard 1 KHz tone that is specifically used for this type of measurement (HP or Boonton have a wide range of 1 KHz meters with range switches for exactly this application). You then standardize the maximum reading along the track of the line where the maxima occurs, shift the detector to the minimum and read the return loss in dB directly from the meter and range switch setting.

The ability to confirm you have correctly determined the VSWR (or return loss) is by reducing the detector loading and taking another measurement. If the determination has changed, you were too heavily loaded in the former determination. You repeat this process until you either run out of sensitivity, or you duplicate the last determination.

There are, of course, third and fourth and... let's just agree there will be problems: taking instrumentation for granted especially directional couplers and slotted lines. These components at these frequencies can easily appear to be working, and yet through slight connector mating problems force considerable error into measurements. It is easy to measure a value, but it takes more effort to determine its accuracy. Connector problems and device mismatches (like the naive use of the crystal detector to brute force measure power) inevitably lead to gross errors that present seemingly pristine determinations (if you simply stop at the first measurement). You should ALWAYS replace your unknown with a standard and measure it. The standard should also be not only a 50 Ohm load (and good luck proving it is 50 Ohms), but also a pure short and a pure open.

One of the classic "gotchas" is source purity. If your source, at that frequency, exhibits any distortion, you could likely be measuring the return loss at a harmonic. Another classic problem that is widely denied in this group (like death and taxes) is source mismatch. If you have any pretense to accuracy (say measuring or hoping to measure a VSWR less than 1.5:1) then your source MUST match the anticipated LOAD Z (even if the actual load Z does not) and all must match the transmission line Z.

A lot of these "gotchas" come with the illusion that once having made a measurement (however accomplished) that its accuracy is somehow validated by the instrument (the common crowing of $300 invested in the Bird Wattmeter is a hoot, jacking that up to a $60000 Spectrum Analyzer is even more mocking). It goes without saying that there is a lot of slack allowed in actually pumping RF out into the ï¿½ther, but the claims of accuracy of how much for such an itinerant accomplishment are unwarranted.

73's
Richard Clark, KB7QHC

6243. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 08:54:32 UTC
From: richardharrison@webtv.net
Message-ID: <657-3FE55FC8-124@storefull-2311.public.lawson.webtv.net>
Source record: 102909

Art, KB9MZ wrote:
"Can I assume then that broadcast coupling coils are always apart to accommodate a Faraday shield between them?"

This is not an FCC requirement, I Believe. The FCC sets a low allowable harmonic content level for broadcast signals. A Faraday shield between coils eliminates capacitive coupling between them.

Capacitive coupling between coils favors harmonics, as capacitive reactance is inversely proportional to frequency. Killing capacitive coupling is effective in eliminating harmonic radiation. Putting the Faraday shield in the tower coupling makes a powerful lightning deterrent, too.

The usual shield construction is a metal picket fence with the coils on either side sharing an axis.

Best regards, Richard Harrison, KB5WZI

6244. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 12:09:38 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <Bridnah3F-4aEHiiRVn-sw@crocker.com>
Source record: 102910

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20031220193524.03883.00001525@mb-m07.aol.com...
> > that thing doesn't tell the sign of the reactance only its magnitude.
>
> David,
> That thing! My most treasured piece of ham test gear. For the $180 I
gave
> for the 259B 4 years ago, it has given me the most enjoyment and info in
my 40
> years of this hobby. For the amount of money, it does a lot. We are
amateurs,
> right?
>
>
> 73 Gary N4AST

yep, is a great tool. it helped me do a retune of my 80m 4-square one handed that would have taken much longer with just swr bridges and a helper. i don't know how i have lived this long without one... and i don't miss the sign of the reactance, in most cases it either doesn't matter or you can pretty much guess what it is.

6245. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 15:29:45 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vubf3ainq74203@corp.supernews.com>
Source record: 102911

Well, if that's the case then I won't worry about it.. i'll follow
you're advice and just put a sub-base layer of sand down under
the concrete pad. It'll save lots of money, time and trouble for
sure.

Clint
KB5ZHT

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:3fe4feaa_3@news1.prserv.net...
> Clint
> Just to set the record straight and try to put the brakes on another urban
> legend.
>
> I can tell you from experience that the experience you describe is not
> common, and when it does occur, it is due to incompetent installation.
Like
> pouring the cement first and then adding the tower, as I believe you
intend.
>
> I have some Rohn 25G which is 40+ years old. It was stuck in cement for
25
> years in the first location, until I torched it off to move it. The part
> that was still in the cement was still sound and intact.
>
> It is now in the second location, where it has been for 15+ years, and no
> rust has appeared at the point where it goes into the cement.
>
> There are two things necessary to get this result.
> 1. The top of the cement must be crowned so water doesn't form a puddle,
> but drains off.
> 2. The bottom of the hole must have a layer of sand for the inside of the
> legs to drain into so they don't get plugged with cement and hold water.
> Tape over the unused bolt holes is a good idea as part of that.
> And, to be complete, prepare the hole, add the sand, locate the tower in
the
> hole using temporary braces above ground, then pour the cement.
>
> A number of years back, I removed a surplus Rohn 45G tower which had been
in
> place for about 15 years, with a very small (~200#) cement base containing
> no reinforcing. The cement was poured in a shallow limestone cavity, and
I
> was able to lift it out and then break the cement away from the tower
legs.

> The galvanizing inside the cement was over 90% intact, but the bare places
> had only a surface coating of rust, and I expect it would have stood at
> least another 15 years before any significant corrosion damage occurred.
> The cement was not crowned, as the installation was temporary, and that
> likely contributed to the corrosion. That and the limestone held water
> also. +
>
> To make a permanent (60 years +) installation, coat the part of the tower
> which is to go in the cement with bituminous cement and wrap that with
> corrosion resistant tape. This is the technique which was used to put
> galvanized conduit in cement below grade for years before PVC was
approved.
> It is also recommended for guy anchor rods. There is a long documented
> history of the success of this method in the electrical industry. It is
> still used in some locations, and the materials are still sold by
electrical
> suppliers.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
> "Clint" <rattlehead at computron dot net> wrote in message
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> > does anybody know a retailer that sells these things?
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> > Clint
> > KB5ZHT
> >
> > --
> >
> >
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> > It's as if the diplomatic train has left the station and
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> > --Neil Cavuto, describing how america's enemies
> > are now suddenly congradulating us and expressing
> > "delight" at the capture of saddam, finally proving
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--

6246. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 16:06:11 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <bs4gdjsdj0@216.39.144.81>
Source record: 102912

I believe gravel is preferable to sand. If the sand becomes wet
it might block the end of the tube preventing adequate drainage, thus
defeating the purpose.

Bob, N7XY

On Sun, 21 Dec 2003 09:29:45 -0600, Clint wrote:
> Well, if that's the case then I won't worry about it.. i'll follow
> you're advice and just put a sub-base layer of sand down under
> the concrete pad. It'll save lots of money, time and trouble for
> sure.
>
> Clint
> KB5ZHT
>
> "Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
> news:3fe4feaa_3@news1.prserv.net...
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>> Just to set the record straight and try to put the brakes on another urban
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>> common, and when it does occur, it is due to incompetent installation.
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>> Crazy George
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>> >
>> > does anybody know a retailer that sells these things?
>> > I can't find them in the AES mag....
>> >
>> > Clint
>> > KB5ZHT
>> >

6247. Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 16:55:24 UTC
From: jder8745@aol.com
Message-ID: <20031221115524.12189.00001497@mb-m05.aol.com>
Source record: 102913

A while back a posted a query about Slinky antennas. I got several nice replies for which I want to thank the senders.

Later I returned to this group only to find I had accidentally marked all the threads as READ. Boy is my face RED.

Q: How can I undo this error? I bet I'm not the only one who has done it.

tnx es 73 de jack, K9CUN.

6248. Re: 802.11b Range problems

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:02:55 UTC
From: Ralph Blach <rblach@intrex.net>
Message-ID: <3FE5D23F.2030301@intrex.net>
Source record: 102914

mxduffie@axtxom.net wrote:
> On Fri, 5 Dec 2003 01:59:05 -0800, "Joel Kolstad"
> <JKolstad71HatesSpam@Yahoo.Com> wrote:
>
>
>>It certainly looks well-constructed, but I'd have a lot more confidence in
>>Cantenna's products if they had measured (or even simulated) radiation
>>patterns and calculations. They also don't mention their feed arrangement
>>which could make a huge difference in actual performance.
>
>
> For a few dollars more, you can get real commercial antennas. My
> internet service comes to me via a 7 mile hop using a PCI card or
> WGB external box running 100mw. Works great, giving me better than
> 1/3 T-1 connection. When I swing the antenna around, I see all of
> my ISP's APs, including one 35 miles away in the next state. I've
> got a few links if you need them. I just went through them and see
> that some have changed, but there's lots of stuff out there for
> WiFi. Your main worry is the antenna connector, if you are running
> a PCMCIA card.
>
> Gary
Where does one get the external 100mw tranmitter? I am also looking for a
good omnidirectional radiator.

I have a linksys Wireless G router

Chip
73 kf4wbk

6249. Re: Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:17:39 UTC
From: Bill Turner <noway@nohow.com>
Message-ID: <vubldko5n37d8f@corp.supernews.com>
Source record: 102915

JDer8745 wrote:

> A while back a posted a query about Slinky antennas. I got several nice replies
> for which I want to thank the senders.
>
> Later I returned to this group only to find I had accidentally marked all the
> threads as READ. Boy is my face RED.
>
> Q: How can I undo this error? I bet I'm not the only one who has done it.
>
> tnx es 73 de jack, K9CUN.
>
>

How to do it depends on your newsreader program. Which one are you using?

--
Bill W6WRT

6250. Re: S band antenna testing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:27:21 UTC
From: Allan Butler <ka0ies@hotmail.com>
Message-ID: <ZJkFb.607898$HS4.4449089@attbi_s01>
Source record: 102916

Thanks Richard;

I can understand the need to calibrate and verify everything as you said.

One of the things that popped up was your comment on making certain that the source matches the intended load Z. When I worked on receivers in the past we used to use what is called "hard microvolts". This was done by putting a 3dB pad in the line between the receiver and the signal generator. That way the impedance of the generator was more likely to be 50 ohms even though the generator was specified to be 50 ohms.

I always remember that it was hard microvolts because it was harder to make specifications on the radio with the attenuator in place.

Thanks for all the pointers. It is amazing that some people don't understand that the equipment may be up to snuff, but the procedures are blowing the results out of the ballpark.

When we used network analyzers we always tried to make the device we were developing so it could plug into the face of the analyzer. If that was not possible we would use cables made by the factory for that analyzer, clean all the contact surfaces thouroughly, make certain that connectors were torqued properly for the series and then do a full calibration at the end of the cables so the analyzer would be able to give us results as good as possible.

Unfortunately I don't have access to that type of equipment anymore otherwise I would be using that.

Thanks again for the information.

Al Butler
ka0ies

6251. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:28:37 UTC
From: Clint <"rattlehead at computron dot net">
Message-ID: <vubm2aakqedg1d@corp.supernews.com>
Source record: 102917

"Bob Nielsen" <nielsen@removethis.oz.net> wrote in message
news:bs4gdjsdj0@216.39.144.81...
> I believe gravel is preferable to sand. If the sand becomes wet
> it might block the end of the tube preventing adequate drainage, thus
> defeating the purpose.
>
> Bob, N7XY

OH, damn good advice.... how about pea gravel, or maybe 3/8" rock? it would
allow
drainage very well (many french drains and other water drain systems use pea
gravel or
small rock to allow water passage or filtration)....

Clint
KB5ZHT

6252. Vacation HF antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:36:53 UTC
From: Gery Duyck <Gery@duyck-co.be>
Message-ID: <3fe5da34$0$17855$ba620e4c@reader5.news.skynet.be>
Source record: 102918

Hi,

Which antenna sould I use to work with my yaesu FT-100D, on vacation in the mountains.
longwire + tuner, or vertical + tuner or even other solutions.

I think a long wire should be the best, but what should be it's best length?

Any other tips and info is welcome.

ON4GDK, Gery D.

6253. Re: Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 17:57:25 UTC
From: Roger Halstead <mynewsat@rogerhalsteaddot.com>
Message-ID: <3lnbuvsitmhf7hvjlemoaihi6cdj3afdcq@4ax.com>
Source record: 102822

On 21 Dec 2003 16:55:24 GMT, jder8745@aol.com (JDer8745) wrote:

>A while back a posted a query about Slinky antennas. I got several nice replies
>for which I want to thank the senders.
>
>Later I returned to this group only to find I had accidentally marked all the
>threads as READ. Boy is my face RED.
>
>Q: How can I undo this error? I bet I'm not the only one who has done it.

It depends on your news reader, but most allow you to go back and
<mark all unread> from the same menu that has the <mark all read> Of
course you will then have to dig through and find the threads.

It might be easier if you remember the thread name to just go to
Google and search on the thread name. Of course as you posted the
question you should do fine by using Google to search on your name.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
Return address modified due to dumb virus checkers
>
>tnx es 73 de jack, K9CUN.
>

6254. Re: Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 18:26:57 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe5e661_2@corp.newsgroups.com>
Source record: 102819

JDer8745 wrote:
> A while back a posted a query about Slinky antennas. I got several nice replies
> for which I want to thank the senders.
>
> Later I returned to this group only to find I had accidentally marked all the
> threads as READ. Boy is my face RED.
>
> Q: How can I undo this error? I bet I'm not the only one who has done it.

Set your newsreader to "sort by thread" and look for the subject,
"Slinky Antenna". Or go to http://groups.google.com/ and type in
rec.radio.amateur.antenna and look for your thread.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6255. Re: Vacation HF antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 18:37:46 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fe5e8ea$1_2@corp.newsgroups.com>
Source record: 102821

Gery Duyck wrote:

> Hi,
>
> Which antenna sould I use to work with my yaesu FT-100D, on vacation in the
> mountains. longwire + tuner, or vertical + tuner or even other solutions.
>
> I think a long wire should be the best, but what should be it's best length?
>
> Any other tips and info is welcome.

If you have supports, I would use a dipole cut to the lowest frequency
of interest, fed with ladder-line + tuner. If you don't have supports,
I would use a center-loaded vertical with radials (like the improved St.
Louis Vertical). The collapsible SD-20 fishing pole makes a vertical.
Two of them plus a support make a rotatable dipole. Try

http://www.wr6wr.com/ click on products, then SD-20.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6256. Re: S band antenna testing

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 19:26:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <svrbuv4tfraso7h8qge2r8j7pvr7no9k6p@4ax.com>
Source record: 102823

On Sun, 21 Dec 2003 17:27:21 GMT, Allan Butler <ka0ies@hotmail.com>
wrote:

>Thanks Richard;
>
>I can understand the need to calibrate and verify everything as you said.
>
>One of the things that popped up was your comment on making certain that the
>source matches the intended load Z. When I worked on receivers in the past
>we used to use what is called "hard microvolts". This was done by putting
>a 3dB pad in the line between the receiver and the signal generator. That
>way the impedance of the generator was more likely to be 50 ohms even though
>the generator was specified to be 50 ohms.
>
>I always remember that it was hard microvolts because it was harder to make
>specifications on the radio with the attenuator in place.
>
>Thanks for all the pointers. It is amazing that some people don't
>understand that the equipment may be up to snuff, but the procedures are
>blowing the results out of the ballpark.
>
>When we used network analyzers we always tried to make the device we were
>developing so it could plug into the face of the analyzer. If that was not
>possible we would use cables made by the factory for that analyzer, clean
>all the contact surfaces thouroughly, make certain that connectors were
>torqued properly for the series and then do a full calibration at the end
>of the cables so the analyzer would be able to give us results as good as
>possible.
>
>Unfortunately I don't have access to that type of equipment anymore
>otherwise I would be using that.
>
>Thanks again for the information.
>
>Al Butler
>ka0ies

Hi Al,

You are welcome. Visits to some of the Hamfests should reveal a lot
of microwave plumbing that could do all of this for you. Few who
traffic in that trade know the original cost of that stuff, and it
goes for literal pennies on the kilobuck. Then there are those who
are savvy enough to charge a healthy hunk of change - I would trust
them more for at least knowing how to preserve their investment.

Example: I recall seeing an HP Coaxial slotted line for sale at $20 and the fellow offering that the detector probe stripped from it would make a neat depth gauge. How my heart sank....

As for your discussion about the 3 dB pad, its application is to serve as isolation from source Z variation. It usually came in the form of a T resistance network if I recall correctly.

Hammering out all these variables in the SHF lends perspective to what matters, and how much, at a manageable scale that can be handled all in one place on the bench (unlike spreading out over 10's of meters for HF).

73's
Richard Clark, KB7QHC

6257. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 19:29:57 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <9PGdnTL2y8CWeniiRVn-ug@ctc.net>
Source record: 102820

> Well, if that's the case then I won't worry about it.. i'll follow
> you're advice and just put a sub-base layer of sand down under
> the concrete pad. It'll save lots of money, time and trouble for
> sure.

You can go here and see what Rohn recommends for the base and guys .

http://www.rohnnet.com/

Look under the Online Catalog and then under the GT series.

Looks like they recommend about 6 inches of compacted sand and gravel with about 2 inches of the legs put into the sand/gravel. Then a concrete base about 4 feet in each direction.

6258. Interesting listening: W6S/Santa

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 19:40:09 UTC
From: wa8mea@hotmail.com
Message-ID: <8a260fb2.0312211140.6c0b3aa8@posting.google.com>
Source record: 102824

I'm enjoying listening to "Santa" this afternoon. At 19:24 UTC on 18.114 mhz. This is one of the finest services I've witnessed in my 30 plus years of being invlolved in amateur radio. And there has been a tradition in my home with my children QSO'ing with W6S/"Santa" for a number of years. W6S/Santa has actually been doing this for 32 years!!

I'm privilaged with perfect propagation this afternoon, so I'm able to hear the little kids respond to Santa. One of the little peanuts just said "I love you" out of the blue. I think it took Santa back a bit and he got a little teary-eyed.

Good stuff. Give's me a little bit of hope for humanity.

73 and Merry Christmas!

Bill - WA8MEA
wa8mea@hotmail.com
*NEAT STUFF at http://qth.com/dwm

6259. Re: G5RV

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 19:44:27 UTC
From: ON5MJ <"on5mj_no_more _spam_in_stock_sorry_"@skynet.be>
Message-ID: <3fe5f7e4$1$6522$ba620e4c@reader3.news.skynet.be>
Source record: 102825

Hi Richard,

I am always interested in historical facts. I have learned much details to-day. So my wishes are gratified to the full.

73 de Jacques - ON5MJ

6260. WTB: SONY TV REMOTE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 20:32:29 UTC
From: n2ion@aol.com
Message-ID: <20031221153229.04365.00001336@mb-m29.aol.com>
Source record: 102826

I'M IN NEED OF A SONY RM-761A REMOTE CONTROL

EMAIL IF YOU HAVE ONE.

THANKS IN ADVANCE

6261. mag loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 21:08:29 UTC
From: KC5CQW <kc5cqw@cableone.net>
Message-ID: <vuc2ugfbkkrj3e@corp.supernews.com>
Source record: 102827

What is the best way to feed a mag loop? I used a 1/5 feed with the shield and center shorted at the base and a 3/8" gap at the top of the shield (wa0vsl). Should I solder the shields at the bottom and the center to the shield at the top? Also, what about the shape of the feed? Mine is an eliptical shape for bandwidth. Is a circle better? I based my loop on the octagon from the elecraft website. 73, Damon

6262. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 21:17:05 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <l5oFb.609479$HS4.4462813@attbi_s01>
Source record: 102828

JGBOYLES wrote:

>>that thing doesn't tell the sign of the reactance only its magnitude.
>
>
> David,
> That thing! My most treasured piece of ham test gear. For the $180 I gave
> for the 259B 4 years ago, it has given me the most enjoyment and info in my 40
> years of this hobby. For the amount of money, it does a lot. We are amateurs,
> right?
>
>
> 73 Gary N4AST

'that thing' is the best piece of non professional laboratory grade RF
equipment I own.

Take a little time to study what it will do for you. You'll be surprised!!

Dave, W1MCE
Manager, Textron Antenna Range, Textron Defense Systems, retired

6263. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 21:34:08 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <kloFb.419229$Dw6.1292576@attbi_s02>
Source record: 102829

Let's go a little slowly here. It is not clear where the reading is
taking place. He states 'if I put a cap across the coax'. Where is the
reading? Across the coax or at the antenna?

He should make the reading at the antenna terminals and add compensation
there so that the VSWR changes from 2.1:1 to approximately 1:1.

I don't have a problem with a 2.1:1 VSWR. I'd leave it alone or retrim
the antenna.

W1MCE
+ + +

Wes Stewart wrote:

> On 20 Dec 2003 23:00:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:
>
> |Hi Group,
> |
> |A friend of mine let me borrow one of those MFJ antenna analizier with the
> |reads out of the R and X component.
> |
> |Now if I have a reading of 40 R and 35 X then if I put a cap across the coax
> |with an impedance of 35 ohm it should cancel out the inductive reactance and I
> |should only see the 40 ohm resistive?
>
> No. The reading you have is an impedance. Impedances are given in
> series form. If you shunt this with -j35, you should read 30.6 -j35
>
>
> If you want to tune out the reactance, put your -j35 capacitor in
> series with the load.
>

6264. Re: Interesting listening: W6S/Santa

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 21:51:47 UTC
From: desmoface@aol.com
Message-ID: <20031221165147.19091.00001267@mb-m13.aol.com>
Source record: 102830

>I'm enjoying listening to "Santa" this afternoon. At 19:24 UTC on
>18.114 mhz.

Hi Bill...I heard him too..I think I heard a couple santa's throughout the hf bands this weekend..I believe the one on 17 was 100% qsl'ing all who wanted one...

73's de kb8viv

Steve

6265. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 22:07:34 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a4f83c62312d44a989699@news-server.socal.rr.com>
Source record: 102831

In article <OBaDb.549665$Tr4.1495835@attbi_s03>, j.beltz@insightbb.com
says...
> i live in an single story first floor apartment,
> any ideas on an 80-10 meter antenna indoors only,
> thanks jack

There's a great book from the ARRL called, "Stealth Amateur Radio."
Worth looking into for stealthy antenna installations.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6266. Re: apartment dwellers antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 22:07:34 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a4f841de43ab5a698969a@news-server.socal.rr.com>
Source record: 102832

In article <3fdf2535.495600328@news.galilei.com>,
raiar@bbs.galilei.com.nospam says...
> What do you do when you move into a subdivision with no restrictions
> regarding antenna's and then later they add them?

If you have your antennas up before the restrictions, I suspect there's little they can do to make you take them down to conform to the new restrictions. You may not be able to put up NEW stuff, but the existing antennas should be grandfathered.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6267. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 23:36:40 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312211536.1443558f@posting.google.com>
Source record: 102833

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<657-3FE55FC8-124@storefull-2311.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "Can I assume then that broadcast coupling coils are always apart to
> accommodate a Faraday shield between them?"
>
> This is not an FCC requirement, I Believe. The FCC sets a low allowable
> harmonic content level for broadcast signals. A Faraday shield between
> coils eliminates capacitive coupling between them.
>
> Capacitive coupling between coils favors harmonics, as capacitive
> reactance is inversely proportional to frequency. Killing capacitive
> coupling is effective in eliminating harmonic radiation. Putting the
> Faraday shield in the tower coupling makes a powerful lightning
> deterrent, too.
>
> The usual shield construction is a metal picket fence with the coils on
> either side sharing an axis.
>
> Best regards, Richard Harrison, KB5WZI

Just to be sure I understand this. Is one coil made from coax with the
braid grounded or is the Faraday shield of a corugated sheeting form
that provides a clearance groove in one or more turns to allow
entrance of the other
coil turns? Do any commercials use a rotating coil to vary the
coupling
with a fixed coil thus making the adition of a Faraday shield pretty
straight forward ? The latter is the form that I favour.
Regards
Art

6268. Re: Vacation HF antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-21 23:37:07 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <D8qFb.4092$Vv2.1211057@news1.news.adelphia.net>
Source record: 102834

Gery Duyck wrote:

> Hi,
>
> Which antenna sould I use to work with my yaesu FT-100D, on vacation in the
> mountains.
> longwire + tuner, or vertical + tuner or even other solutions.
>
> I think a long wire should be the best, but what should be it's best length?
>
> Any other tips and info is welcome.

Not a dipole? That seems a lot simpler overall.

- Mike KB3EIA -

6269. Re: mag loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 00:56:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bs5ffm$3q4$1@sparta.btinternet.com>
Source record: 102835

"KC5CQW" wrote -
> What is the best way to feed a mag loop? I used a 1/5 feed with the shield
> and center shorted at the base and a 3/8" gap at the top of the shield
> (wa0vsl). Should I solder the shields at the bottom and the center to the
> shield at the top? Also, what about the shape of the feed? Mine is an
> eliptical shape for bandwidth. Is a circle better? I based my loop on the
> octagon from the elecraft website. 73, Damon
>
==========

Samon, and others,

For every impedance matching circuit there must be at least two controls.
One is related to the resistive impedance component and the other to the
reactive component.

In the case of a magloop one component is the tuning CAPACITOR and the other
is COUPLING-LOOP DIAMETER. It so happens that for a 50-ohms system a
circular coupling loop needs a diameter about 1/5 of the main loop. A nice
convenient feature of a magloop is that the 1/5th ratio remains relatively
unchanged over several bands. So only the capacitor need be re-adjusted
when changing frequency from one band to another.

Actually, it is the enclosed AREA of the two loops which matters. For a
50-ohm system the enclosed areas should be in the ratio about 1/25. So the
actual SHAPE of the coupling loop is not of great consequence. Another
feature is that the exact location of the coupling loop within the main loop
is not of great consequence. It is mechanically convenient to mount the
coupling loop near to the circumference of the main loop. For the area
ratios to hold it matters only that the two loops lie in the same plane.

In fact, the effective (diameter) area coupling ratios can be be 'pruned'
more conveniently just by rotating the coupling loop inside the main loop
without changing its size or shape. (But nitpickers may not approve of the
antenna's cosmetic properties. ;o)

The practice of extending the coax line to form the coupling loop has no
electrical/radio advantages. A bare, self-supporting wire may be better
because it is more conveniently adjusted for length/diameter/enclosed area.
Or for rotating in the plane of the main loop.

The main loop must NOT be electrically connected to the coax braid. Allow
it to find its own electrical potential within the space it has been
allocated. Ideally the main loop should be isolated from everything except
via its magnetic coupling to the small loop. Choke all connections to a
remotely-controlled tuning capacitor.

The shape of magloops is of no electrical consequence except that a circle has the greatest enclosed area for a given perimeter. This gives the greatest possible radiation resistance for a given conductor loss resistance and hence also the greatest radiating efficiency. But as program MAGLOOP4 will show, it is not very critical insofar as S-units are concerned.

For a full analysis of magloop performance, download program MAGLOOP4 in a few seconds from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

6270. Carolina Cyclone HF mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 02:52:24 UTC
From: Jerry Oxendine <joxendi@bellsouth.net>
Message-ID: <yZsFb.5195$OI1.146@bignews3.bellsouth.net>
Source record: 102836

As the Holidays are upon us, I find that I am busy in my shop again
contructing Carolina Cylone II screwdriver
antennas. This is the 3" version that works so well for those people that
just must have the BEST mobile HF
signal around. Built of tough materials, this antenna will
be with you thru many automobile trades (the installation
of radios actually saves me money because it makes me
reluctant to trade cars! LOL!) And it will give you that
excellent signal you always wanted! And, yes, it will beat
those "skinny" little 1 1/2" dia ones wound with #16 wire.

You will find that your Cyclone II is a full 3" diameter and
wound with #14 wire. Spacing is 8 Turns per Inch. Forms are tough, but
resilient, black nylon and are also
resistant to UV rays. Some other competitors use those
flexible don't-squeeze-the-Charmin covers made of Butyl. These will
discolor, crack, and disintegrate in about
a year. Cyclone II uses covers of a full 1/8" wall thick-ness and will
remain clear AND protect your antenna from rain, snow, dirt, dust and UV
rays. No replacing your cover for many years. I also beat the competitors'
prices by quite a few $$$$$$$$. Cyclone II only costs
$350 shipped to the lower 48 states.

Now if you are one of those who operates mostly 40 thru
10 Meters (as well as 6 Meters) with occasional forays onto 75 Meters, you
will find that Cyclone I will be an
excellent choice, and will deliver surprising performance
on all bands! This one has all of the features previously
mentioned in a package of 2" diameter including the durable cover. It, too,
is reasonably priced at only $240
shipped within the lower 48 states.

Visit www.qsl.net/k4kwh to see photos of this excellent
product and to order. I am moderately busy in the shop,
so you can give yourself a Christmas present this year by
purchasing one of my Carolina Cyclone antennas, and "give" me a 'present' by
keeping my shop busy.

At any rate, Merry Christmas to all and a Happy New Year.

Jerry
K4KWH

www.qsl.net\k4kwh

6271. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 03:14:36 UTC
From: richardharrison@webtv.net
Message-ID: <7009-3FE6619C-40@storefull-2315.public.lawson.webtv.net>
Source record: 102837

Art, KB9MZ wrote:
"Do any commercials use a rotating coil to vary the coupling?"

Lots of ingenuity and variety have been used, and I`ve not seen it all. But, I haven`t seen a swinging link out at the tower where the Faraday shield is used in medium wave broadcast stations.

MW BC stations don`t ordinarily change frequencies or antennas except for some day/night changes done by remote switching. For initial power division among several towers, there are power and phasing networks back at the station house. There is a "dog house" at each tower to house matching and coupling networks. Coupling includes the Faraday shield between primary and secondary coils.

The shield hides one coil from the other for electrostatic lines of force. The shield is often a grounded metal plate. It is ineffective in blocking magnetic coupling because it is only grounded on one end, and has parallel slots perpendicular to the grounded end. These slots prevent circulating current in the plate. Circulating current in the plate would produce a counter-EMF which would neutralize the magnetic field of the primary coil and its coupled energy in the secondary. The slots make the shield plate pemeable to the magnetic field, but not permeable to the electrostatic field.

Sometimes, individuual wires are used as a Faraday shield in place of a slotted plate. The wires may work better at reducing circulating current, but the slotted plate obviously works well enough for many transmitting stations.

Best regards, Richard Harrison, KB5WZI

6272. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 03:37:36 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fe66966_3@news1.prserv.net>
Source record: 102838

Clint:

When you pour the cement and put the crown on the top, make it at least 3/4"-1" higher in the center as it will probably drop some in the center as it cures. This is why so much "professional" cement flat work holds water in the middle. No one teaches the proper method of cement installation any longer.

--
Crazy George

6273. Re: please recommend any interesting links for hand made SWL antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 04:31:54 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <_suFb.422685$Dw6.1305701@attbi_s02>
Source record: 102839

http://www.kc7nod.20m.com/

"Edgar" <edesign@sala.lt> wrote in message
news:brt1ls$78iol$1@ID-208708.news.uni-berlin.de...
> please recommend any interesting sites for hand made SWL antennas
>
>

6274. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 04:54:51 UTC
From: Wes Stewart <*n7ws*@arrl.net>
Message-ID: <j8tcuvgn6ft09392hs36huv3kpep9bh7e5@4ax.com>
Source record: 102840

On Sun, 21 Dec 2003 21:34:08 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

|Let's go a little slowly here. It is not clear where the reading is
|taking place. He states 'if I put a cap across the coax'. Where is the
|reading? Across the coax or at the antenna?

The reading is where the coax connected to the MFJ thingie. Beats me
as to where that was. But I don't care whether the reading was at the
antenna, the middle of the coax or the transmitter end.

Wherever he took the reading is the *load* as far as I'm concerned
and that's where he needs to insert the -j35 series reactance to
cancel the +j35.

If he makes a measurement elsewhere and gets a different answer, then
he needs a different solution.

|
|He should make the reading at the antenna terminals and add compensation
|there so that the VSWR changes from 2.1:1 to approximately 1:1.

If the terminals are 100' in the air, in between two supports, that
might be difficult. But in principle I agree the best place to do the
matching is at the antenna. But when I say this, all of the guys
using ladder line with 50:1 SWRs get all upset.

|
|I don't have a problem with a 2.1:1 VSWR. I'd leave it alone or retrim
|the antenna.

Yep. The old Drake L-4B "antenna tuner" easily handles this.
|
|
|W1MCE
|+ + +
|
|Wes Stewart wrote:
|
|> On 20 Dec 2003 23:00:17 GMT, pdrunen@aol.com (PDRUNEN) wrote:
|>
|> |Hi Group,
|> |
|> |A friend of mine let me borrow one of those MFJ antenna analizier with the
|> |reads out of the R and X component.
|> |
|> |Now if I have a reading of 40 R and 35 X then if I put a cap across the coax

|> |with an impedance of 35 ohm it should cancel out the inductive reactance and I
|> |should only see the 40 ohm resistive?
|>
|> No. The reading you have is an impedance. Impedances are given in
|> series form. If you shunt this with -j35, you should read 30.6 -j35
|>
|>
|> If you want to tune out the reactance, put your -j35 capacitor in
|> series with the load.
|>

6275. Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 09:14:17 UTC
From: Gary Smith <swordtail@dodo.com.au>
Message-ID: <3fe6b5e8@news.comindico.com.au>
Source record: 102841

Hi, a friend of mine has a Yaesu RSM-2 10/80 metre antenna. He says it has an SWR of around 3.7 MHz and wants to lower it for around 3.57 but the adjustable tip doesnt affect it enough. Anyone got any tuning tips or specs/instructions/comments?

Thankyou

Gary

6276. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 13:40:03 UTC
From: Wes Stewart <n7ws@_arrl.net>
Message-ID: <8frduvcfrh6offt33g8i4u471lj9l8bs7d@4ax.com>
Source record: 102842

On Sun, 21 Dec 2003 21:37:36 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

|Clint:
|
|When you pour the cement and put the crown on the top, make it at least
|3/4"-1" higher in the center as it will probably drop some in the center as
|it cures. This is why so much "professional" cement flat work holds water
|in the middle. No one teaches the proper method of cement installation any
|longer.

Sorry George, I can't help myself.<g>

"Cement" is the stuff that holds the aggregate in "concrete" together
and concrete is "placed," not "poured".

6277. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 14:03:12 UTC
From: Gary Smith <swordtail@dodo.com.au>
Message-ID: <3fe6f99f$1@news.comindico.com.au>
Source record: 102843

Sorry, thats SWR of around 1.7:1 at 3.7 MHz...

"Gary Smith" <swordtail@dodo.com.au> wrote in message
news:3fe6b5e8@news.comindico.com.au...
> Hi, a friend of mine has a Yaesu RSM-2 10/80 metre antenna. He says it has
> an SWR of around 3.7 MHz and wants to lower it for around 3.57 but the
> adjustable tip doesnt affect it enough. Anyone got any tuning tips or
> specs/instructions/comments?
>
> Thankyou
>
> Gary
>
>

6278. Re: WTB: SONY TV REMOTE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 14:31:47 UTC
From: richardharrison@webtv.net
Message-ID: <7008-3FE70053-116@storefull-2315.public.lawson.webtv.net>
Source record: 102844

N2ION wrote:
"I`m in need of a Sony RM-761A remote control."

If you can`t wait to use a remote control with most Sony consumer appliances, I`ve found universal controls packed with instructions to program them for a particular brand and or model of appliance work.

Difference in price is usually determined by the number of different appliances the single remote control is capable of controlling. The same universal remote may control TV, VCR, disc player, etc.

Best regards, Richard Harrison, KB5WZI

6279. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 15:07:20 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312220707.4a56c3a@posting.google.com>
Source record: 102845

Richard,
Thank you for that extensive reply. I now see that a
floating coax shield would be ineffective as a screen
since it would not discriminate
I initially looked at a picket fence as having
two hortizontal members as well but now I see it as more
of a fork design with the tines at a 90 degree
axis to the axis of the secondary inductance and parallel
to the actual coils. We will see if works out for both
lightning and static as my tower is grounded together
with a heavy separate aluminum cable connected to my
ground grid. It has yet to be hit by lightning however

Best regards

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<7009-3FE6619C-40@storefull-2315.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "Do any commercials use a rotating coil to vary the coupling?"
>
> Lots of ingenuity and variety have been used, and I`ve not seen it all.
> But, I haven`t seen a swinging link out at the tower where the Faraday
> shield is used in medium wave broadcast stations.
>
> MW BC stations don`t ordinarily change frequencies or antennas except
> for some day/night changes done by remote switching. For initial power
> division among several towers, there are power and phasing networks back
> at the station house. There is a "dog house" at each tower to house
> matching and coupling networks. Coupling includes the Faraday shield
> between primary and secondary coils.
>
> The shield hides one coil from the other for electrostatic lines of
> force. The shield is often a grounded metal plate. It is ineffective in
> blocking magnetic coupling because it is only grounded on one end, and
> has parallel slots perpendicular to the grounded end. These slots
> prevent circulating current in the plate. Circulating current in the
> plate would produce a counter-EMF which would neutralize the magnetic
> field of the primary coil and its coupled energy in the secondary. The
> slots make the shield plate pemeable to the magnetic field, but not
> permeable to the electrostatic field.
>
> Sometimes, individuual wires are used as a Faraday shield in place of a
> slotted plate. The wires may work better at reducing circulating
> current, but the slotted plate obviously works well enough for many
> transmitting stations.

>
> Best regards, Richard Harrison, KB5WZI

6280. Re: antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 15:46:52 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <MIEFb.628499$Fm2.565166@attbi_s04>
Source record: 102846

Wes, prior to my change of QTH from Massachusetts to New Hampshire I was one of those guys using a center fed doublet with tuned 600 ohm feeders and 40:1 VSWRs. I don't have any problem with non resonant antennas and/or high VSWR! Just manage the losses at a level you are comfortable with.

I also posted that I would not be concerned with a 40 +/- j35 load [VSWR = 2.1:1]. If it causes the original poster problems then I stated 'trim' the antenna.

Or, add/subtract feedline to eliminate the reactive component. Or, use a transmission line stub to both eliminate the reactive component and achieve a 1:1 VSWR. There are lots of methods to get to 1:1, but I believe it is not necessary.

DD, W1MCE
+ + +

Wes Stewart wrote:

But in principle I agree the best place to do the
> matching is at the antenna. But when I say this, all of the guys
> using ladder line with 50:1 SWRs get all upset.

6281. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 15:48:08 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <YmEFb.426478$Dw6.1312140@attbi_s02>
Source record: 102847

There is absolutely nothing wrong with a VSWR of 1.7:1!!!

W1MCE

Gary Smith wrote:

> Sorry, thats SWR of around 1.7:1 at 3.7 MHz...
>
>
> "Gary Smith" <swordtail@dodo.com.au> wrote in message
> news:3fe6b5e8@news.comindico.com.au...
>
>>Hi, a friend of mine has a Yaesu RSM-2 10/80 metre antenna. He says it has
>>an SWR of around 3.7 MHz and wants to lower it for around 3.57 but the
>>adjustable tip doesnt affect it enough. Anyone got any tuning tips or
>>specs/instructions/comments?
>>
>>Thankyou
>>
>>Gary
>>
>>
>
>
>

6282. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 16:16:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8f5euv4b5bq0ara6u95qgi90p4n39f5f1t@4ax.com>
Source record: 102848

On 22 Dec 2003 07:07:20 -0800, aunwin@insightbb.com (Art Unwin KB9MZ) wrote:

>Richard,
>Thank you for that extensive reply. I now see that a
>floating coax shield would be ineffective as a screen

A floating coax is as good as any shield to be used for a Faraday Shield. It is used extensively in balanced loop constructions everyday.

>since it would not discriminate

You still don't get the purpose of the shield. It discriminates very effectively - its whole purpose in life. Research Richard's comments in Google.

> I initially looked at a picket fence as having
>two hortizontal members as well but now I see it as more
>of a fork design with the tines at a 90 degree
>axis to the axis of the secondary inductance and parallel
>to the actual coils.

No such requirement exists - there are NO alignment issues. The reason they fork is to eliminate current flow. Every power transformer on this planet employing a Faraday Shield does it with a solid sheet of copper. The copper does not conduct nor support current loops because it is connected to ground at one point only. Hence, such a design is consistent with the "fork" metaphor, if you only think of it as having one, extremely wide tine.

Art, you have Terman, why don't you consult him?

>We will see if works out for both
>lightning and static as my tower is grounded together
>with a heavy separate aluminum cable connected to my
>ground grid. It has yet to be hit by lightning however
>
>Best regards
>

Hi Art,

You should consult the Code as to grounding methods.

73's
Richard Clark, KB7QHC

6283. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 16:30:36 UTC
From: richardharrison@webtv.net
Message-ID: <7008-3FE71C2C-117@storefull-2315.public.lawson.webtv.net>
Source record: 102849

Art, KB9MZ wrote:
"I now see that a floating coax shield would be ineffective as a screen since it would not discriminate.."

Art is in agreement with King, Mimno, and Wing on this. They say on page 235 of "Transmission Lines, Antennas, and Wave Guides:

"The operation of the shielded loop is explained popularly by first stating that the desired loop current is due to the magnetic field, the undesired up-and-down current to the electric field, and then maintaining that the metal shield cannot be penetrated by the electric field but can be penetrated by the magnetic field. All these statements are incorrect in light of fundamental electromagnetic principles."

Ever have an open coax shield connection only at one end of the cable? Wasn`t the screening vitiated? I don`t want to argue with (3) Ph.D.`s.

Best regards, Richard Harrison, KB5WZI

6284. Re: mag loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 17:08:39 UTC
From: richardharrison@webtv.net
Message-ID: <7008-3FE72517-118@storefull-2315.public.lawson.webtv.net>
Source record: 102850

Reg, G4FGQ wrote:
"The shape of magloops is of no electrical consequence except that a
circle has the greatest enclosed area for a given perimeter. This gives
the greatest possible radiation resistance for a given loss resistance
and hence the greatest radiating efficiency."

Great logic. What about the fractal idea that you can zig-zag the
perimeter for greater wire length and thus lower the resonant frequency
for a given area? Isn`t that inherently inefficient?

Best regards, Richard Harrison, KB5WZI

6285. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 17:41:00 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <M0GFb.16834$VB2.37274@attbi_s51>
Source record: 102852

Gary, the real question is how to change the frequency from 3.7 to 3.57 MHz?

I can't find the RSM-2 in the on-line Yaesu catalog or at HRO. Where can
I [we] find some online info on this antenna?

Deacon Dave, W1MCE
+ + +

6286. Re: WTB: SONY TV REMOTE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 17:41:49 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <8ZFFb.11154$WQ3.1664@lakeread05>
Source record: 102851

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:7008-3FE70053-116@storefull-2315.public.lawson.webtv.net...
> N2ION wrote:
> "I`m in need of a Sony RM-761A remote control."
>
> If you can`t wait to use a remote control with most Sony consumer
> appliances, I`ve found universal controls packed with instructions to
> program them for a particular brand and or model of appliance work.
>
> Difference in price is usually determined by the number of different
> appliances the single remote control is capable of controlling. The same
> universal remote may control TV, VCR, disc player, etc.
>
> Best regards, Richard Harrison, KB5WZI
>

Many universals don't cover all of the functions needed by Sony
products. And many times the remote is the only way to adjust
certain settings.

Pete

6287. Re: mag loop

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 19:01:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bs7f1egbi1@sparta.btinternet.com>
Source record: 102853

```
--
.....................................................
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....................................................
"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:7008-3FE72517-118@storefull-2315.public.lawson.webtv.net...
> Reg, G4FGQ wrote:
> "The shape of magloops is of no electrical consequence except that a
> circle has the greatest enclosed area for a given perimeter. This gives
> the greatest possible radiation resistance for a given loss resistance
> and hence the greatest radiating efficiency."
>
> Great logic. What about the fractal idea that you can zig-zag the
> perimeter for greater wire length and thus lower the resonant frequency
> for a given area? Isn`t that inherently inefficient?
>
> Best regards, Richard Harrison, KB5WZI

==================================

Richard, after all these years I still refuse to be dragged into that
madhouse. Cheerio. Perhaps see you later.
----
Reg.
>
```

6288. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 19:37:38 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <vMidnesCrMua1XqiRVn-sw@comcast.com>
Source record: 102854

"larry d clark" <buddycl@swbell.net> wrote in message
news:32LEb.83$9p3.43604105@newssvr11.news.prodigy.com...
> hi
>
> i've got a question about how wires to use when making
> a fat conductor hf dipole(cage antenna)using wire equally
> spaced around a circular form. ie target diameter is 8
> inches, how many wires around the form, 4, 6, 8?
>
> tnx
>
> larry
> kd5foy
>
Larry,

If all you are trying to do is to increase the bandwidth, there are better ways. For instance, have two dipoles, connected together at the feedpoint, but with the ends separated either vertically or horizontally. Cut the two dipoles for slightly different frequencies. I ran EZNEC on such an antenna for 75/80, and easily got an SWR of less than 2:1 from 3.5 -4.0. You could mount the support antenna as a dipole, and the other as an inverted V.

Tam/WB2TT

6289. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 20:56:07 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <HTIFb.18123$P%1.16775053@newssvr28.news.prodigy.com>
Source record: 102855

Why not use Romex, connect all three conductors together at the
feedpoint, and cut each conductor for whatever resonant frequency on
each band.. I've done this, and with a little matching it worked out
nicely.

73 de AI8W, Chris

Tarmo Tammaru wrote:

> "larry d clark" <buddycl@swbell.net> wrote in message
> news:32LEb.83$9p3.43604105@newssvr11.news.prodigy.com...
>
>>hi
>>
>>i've got a question about how wires to use when making
>>a fat conductor hf dipole(cage antenna)using wire equally
>>spaced around a circular form. ie target diameter is 8
>>inches, how many wires around the form, 4, 6, 8?
>>
>>tnx
>>
>>larry
>>kd5foy
>>
>
> Larry,
>
> If all you are trying to do is to increase the bandwidth, there are better
> ways. For instance, have two dipoles, connected together at the feedpoint,
> but with the ends separated either vertically or horizontally. Cut the two
> dipoles for slightly different frequencies. I ran EZNEC on such an antenna
> for 75/80, and easily got an SWR of less than 2:1 from 3.5 -4.0. You could
> mount the support antenna as a dipole, and the other as an inverted V.
>
> Tam/WB2TT
>
>

6290. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 20:58:23 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <PVIFb.18124$P%1.16775531@newssvr28.news.prodigy.com>
Source record: 102856

If the thing tunes with a screw, buy a longer screw and replace the
one that's in there. If not, just add wire.

73 de AI8W, Chris

Dave Shrader wrote:

> Gary, the real question is how to change the frequency from 3.7 to 3.57
> MHz?
>
> I can't find the RSM-2 in the on-line Yaesu catalog or at HRO. Where can
> I [we] find some online info on this antenna?
>
> Deacon Dave, W1MCE
> + + +
>

6291. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 21:24:45 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <xiJFb.456020$275.1339004@attbi_s53>
Source record: 102857

Gary, also be aware that if this is a mobile type antenna, that is ...
short compared to a 1/2 wavelength, then resonance is not indicated by
lowest VSWR. Resonance has nothing to do with VSWR. Resonance means the
frequency where there is no reactance.

The radiation resistance of short antennas on 80 meters can be as low as
4 ohms resulting in a VSWR of 12:1 at resonance!! Measure the antenna's
resonant frequency using an MFJ 259B or equivalent.

What you may need is an auto-tuner mounted at the antenna.

Deacon Dave, W1MCE

Gary Smith wrote:

> Sorry, thats SWR of around 1.7:1 at 3.7 MHz...
>
>
> "Gary Smith" <swordtail@dodo.com.au> wrote in message
> news:3fe6b5e8@news.comindico.com.au...
>
>>Hi, a friend of mine has a Yaesu RSM-2 10/80 metre antenna. He says it has
>>an SWR of around 3.7 MHz and wants to lower it for around 3.57 but the
>>adjustable tip doesnt affect it enough. Anyone got any tuning tips or
>>specs/instructions/comments?
>>
>>Thankyou
>>
>>Gary
>>
>>
>
>
>

6292. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 22:07:07 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs7puq$3qfj$1@news3.infoave.net>
Source record: 102858

Amen and Amen! back in the early days of GPS (Then called the BRN-3 Transit System) The transmit antennas has an SWR of 13:1. SWR meters will be outlawed the day I take over as the world dictator.

I have never, ever, understood this preoccupation with SWR. I am guessing it comes from the CB world where getting one's "SWR's down" was the holy grail...
"Dave Shrader" <david.shrader@comcast.net> wrote in message news:YmEFb.426478$Dw6.1312140@attbi_s02...
> There is absolutely nothing wrong with a VSWR of 1.7:1!!!
>
> W1MCE
>
>

6293. Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-22 23:39:52 UTC
From: dclapp@winternet.com
Message-ID: <da9cb33f.0312221539.1d05db8d@posting.google.com>
Source record: 102859

I've read that loop receiving antennas capture more of the magnetic field -- and less of the electrical field (true?) -- than other forms of antennas. Why is that?? Thanks in advance for any enlightenment!

6294. 2m horz loop where????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 01:02:03 UTC
From: lorentzsonci@lycos.com
Message-ID: <3s4fuvotg77vrh2s7plhoukcnb788slo38@4ax.com>
Source record: 102860

I am looking for the website location/companies of two meter horz antennas.
So far I have found one, would appreciate your help. thanks in advance. 73
"remove 'z' from email address

6295. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 01:17:02 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312221717.41ea9bf8@posting.google.com>
Source record: 102861

Richard,
At the moment I am interested in Richards comment that the
tines that he has SEEN commercially were pock marked because
of flashovers. Hearing that encourages me that my choice of
doing the same thing was a good one where I was persueing
the hope that it will reduce local noise and static crashes.
I am not a long time user of the top band but it doesn't
take a rocket scientist to see that any noise reduction on
receive will help! Maybe at a later date I will try my coax
coil idea, but for now I am useing existing wheels before
thinking about inventing a new wheel.
Ofcourse, any comments on the subject are very welcome in
the event I decide to change my aproach as this is new to
me with regards to prior personal construction.
Have you personally constructed an antenna with a coupling
interface and how did it work out.
By the way the tines are already on my antenna
but it will take time to determine any advantages.
Tho it is a horizontaly polarised antenna I assume there are
vertical components that could be erased BEFORE it gets
to my radio.
You may recall that my antenna is very narrow banded so as
to prevent extranious noise getting to the radio, in that the
signal is filtered before it is amplified and removed by
the radio's filter.This is the phillosophy behind
my design and it is hoped that tines will help here also.
Best regards
Art

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<8f5euv4b5bq0ara6u95qgi90p4n39f5f1t@4ax.com>...
> On 22 Dec 2003 07:07:20 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >Richard,
> >Thank you for that extensive reply. I now see that a
> >floating coax shield would be ineffective as a screen
>
> A floating coax is as good as any shield to be used for a Faraday
> Shield. It is used extensively in balanced loop constructions
> everyday.
>
> >since it would not discriminate
>

> You still don't get the purpose of the shield. It discriminates very
> effectively - its whole purpose in life. Research Richard's comments
> in Google.
>
> > I initially looked at a picket fence as having
> >two hortizontal members as well but now I see it as more
> >of a fork design with the tines at a 90 degree
> >axis to the axis of the secondary inductance and parallel
> >to the actual coils.
>
> No such requirement exists - there are NO alignment issues. The
> reason they fork is to eliminate current flow. Every power
> transformer on this planet employing a Faraday Shield does it with a
> solid sheet of copper. The copper does not conduct nor support
> current loops because it is connected to ground at one point only.
> Hence, such a design is consistent with the "fork" metaphor, if you
> only think of it as having one, extremely wide tine.
>
> Art, you have Terman, why don't you consult him?
>
> >We will see if works out for both
> >lightning and static as my tower is grounded together
> >with a heavy separate aluminum cable connected to my
> >ground grid. It has yet to be hit by lightning however
> >
> >Best regards
> >
>
> Hi Art,
>
> You should consult the Code as to grounding methods.
>
> 73's
> Richard Clark, KB7QHC

6296. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 01:40:51 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <E2NFb.25033$gN.5459@fed1read05>
Source record: 102862

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message news:bs7puq$3qfj$1@news3.infoave.net...> I have never, ever, understood this preoccupation with SWR. I am guessing it
> comes from the CB world where getting one's "SWR's down" was the holy
> grail...

When running low power, like CB'rs and QRP operators do, I can easily understand the "preoccupation" with SWR. And when I used to run vacuum tube transmitters in the USAF, SWR was important then too... high SWR levels were not good for the finals.

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6297. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 03:07:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <79bfuv45tajibgmhmhnqaj7h58bgk3aqc9@4ax.com>
Source record: 102863

On 22 Dec 2003 17:17:02 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Richard,
>At the moment I am interested in Richards comment that the
>tines that he has SEEN commercially were pock marked because
>of flashovers. Hearing that encourages me that my choice of
> doing the same thing was a good one where I was persueing
>the hope that it will reduce local noise and static crashes.
>I am not a long time user of the top band but it doesn't
>take a rocket scientist to see that any noise reduction on
>receive will help! Maybe at a later date I will try my coax
>coil idea, but for now I am useing existing wheels before
>thinking about inventing a new wheel.
> Ofcourse, any comments on the subject are very welcome in
>the event I decide to change my aproach as this is new to
>me with regards to prior personal construction.
>Have you personally constructed an antenna with a coupling
>interface and how did it work out.
>By the way the tines are already on my antenna
>but it will take time to determine any advantages.
>Tho it is a horizontaly polarised antenna I assume there are
>vertical components that could be erased BEFORE it gets
>to my radio.
>You may recall that my antenna is very narrow banded so as
>to prevent extranious noise getting to the radio, in that the
>signal is filtered before it is amplified and removed by
>the radio's filter.This is the phillosophy behind
>my design and it is hoped that tines will help here also.
>Best regards
>Art
>

Hi Art,

I've worked on many shielding problems, and they are not always
intuitive, nor simple. In fact, the inappropriate "addition" of a
ground is often a cure worse than the original ill. There are also
issues of where to ground when the circuit being shielded has a
floating termination (like the coax example). In one instance the
shield is perfect, in others it is a coupling capacitor. To all
outward appearances, the circuits are identical until you come to the
question of ground.

Here the variables are manifold, but in general (unless experience demonstrates otherwise) you always ground at the load of a signal. For two-way communication systems, this presents something of a paradox (which end is the load? When?). And of course, this has NOTHING to do with lightening strikes, and everything to do with Common Mode (which are sometimes one and the same problem).

If you are worried about received noise, the load is the receiver, but this is not necessarily the lightning protection answer. Putting a ground at both ends can create nightmares, and it can solve nightmares. The creation of nightmares often comes in the form of using the coax shield as the ground common between two points (a serious risk to the point of death). Such a quick fix, ad hoc solution may remove noise and yet kill you when you disconnect it for maintenance. A separate wire conforms to code, keeps you safe, and generally takes care of the noise and lightning.

73's
Richard Clark, KB7QHC

6298. Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 03:55:45 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FE7BCBD.1060709@ix.netcom.com>
Source record: 102864

I think everyone knows that the old "Ethernet" "thicknet" is just
foam RG8U with very good shielding. I was fishing some power
BX cable in the walls/ceilings of the house, and took the opportunity
to also fish some coax for the ham shack upstairs. I figured that
I would use the Ethernet cable I had laying around as it is 50 ohm
coax. And lower loss than RG58. Not that it much matters for
HF for a 20 foot length. But if I wanted to operate 6m or 2m
it would begin to. I have a vertical in the back yard fed by about
15 feet of some rather ancient RG58 that then passes thru a hole
in the house's wall about 2 feet above grade (well sealed with caulking).
And in the basement a few feet in it meets the ethernet I just ran.
This reduced the clutter of coax inside the shack for better spouse
acceptance factor... Used a wall plate intended for phone jacks and
F connectors to make a neat termination for the Ethernet (a BNC
connector). Or if you have one an N barrel.

I don't think any IT guys use Ethernet cable anymore, so maybe
you can ask them to save some for you when they gut the ceilings,
etc at work.

6299. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 04:07:32 UTC
From: richardharrison@webtv.net
Message-ID: <2897-3FE7BF84-421@storefull-2314.public.lawson.webtv.net>
Source record: 102866

Art, KB9MZ wrote:
"---he has seen commercially were pock marked because of flashovers."

True. It mystified me that lightning preferred the Faraday screen to the made for the purpose arc-gap across the base insulator. It may result from impedance discontinuity. The surge impedance of the tower depends on how skinny it is. The rigid rod connecting a tower to the "dog house" network is at a certain height above the earth which gives the rod a Zo as a single conductor transmission line, then this line connects with an air-core solenoid returned to the earth to complete the circuit.

The coil must have a high reactance for some of the lightning`s spectrum of energy, so it arcs across the gap between the coil and the grounded Faraday screen. Once the arc is established, it is a low impedance from d-c to daylight. The pock marks are deep and numerous.

A horizontal antenna reduces local noise because local signals and local noise arrive at an angle almost parallel to the surface of the earth. Propagation of horizontally polarized waves along the surface of the earth is almost zero if the earth is a good conductor in the local area. With good conductivity, incident and reflected waves are nearly equal in strength. The reflection of a horizontally polarized wave is 180-degrees out-of-phase with the incident wave. When these two waves, incident and reflected waves arrive at a distant point, they nearly completely cancel, as their path lengths are nearly equal too.

The bandwidth of standing wave antennas may be small when compared with the frequency range allocated for an amateur band, but as compared with the intermediate frequency passband of the receiver, the antenna bandwidth is likely large. The Q of the antenna is lowered by radiation resistance which is the antenna`s end product.

Best regards, Richard Harrison, KB5WZI

6300. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 04:12:47 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bs8fc5$43s0$1@news3.infoave.net>
Source record: 102865

While a transmitter looking into an impedence mismatch can be a problem, transforming the impedence the transmitter sees satisfies the transmitter and has no effect on antenna SWR. Everybody's happy, nothing changes as far as SWR.

An interesting exercise, compare an antenna cut so that is 1:1, change it so that the SWR is now 3:1 and tell me what difference one would observe at the receiving end.

You may use a tuner to match the transmitter to the newly adjusted antenna.

"Jerry Bransford" <jerrypb@mecox.net> wrote in message news:E2NFb.25033$gN.5459@fed1read05...
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bs7puq$3qfj$1@news3.infoave.net...> I have never, ever, understood this
> preoccupation with SWR. I am guessing it
> > comes from the CB world where getting one's "SWR's down" was the holy
> > grail...
>
> When running low power, like CB'rs and QRP operators do, I can easily
> understand the "preoccupation" with SWR. And when I used to run vacuum tube
> transmitters in the USAF, SWR was important then too... high SWR levels were
> not good for the finals.
>
> Jerry
> --
> Jerry Bransford
> To email, remove 'me' from my email address
> KC6TAY, PP-ASEL
> See the Geezer Jeep at
> http://members.cox.net/jerrypb/
>
>

6301. Re: WTB: SONY TV REMOTE

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 04:50:19 UTC
From: richardharrison@webtv.net
Message-ID: <657-3FE7C98B-413@storefull-2311.public.lawson.webtv.net>
Source record: 102867

Uncle Peter wrote:
"Many universals don`t cover all the functions needed by Sony products."

I bought a Radio Shack 4-in-ONE REMOTE at the Big Lots Store for $6 and it works the TV, VCR, and cable box. The TV and VCR are Sony. Some RS Stores still sell this remote.

I tried to use the Radio Shack remote with a Phillips TV to no avail, so I bought a Phillips universal remote and it works just fine except this universal remote has no return to previous channel switch. Target gets $8 or $9 for the Philips (Magnavox) universal remote.

Best regards, Richard Harrison, KB5WZI

6302. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 05:06:44 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312222106.387fcc45@posting.google.com>
Source record: 102868

Richard
I think you are confusing low frequency aplications with
high frequency aplications. A flat sheet allows formation of
ground loops that then form their own emissions.
This is not desirable in high frequency aplications and
thus a common short circuit to ground for discharge is required.
Best regards
Art

ichard Clark <kb7qhc@comcast.net> wrote in message
news:<5769uvs62r9iu2pno9ng3a6ua5v0o8n2en@4ax.com>...
> On 19 Dec 2003 19:51:26 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
> >Can't see how a Faraday shield can be used if they are link coupled
>
> Hi Art,
>
> Nearly every power transformer on this planet uses a faraday shield
> between link coupled circuits. Those that don't (and they got to be
> dirt cheap from a garage shop operation) suffer from it too (as does
> the user).
>
> This is an old, old topic that Richard Harrison, KB5WZI, has
> described, explained, discussed to considerable bandwidth that should
> serve as a basis for your research in Google.
>
> 73's
> Richard Clark, KB7QHC

6303. Re: Rohn tower hinge or 5 ft section...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 05:14:39 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fe7d1af_2@news1.prserv.net>
Source record: 102769

Wes:

You are technically correct about the cement/concrete names, but I believe you will find the previously incorrect "cement" usage for concrete is now accepted because it has become the norm. Like the long term result of the incorrect use of "dumb". It is rarely used correctly these days.

And, placing is certainly correct for flatwork, but I've never heard of a "continuous place" for large continuous pours like major buildings and other structures. How many times did I hear that during the post-mortems of the WTC construction, for example?

--
Crazy George
Remove N O and S P A M imbedded in return address
"Wes Stewart" <n7ws@_arrl.net> wrote in message
news:8frduvcfrh6offt33g8i4u471lj9l8bs7d@4ax.com...
> On Sun, 21 Dec 2003 21:37:36 -0600, "Crazy George"
> <muNnscOh@attSglPobaAl.nMet> wrote:
>
> |Clint:
> |
> |When you pour the cement and put the crown on the top, make it at least
> |3/4"-1" higher in the center as it will probably drop some in the center
as
> |it cures. This is why so much "professional" cement flat work holds
water
> |in the middle. No one teaches the proper method of cement installation
any
> |longer.
>
> Sorry George, I can't help myself.<g>
>
> "Cement" is the stuff that holds the aggregate in "concrete" together
> and concrete is "placed," not "poured".
>
>

6304. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 05:25:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hkjfuvsb7010f737eh7kg3bjeo6oai302p@4ax.com>
Source record: 102770

On 22 Dec 2003 21:06:44 -0800, aunwin@insightbb.com (Art Unwin KB9MZ) wrote:

>Richard
>I think you are confusing low frequency aplications with
>high frequency aplications. A flat sheet allows formation of
>ground loops that then form their own emissions.
>This is not desirable in high frequency aplications and
>thus a common short circuit to ground for discharge is required.
>Best regards
>Art

Hi Art,

I am confusing nothing. A current cannot be induced without a path, if you do not provide any more than one terminus, there is no path EXCEPT TO GROUND and it is a common shared by both halves of the magnetic linked circuits (read your Terman). This means the circuits on both sides of the shield are electrically decoupled from each other and are driving ground directly - capacitively (the electric field). The sole purpose of the Power Transformer's Faraday Shield is EXACTLY for snubbing VLF/MF/HF/VHF/UHF coupling (there's no purpose to killing 50/60 Hz fields with a Faraday Shield, that just doesn't make sense in the first place).

The guff you are repeating is the ill-understood concepts of UHF/SHF circulating currents that could only be developed if the wavelength scale can support it. Are you talking about 900 MHz applications with 3 inch Faraday screens? I think not.

There's no mystery about this, dimension and frequency drive all such issues.

73's
Richard Clark, KB7QHC

6305. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 06:14:43 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <o3RFb.26455$gN.9457@fed1read05>
Source record: 102771

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bs8fc5$43s0$1@news3.infoave.net...
> While a transmitter looking into an impedence mismatch can be a problem,
> transforming the impedence the transmitter sees satisfies the transmitter
> and has no effect on antenna SWR. Everybody's happy, nothing changes as
far
> as SWR.

Now you're changing things by adding a tuner... the net effect is that the transmitter is now seeing a 1:1 swr. All we talked about was your claiming there was a preoccupation with SWR... if there was no problem with a high swr, then there's no need for the tuner you just inserted into your justification.

There is and always will be a need to present the transmitter with the lowest possible SWR, regardless of if it is accomplished with a well-tuned antenna or if that is not possible, inserting an antenna tuner between the transmitter and antenna. So you can't get away from a "preoccupation" with SWR no matter what you like to think. :)

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6306. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 06:26:14 UTC
From: CW <clinton.magers@comcast.net>
Message-ID: <aeRFb.180451$_M.828054@attbi_s54>
Source record: 102772

True but that's not the frequency he is trying to tune it for.

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:YmEFb.426478$Dw6.1312140@attbi_s02...
> There is absolutely nothing wrong with a VSWR of 1.7:1!!!
>
> >
> >
> >
>

6307. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 07:06:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bs8pii$k9q$1@titan.btinternet.com>
Source record: 102773

There is only one field electromagnetic field.

It has two components, electric and magnetic.

One component cannot exist without the other.

As the field travels through space at the velocity of light, one component generates the other, and vice-versa.

The magnetic field, as it sweeps by at high speed, induces a current in a short wire bent into the form of a loop.

The electric field, as it sweeps by, induces a voltage between the ends of a short straight length of wire (a dipole).

On a long length of wire of any shape, an appreciable fraction of a wavelength or longer, both appreciable currents and voltages will exist.

To sum up, a small loop is most sensitive to the magnetic component as in an electricity generator, and a straight wire with its ends is most sensitive to the electric component. But both effects MUST act together. They cannot be considered in isolation. As in any other electrical circuit Amps and Volts are always related by a resistance which depends on the length and shape of the wire.

And there are many more ways of describing it.

Reg.

6308. Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 10:24:12 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <bs954a$aptrk$1@ID-150848.news.uni-berlin.de>
Source record: 102774
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so that it can be either horizontally or vertically polarized? If so, can you please direct me to a website or whatever. Preference right now for a manual system, but would also take a look at motorised systems.

TIA.

Rich.

(Followup set to rec.radio.amateur.antenna, so all replies will go to this group).

6309. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 11:51:48 UTC
From: Maarten Hagg <maartenmiriam@hetnet.nl>
Message-ID: <bs9ae9$8sm$1@reader10.wxs.nl>
Source record: 102775

Hello group,

This is ONLY true for 'far field' sources.
In the Far Field (> 1 wavelenght) according to maxwell's law
the E-field and H-field are mutual dependent.
(natural impedance is : 120*Pi=377 Ohm)
In the Near Field (< 1 wavelenght) this is NOT true.
The natural impedance drops for H-field and raises for E-field.
This is why loop antenna's are less sensitive for local interference,
like light dimmers, TV sets ect.

Maarten Hagg
the Netherlands

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bs8pii$k9q$1@titan.btinternet.com...
> There is only one field electromagnetic field.
>
> It has two components, electric and magnetic.
>
> One component cannot exist without the other.
>
> As the field travels through space at the velocity of light, one component
> generates the other, and vice-versa.
>
>
> The magnetic field, as it sweeps by at high speed, induces a current in a
> short wire bent into the form of a loop.
>
>
> The electric field, as it sweeps by, induces a voltage between the ends of
a
> short straight length of wire (a dipole).
>
>
> On a long length of wire of any shape, an appreciable fraction of a
> wavelength or longer, both appreciable currents and voltages will exist.
>
>
> To sum up, a small loop is most sensitive to the magnetic component as in
an
> electricity generator, and a straight wire with its ends is most sensitive
> to the electric component. But both effects MUST act together. They
cannot
> be considered in isolation. As in any other electrical circuit Amps and

> Volts are always related by a resistance which depends on the length and
> shape of the wire.
>
> And there are many more ways of describing it.
> ---
> Reg.
>
>

6310. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 12:24:21 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <ufcguv07q1f01jd4ueqmd1rede4l2dssp5@4ax.com>
Source record: 102776

On Tue, 23 Dec 2003 03:55:45 GMT, Robert Casey <wa2ise@ix.netcom.com>
wrote:

>I think everyone knows that the old "Ethernet" "thicknet" is just
>foam RG8U with very good shielding. I was fishing some power
>BX cable in the walls/ceilings of the house, and took the opportunity
>to also fish some coax for the ham shack upstairs. I figured that
>I would use the Ethernet cable I had laying around as it is 50 ohm
>coax. And lower loss than RG58. Not that it much matters for
>HF for a 20 foot length. But if I wanted to operate 6m or 2m
>it would begin to. I have a vertical in the back yard fed by about
>15 feet of some rather ancient RG58 that then passes thru a hole
>in the house's wall about 2 feet above grade (well sealed with caulking).
>And in the basement a few feet in it meets the ethernet I just ran.
>This reduced the clutter of coax inside the shack for better spouse
>acceptance factor... Used a wall plate intended for phone jacks and
>F connectors to make a neat termination for the Ethernet (a BNC
>connector). Or if you have one an N barrel.
>
>I don't think any IT guys use Ethernet cable anymore, so maybe
>you can ask them to save some for you when they gut the ceilings,
>etc at work.

Be careful of the power handling capabilities of thicknet coax removed
from service. Be aware also that it has been in place for up to
twenty-five years. You do know how thicknet is accessed don't you? A
hole is drilled in the insulation and braid. A device called a
"vampire tap" is then clamped around the cable. The tap has a probe
that (sometimes!) contacts the center conductor. That can't be good
for the characteristics of the cable when removed, or the
weather-proofing either. Stop being such a damn cheapskate and buy
some good, new coax. It's better for your radios, it's less trouble
for you and you'll do your little bit to help the economy. Oh, yeah,
don't forget to recycle the old 10b2 and 10b5 cabling, that's just
about all it's good for.

Russ, KF4WXD and CCNP

6311. Re: fat conductor question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 12:36:09 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <ZEWFb.1942$PY7.1747@newssvr22.news.prodigy.com>
Source record: 102777

Many tnx for the excellent suggests!!!
it is much appreciated

larry
kd5foy

"larry d clark" <buddycl@swbell.net> wrote in message
news:32LEb.83$9p3.43604105@newssvr11.news.prodigy.com...
> hi
>
> i've got a question about how wires to use when making
> a fat conductor hf dipole(cage antenna)using wire equally
> spaced around a circular form. ie target diameter is 8
> inches, how many wires around the form, 4, 6, 8?
>
> tnx
>
> larry
> kd5foy
>
>

6312. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 13:48:51 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312230548.13f92708@posting.google.com>
Source record: 102778

If you ask "why" deeply enough, we'll get to a point where we have to say, "Because that's just the way it is." But a bit more explanation to what Reg wrote... If the loop is balanced and oriented properly, the voltages induced by the electric field will be equal amplitude and the same polarity, or very nearly so, and cancel out at the feedpoint, but the EMF induced in the loop by the magnetic component of the electromagnetic field will be there in full force. Look up "Faraday's Law of Magnetic Induction." One advantage of a small loop at low frequencies is that local "noise" sources are commonly predominantly electric-field...they have not fully developed at that distance into electromagnetic fields, and boundary conditions constrain them to be predominantly vertical near the ground, so if the loop is properly balanced and oriented in that field, it can reject much of the local "electrical" noise. There are also possibilities for using the directional "nulls" of the loop to find the direction of an incoming signal, if the loop is small, and there are advantages there, too, in having it respond to the magnetic component only. You can find more complete explanations in antenna books...for instance, King, Mimno and Wing, "Transmission Lines, Antennas and Waveguides."

Cheers,
Tom

dclapp@winternet.com (dclapp) wrote in message news:<da9cb33f.0312221539.1d05db8d@posting.google.com>...
> I've read that loop receiving antennas capture more of the magnetic
> field -- and less of the electrical field (true?) -- than other forms
> of antennas. Why is that?? Thanks in advance for any enlightenment!

6313. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 14:00:33 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fe84d24_3@news1.prserv.net>
Source record: 102780

Caution:

When rotating a Yagi to vertical polarization, the mast and feedline must be clear of all the antenna elements, and preferably any conductor in the plane of the elements is located outside the near field. Otherwise there is no pattern and forward gain and F/B both suffer, sometimes very badly. This then leads to some arrangement of 2 antennas on a cross boom which pivots in the middle. This has been described from time to time in all the ham magazines and other postings, but I don't have a specific URL. I have done it with my own design several times until I got enough towers to have both at the same time.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:bs954a$aptrk$1@ID-150848.news.uni-berlin.de...
> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
> that it can be either horizontally or vertically polarized? If so, can
you
> please direct me to a website or whatever. Preference right now for a
> manual system, but would also take a look at motorised systems.
>
> TIA.
>
> Rich.
>
> (Followup set to rec.radio.amateur.antenna, so all replies will go to this
> group).
>
>

6314. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 14:04:23 UTC
From: caljsi@aol.com
Message-ID: <20031223090423.26118.00001635@mb-m06.aol.com>
Source record: 102779

Many years ago, polarization on 2 meters was a hotly debated subject. For instance, in New England, horlzontal was the preference but in New Jersey vertical ruled. Now this was around 1950, well before FM became widely used on 2 meters. So there were several articles in QST and CQ about so-called "flop-over" arrays. Probably the best known was the pair of 5 element Yagis, the design for which was worked out by a W2 in Southern New Jersey.
Fast-forwarding by 50 years or so, I would think you could do a similar thing with a pair of Yagis. It should work out better than a single Yagi, since the feedline wouldn't be parallel to and in the same plane as the elements when you're using vertical polarization.
73
Cal K4JSI

6315. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 14:08:06 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <a%XFb.758$UB3.212@nwrddc03.gnilink.net>
Source record: 102781

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:bs954a$aptrk$1@ID-150848.news.uni-berlin.de...
> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
> that it can be either horizontally or vertically polarized? If so, can
you
> please direct me to a website or whatever. Preference right now for a
> manual system, but would also take a look at motorised systems.
>
> TIA.
>
> Rich.
>
Do a Google search under 70cM EME. Polarity rotation to avoid Faraday loss
is routine with these arrays- but they are arrays- so the mast/ feedline
plays virtually no roll in pattern- as it assuredly will in a single yagi
when vertically polarized.

Dale W4OP

6316. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 14:12:10 UTC
From: Gary Smith <swordtail@dodo.com.au>
Message-ID: <3fe84d39$1@news.comindico.com.au>
Source record: 102782

Thankyou for that input Dave, i will notify the owner and see what he comes
up with.

Gary

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:xiJFb.456020$275.1339004@attbi_s53...
> Gary, also be aware that if this is a mobile type antenna, that is ...
> short compared to a 1/2 wavelength, then resonance is not indicated by
> lowest VSWR. Resonance has nothing to do with VSWR. Resonance means the
> frequency where there is no reactance.
>
> The radiation resistance of short antennas on 80 meters can be as low as
> 4 ohms resulting in a VSWR of 12:1 at resonance!! Measure the antenna's
> resonant frequency using an MFJ 259B or equivalent.
>
> What you may need is an auto-tuner mounted at the antenna.
>
> Deacon Dave, W1MCE
>
> Gary Smith wrote:
>
> > Sorry, thats SWR of around 1.7:1 at 3.7 MHz...
> >
> >
> > "Gary Smith" <swordtail@dodo.com.au> wrote in message
> > news:3fe6b5e8@news.comindico.com.au...
> >
> >>Hi, a friend of mine has a Yaesu RSM-2 10/80 metre antenna. He says it
has
> >>an SWR of around 3.7 MHz and wants to lower it for around 3.57 but the
> >>adjustable tip doesnt affect it enough. Anyone got any tuning tips or
> >>specs/instructions/comments?
> >>
> >>Thankyou
> >>
> >>Gary
> >>
> >>
> >
> >
> >
>

6317. Re: Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 14:31:20 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <YkYFb.67820$Dt6.1671662@twister.tampabay.rr.com>
Source record: 102783

HERE'S where you need to start
http://www.geocities.com/swl_yb400pe/slinkypage.html

yodar

"Cecil Moore" <Cecil.A.Moore@ieee.ONEDOT.org> wrote in message
news:3fe5e661_2@corp.newsgroups.com...
> JDer8745 wrote:
> > A while back a posted a query about Slinky antennas. I got several nice
replies
> > for which I want to thank the senders.
> >
> > Later I returned to this group only to find I had accidentally marked
all the
> > threads as READ. Boy is my face RED.
> >
> > Q: How can I undo this error? I bet I'm not the only one who has done
it.
>
> Set your newsreader to "sort by thread" and look for the subject,
> "Slinky Antenna". Or go to http://groups.google.com/ and type in
> rec.radio.amateur.antenna and look for your thread.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
>

6318. Re: Marked All Read HELP! SLINKY

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 15:05:09 UTC
From: jder8745@aol.com
Message-ID: <20031223100509.15352.00001739@mb-m03.aol.com>
Source record: 102784

TNX!!!

Jack, K9CUN

6319. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 15:12:33 UTC
From: jder8745@aol.com
Message-ID: <20031223101233.15352.00001740@mb-m03.aol.com>
Source record: 102785

Someone sed:

"There is and always will be a need to present the transmitter with the
lowest possible SWR,..."

It's actually to present the xmtr with the proper load impedance with or
without an actual antenna connected. If no antenna is connected but instead,
say, a dummy load, there is no SWR because there is no tl.

Jack, K9CUN

6320. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 15:16:27 UTC
From: jder8745@aol.com
Message-ID: <20031223101627.15352.00001741@mb-m03.aol.com>
Source record: 102786

If you are talking about a mobile installation where the tl is only 6 feet long, what difference does it make if the SWR is high? (assuming that the line voltage is not so high that it arcs through the dielectric)

73 de Jack, K9CUN

6321. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 15:35:25 UTC
From: Maarten Hagg <maartenmiriam@hetnet.nl>
Message-ID: <bs9nnuekd1@reader08.wxs.nl>
Source record: 102787

The way Tom tells us is a good way to tell it.

And for those who wonder are there any on the market?
There will be one soon .

See URL : http://home.hetnet.nl/~maartenmiriam/index.html
For a full colour brochure, drop me an email.

Maarten

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0312230548.13f92708@posting.google.com...
> If you ask "why" deeply enough, we'll get to a point where we have to
> say, "Because that's just the way it is." But a bit more explanation
> to what Reg wrote... If the loop is balanced and oriented properly,
> the voltages induced by the electric field will be equal amplitude and
> the same polarity, or very nearly so, and cancel out at the feedpoint,
> but the EMF induced in the loop by the magnetic component of the
> electromagnetic field will be there in full force. Look up "Faraday's
> Law of Magnetic Induction." One advantage of a small loop at low
> frequencies is that local "noise" sources are commonly predominantly
> electric-field...they have not fully developed at that distance into
> electromagnetic fields, and boundary conditions constrain them to be
> predominantly vertical near the ground, so if the loop is properly
> balanced and oriented in that field, it can reject much of the local
> "electrical" noise. There are also possibilities for using the
> directional "nulls" of the loop to find the direction of an incoming
> signal, if the loop is small, and there are advantages there, too, in
> having it respond to the magnetic component only. You can find more
> complete explanations in antenna books...for instance, King, Mimno and
> Wing, "Transmission Lines, Antennas and Waveguides."
>
> Cheers,
> Tom
>
> dclapp@winternet.com (dclapp) wrote in message
news:<da9cb33f.0312221539.1d05db8d@posting.google.com>...
> > I've read that loop receiving antennas capture more of the magnetic
> > field -- and less of the electrical field (true?) -- than other forms
> > of antennas. Why is that?? Thanks in advance for any enlightenment!

6322. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 17:00:25 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312230900.281877c1@posting.google.com>
Source record: 102788

richardharrison@webtv.net (Richard Harrison) wrote in message
news:<2897-3FE7BF84-421@storefull-2314.public.lawson.webtv.net>...
> Art, KB9MZ wrote:
> "---he has seen commercially were pock marked because of flashovers."
>
> True. It mystified me that lightning preferred the Faraday screen to the
> made for the purpose arc-gap across the base insulator. It may result
> from impedance discontinuity. The surge impedance of the tower depends
> on how skinny it is. The rigid rod connecting a tower to the "dog house"
> network is at a certain height above the earth which gives the rod a Zo
> as a single conductor transmission line, then this line connects with an
snip

.
>
> The bandwidth of standing wave antennas may be small when compared with
> the frequency range allocated for an amateur band, but as compared with
> the intermediate frequency passband of the receiver, the antenna
> bandwidth is likely large. The Q of the antenna is lowered by radiation
> resistance which is the antenna`s end product.

Hold it right there please Richard,

My antenna is more than just a radiator it is a 'band pass filter'
purposefully made that way to REJECT unwanted signals at the onset !
The normal antenna supplies everything to the radio whether you like
it or not. Not only that, it AMPLIFIES it before you supply the
filtering effect of a crystal.
Even tho the crystal narrow the band pass for listening purposes the
unwanted
signals have already entered the radio and contributed to the noise
floor.
I realise that most people separate the function of the antenna from
the receiver and thus do not consider it in exactly the same way.
By the way my screen was a wire tray so yesterday I cut away the
horizontal
struts. One swallow doesn't make a summer but the atmospheric noise
was down a full S unit from yesterday even tho it was raining and a
snow front moving in.
Things like this fits right in with my antenna design purposes which
is to make use of networks
Best Regards
Art

>
> Best regards, Richard Harrison, KB5WZI

6323. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 17:33:02 UTC
From: jder8745@aol.com
Message-ID: <20031223123302.15374.00001686@mb-m04.aol.com>
Source record: 102789

"Now you're changing things by adding a tuner... the net effect is that the transmitter is now seeing a 1:1 swr."

So the sending end impedance is the Zo of the line. What if that value is NOT what the xmtr needs to see for a match to its output. E.g. The tl has a Zo of 398 Ohms, the SWR is 1 so the transmitter sees a load impedance is 398 Ohms. May be bad for the xmtr that wants to work into diffrent load, say 50 Ohms or so.

73 de Jack, K9CUN

6324. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 18:27:38 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312231027.1727aeda@posting.google.com>
Source record: 102790

Richard you are a smart guy with respect to radio matters so you must
be misinterpreting things that are being said on this thread
That commercial radio stations use tines is evidence to me that they
serve a purpose i.e. electrostatic shielding, not everything, just
electrostatic stuff
(ignoring harmonics e.t.c.)
As for low frequency use, that would include audio, not just 50/60
which you refer to 'power . Now you say look at Terman and I have, not
only the section on transformers but on coupling circuitry...way back
to the days of spark gaps and ticklers, each of which are treated
differently by not only Terman but also by others. You will also note
that audio cables have sheet like covering just like books do with
TOTAL shielding. Pretty much all books on fields and waves have a
section of total shielding of nearby circuits with special reference
to TOTAL enclosure and the effects on circuits or inductances that are
so enclosed.
With all that being said and getting back to the initial area of
discussion
where Richard alluded to the picket fence. Why do you think that the
broadcast industry hung on to the ungainingly picket fence after all
these years and why would it not descriminate with regard to other
influences ?

Best regards
Art

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<hkjfuvsb7010f737eh7kg3bjeo6oai302p@4ax.com>...
> On 22 Dec 2003 21:06:44 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >Richard
> >I think you are confusing low frequency aplications with
> >high frequency aplications. A flat sheet allows formation of
> >ground loops that then form their own emissions.
> >This is not desirable in high frequency aplications and
> >thus a common short circuit to ground for discharge is required.
> >Best regards
> >Art
>
> Hi Art,
>
> I am confusing nothing. A current cannot be induced without a path,
> if you do not provide any more than one terminus, there is no path
> EXCEPT TO GROUND and it is a common shared by both halves of the

> magnetic linked circuits (read your Terman). This means the circuits
> on both sides of the shield are electrically decoupled from each other
> and are driving ground directly - capacitively (the electric field).
> The sole purpose of the Power Transformer's Faraday Shield is EXACTLY
> for snubbing VLF/MF/HF/VHF/UHF coupling (there's no purpose to killing
> 50/60 Hz fields with a Faraday Shield, that just doesn't make sense in
> the first place).
>
> The guff you are repeating is the ill-understood concepts of UHF/SHF
> circulating currents that could only be developed if the wavelength
> scale can support it. Are you talking about 900 MHz applications with
> 3 inch Faraday screens? I think not.
>
> There's no mystery about this, dimension and frequency drive all such
> issues.
>
> 73's
> Richard Clark, KB7QHC

6325. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 18:46:51 UTC
From: mike@corn2.freeserve.co.uk
Message-ID: <3fe88c23.943440017@news.freeserve.net>
Source record: 102791

Many years ago I used a car windscreen wiper motor and gearbox to do
just this. IRRC the boom was monted in two ball races and there was an
operating arm , set at 45 degrees to the main polarisation, which was
attached to the wiper motor and the boom. Sorry but I really can't
remember any further details but ISTR that I had to make the motor
operate in "one wipe" mode by frigging the switch.
hth and seasons wotzits, Mike W, G8NXD
--
On Tue, 23 Dec 2003 10:24:12 -0000, "Richard"
<nearlynews_email@ntlworld.com> wrote:

>Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
>that it can be either horizontally or vertically polarized? If so, can you
>please direct me to a website or whatever. Preference right now for a
>manual system, but would also take a look at motorised systems.
>
>TIA.
>
>Rich.
>
>(Followup set to rec.radio.amateur.antenna, so all replies will go to this
>group).
>
>

6326. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 19:24:47 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FE8967D.9030604@get.lost>
Source record: 102792

Richard wrote:
> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
> that it can be either horizontally or vertically polarized? If so, can you
> please direct me to a website or whatever. Preference right now for a
> manual system, but would also take a look at motorised systems.

VHF/UHF antennas are cheap and small enough so that you can make/buy two
and mount them 90 degree apart and have two separate feeds, if you feel
you absolutely need different polarizations.
Iow, any mechanical rotation would be either more expensive, more
complicated or more time consuming (or all of the above) than simply
installing two antennas.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

6327. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 19:54:20 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <bsa6gg$avbv4$1@ID-150848.news.uni-berlin.de>
Source record: 102793

Mike W wrote:
> Many years ago I used a car windscreen wiper motor and gearbox to do
> just this. IRRC the boom was monted in two ball races and there was an
> operating arm , set at 45 degrees to the main polarisation, which was
> attached to the wiper motor and the boom. Sorry but I really can't
> remember any further details but ISTR that I had to make the motor
> operate in "one wipe" mode by frigging the switch.
> hth and seasons wotzits, Mike W, G8NXD

Yep, that's an idea.

I could buy 2 yagis, it's not really the expense, but a question of loading
on my scaffolding pole mast! :c)

Or I figure a peice of string and some kind of mechanism.

6328. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 20:55:33 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <WbqdnSUkhclVNnWiRVn-jw@comcast.com>
Source record: 102794

> VHF/UHF antennas are cheap and small enough so that you can make/buy two
> and mount them 90 degree apart and have two separate feeds, if you feel
> you absolutely need different polarizations.

Double the ice/wind load, and double the weight.
Though the weight might be equal with a rotatable single, with the
mechanism.

6329. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 21:04:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4d6huvg6jnl8gp2lt48s73sb2o4fek40nq@4ax.com>
Source record: 102795

On 23 Dec 2003 10:27:38 -0800, aunwin@insightbb.com (Art Unwin KB9MZ) wrote:

>That commercial radio stations use tines is evidence to me that they
>serve a purpose i.e. electrostatic shielding, not everything, just
>electrostatic stuff

And what have I written that would suggest otherwise?

>(ignoring harmonics e.t.c.)

Ignoring harmonics? Read your Terman. Read Richard Harrison's postings.

>As for low frequency use, that would include audio, not just 50/60
>which you refer to 'power .

Faraday shields are used universally there for the same reasons they are used in ELF/VLF/LF/MF/HF/VHF/UHF so there is absolutely no argument to made for or against ANY band. As I said, wavelength and physical size dominate ALL considerations and no one is talking about a 6 inch shield used in the SHF.

Or are you?

>Now you say look at Terman and I have, not
>only the section on transformers but on coupling circuitry...way back
>to the days of spark gaps and ticklers, each of which are treated
>differently by not only Terman but also by others.

Art, did you actually read Terman? You offer nothing in that regard to support or negate any discussion here. I have references going back to the spark gap days of 100 years ago and nothing there bears on any of this additional discussion you are bringing to the mix.

For the mythical lurker, such a reference is found on page 39 of "Electronic and Radio Engineering" (1955 ed.) and specifically to the matter of tines in problem 2-45. The matter of its construction is strictly a matter of convenience as solid conductors would work as long as there is no complete loop introduced by grounding the sheet at two (2) points. This, as I've pointed out in recent posts, is the commonplace of neophytes going hog wild making multiple grounds and "curing" problems where the cure kills the patient. This last comment is the assignment to Terman's problem. He pointedly uses the one word imperative: "Explain."

> You will also note
>that audio cables have sheet like covering just like books do with

>TOTAL shielding. Pretty much all books on fields and waves have a
>section of total shielding of nearby circuits with special reference
>to TOTAL enclosure and the effects on circuits or inductances that are
>so enclosed.

There is no such thing as total shielding from these rather ordinary sources you have access to; except as an academic wet dream argued by philosophers who have not actually had to perform a total shielded solution. Some of the worst interference problems I've solved have come from "totally shielded" designs by pHDs. Again, wavelength and physical size will not be denied.

>With all that being said and getting back to the initial area of
>discussion
>where Richard alluded to the picket fence. Why do you think that the
>broadcast industry hung on to the ungainingly picket fence after all
>these years and why would it not descriminate with regard to other
>influences ?
>
>Best regards
>Art
>
Hi Art,

To answer your last question - there are far more issues considered in the practical world of commercial design that require no proof through cut-and-paste philosophies. In simple terms, Production Engineering works and its success does not breed the need for a new science or physics. Just as fractal antennas work (any hank of wire does too); there was no need to proceed to invent a fractal electromagnetics to tart up the "new" idea (those mantles of nobility didn't add even a tenth dB more gain for all the pHd's efforts to publish).

73's
Richard Clark, KB7QHC

6330. Re: Lightning Arrester

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 21:09:18 UTC
From: richardharrison@webtv.net
Message-ID: <658-3FE8AEFE-186@storefull-2311.public.lawson.webtv.net>
Source record: 102796

Art, KB9MZ wrote:
"That commercial stations use tines is evidence to me that they serve a purpose, i.e. electrostatic shielding, not everything, just electrostatic stuff."

That is exactly correct. The magnetically coupled coils have a rather broadband response, but the coupling coefficient is less than 1. If you took the advice of others in this thread and checked Cebik`s pages, he advises that incomplete coupling (k<1) does not insure inefficiency. High efficiency is available with loose coupling though throughput may be constricted.

Reduced magnetic coupling may make additional coupling from capacitance bypassing the transformer throughput more significant. Impedance of the gratitous capacitance, bypassing the coupling transformer, at the 2nd harmonic frequency is only 1/2 the impedance of that at the fundamental frequency. Likewise, at the 3rd harmonic frequency, impedance of the capacitive reactance is only 1/3 that at the fundamental frequency. The stray coupling capacitance amounts to a high-frequency boost circuit which is thwarted by the Faraday screen.

Faraday screening to eliminate priority harmonic coupling to the antenna is an important advantage in harmonic suppression.
I think the Faraday screen is an expected feature of coupling to the antenna tower in medium wave broadcasting.

My copy of Terman isn`t at hand now, but I recall that he treats skin effect, iron-core transformer Faraday screens, and air-core transformer Faraday screens. Richard Clark is right. The implementations are slightly different depending if it`s an iron-core low frequency transformer or an air-core high-frequency transformer. The aim is the same, eliminating capacitive coupling between the transformer coils.

At short wave frequencies there are other practical ways to rid antennas of harmonic content. I recall King, Mimno, and Wing describing tuned transmission line traps to expel harmonics.

Kraus says antenna useful bandwidth is generally a matter of both pattern and impedance. In a thin dipole, Kraus says the pattern usually changes slowly with frequency, so likely it`s impedance variation which limits the useful bandwidth.

In a fat antenna, or in a conical, horn, lens, rhombic, and some others, the impedance is so well behaved that the pattern variation may limit the useful bandwidth.

Kraus` 1950 2nd edition of "Antennas" includes several transmission line tricks for matching short wave antennas over a wider bandwidth. See item 14-24 (Matching Arrangements) on page 434.

Best regards, Richard Harrison, KB5WZI

6331. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 22:23:25 UTC
From: w4jle <W4JLE@pbtcomm.net>
Message-ID: <bsaf98$557i$1@news3.infoave.net>
Source record: 102797

That is pure nonsense! The tuner is only an impedence matching device. It has NO effect on SWR.

Have you ever run mobile? Did you tune for best SWR, or best field strength? Did they occur at the same tuning points?

If you said SWR, back to Ch 19 and co-phased antennas.

"Jerry Bransford" <jerrypb@mecox.net> wrote in message news:o3RFb.26455$gN.9457@fed1read05...
> "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> news:bs8fc5$43s0$1@news3.infoave.net...
> > While a transmitter looking into an impedence mismatch can be a problem,
> > transforming the impedence the transmitter sees satisfies the transmitter
> > and has no effect on antenna SWR. Everybody's happy, nothing changes as far
> > as SWR.
>
> Now you're changing things by adding a tuner... the net effect is that the
> transmitter is now seeing a 1:1 swr. All we talked about was your claiming
> there was a preoccupation with SWR... if there was no problem with a high
> swr, then there's no need for the tuner you just inserted into your
> justification.
>
> There is and always will be a need to present the transmitter with the
> lowest possible SWR, regardless of if it is accomplished with a well-tuned
> antenna or if that is not possible, inserting an antenna tuner between the
> transmitter and antenna. So you can't get away from a "preoccupation" with
> SWR no matter what you like to think. :)
>
> Jerry
> --
> Jerry Bransford
> To email, remove 'me' from my email address
> KC6TAY, PP-ASEL
> See the Geezer Jeep at
> http://members.cox.net/jerrypb/
>
>

6332. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 22:43:59 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FE8C529.7040204@ix.netcom.com>
Source record: 102798

Russ wrote:

>Be careful of the power handling capabilities of thicknet coax removed
>from service.
>
I'm not looking to run a kilowatt thru it. And I know that foam coax is
less capable
than solid coax. I'm only running 100W anyway.

> Be aware also that it has been in place for up to
>twenty-five years. You do know how thicknet is accessed don't you? A
>hole is drilled in the insulation and braid. A device called a
>"vampire tap" is then clamped around the cable. The tap has a probe
>that (sometimes!) contacts the center conductor. That can't be good
>for the characteristics of the cable when removed, or the
>weather-proofing either.
>
I'm aware of vampire taps, and the cable I used had none. And the cable
has been indoors
all the time, and in good condition. I used to use it on 2m and it
worked well for that.

> Stop being such a damn cheapskate and buy
>some good, new coax.
>
Wouldn't be a true ham, then.... ;-)

>Russ, KF4WXD and CCNP
>
>
73s

6333. Re: questions regarding full wave loop antenna (as a "loop skywire")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-23 23:50:31 UTC
From: sjt <k5gak@arrl.net>
Message-ID: <3FE8D4C7.1030102@arrl.net>
Source record: 102799

I just built a aimilar antenna, 70'/side and 15' high. I used #17
aluminum fence wire, its cheap and light.
I made open wire transmission line for the phasing and transmission
lines from the same wire. Im using a
Nye Viking Matchbox to tune the antenna. The Z varies widely so I doubt
if you will find a universal match
using baluns if you operate on all HF bands.

You could make it from 2 G5RV's

Do you have the article by VE2CV? If not get it from ARRL
The antenna works much better than the GAP that I have.
73
Spencer

Eric Oyen - N7ZZT wrote:
> ok,
>
> I've read what I could on full wave loops, but the info I have is very
> sketchy about the feedpoint connection.
>
> 1. do I need a balun?
> 2. can I use a hairpin matcher after a balun to resonate the antenna and
> acheive proper impeadance?
> so help is definitely requested here
>
> you may contact me directly at n7zzt at hotmail dot come (you will have to
> type this in as a normal e-mail as I am trying to reduce spam)
>
> Eric Oyen
> DE N7ZZT
> Phoenix, Arizona
>

6334. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 00:14:52 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FE8DA7E.9030802@get.lost>
Source record: 102800

Dave VanHorn wrote:

>>VHF/UHF antennas are cheap and small enough so that you can make/buy two
>>and mount them 90 degree apart and have two separate feeds, if you feel
>>you absolutely need different polarizations.
>
> Double the ice/wind load, and double the weight.
> Though the weight might be equal with a rotatable single, with the
> mechanism.

Ice and wind load are hardly a concern on VHF, unless one is stacking a
moonbounce array.

73 ... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

6335. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 00:44:23 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <_9CdnXvgo4n4fHWiRVn-tA@comcast.com>
Source record: 102801

> Ice and wind load are hardly a concern on VHF, unless one is stacking a moonbounce array.

I know a few guys who would like to sell you some antennas that don't have anything wrong with them, then..

6336. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 02:05:29 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <Kv6Gb.26526$gN.4399@fed1read05>
Source record: 102802

-
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

"w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
news:bsaf98$557i$1@news3.infoave.net...
> That is pure nonsense! The tuner is only an impedence matching device. It
> has NO effect on SWR.

Of course not, for cripe's sakes would you guys stop with the looking for
any possible way to get around the 'intent' of the answer??? OF COURSE a
tuner is an impedence matching device. A tuner is used when there's no
other way to get an antenna matched to the frequency... when the antenna's
SWR is too high. Cripes, I'm sorry I pissed you guys off for daring to say
adjusting for minimum SWR instead of the proper impedence. When I was in
the industry, I dare say no one that worked in the industry would have
batted an eye or even thought anything about it or even WORRIED about the
nano-better correctness of saying you were matching impedences instead of
getting the SWR down since that is the indication used by EVERY tuner I have
ever used to CORRECT THE IMPEDENCE... SWR. Does your antenna tuner indicate
SWR or impedence? I know mine indicates SWR. Pardon me all to hell.

Jerry
>
> Have you ever run mobile? Did you tune for best SWR, or best field
strength?
> Did they occur at the same tuning points?
>
> If you said SWR, back to Ch 19 and co-phased antennas.
>
>
>
> "Jerry Bransford" <jerrypb@mecox.net> wrote in message
> news:o3RFb.26455$gN.9457@fed1read05...
> > "w4jle" <W4JLE(remove this to reply)@pbtcomm.net> wrote in message
> > news:bs8fc5$43s0$1@news3.infoave.net...
> > > While a transmitter looking into an impedence mismatch can be a
problem,
> > > transforming the impedence the transmitter sees satisfies the
> transmitter
> > > and has no effect on antenna SWR. Everybody's happy, nothing changes
as

> > far
> > > as SWR.
> >
> > Now you're changing things by adding a tuner... the net effect is that
the
> > transmitter is now seeing a 1:1 swr. All we talked about was your
> claiming
> > there was a preoccupation with SWR... if there was no problem with a
high
> > swr, then there's no need for the tuner you just inserted into your
> > justification.
> >
> > There is and always will be a need to present the transmitter with the
> > lowest possible SWR, regardless of if it is accomplished with a
well-tuned
> > antenna or if that is not possible, inserting an antenna tuner between
the
> > transmitter and antenna. So you can't get away from a "preoccupation"
> with
> > SWR no matter what you like to think. :)
> >
> > Jerry
> > --
> > Jerry Bransford
> > To email, remove 'me' from my email address
> > KC6TAY, PP-ASEL
> > See the Geezer Jeep at
> > http://members.cox.net/jerrypb/
> >
> >
>
>

6337. Re: 2m horz loop where????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 02:11:04 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <YA6Gb.122978$%h4.68016@twister.tampabay.rr.com>
Source record: 102803

check out www.M2inc.com and look at there HO loop
also www.par-electronics.com has one
also if you wish to build one go here
www.ac6v.com click on antenna projects
good luck

6338. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 06:11:10 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FE92DFB.4050304@ix.netcom.com>
Source record: 102804

Jim Kelley wrote:

>Cecil Moore wrote:
>
>
>>William F. Hagen wrote:
>>
>>
>>>an antenna has an impedence at the frequency it is being used at, and an
>>>impedance at its resonant frequency. If either of these impedences happen to be
>>>50 ohms and the coax being used is 50 ohms, and the transceiver is working at
>>>50 ohms, then the swr is 1:1, and the swr is on the transmission line, not on
>>>the antenna.
>>>
>>>
>
>
>
>>One source of confusion is, on systems with both coax and ladder-line,
>>the SWR on the coax Vs the SWR on the ladder-line. A 12:1 SWR on 600
>>ohm ladder-line can result in a 50 ohm SWR of 1:1 without a tuner.
>>The ladder-line can be used as an impedance transformer.
>>
>>
>
>That lily really didn't need the gold paint job, Cecil.
>
>But thanks for providing a source of confusion. How could we have a
>good argument without one. :-)
>
>73, Jim AC6XG
>
>
For additional confusion, *IF* your transmission line (coax or ladder
line) is low loss,
and if your rig can load into it, SWR doesn't much matter. Reflected
power will
"bounce" off the rig and go back to the antenna. Our rigs actually
present a very
low impedance to the antenna and transmission line. This is by design;
we want all
of the RF we manufactured to go to the antenna and none wasted as heat
in the
rig. Our rigs don't really look like the Thevinian equivalent (voltage

source with
internal resistor of 50 ohms) feeding a 50 ohm load. For a fixed
voltage and fixed
internal resistance, using a 50 ohm load gets you max power *into the load*,
ignoring the wasted power in the source resistance. Your electric power
company doesn't do that, efficiency would suck. They want all the energy
used to be in paying customer's loads. They do that by keeping their source
impedance very low. Actually, our rigs have a source impedance
of only a few ohms, and are designed to pump power into a 50 ohm load.
There is a delay involved with the reflected power getting to the
antenna, but
for the narrow bandwidth signals we transmit (SSB voice or code) this is not
significant. It will matter for amateur television up on UHF, though.

You can get a lower SWR reading than what your antenna is doing if you have
lossy feedline. The lossy feedline is absorbing some of the reflected
power.
So don't be suprised at the worse SWR if you upgrade your coax. As long as
you can load up into it, it's not a real problem.

==========

"What did Santa say at the house of ill repute?"
"Ho ho ho!"

==========
Keep Santa in Xmas

6339. Problem with 40m halfwave off-centre toroidal balun feed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 07:27:35 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <85fbsb-652.ln@p400bob.lse.com.au>
Source record: 102806

Hi all

With the approach of HF priviliges for Australian "limited" amateurs I have put up a few antennas for various HF bands.

I am having trouble getting a 40 metre dipole going. It is a little unusual in that due to distance and cable constraints I am feeding it 3 metres from one end. I have modelled this on Mininec and it says 200-300 ohms.

To get the 50 ohm line impedence I constructed a broadband RF balun on a Neosid F25 ring. I should point out that I already have one of these working on a single 20m quad loop, transforming the line to about 100 ohms. The ring on the 40m antenna has 10 turns on the primary (about 200 ohms inductive reactance) and 29 on the secondary. It has taps at turns 10, 14, 20, 25 and 29 for 100, 200, 300 amd 400 ohms respectively.

The modelling I did gave me a start point of about 18.8 metres. I guess this is because of ground proximity and 4mm thick wire. The problem is that the thing loads up real good on 11.0MHz and has about 2.5:1 VSWR on 5.9MHz. The 50 coax feed is an arbitary length of RG58 maybe 15 metres long. On 40m it is unusable!

The question is, does the balun secondary contribute to the the antenna resonance sufficiently to shift its operating frequency that much? I'll admit I am a little in the dark here and any help/thoughts would be appreciated. I am thinking that the off centre feed is seeing the reactance as a significant component of the resonant frequency.

Cheers

Bob VK2YQA

--

(The reply address is broken. Put bcnoop in front of the at!)

6340. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 07:34:49 UTC
From: Bob <bcnntp@optusnet.com.au>
Message-ID: <pifbsb-u52.ln@p400bob.lse.com.au>
Source record: 102807

Hi Richard

My 5 element 2m yagi is setup that way but I'll admit I didnt do it in a pretty manner.

The attachment on the rear of the antenna has 2 U bolts for the mast and two plates shaped to fit the boom over about a 6 inch length. I simply put some washers (spacers) between the two plates so the boom would interference fit.

I then pulled the boom back a little so maybe 2" was showing behind the clamp, drilled a hole in it and bolted a flat piece of gal steel strip about 2 ft long either side on it. The ends of the gal flat were also bolted together.

I then attached a piece of rope to each end of the gal strips and greased up the inside of the clamp plates.

Real horrible but it works!

Cheers Bob VK2YQA

> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
> that it can be either horizontally or vertically polarized? If so, can
> you
> please direct me to a website or whatever. Preference right now for a
> manual system, but would also take a look at motorised systems.
>
> TIA.
>
> Rich.
>
> (Followup set to rec.radio.amateur.antenna, so all replies will go to this
> group).

--

(The reply address is broken. Put bcnoop in front of the at!)

6341. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 08:09:55 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsbhki$r1k$1@hercules.btinternet.com>
Source record: 102805

Standing wave ratios on ordinary 1/2-wave dipoles can soar as high as 10-to-1.

With all the fuss made about excessive SWR everywhere else, why is it the guru's never mention it, let alone show anxiety about it? What are they trying to cover up?

6342. Re: Problem with 40m halfwave off-centre toroidal balun feed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 14:09:17 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <h6hGb.2032$UB3.873@nwrddc03.gnilink.net>
Source record: 102808

"Bob" <bcnntp@optusnet.com.au> wrote in message
news:85fbsb-652.ln@p400bob.lse.com.au...
> Hi all
>
> With the approach of HF priviliges for Australian "limited" amateurs I
have
> put up a few antennas for various HF bands.
>
> I am having trouble getting a 40 metre dipole going. It is a little
unusual
> in that due to distance and cable constraints I am feeding it 3 metres
from
> one end. I have modelled this on Mininec and it says 200-300 ohms.
>
> To get the 50 ohm line impedence I constructed a broadband RF balun on a
> Neosid F25 ring. I should point out that I already have one of these
> working on a single 20m quad loop, transforming the line to about 100
ohms.
> The ring on the 40m antenna has 10 turns on the primary (about 200 ohms
> inductive reactance) and 29 on the secondary. It has taps at turns 10, 14,
> 20, 25 and 29 for 100, 200, 300 amd 400 ohms respectively.
>
> The modelling I did gave me a start point of about 18.8 metres. I guess
this
> is because of ground proximity and 4mm thick wire. The problem is that the
> thing loads up real good on 11.0MHz and has about 2.5:1 VSWR on 5.9MHz.
The
> 50 coax feed is an arbitary length of RG58 maybe 15 metres long. On 40m it
> is unusable!
>
> The question is, does the balun secondary contribute to the the antenna
> resonance sufficiently to shift its operating frequency that much? I'll
> admit I am a little in the dark here and any help/thoughts would be
> appreciated. I am thinking that the off centre feed is seeing the
reactance
> as a significant component of the resonant frequency.
>
> Cheers
>
> Bob VK2YQA
>
>You might try some shunt capacity on the 50 Ohms side- I have seen this on
a broadband 10:1 I built.
I think my first choise however, would be a simple L matching network- very

predictable and easily built. Shunt C on the Hi Z side and a series inductor to the 50 Ohm center conductor. Then follow it up with a current mode choke. Coaxial cable makes a fine HV cap.

Dale W4OP

6343. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 16:58:09 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FE9C5A1.809E80AE@cwis.net>
Source record: 102809

Richard,
I remember seeing something like your string idea. Used a
'barn-door' hinge with a rope-loop attached. Pull one rope the
antenna 'stood up', pull the other it laid down. Ran the ropes
through a couple of 'turning blocks', into the shack's window.
The 'turning blocks were low on the tower so the rope sort of
twisted around the tower when the beam was turned. Didn't seem
to be much of a bother...
'Doc

6344. jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 17:16:09 UTC
From: jaepstein_63@yahoo.com
Message-ID: <27e4d2e8.0312240916.153caa8d@posting.google.com>
Source record: 102810

Hi,

I'm sorry if I'm in the wrong newsgroup, but you folks seem to know
more about antennas than anyone else on usenet.

The previous owner of my house installed a fairly substantial roof
antenna for radio reception, because his favorite FM radio station was
50 miles away. Here's a picture:
http://epsteinmania.com/jonathan/public/antenna.jpg

I now would like to receive HDTV off-the-air programming at my house.
It turns out that I will need to add about a 60-foot cable run to use
this existing antenna, but it seems that this would be the most
practical method. I'm actually in a pretty good TV reception area ...
when I typed my address into antennaweb.org, it says
that I only need a "small multidirectional antenna":
http://www.antennaweb.org/aw/yellow.asp

So my questions are:
1) can I jury-rig this existing antenna for HDTV OTA reception?
AND
2) how do I do it? E.g., to what part of the antenna do I attach an
RG6 cable, and what adapters if any are necessary.

TIA,

Jonathan

6345. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:17:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7rkjuv0e045toth2svlqs42m0ti6753g01@4ax.com>
Source record: 102811

On 24 Dec 2003 09:16:09 -0800, jaepstein_63@yahoo.com (Jonathan Epstein) wrote:

>Hi,
>
>I'm sorry if I'm in the wrong newsgroup, but you folks seem to know
>more about antennas than anyone else on usenet.
>
>The previous owner of my house installed a fairly substantial roof
>antenna for radio reception, because his favorite FM radio station was
>50 miles away. Here's a picture:
> http://epsteinmania.com/jonathan/public/antenna.jpg
>
>I now would like to receive HDTV off-the-air programming at my house.
>It turns out that I will need to add about a 60-foot cable run to use
>this existing antenna, but it seems that this would be the most
>practical method. I'm actually in a pretty good TV reception area ...
>when I typed my address into antennaweb.org, it says
>that I only need a "small multidirectional antenna":
> http://www.antennaweb.org/aw/yellow.asp
>
>
>So my questions are:
>1) can I jury-rig this existing antenna for HDTV OTA reception?
>AND
>2) how do I do it? E.g., to what part of the antenna do I attach an
>RG6 cable, and what adapters if any are necessary.
>
>TIA,
>
>Jonathan

Hi Jonathan,

Of the two antennas shown in your first link, it is the upper antenna that the former occupant used as wideband FM antenna. It is mounted on the rotator.

The bottom, fixed antenna, is a multichannel medium directional TV antenna.

Neither is particularly suitable to the HDTV purist, but given that your needs are so low living in a large signal area, issues of "purity" may be moot.

It would be simple enough to try one, and then the other. The lower one may take some time on the roof in participating in the traditions of 1950's era domestic engineering (twisting the thing until a relay line of wife and kids affirm the picture is clear now). If you have only one or several channels located in the same region, the fixed (non rotatable) antenna will do fine.

Each antenna appears to have its own line, along with a control line for the rotator. Simply follow those down to where they pass through a wall into the family room and use them in the same manner as the previous owner. If you need to lengthen either or both antenna lines (control line too) there are barrel connectors available at Radio Shack to mate lengths of line and simple add them a la extension cord style. The lengthening of the control lines may take more attention, ask a sales clerk that has at least some time in the saddle at the store (or try different stores).

If you draw the antenna lines out of the wall and make the extensions outside, tighten the connections firmly and wrap all metal bright work with electrical tape in overlapping turns (about a foot or more of tape for three inches of bright work). Start the tape with a margin before and after the bright work, on the plastic of the actual cable, so no rain penetrates through the back of the connectors. If the connectors are hooded, start on the cable behind the hood and progress to beyond the hood of the mated connector.

73's
Richard Clark, KB7QHC

6346. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:25:06 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <bsclm9$1g0$1@news1.tribune.com>
Source record: 102812

go to www.antennaweb.org.

do the antenna selection based on your zip code, address etc.

Here in chicago, all but one of our HDTV stations are UHF.

I have a bigger outdoor antenna than yours. I am 40 air miles from the
sears tower.

My ANALOG 2 and 5 are noisy. My analog uhf are good.

On hdtv I can not decode channel 3 perfectly, the rest are all uhf and are
fine.

KA9CAR
John

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7rkjuv0e045toth2svlqs42m0ti6753g01@4ax.com...
> On 24 Dec 2003 09:16:09 -0800, jaepstein_63@yahoo.com (Jonathan
> Epstein) wrote:
>
> >Hi,
> >
> >I'm sorry if I'm in the wrong newsgroup, but you folks seem to know
> >more about antennas than anyone else on usenet.
> >
> >The previous owner of my house installed a fairly substantial roof
> >antenna for radio reception, because his favorite FM radio station was
> >50 miles away. Here's a picture:
> > http://epsteinmania.com/jonathan/public/antenna.jpg
> >
> >I now would like to receive HDTV off-the-air programming at my house.
> >It turns out that I will need to add about a 60-foot cable run to use
> >this existing antenna, but it seems that this would be the most
> >practical method. I'm actually in a pretty good TV reception area ...
> >when I typed my address into antennaweb.org, it says
> >that I only need a "small multidirectional antenna":
> > http://www.antennaweb.org/aw/yellow.asp
> >
> >
> >So my questions are:
> >1) can I jury-rig this existing antenna for HDTV OTA reception?
> >AND
> >2) how do I do it? E.g., to what part of the antenna do I attach an
> >RG6 cable, and what adapters if any are necessary.

> >
> >TIA,
> >
> >Jonathan
>
> Hi Jonathan,
>
> Of the two antennas shown in your first link, it is the upper antenna
> that the former occupant used as wideband FM antenna. It is mounted
> on the rotator.
>
> The bottom, fixed antenna, is a multichannel medium directional TV
> antenna.
>
> Neither is particularly suitable to the HDTV purist, but given that
> your needs are so low living in a large signal area, issues of
> "purity" may be moot.
>
> It would be simple enough to try one, and then the other. The lower
> one may take some time on the roof in participating in the traditions
> of 1950's era domestic engineering (twisting the thing until a relay
> line of wife and kids affirm the picture is clear now). If you have
> only one or several channels located in the same region, the fixed
> (non rotatable) antenna will do fine.
>
> Each antenna appears to have its own line, along with a control line
> for the rotator. Simply follow those down to where they pass through
> a wall into the family room and use them in the same manner as the
> previous owner. If you need to lengthen either or both antenna lines
> (control line too) there are barrel connectors available at Radio
> Shack to mate lengths of line and simple add them a la extension cord
> style. The lengthening of the control lines may take more attention,
> ask a sales clerk that has at least some time in the saddle at the
> store (or try different stores).
>
> If you draw the antenna lines out of the wall and make the extensions
> outside, tighten the connections firmly and wrap all metal bright work
> with electrical tape in overlapping turns (about a foot or more of
> tape for three inches of bright work). Start the tape with a margin
> before and after the bright work, on the plastic of the actual cable,
> so no rain penetrates through the back of the connectors. If the
> connectors are hooded, start on the cable behind the hood and progress
> to beyond the hood of the mated connector.
>
> 73's
> Richard Clark, KB7QHC

6347. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:33:02 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FE9DBDD.1090500@ix.netcom.com>
Source record: 102813

Reg Edwards wrote:

>Standing wave ratios on ordinary 1/2-wave dipoles can soar as high as
>10-to-1.
>
>
>With all the fuss made about excessive SWR everywhere else, why is it the
>guru's never mention it, let alone show anxiety about it? What are they
>trying to cover up?
>
>
>
>
It's a communist plot! ;-) Actually, if your feedline is low loss,
and is
able to handle the higher voltages you'd get with high SWRs, and you're
using a narrowband mode like voice SSB, and your rig can tune load
into it, high SWR is not a problem.

BTW, if you're using coax to feed a dipole, be sure to make a coil of
the coax feedline of several turns at the antenna feedpoint. The object
of this is to keep RF currents from traveling down the *OUTSIDE*
of the coax shield. Otherwise your antenna's radiation pattern will
be goofed up, and also the SWR will get even worse. This also
keeps stray RF out of the shack.

6348. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:36:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b3mjuvgjvnjsq91r1so09atlmj13gbltej@4ax.com>
Source record: 102814

On Wed, 24 Dec 2003 06:11:10 GMT, Robert Casey <wa2ise@ix.netcom.com>
wrote:

> Our rigs actually
>present a very
>low impedance to the antenna and transmission line. This is by design;
>we want all
>of the RF we manufactured to go to the antenna and none wasted as heat
>in the
>rig. Our rigs don't really look like the Thevinian equivalent (voltage
>source with
>internal resistor of 50 ohms) feeding a 50 ohm load.

Hi Robert,

Actually none of this is true. It is the glib explanation that is
bandied about commonly in this forum, but it contains its own internal
inconsistency of logic.

This illogic is present in the single statement:
>Reflected power will
>"bounce" off the rig and go back to the antenna.
The presumption is that the point of bouncing back, the transistion
point of the so-called low Z transmitter to the high Z line, performs
this action. It contains to howlers:
1. if it were true, no one would ever need a tuner whose sole purpose
is to do exactly that (the bouncing back);
2. if it were true, the original power coming from the transmitter
would see the same reflection and bounce right back in to turn to heat
(which is a fairly true representation of the problem of SWR).

As for the reality of the situation, answer me this:
1. How much power does your rig transmit?
2. How much power does your rig draw?
Correct me if the operation of dividing the first by the second does
not reveal an efficiency of roughly 40% and a power loss to heat of
roughly greater than that transmitted. Your rig has a massive heat
sink with a fan, n'est pas?

Too many of the pundits want to force a literal carbon composition
resistor into the mix so that they can point to its absence proving
Thevenin's Theorem does not apply. The same pundits ignore the fact
that Thevenin did not specify a resistor, he specified an impedance to
satisfy his theorem. It was Edison's pervsion of logic in trying to
persuade the investors that AC distribution was for the birds when it
came time to match loads. He inserted the false claim of resistance

forcing inefficiency. This perversion has been with us ever since and qualifies such believers only as possible investors in the Edison DC Power distribution company (which folded immediately due to inefficiency in the market place).

73's
Richard Clark, KB7QHC

6349. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:39:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a3njuvc524btrtve5e0p60nvecrljt6qrc@4ax.com>
Source record: 102815

On Wed, 24 Dec 2003 08:09:55 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Standing wave ratios on ordinary 1/2-wave dipoles can soar as high as
>10-to-1.
>
>
>With all the fuss made about excessive SWR everywhere else, why is it the
>guru's never mention it, let alone show anxiety about it? What are they
>trying to cover up?
>

Ah Punchinello,

You have had your crown returned to you by those same gurus who have
abandoned the field, and who quixotically made just those
protestations you now so miss.

We will leave it in your capable hands to argue both sides of the coin
on this one, in your fulsome, best oratorio.

73's and the best of the season to ye,
Richard Clark, KB7QHC

6350. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:49:49 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FE9DFCC.6060000@ix.netcom.com>
Source record: 102816

Jonathan Epstein wrote:

>Hi,
>
>I'm sorry if I'm in the wrong newsgroup, but you folks seem to know
>more about antennas than anyone else on usenet.
>
>The previous owner of my house installed a fairly substantial roof
>antenna for radio reception, because his favorite FM radio station was
>50 miles away. Here's a picture:
> http://epsteinmania.com/jonathan/public/antenna.jpg
>
>I now would like to receive HDTV off-the-air programming at my house.
>
>
HDTV can be more sensitive to nulls caused by reflections on the antenna
feedline
from the antenna and receiver. One way to reduce this is to use a
preamp mounted
at the antenna to drive the feedline. This isolates any antenna
mismatches from the
feedline. The preamp should present a more controlled impedance to
match into
your feedline, thus reducing reflections from any mismatch in the
receiver.
Select a lower gain preamp if you live in a high signal strength area.

6351. Re: Problem with 40m halfwave off-centre toroidal balun feed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 18:52:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <denjuvc72uq0qug8thi5l5c6h6or9kpi5s@4ax.com>
Source record: 102817

On Wed, 24 Dec 2003 18:27:35 +1100, Bob <bcnntp@optusnet.com.au>
wrote:
>I am having trouble getting a 40 metre dipole going. It is a little unusual
>in that due to distance and cable constraints I am feeding it 3 metres from
>one end. I have modelled this on Mininec and it says 200-300 ohms.

Hi Bob,

There are any number of problems here. Being fed 3 meters from the
end of 20 meters of wire is a long shot in calling it a dipole. This
has nothing to do with its performance nor the Z that you computed,
but it, and the method of BalUn construction suggests you have every
chance of suffering big time from unbalanced transmission line
currents.

What you describe as a BalUn is in fact a simple Z transformer. The
two are not always the same thing in operation. For one, there is no
sense of the Bal of the BalUn. That is to say, you have no choking
action in your transformer to offer the balance suggested, and the
offset dipole feed drives that necessity with a vengeance. Try
feeding your Z transformer with a 1:1 Current BalUn (buy one or find a
competent construction article, or research google for postings to
this matter).

Another issue is found in the difference between simple Z transformer
operation and that of true BalUns. BalUns work over a considerably
greater span of frequencies. The problems you describe in large
frequency changes match the performance issues of simple Z
transformers. These are tuning issues that BalUns survive through
having less turns for the same Z transformation.

73's
Richard Clark, KB7QHC

6352. Re: Problem with 40m halfwave off-centre toroidal balun feed

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 20:51:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bscu92$489$1@sparta.btinternet.com>
Source record: 102818

An incorrect model was fed into the program. The feedline actually radiates like the clappers and the whole thing behaves like an inverted-L with a small 3 metres spur which does very little.

If the severe off-centre feedpoint MUST be used, probably the best way to feed the antenna is via an open-wire line and just accept whatever impedance is presented to the tuner, via a good choke, at the transmitter end.

As the antenna will have the crude general characteristics of a long, random length, inverted-L, why not go the whole way - erect an inverted-L and feed it against ground? Easily modelled and tuned. It also becomes multi-band. You won't need a particularly good ground connection.

Reg, G4FGQ

6353. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 21:11:10 UTC
From: Joe Strain <jstrain1@cfl.rr.com>
Message-ID: <OhnGb.126861$b01.2799937@twister.tampabay.rr.com>
Source record: 102719

DIDNT SEE ANYTHING IN SPRING 2003 so I thought the product was vaporware. I am a prospect, but I am a SWL and dont need & wont pay for a product set up for transmitters

The Wellbrook LA5030 is on my wish list but I don't think it's in my budget. Notice how cleverly they avoid stating COST?

Yodarnosopam@cfl.rr.com
==========

"Maarten Hagg" <maartenmiriam@hetnet.nl> wrote in message news:bs9nnuekd1@reader08.wxs.nl...
> The way Tom tells us is a good way to tell it.
>
> And for those who wonder are there any on the market?
> There will be one soon .
>
> See URL : http://home.hetnet.nl/~maartenmiriam/index.html
> For a full colour brochure, drop me an email.
>
> Maarten

6354. w.t.b. mfj-1622 portable antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 21:34:20 UTC
From: "j.beltz" <j.beltz@insightbb.com>
Message-ID: <wDnGb.32503$VB2.70969@attbi_s51>
Source record: 102720

looking for an mfj-1622 portable antenna
thanks jack

6355. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 22:55:58 UTC
From: jder8745@aol.com
Message-ID: <20031224175558.15365.00001702@mb-m03.aol.com>
Source record: 102721

"There is and always will be a need to present the transmitter with the lowest possible SWR, regardless of if it is accomplished with a well-tuned antenna or if that is not possible, inserting an antenna tuner between the transmitter and antenna"

==========

Many years ago when transmitters had tuneable outputs, matching cud be achieved by something called a "pi network" in the transmitter box.

This circuit resonated the final plate circuit and provided a match to the sending end impedance of the tl. Granted the magnitude of the SWR, i.e., degree of mismatch, it wud match wasn't as much as modern day "tuners".

They are not antenna tuners. If they were they wud be located at the antenna, not the hamshack.

73 de Jack, K9CUN

6356. Re: Slinky Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-24 23:20:27 UTC
From: dick <enigma_y_2000@yahoo.com>
Message-ID: <1kflw3z5myyo4$.1efgdsozvpnle.dlg@40tude.net>
Source record: 102722

Hi,

I use a slinky antenna made from 4 or 5 slinkys. I have it strung from tree to tree at an average height of 5 feet. I transform its high impedance with a 9:1 torroid so it is an appx match for my 50 Ohm input receivers.

I've had it in use in Minnesota winters and summers, for about 4 years and it is holding up well.

Most of the time it compares favorably to my DX-A antenna and I use it from BC through 20 Meters.

Easy and cheap.

D.

On 17 Dec 2003 17:38:19 GMT, JDer8745 wrote:

> Greetings,
>
> I would like to hear from (ON THE LIST) anyone currently using a slinky
> antenna, either homebrew or the commercial variety.
>
> Just tell me how you use it, on what bands, etc.
>
> Thanks in advance. Let's say we cut the thread off at, say 10^4, responses.
>
> 73 de Jack, K9CUN

6357. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 00:00:39 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <JMpGb.27024$gN.14253@fed1read05>
Source record: 102723

"JDer8745" <jder8745@aol.com> wrote in message
news:20031224175558.15365.00001702@mb-m03.aol.com...
> "There is and always will be a need to present the transmitter with the
> lowest possible SWR, regardless of if it is accomplished with a well-tuned
> antenna or if that is not possible, inserting an antenna tuner between the
> transmitter and antenna"
>
> ====================
>
> Many years ago when transmitters had tuneable outputs, matching cud be
achieved
> by something called a "pi network" in the transmitter box.
>
> This circuit resonated the final plate circuit and provided a match to the
> sending end impedance of the tl. Granted the magnitude of the SWR, i.e.,
> degree of mismatch, it wud match wasn't as much as modern day "tuners".
>
> They are not antenna tuners. If they were they wud be located at the
antenna,
> not the hamshack.

Jack, I guess all the manufacturers that sell "antenna tuners" are totally wrong about what it is they're manufacturing and selling. If I were you, I would go after all the "antenna tuner" manufacturers in the below URL and tell them they're all wrong.
http://search.cartserver.com/search/search.cgi?bool=AND&cartid=a-6994&category=newprices&maxhits=600&keywords=%22antenna+tuner%22&go.x=17&go.y=9

They'll thank you for correcting them... ;)

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6358. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 00:32:30 UTC
From: Radioman <radio@ptt.edu>
Message-ID: <3FEA301E.99593759@ptt.edu>
Source record: 102724
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

John Soto wrote:
>
> I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> way of making sure the connections are *waterproof* indefinately.
>
> I'm using T&B SNS connectors on the cable and where the connection
> meets the LNB, I'm thinking about using some sorta of silicone grease
> sealant on the threds, plenty of wrapping with Scotch 88 tape and then
> a coat of Skotchcoat.

Product called "Coax-Seal". Non-hardening black putty.

6359. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 00:41:08 UTC
From: Builder <Builder@antispam.com>
Message-ID: <EmqGb.154959$Vu5.10281255@twister.southeast.rr.com>
Source record: 102725
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

I use standard electrical ductseal grey non hardening putty..have it at any
home depot or electric supply house
"Radioman" <radio@ptt.edu> wrote in message
news:3FEA301E.99593759@ptt.edu...
> John Soto wrote:
> >
> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> > way of making sure the connections are *waterproof* indefinately.
> >
> > I'm using T&B SNS connectors on the cable and where the connection
> > meets the LNB, I'm thinking about using some sorta of silicone grease
> > sealant on the threds, plenty of wrapping with Scotch 88 tape and then
> > a coat of Skotchcoat.
>
> Product called "Coax-Seal". Non-hardening black putty.

6360. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 01:10:45 UTC
From: jgboyles@aol.com
Message-ID: <20031224201045.19959.00000969@mb-m01.aol.com>
Source record: 102726

>Jack, I guess all the manufacturers that sell "antenna tuners" are totally
>wrong about what it is they're manufacturing and selling.
>They'll thank you for correcting them... ;)

Jerry, that was an impressive list of tuners. But did you note that not all of them were listed as "Antenna Tuners". Some of them were designed to sit in the shack next to the rig. These tune the antenna plus the transmission line system as a whole. They don't get the SWR's down, SWR remains the same on the antenna system.
Others on the list can be mounted right at the antenna, and fed with 50 ohm coax. They get the SWR's down on the transmission line because the 50 ohm coax sees a Zo match.
Others on that list can be placed in the shack or at the antenna. The function is to transform whatever impedance the tuner sees to 50 ohms. Tuner in the shack, no SWR change, at antenna, yes. So, "Antenna Tuner", what's in a name?

73 Gary N4AST

6361. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 01:52:40 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnbukgn7.2h82.bit-bucket@localhost.config.com>
Source record: 102727

On Thu, 25 Dec 2003 00:41:08 GMT, Builder hath writ:
> I use standard electrical ductseal grey non hardening putty..
> have it at any home depot or electric supply house

Just ask the guy for a brick of "Elephant Shit".
He'll know what you want... <g> (We'll maybe not at Home Depot...)

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | OS/2
| Gunnison, Colorado | @ | Jonesy | linux __
| 7,703' -- 2,345m | config.com | DM68mn SK

6362. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 02:18:20 UTC
From: Rick <nospam@nospam.org>
Message-ID: <BC0FB31C.5915%nospam@nospam.org>
Source record: 102728
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

I use self vulcanizing plumbers tape (peel off the white strip stuff that sticks to itself permanently when you overlap it) and one or two black cable ties at the finishing end. (to hold it until the chemistry bonds them at the molecular level - time depends on temperature)

when applied to clean surfaces, and you wrap 'up' so dripping water rolls over the seams and not into them, it's leak-proof.

ï¿½Ciao!

6363. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 02:37:18 UTC
From: John Smith <jsmith@cox.net>
Message-ID: <x3sGb.4712$6I1.1949@okepread03>
Source record: 102729
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

Hey, here's the best way to do this without it looking like shit and it will still be easy to remove later if you need to change out LNBs or something. use digiseals and digicon 360 degree crimp connectors also use a non conductive grease on the threads. its the strongest connector on the market and weatherproof to boot. All reputable installers use digicons and digiseals with a grease if you really want to fullproof it then use a heat shrink tube over the entire connector and digiseal. :)
"Radioman" <radio@ptt.edu> wrote in message
news:3FEA301E.99593759@ptt.edu...
> John Soto wrote:
> >
> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> > way of making sure the connections are *waterproof* indefinately.
> >
> > I'm using T&B SNS connectors on the cable and where the connection
> > meets the LNB, I'm thinking about using some sorta of silicone grease
> > sealant on the threds, plenty of wrapping with Scotch 88 tape and then
> > a coat of Skotchcoat.
>
> Product called "Coax-Seal". Non-hardening black putty.

6364. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 03:47:58 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <Q5tGb.27038$gN.22150@fed1read05>
Source record: 102730

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20031224201045.19959.00000969@mb-m01.aol.com...So, "Antenna Tuner",
what's in a
> name?

Exactly. My point was the ragging on the "antenna tuner" term and one ham trying to display his brilliance to the world by pontificating on exactly what an antenna tuner is supposed to be. If someone can't use a commonly used term with MOST of the world understanding what is meant without some know-it-all jumping on it to point out some minor technical mis-use of a term, then it's time to wonder his motive.

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6365. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 05:47:12 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FEA79B5.9040809@ix.netcom.com>
Source record: 102731

>
>
>
>As for the reality of the situation, answer me this:
>1. How much power does your rig transmit?
>2. How much power does your rig draw?
>Correct me if the operation of dividing the first by the second does
>not reveal an efficiency of roughly 40% and a power loss to heat of
>roughly greater than that transmitted. Your rig has a massive heat
>sink with a fan, n'est pas?
>
n'est pas? ? Anyway, the power lost inside the transmitter I thought
was due to the
inneficiencies of a class A or B amp configuration. That the amplifying
device (tube
or transistor) is metering out varying amounts of current from a
constant DC supply.
And the current has to pass thru the tube or transistor before it gets
to the load.
Assuming a sine wave at RF, zero crossing would be low wasted power, peak
also low wasted power, but at 0.707 peak max wasted power (class B). Class
C is more efficient except the power in the harmonics you get have to be
filtered
out, and you get a heated filter.

Now if the Thevenin impedance of the transmitter was 50 ohms, then half
of the remaining power you successfully converted to RF would heat the
transmitter some more. That 40% would become 20%. But if you design
the output right, making the Thevenin impedance very low, little RF power
is wasted in the transmitter (say 1%) and 39% is pumped out into space
(on the air)
by a matched antenna. Now that low Thevenin impedance will reflect
most of the reflected from the mismatched antenna power back to the antenna.
If the transmitter Thevenin impedance was 50 ohms, it would absorb the
reflections and get even hotter. Oh, this has its uses, like in a
signal coming
from a TTL line driver that passes thru a "source termination" resistor
of 100
ohms, then thru a 100 ohm impedance transmission line (like carefully
designed
traces on circuit boards in that GHz computer) and then to a single
destination
receiving TTL gate. which looks like a high impedance load. The reflected
signal gets absorbed by the source termination. A reason for not

destination
terminations is that this makes the source work harder pumping DC current when the signal is a "high", vs essentially idling when just source terminated.
No daisy chaining allowed, the signal looks like crap except at the very end.

6366. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 06:28:56 UTC
From: k9sqg@aol.com
Message-ID: <20031225012856.09478.00001225@mb-m17.aol.com>
Source record: 102732

What I do is ensure all mating surfaces are clean and bright. Then I use Caige Laboratories contact cleaner ($15 a can but it goes a long way). I use "Stuff", and yes that is the name, teflon based insulating grease to coat the surfaces and fill the voids; exess is wiped off. Then I use a bead of silicon rubber to seal all joints, coax entry points into connectors, etc. After it cures, I wrap the entire connection with Scotch or 3M black electrical tape, 2-3 wraps. Then I again use silicon rubber to completely coat the entire assembly from end to end, sometimes with 2-3 coats. After all that cures, I use CoaxSeal on top of that. I've had connectors last 10+ years that way, not sure how much longer they would have lasted since I took the antennas down when I moved.

Evan

6367. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 08:20:36 UTC
From: ddl@danlan.*com
Message-ID: <1184809@news1.IPSWITCHS.CMM>
Source record: 102735

In article <20031225012856.09478.00001225@mb-m17.aol.com>, k9sqg@aol.com (K9SQG) writes:

| What I do is ensure all mating surfaces are clean and bright. Then I use Caige
| Laboratories contact cleaner ($15 a can but it goes a long way). I use
| "Stuff", and yes that is the name, teflon based insulating grease to coat the
| surfaces and fill the voids; exess is wiped off.

Are there any problems using STUF with higher frequencies (e.g., 2.4GHz)? The
insertion loss comparison chart they provide stops around 1.4GHz, though they
don't mention specific problems going higher...

Dan Lanciani
ddl@danlan.*com

6368. Re: questions regarding full wave loop antenna (as a "loop skywire")

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 08:21:15 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2003.12.25.08.21.15.711860@127.0.0.1>
Source record: 102733

hmmmmmmm
food for thought. I might just do that. I'll have to consider how to run
something that length though. I am on a standard residential plot of land
here in western phoenix (75x75) and we have overhead power feeding the lot
here (very noisy for the swl). I think I can get a few feet if I do it at
the 4 corners of the roof.... (and it should get me better than 20 feet
off the ground at that point).

Meanwhile... back at the ranch..

DE N7ZZT
n7zzt at hotmail dot com

On Tue, 23 Dec 2003 16:50:31 -0700, sjt wrote:

> I just built a aimilar antenna, 70'/side and 15' high. I used #17 aluminum
> fence wire, its cheap and light. I made open wire transmission line for
> the phasing and transmission lines from the same wire. Im using a
> Nye Viking Matchbox to tune the antenna. The Z varies widely so I doubt if
> you will find a universal match
> using baluns if you operate on all HF bands.
>
> You could make it from 2 G5RV's
>
> Do you have the article by VE2CV? If not get it from ARRL The antenna
> works much better than the GAP that I have. 73
> Spencer
>

--
the difference between intelligence and stupidity is that intelligence
has its limits.

6369. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 08:39:05 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <728luvo0t6qq74uvo1kh0nv6dijiokqrs8@4ax.com>
Source record: 102734

On 25 Dec 2003 01:52:40 GMT, Allodoxaphobia <bit-bucket@config.com>
wrote:

>On Thu, 25 Dec 2003 00:41:08 GMT, Builder hath writ:
>> I use standard electrical ductseal grey non hardening putty..
>> have it at any home depot or electric supply house
>
>Just ask the guy for a brick of "Elephant Shit".
>He'll know what you want... <g> (We'll maybe not at Home Depot...)
>

I do it the cheap and easy way.
"Flooded" heat shrink tubing. You get it at the local electrical
supply houses.

It comes in several sizes, but the large size will fit *over* both
PL259s and type N connectors. It contains a lining that is like hot
glue. The stuff makes a compact, smooth, mechanically strong, and
water proof joint. Just make it long enough to extend out on to the
coax 1 1/2 to 2 inches.

I should shoot some photos of how I do it and how easy it is to do.
I've found nothing that is completely weather proof when it comes to
lightening. I had it blow every thing off the connectors at the top
of the tower, including the silver plating on the connectors. 15
minutes later there was water running out of one of my rigs. That was
when I changed from 9913 to LMR-400

My second preference is "Liquid Electrical tape". I used to find it in
marine stores, but Ace Hardware carries it now.

Just give the connectors and cable a couple of thorough coats. Let
dry about 5 minutes between coats.

It works as good as coax seal if you make sure you get everything
covered and it weathers well. It does not come off as easy as coax
seal, but then again it's a film that you can break and then re coat.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>Jonesy

6370. W3EDP HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 10:12:07 UTC
From: ZL3VML <zl3vml@xtra.co.nz>
Message-ID: <xJyGb.39897$VV6.903417@news.xtra.co.nz>
Source record: 102736

Hi,
Does anyone use or have used the W3EDP longwire antenna?
Due to the location of my shack I can only use a longwire type antenna for HF.
My tower holds numerous VHF / UHF antennas as I run the local BBS so an HF beam is out of the question.
I would like to hear what your thoughts are on this antenna if you have ever used one.
73
Mark - ZL3VML

6371. Tuning a folded Dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 10:19:53 UTC
From: ZL3VML <zl3vml@xtra.co.nz>
Message-ID: <PQyGb.39902$VV6.903938@news.xtra.co.nz>
Source record: 102737

Hi.
Well sort of - its a 5 element yagi with the driven element being a folded dipole.
I have two questions, one, I need to tune it higher in the (2m) band and as I have never used a folded dipole before, I am not sure how to go about tuning it, but I would think I just need to shorten the dipole a fraction? (untill I get the best swr)
Second question - how do I optimise the length of the feedline ?(quarter or half wavelengths) as it seems to have a marked affect on the swr of the antenna.
I am inclined to replace it with a halfwave dipole and just feed it with a gamma match.
Thanks for any help
73
Mark - ZL3VML

6372. Re: Tuning a folded Dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 12:10:00 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <BY-dncdovfmyTHei4p2dnA@ctc.net>
Source record: 102738

> Well sort of - its a 5 element yagi with the driven element being a folded
> dipole.
> I have two questions, one, I need to tune it higher in the (2m) band and
as
> I have never used a folded dipole before, I am not sure how to go about
> tuning it, but I would think I just need to shorten the dipole a fraction?
> (untill I get the best swr)
> Second question - how do I optimise the length of the feedline ?(quarter
or
> half wavelengths) as it seems to have a marked affect on the swr of the
> antenna.

If the antenna was designed for the lower portion of the band and you are
moving it higher, you will need to adjust the lengths of all the elements.
Not so much as for swr but for the gain and patern.
YOu adjust the dipole by shorten it. If the swr changes due to the
feedline length the antenna needs adjusting. As well known the swr at the
antenna is the same but the length of feedline will have some effect. To
get the impedance to match at the antenna use a 1/2 wave length of feed line
betweent the antenna and the swr meter.

6373. Re: Yaesu RSM-2 antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 15:07:45 UTC
From: jder8745@aol.com
Message-ID: <20031225100745.11201.00001494@mb-m11.aol.com>
Source record: 102739

Someone sed:

"Jack, I guess all the manufacturers that sell "antenna tuners" are totally wrong about what it is they're manufacturing and selling. If I were you, I would go after all the "antenna tuner" manufacturers in the below URL and tell them they're all wrong."
==========

It's no use. They wouldn't believe me.

I tried to explain to someone once that buffalos don't have wings. The didn't believe me either.

73 de Jack K9CUN

6374. Re: W3EDP HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 15:08:28 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEAFD6C.22A216E3@cwis.net>
Source record: 102740

Mark,
Never heard of it, what is it?
'Doc

6375. Re: W3EDP HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 16:55:31 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEB1683.F4DC67A0@cwis.net>
Source record: 102741

Mark,
I found it. It appears to be a typical end fed random wire
antenna. I don't see why it wouldn't work. Depending on the
size of the capacitor it may only be good for QRP, and I think
I'd go with a good radial ground system if possible, not bother
with the counterpoise'.
An alternative to the 'LC' network would be a good tuner
which
make it a bit more versatile I'd think.
Good luck and happy holidays...
'Doc

6376. Re: W3EDP HF Antenna ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 17:47:34 UTC
From: garigue <garigue@comcast.net>
Message-ID: <WoFGb.478625$275.1377967@attbi_s53>
Source record: 102742

Hello Mark ,,,

I have used the W3EDP antenna with my K-2. This use however has been strictly in the field. I made mine from that old Christmas Tree lamp wire so it was free. The short stub was placed at a minimal angle off of the binding posts from the BNC connector. A tree is used as a terminus at about a 35 foot elevation ....my accurate limit for an underhand rock toss. Performance .... it works well given the simplicity. The EDP was also used in a "bizarre" configuration by me where the end was several feet off the ground and the rig was on a 3 story balcony. I casually worked about 25 countries on 20 and 15 between lying on the beach and drinking beer during one week. The only difficulty I had was an inability to effectively tune 15 meters during one night in the woods. That was a little strange as the K-2 tuner is very effective. The antenna is sort of a relative to a Zepp from what I have read.

Put it up and try a few configurations .... you might be surprised .... Merry Christmas and the best for 04 Mark

73 KI3R Tom Popovic Belle Vernon Pa. nr Pittsburgh

"ZL3VML" <zl3vml@xtra.co.nz> wrote in message
news:xJyGb.39897$VV6.903417@news.xtra.co.nz...
> Hi,
> Does anyone use or have used the W3EDP longwire antenna?
> Due to the location of my shack I can only use a longwire type antenna for
> HF.
> My tower holds numerous VHF / UHF antennas as I run the local BBS so an HF
> beam is out of the question.
> I would like to hear what your thoughts are on this antenna if you have
ever
> used one.
> 73
> Mark - ZL3VML
>
>

6377. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 17:50:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9u3muvsji6ui0nua0p6ovrhdoaavgs5t7q@4ax.com>
Source record: 102743

On Thu, 25 Dec 2003 05:47:12 GMT, Robert Casey <wa2ise@ix.netcom.com>
wrote:

>>As for the reality of the situation, answer me this:
>>1. How much power does your rig transmit?
>>2. How much power does your rig draw?
>>Correct me if the operation of dividing the first by the second does
>>not reveal an efficiency of roughly 40% and a power loss to heat of
>>roughly greater than that transmitted. Your rig has a massive heat
>>sink with a fan, n'est pas?
>>
>n'est pas? ? Anyway, the power lost inside the transmitter I thought
>was due to the
>inneficiencies of a class A or B amp configuration.

Hi Robert,

Given you offer no evidence to the contrary, 40% efficiency seems to
be the confirmed rule. Giving it a name does nothing to reduce it or
enhance it, the calories expended rob us of RF output for the power
draw to generate that output. That power loss is confirmed through
everyone's experience as heat. Heat sinks and fans testify to our
acceptance of its loss.

The ONLY advance we can claim in the last half century, is that no
power is lost to lighting up filaments in transistors.

> That the amplifying
>device (tube
>or transistor) is metering out varying amounts of current from a
>constant DC supply.
>And the current has to pass thru the tube or transistor before it gets
>to the load.

All of this goes without saying and changes nothing about efficiency,
or Thevenin issues that isn't already obvious. If it illustrates
anything is that it CONFIRMS the Thevenin mechanism (once you look
under the hood, an argument no-no if you first posit the Thevenin
argument).

>Assuming a sine wave at RF, zero crossing would be low wasted power, peak
>also low wasted power, but at 0.707 peak max wasted power (class B).

What makes the angle an indicator of waste? The RF wave consists of
360 degrees of variation all of which is propagated. If you have your
head under the hood, playing with the innards of the source, there is
still nothing inherently lossy about the angle of conduction.

It is correlatable to the magnitude of voltage across a source (the tube/transistor, not the load), or current through the source (same provisos), but in that respect the least loss occurs at the EXTREME of the cycle that draws down the voltage differential against the supply or the current magnitude; certainly not at the zero cross (there is no such thing at the plate or collector of a powered amplifier) and even more remotely the 0.707. Again, such discussion simply focuses on the Thevenin validation for the source Z specification.

> Class
>C is more efficient except the power in the harmonics you get have to be
>filtered
>out, and you get a heated filter.

Your logic, as faulty as the presentation may be, simply validates the Thevenin specification for the Source Z. You exhibit any number of calorie sinks to satisfy some aspect of the Real R, but I see by the flawed argument below that you persist in Edison's folly of forcing an R only into the Z specification of Thevenin.

However, we will next proceed to illustrate that Edison's folly is in fact demonstrably valid for the present discussion. :-)
>
>Now if the Thevenin impedance of the transmitter was 50 ohms, then half
>of the remaining power you successfully converted to RF would heat the
>transmitter some more.

With a 40% efficiency, that has been demonstrated without further analysis.

> That 40% would become 20%.

This is ENRON math.

> But if you design
>the output right, making the Thevenin impedance very low, little RF power
>is wasted in the transmitter (say 1%) and 39% is pumped out into space
>(on the air)
>by a matched antenna.

"IF?" Are we to assume that every transmitter that has come down the pike has never been designed correctly nor optimized? Forcing such an argument without showing how to accomplish it presumes you have a method that transcends all of the current generation of Engineers capacity to bring it to the market. The force of Capitalism and the Profit Motive most sincerely invalidates that concept in a heartbeat.

What about the remaining 61%? You have in fact lowered the emitted power in comparison to the drawn power in your argument above. How this goes to prove that Thevenin's source is Resistorless is an argument of the man standing behind the curtains.

>Now that low Thevenin impedance will reflect
>most of the reflected from the mismatched antenna power back to the antenna.

And how does the low source Z face the prospect of the High load Z reflecting the power in turn? Thevenin explains the absurdity of this forced expectation, but you do not. Your argument contains the usual blindside, to be described below.

>If the transmitter Thevenin impedance was 50 ohms, it would absorb the
>reflections and get even hotter.

It does get hot, that is demonstrably true to everyone's experience. That heat has its genesis in the Thevenin model and confirms it.

>Oh, this has its uses, like in a
>signal coming
>from a TTL line driver that passes thru a "source termination" resistor
>of 100
>ohms, then thru a 100 ohm impedance transmission line (like carefully
>designed
>traces on circuit boards in that GHz computer) and then to a single
>destination
>receiving TTL gate. which looks like a high impedance load. The reflected
>signal gets absorbed by the source termination. A reason for not
>destination
>terminations is that this makes the source work harder pumping DC current
>when the signal is a "high", vs essentially idling when just source
>terminated.
>No daisy chaining allowed, the signal looks like crap except at the very
>end.
>

Your final elaborations above, again, go to the proof of Thevenin, how you expect it to be otherwise has not been demonstrated.

Eventually, these arguments devolve to the myopic observation that there is no "smoking gun" to be exhibited in the form of a carbon composition resistor that embodies the forced R argument of Thevenin. Such posters un/willingly ignore the obvious location found within the Emitter-Collector junction. When my push comes to shove, like right now, they generally scrabble around the spec sheets (giving every evidence of having never built from one) to point out that their transistor exhibits 2 to 3 Ohms NOT 50! They thump their thin chest with pride and then proclaim vindication. Again the myopic arguments collapse in turn when it is pointed out that the Transistor's Emitter-Collector junction is not the Source Z, but rather the abstracted or untransformed value that has yet to be observed (hence the failure of their myopic testimony).

If you are going to look under the hood, you have to look at everything under the hood. For EVERY finals deck supporting the usual tandem transistor output, they ALL drive a transformer exhibiting a 1:3 winding ratio. The canonical instruction of Z transformation reveals that this same series combination of Emitter-Collector Z presented through the transformer finds at that output their abstract Source Z transformed to, guess what?, roughly 50 Ohms.

However, that is not ALL of the components under the hood to be examined. We also have in EVERY finals deck, an output low pass filter with a characteristic Z of, guess what?, roughly 50 Ohms.

Hence, in the deep interior where we abstract the Thevenin model to the circuit level, the equivalent R that is demanded, is found in the several Ohms described above. THAT abstracted Thevenin Source sees the 50 Ohm Load transformed DOWN to its expected value (the usual, and expected reverse operation of transformers built with 3:1 ratios, from the perspective of the load).

Most posters argue from their blind side of wholly ignoring the MATCHing operation of the finals' transformer to force their low R argument (which is a corruption of Thevenin's stated Z).

Thus, there is a chain of transformation from the Emitter-Collector junction through many levels to finally meet a load that exhibits the confirmation of Thevenin that is consistent with the evidence of heat dissipated by the physical source.

If that load presents a mismatch, the power returned is delivered to a MATCHED load: what was formerly the Source. The Source, by design, reflects NOTHING. When the Source is presented with a mismatched Load we either perform additional matching operations (a Tuner) or accept the additional heat burden the mismatch forces upon the Source. This can be in the form of a long term temperature rise (current phase is additive) or the sudden spark (heat, n'est pas?) of voltage breakdown (voltage phase is additive). Contrary to the lore of Transistors being low voltage devices, failure is found far more frequently in the current density at the, guess what?, Emitter-Collector junction. The catastrophic results testify, again, to the validity of the Thevenin model. As I have repaired more than my share of Electronic equipment, professional experience has shown the majority of transistor failures reveal themselves as shorts due to their inability to shed the heat of that current density (a melt down - calories - heat - R).

The compelling, and obvious proof of this last is found in very few operators deliberately driving massive mismatches to anything less than equipment failure as a consequence. Of course, when that occurs, it validates the reflective mode of the Source for as many cycles of RF stored in the transmission line returning from the mismatched load; being generous, say roughly several microseconds?

73's
Richard Clark, KB7QHC

6378. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 18:30:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsfaba$m0d$1@sparta.btinternet.com>
Source record: 102744

Richard sed,
> no power is lost to lighting up filaments in transistors.
>
==========

Wrong ! Transistors don't have filaments.

6379. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 18:41:06 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <8bGGb.27604$gN.16638@fed1read05>
Source record: 102745

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bsfaba$m0d$1@sparta.btinternet.com...
> Richard sed,
> > no power is lost to lighting up filaments in transistors.
> >
> ========================
>
> Wrong ! Transistors don't have filaments.

Are some people so ready to jump on comments they see that they fail to see the comment being jumped on was made tongue-in-cheek??? OF COURSE the guy that said "no power is lost to lighting up filaments in transistors" knew there are no filaments in transistors. Sheesh.

I can't believe the number of people here just waiting to try and demonstrate how brilliant they are here by jumping on such comments where the intent should have been obvious to everyone.

Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6380. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 19:18:17 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FEB37F9.8090504@ix.netcom.com>
Source record: 102746

Richard Clark wrote:

>On Thu, 25 Dec 2003 05:47:12 GMT, Robert Casey <wa2ise@ix.netcom.com>
>wrote:
>
>
>
>>>As for the reality of the situation, answer me this:
>>>1. How much power does your rig transmit?
>>>2. How much power does your rig draw?
>>>Correct me if the operation of dividing the first by the second does
>>>not reveal an efficiency of roughly 40% and a power loss to heat of
>>>roughly greater than that transmitted. Your rig has a massive heat
>>>sink with a fan, n'est pas?
>>>
>>>
>>>
>>n'est pas? ? Anyway, the power lost inside the transmitter I thought
>>was due to the
>>inneficiencies of a class A or B amp configuration.
>>
>>
>
>Hi Robert,
>
>Given you offer no evidence to the contrary, 40% efficiency seems to
>be the confirmed rule. Giving it a name does nothing to reduce it or
>enhance it, the calories expended rob us of RF output for the power
>draw to generate that output. That power loss is confirmed through
>everyone's experience as heat. Heat sinks and fans testify to our
>acceptance of its loss.
>
>
>
Let's ignore, for the moment, the losses involved in the conversion of
DC power to
RF power. Now lets say we have 100 watts of RF. If the antenna is a
perfect
load (50 ohms resistive) and if the Thevenin impedance of the transmitter is
50 ohms, then yes, you got 50 watts of extra heat in the transmitter.
Now if the
transmiter has a very low Thevenin impedance, then more power is delivered
to the antenna and less waste in the transmitter. I'm not trying to do
the "transfer

the max power to the load and I don't care how much waste in the source"
Thevenin
thing we had in EE101. If I did that, and the amp is up to it, I could
transmit
even more power to the antenna, but I'd waste more in the source.

In any event Merry Xmas.

6381. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 19:56:48 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <QNydnWZXJuiW3Hai4p2dnA@crocker.com>
Source record: 102748

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bsfaba$m0d$1@sparta.btinternet.com...
> Richard sed,
> > no power is lost to lighting up filaments in transistors.
> >
> ========================
>
> Wrong ! Transistors don't have filaments.
>
>
but they are full of smoke, let out the smoke and they don't work any more.
WAKE UP reg, read his statement again and don't be so fast to jump on some
one.

6382. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 21:39:18 UTC
From: Harold Burton <hwburton@cableone.net>
Message-ID: <vumf4dfqlafmf0@corp.supernews.com>
Source record: 102747

"Jerry Bransford" <jerrypb@mecox.net> wrote in message
news:8bGGb.27604$gN.16638@fed1read05...
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:bsfaba$m0d$1@sparta.btinternet.com...
> > Richard sed,
> > > no power is lost to lighting up filaments in transistors.
> > >
> > ======================
> >
> > Wrong ! Transistors don't have filaments.
>
> Are some people so ready to jump on comments they see that they fail to
see
> the comment being jumped on was made tongue-in-cheek??? OF COURSE the guy
> that said "no power is lost to lighting up filaments in transistors" knew
> there are no filaments in transistors. Sheesh.
>
> I can't believe the number of people here just waiting to try and
> demonstrate how brilliant they are here by jumping on such comments where
> the intent should have been obvious to everyone.
>
> Jerry
> --
> Jerry Bransford

Wellsir, I remember doing that in High School a couple of times
and demonstrating just the opposite. I'm actually fairly bright
but sometimes I'm not as bright as I thoughtI was at a particular moment.

Harold Burton
KD5SAK

6383. DONATIONS NEEDED

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 22:43:18 UTC
From: n2ion@aol.com
Message-ID: <20031225174318.15398.00001812@mb-m04.aol.com>
Source record: 102749

Long Island Mobile Amateur Radio Club (LIMARC), is looking for DONATIONS of "Ham" gear, like triband beams, rigs, and towers, to be used for our Emergency Communication Stations, and Field Day.

If you have any old equipment that you're not using anymore, and would like to donate it to our cause, we will make sure that you get a nice letter, for a tax deduction, from our club.
We really need your help, so please try to assist us in any way that you can.

Thanks in advance

6384. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-25 22:48:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <52omuvc0tas98h6l1g18jrfvja779vnsr7@4ax.com>
Source record: 102750

On Thu, 25 Dec 2003 19:18:17 GMT, Robert Casey <wa2ise@ix.netcom.com>
wrote:

>Let's ignore, for the moment, the losses involved in the conversion of
>DC power to
>RF power.

Let's ignore the R resistor, and then we can prove it doesn't exist?
:-)

> Now lets say we have 100 watts of RF. If the antenna is a
>perfect
>load (50 ohms resistive) and if the Thevenin impedance of the transmitter is
>50 ohms, then yes, you got 50 watts of extra heat in the transmitter.

See? Your logic failed at the gate. You ALREADY have 100W RF as a
premise. :-)

How did you arrive at 100W without its measure AT the Load? To force
the speculation that the internal resistance (neglected but evident by
such logic) drops it? You are separating those things that are
inseparable and this is the common fault of all speculations that look
beneath the hood of the Thevenin Model.

> Now if the
>transmiter has a very low Thevenin impedance, then more power is delivered
>to the antenna and less waste in the transmitter. I'm not trying to do
>the "transfer
>the max power to the load and I don't care how much waste in the source"

This is another forced argument. No where, until now, was it offered
that maximum power was being delivered or even demanded. We are
simply observing what IS. With the efficiency sitting at 40% it is
painfully obvious from the beginning that the road of maximum transfer
has not been tread upon - EVER.

>Thevenin
>thing we had in EE101. If I did that, and the amp is up to it, I could
>transmit
>even more power to the antenna, but I'd waste more in the source.

Brush up on your EE101 to discover that the Thevenin Model is derived
from observables. I have already described ALL observables that are
consistent with opening the model to look under the hood.

There have been many writers here, over the years, who have offered
bench tests that prove this by observation. As of yet, none has been

toppled with work equal in quality (i.e. demonstration or measurement). It is no more simple that plunking the load into a bucket of water, plunking the transmitter into a bucket of water, hitting the transmit switch and measuring temperature. The transmitter will release more heat than the load.

To save yourself the issue of submerging the source, common practice (as described by Thevenin) would have you measure the voltage across the source, and the current into it. Yields identical results. I've employed the HP Caloric Wattmeter for years at the Metrologist's bench to faithfully validate this concept over and over.
>
>In any event Merry Xmas.

Season's Greetings
Richard Clark, KB7QHC

6385. Re: w.t.b. mfj-1622 portable antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 01:44:14 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEB926E.13B0CFF2@cwis.net>
Source record: 102751

...did MFJ quit selling them?
'Doc

6386. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 03:22:50 UTC
From: jaepstein_63@yahoo.com
Message-ID: <27e4d2e8.0312251922.5fe0ea5d@posting.google.com>
Source record: 102752

Hi Richard,

Thanks for your quick and extremely thorough and friendly response. As
no doubt you can tell, I know nothing about antennas. Thanks also for
telling me what each antenna does.

In addition to the messages posted here, I also received a couple of
very helpful private emails.

The image of 1950's domestic engineering sounds like fun, but I think
that in this modern era I can make the necessary adjustments while
talking to my wife by cell phone :-)

I left out some detail in my original message, which I'll now attempt
to rectify. The existing antenna is above my living room, and the
associated TVs are on the far side of the house. In addition, I have a
satellite dish which is pole-mounted in my yard (my neighborhood has a lot
of mature trees, so there was no way to mount the dish on the roof),
and its junction point-of-entry into the house is directly on the
opposite side of the house, about 50' as a crow flies or 60' using
cables.
Portions of my house, especially the family room where the HDTV is
located, are pretty hard to wire internally, so I'd like to use this
existing
satellite dish connection and use combiners and splitters as
necessary.

I think that even if I wind up using the rotatable FM antenna, making
an occasional trip to the living room stereo cabinet to rotate the
antenna is an acceptable level of inconvenience.

If necessary I could adopt your suggestion and draw the antenna lines
out of the wall from the exterior. However (in my ignorance) I would
prefer to start fresh and connect "virgin" cables and connectors to the
antenna, if that's practical. Also, as another poster mentioned, the
HDTV signals are all UHF, and I don't know what (if anything) I need to
do to provide the appropriately undegraded signal, in a manner which
will 'mix' and 'unmix' well with the dish signal.

Hmm... another option: I have to check this out by going back on the
roof, but I suspect that the lower antenna has a cable, but isn't

actually connected to anything, so perhaps I could draw it outside without
messing up my FM radio reception. In that case it might just be a matter
of connecting to an RG6 cable. I could be wrong, but I don't think that
the existing cable attached to the antenna is coax ... perhaps it's
twinlead. But in any case I now have a general sense of what baluns I
might need to buy, and what I need to look for now to interpret the
existing hardware.

Another remaining concern is how much power I will lose with a 60'
cable run ... it seems that it will be approx. 4 dB which corresponds
to roughly a 60% loss of power, if my math and understanding are
correct. This doesn't even include the existing cable runs from the
satellite dish junction to the TVs. I don't have a good sense as to
whether this is too much power to give up ... perhaps the use of a
pre-amp is justified. I'm also not sure whether I need to provide
power to the pre-amp, and how I might do that. I guess that I can
install a pre-amp sort of "en route" to the far side of the house, in
a location where electrical power is more readily available. A
battery powered pre-amp is also not out of the question, especially if
I don't need to climb onto the roof to change the batteries.

My next step is to visit the roof again in daylight and see what I can
figure out based upon the information that I've received here and in
the private emails. I plan to post back after I've explored this.

Thanks again to you or anyone else for continued advice.

Jonathan

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<7rkjuv0e045toth2svlqs42m0ti6753g01@4ax.com>...
> On 24 Dec 2003 09:16:09 -0800, jaepstein_63@yahoo.com (Jonathan
> Epstein) wrote:
>
> >Hi,
> >
> >I'm sorry if I'm in the wrong newsgroup, but you folks seem to know
> >more about antennas than anyone else on usenet.
> >
> >The previous owner of my house installed a fairly substantial roof
> >antenna for radio reception, because his favorite FM radio station was
> >50 miles away. Here's a picture:
> > http://epsteinmania.com/jonathan/public/antenna.jpg
> >
> >I now would like to receive HDTV off-the-air programming at my house.
> >It turns out that I will need to add about a 60-foot cable run to use
> >this existing antenna, but it seems that this would be the most
> >practical method. I'm actually in a pretty good TV reception area ...
> >when I typed my address into antennaweb.org, it says

> >that I only need a "small multidirectional antenna":
> > http://www.antennaweb.org/aw/yellow.asp
> >
> >
> >So my questions are:
> >1) can I jury-rig this existing antenna for HDTV OTA reception?
> >AND
> >2) how do I do it? E.g., to what part of the antenna do I attach an
> >RG6 cable, and what adapters if any are necessary.
> >
> >TIA,
> >
> >Jonathan
>
> Hi Jonathan,
>
> Of the two antennas shown in your first link, it is the upper antenna
> that the former occupant used as wideband FM antenna. It is mounted
> on the rotator.
>
> The bottom, fixed antenna, is a multichannel medium directional TV
> antenna.
>
> Neither is particularly suitable to the HDTV purist, but given that
> your needs are so low living in a large signal area, issues of
> "purity" may be moot.
>
> It would be simple enough to try one, and then the other. The lower
> one may take some time on the roof in participating in the traditions
> of 1950's era domestic engineering (twisting the thing until a relay
> line of wife and kids affirm the picture is clear now). If you have
> only one or several channels located in the same region, the fixed
> (non rotatable) antenna will do fine.
>
> Each antenna appears to have its own line, along with a control line
> for the rotator. Simply follow those down to where they pass through
> a wall into the family room and use them in the same manner as the
> previous owner. If you need to lengthen either or both antenna lines
> (control line too) there are barrel connectors available at Radio
> Shack to mate lengths of line and simple add them a la extension cord
> style. The lengthening of the control lines may take more attention,
> ask a sales clerk that has at least some time in the saddle at the
> store (or try different stores).
>
> If you draw the antenna lines out of the wall and make the extensions
> outside, tighten the connections firmly and wrap all metal bright work
> with electrical tape in overlapping turns (about a foot or more of
> tape for three inches of bright work). Start the tape with a margin
> before and after the bright work, on the plastic of the actual cable,
> so no rain penetrates through the back of the connectors. If the

> connectors are hooded, start on the cable behind the hood and progress
> to beyond the hood of the mated connector.
>
> 73's
> Richard Clark, KB7QHC

6387. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 04:58:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <psenuv0rqgpkvcjh1m5gsp9efcv1cu5ak7@4ax.com>
Source record: 102753

On 25 Dec 2003 19:22:50 -0800, jaepstein_63@yahoo.com (Jonathan
Epstein) wrote:

>Hi Richard,
>
>Thanks for your quick and extremely thorough and friendly response.
>As
>no doubt you can tell, I know nothing about antennas. Thanks also for
>telling me what each antenna does.
>
>In addition to the messages posted here, I also received a couple of
>very helpful private emails.
>
>The image of 1950's domestic engineering sounds like fun, but I think
>that in this modern era I can make the necessary adjustments while
>talking to my wife by cell phone :-)

Yeah, I thought of that too, but it didn't make nearly as amusing an
image.

>
>I left out some detail in my original message, which I'll now attempt
>to rectify. The existing antenna is above my living room, and the
>associated TVs are on the far side of the house. In addition, I have
>a
>satellite dish which is pole-mounted in my yard (my neighborhood has a
>lot
>of mature trees, so there was no way to mount the dish on the roof),
>and its junction point-of-entry into the house is directly on the
>opposite side of the house, about 50' as a crow flies or 60' using
>cables.

A satellite dish and cable have their own issues. It best to keep
these separate.

>Portions of my house, especially the family room where the HDTV is
>located, are pretty hard to wire internally, so I'd like to use this
>existing
>satellite dish connection and use combiners and splitters as
>necessary.

The dish has its own tuner, so combining would seem unlikely. Also,
the frequency of the dish is considerably higher and more prone to
degradation if you begin combining and splitting along the way.
>
>I think that even if I wind up using the rotatable FM antenna, making

>an occasional trip to the living room stereo cabinet to rotate the
>antenna is an acceptable level of inconvenience.

Given your TV signals are UHF, the rotating FM antenna is way out of
band. It may still work, but don't count on it. Trying will resolve
this of course.
>
>If necessary I could adopt your suggestion and draw the antenna lines
>out of the wall from the exterior. However (in my ignorance) I would
>prefer to start fresh and connect "virgin" cables and connectors to
>the
>antenna, if that's practical.

Practicality is strictly a matter of what you want to do, and how
much. Sure, you can replace the entire run, you just need more of the
same thing. There is no downside to it, except it has you on the roof
more, but you may be there more often than anticipated anyway.

>Also, as another poster mentioned, the
>HDTV signals are all UHF, and I don't know what (if anything) I need
>to
>do to provide the appropriately undegraded signal, in a manner which
>will 'mix' and 'unmix' well with the dish signal.

Keep things simple, run separate cables.

>
>Hmm... another option: I have to check this out by going back on the
>roof, but I suspect that the lower antenna has a cable, but isn't
>actually connected to anything, so perhaps I could draw it outside
>without
>messing up my FM radio reception. In that case it might just be a
>matter
>of connecting to an RG6 cable. I could be wrong, but I don't think
>that
>the existing cable attached to the antenna is coax ... perhaps it's
>twinlead. But in any case I now have a general sense of what baluns I
>might need to buy, and what I need to look for now to interpret the
>existing hardware.

Well if it is twin lead, it certainly is a throw-back to the 50's.
You might end up putting the TV antenna on the rotator and retiring
the FM antenna. The TV antenna is already more suitable to UHF.
>
>Another remaining concern is how much power I will lose with a 60'
>cable run ... it seems that it will be approx. 4 dB which corresponds
>to roughly a 60% loss of power, if my math and understanding are
>correct. This doesn't even include the existing cable runs from the
>satellite dish junction to the TVs. I don't have a good sense as to
>whether this is too much power to give up ... perhaps the use of a
>pre-amp is justified. I'm also not sure whether I need to provide
>power to the pre-amp, and how I might do that. I guess that I can

>install a pre-amp sort of "en route" to the far side of the house, in
>a location where electrical power is more readily available. A
>battery powered pre-amp is also not out of the question, especially if
>I don't need to climb onto the roof to change the batteries.

For receivers (we usually talk about transmitters here), a 4 dB loss
is trivial except in fringe areas. 60% may seem like a lot, but in
the scale of things TV tuners are quite capable with working with very
little signal. Again, simply trying will answer most of this.

Pre-amps that are put on the antenna work best. They can be powered
through the same line that carries the signal so no need for
batteries.
>
>My next step is to visit the roof again in daylight and see what I can
>figure out based upon the information that I've received here and in
>the private emails. I plan to post back after I've explored this.
>
>Thanks again to you or anyone else for continued advice.
>
>Jonathan
>
73's
Richard Clark, KB7QHC

6388. How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 04:59:10 UTC
From: Michael <nleahcimathotmaildotcom@nowhere.com>
Message-ID: <Xns945CD57B98FBEnleahcim@63.240.76.16>
Source record: 102754
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Hi - I'm using some Laipac "easy link" modules in a custom remote control/home automation device for my house. I'm using the 433.92mhz models, datasheet here: http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf Can anyone give me any advice about how to design an antenna for this? The reciever will be embedded in an outside wall - so the antenna can be as big as it needs to be. The transmitter's antenna will be in a hand held device - so the smaller the better. Can anyone give me any tips as to how to design this antenna? And sorry for cross posting - I wasn't sure which of these two newsgroups this question fit best. Thanks, and happy holidays!

Michael

6389. Seasons Greetings

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 05:10:54 UTC
From: Troy - VK2HXY <NOSPAMvk2hxy@hotmail.com>
Message-ID: <EoPGb.73$ma.3506@nnrp1.ozemail.com.au>
Source record: 102755

Merry Christmas and a happy New Year to all on this News Group. I have had some great responses to some questions that I have posed throughout the year. Thanks to everyone for their sense of humour and for the no nonsense replies that I have had. It's gratifying to know that there is a lot of information out there that people are still willing to impart with those less in the know. In my mind this is true essence of the Hobby "Experimentation and imparting that knowledge.... Not to mention assisting those to gain a better understanding of the hobby in general. Not all mind's are alike.

Warmest regards to you all. Looking forward to conversing with you all Next Year, wether on or off this NG.

Stay safe, take care.

Troy
VK2HXY
Sydney - Australia

6390. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 05:17:51 UTC
From: Rob <rds2665@yahoo.com.au>
Message-ID: <3febc338$0$1745$5a62ac22@freenews.iinet.net.au>
Source record: 102756
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Michael" <nleahcimathotmaildotcom@nowhere.com> wrote in message
news:Xns945CD57B98FBEnleahcim@63.240.76.16...
> Hi - I'm using some Laipac "easy link" modules in a custom remote
> control/home automation device for my house. I'm using the 433.92mhz
> models, datasheet here:
http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
> Can anyone give me any advice about how to design an antenna for this? The
> reciever will be embedded in an outside wall - so the antenna can be as
big
> as it needs to be. The transmitter's antenna will be in a hand held device
> - so the smaller the better. Can anyone give me any tips as to how to
> design this antenna? And sorry for cross posting - I wasn't sure which of
> these two newsgroups this question fit best. Thanks, and happy holidays!
>
> Michael

There is a directional yagi design @
http://picaxe.orcon.net.nz/yagi433.jpg
and a link to further data at the bottom of the page.

If you find further resources please post them here.

regards
rob

6391. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 05:37:35 UTC
From: Rob <rds2665@yahoo.com.au>
Message-ID: <3febc7d8$0$1730$5a62ac22@freenews.iinet.net.au>
Source record: 102757
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

>
> There is a directional yagi design @
> http://picaxe.orcon.net.nz/yagi433.jpg
> and a link to further data at the bottom of the page.
>
> If you find further resources please post them here.
>
> regards
> rob
>
>

Other link is: http://ac6v.com/antprojects.htm

6392. Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 06:56:06 UTC
From: "Dave J." <dju@nospam.com>
Message-ID: <vemnuvsv3fuf9e8kah3mkdr2cco31arrjo@4ax.com>
Source record: 102758

2 Meter / 440 question.

I have an RV with a fiberglass roof and a luggage rack on top of the roof. I'd like to use the luggage rack as an antenna mount point since there's really no other place to attach a mobile antenna if it needs a ground plane.

But I doubt if the rack is grounded to the vehicle frame. Should I bother running some ground braid down to the frame or will the coaxes shield itself provide enough ground to allow normal antenna performance.

Thanks.

Dave

6393. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 06:57:15 UTC
From: Leon Heller <aqzf13@dsl.pipex.com>
Message-ID: <3febdbcb$0$11179$cc9e4d1f@news.dial.pipex.com>
Source record: 102759
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Michael wrote:

> Hi - I'm using some Laipac "easy link" modules in a custom remote
> control/home automation device for my house. I'm using the 433.92mhz
> models, datasheet here: http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
> Can anyone give me any advice about how to design an antenna for this? The
> reciever will be embedded in an outside wall - so the antenna can be as big
> as it needs to be. The transmitter's antenna will be in a hand held device
> - so the smaller the better. Can anyone give me any tips as to how to
> design this antenna? And sorry for cross posting - I wasn't sure which of
> these two newsgroups this question fit best. Thanks, and happy holidays!

A simple 1/4 wave antenna should do for starters - just cut a piece of
wire to about 70/4 = 17.5 cm.

Leon
--
Leon Heller, G1HSM
Email: aqzf13@dsl.pipex.com
My low-cost Philips LPC210x ARM development system:
http://www.geocities.com/leon_heller/lpc2104.html

6394. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 07:34:00 UTC
From: Michael <nleahcimathotmaildotcom@nowhere.com>
Message-ID: <Xns945CEFBC2290Cnleahcim@204.127.199.17>
Source record: 102760
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Leon Heller <aqzf13@dsl.pipex.com> wrote in
news:3febdbcb$0$11179$cc9e4d1f@news.dial.pipex.com:

>
>
> Michael wrote:
>
>> Hi - I'm using some Laipac "easy link" modules in a custom remote
>> control/home automation device for my house. I'm using the 433.92mhz
>> models, datasheet here:
>> http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf Can anyone give
>> me any advice about how to design an antenna for this? The reciever
>> will be embedded in an outside wall - so the antenna can be as big
>> as it needs to be. The transmitter's antenna will be in a hand held
>> device - so the smaller the better. Can anyone give me any tips as to
>> how to design this antenna? And sorry for cross posting - I wasn't
>> sure which of these two newsgroups this question fit best. Thanks,
>> and happy holidays!
>
> A simple 1/4 wave antenna should do for starters - just cut a piece of
> wire to about 70/4 = 17.5 cm.
>
> Leon

OK - that sounds very manageable for the reciever - but what about the
transmitter? I was hoping to make it the size of the typical keyless entry
keyfob. Is that even remotely possible? Thanks,

Michael

6395. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 08:26:45 UTC
From: "Tim Auton"
Message-ID: <lirnuvclp9hcbuc3ri2nkgg8ftgev9p2ll@4ax.com>
Source record: 102761
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Michael <nleahcimathotmaildotcom@nowhere.com> wrote:

>Leon Heller <aqzf13@dsl.pipex.com> wrote in
>news:3febdbcb$0$11179$cc9e4d1f@news.dial.pipex.com:
>>> Hi - I'm using some Laipac "easy link" modules in a custom remote
>>> control/home automation device for my house. I'm using the 433.92mhz
>>> models, datasheet here:
>>> http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf Can anyone give
>>> me any advice about how to design an antenna for this? The reciever
>>> will be embedded in an outside wall - so the antenna can be as big
>>> as it needs to be. The transmitter's antenna will be in a hand held
>>> device - so the smaller the better. Can anyone give me any tips as to
>>> how to design this antenna? And sorry for cross posting - I wasn't
>>> sure which of these two newsgroups this question fit best. Thanks,
>>> and happy holidays!
>>
>> A simple 1/4 wave antenna should do for starters - just cut a piece of
>> wire to about 70/4 = 17.5 cm.
>
>OK - that sounds very manageable for the reciever - but what about the
>transmitter? I was hoping to make it the size of the typical keyless entry
>keyfob. Is that even remotely possible? Thanks,

A loop antenna is the most compact, either a loop of wire or a PCB
track. Some info on designing them here:

http://www.nvlsi.no/files/Product/applications/applicationnotesallnRFn.pdf

Tim
--
The .sig is dead.

6396. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 09:00:13 UTC
From: Ian Jackson <REMOVEPLEASE@g3ohx.demon.co.uk>
Message-ID: <LncSYTNdi6Ewnx@g3ohx.demon.co.uk>
Source record: 102762
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

In message <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, John Soto
<endor37@skip-the-spam.hotmail.com> writes
>I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
>way of making sure the connections are *waterproof* indefinately.
>
>I'm using T&B SNS connectors on the cable and where the connection
>meets the LNB, I'm thinking about using some sorta of silicone grease
>sealant on the threds, plenty of wrapping with Scotch 88 tape and then
>a coat of Skotchcoat.
>
>

Before connecting, spray both connectors with WD40 (has negligible
effect on signals). Connect. Wipe off WD40 (on outside, of course). Wrap
tightly and neatly with self-amalgamating tape. Spray again with WD40.
Will last for ever.
Ian.
--

6397. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 10:15:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsh1n6rfm1@sparta.btinternet.com>
Source record: 102763
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Assuming a roughly all-round, no-particular-direction antenna is required,
then the most simple antenna is called for. A simple antenna is also the
most efficient.

The most simple antenna is just a straight, vertical rod fed at its center
between its two halves. For F = 434 MHz, overall dipole length is crudely
0.33 metres = 13 inches.

Reg

6398. Re: Shakira getting dirty with dildo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 13:12:11 UTC
From: Mark Russo <rmrusso1@optonline.net>
Message-ID: <3FEC3477.768DB44@optonline.net>
Source record: 102765
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

does it cover the 2 meter and 440 band and does it use the SO-238
connector?

John wrote:

> Shakira spreading on bed with dildo

6399. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 13:15:11 UTC
From: Nick Smith <nospam@nospam.ntlworld.com>
Message-ID: <orWGb.164$Kd3.171656@newsfep1-win.server.ntli.net>
Source record: 102764
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

>
> Before connecting, spray both connectors with WD40 (has negligible
> effect on signals). Connect. Wipe off WD40 (on outside, of course). Wrap
> tightly and neatly with self-amalgamating tape. Spray again with WD40.
> Will last for ever.
> Ian.

Ian,

Surely the WD40 should not be applied to the electrically connecting surfaces ?
Isn't oil an insulator ?
And I wouldn't be happy leaving self amalgamating exposed to the sun - overwrap
in plastic insulating tape as well with the outermost layer not wrapped under much
tension to stop the tape unwrapping itself when baking in the sun.

Nick

6400. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 13:16:43 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <tqcouvoph3g81chau0edmcoqrppiafqpbg@4ax.com>
Source record: 102766
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 26 Dec 2003 13:17:51 +0800, "Rob" <rds2665@yahoo.com.au>
wrote:

>
>"Michael" <nleahcimathotmaildotcom@nowhere.com> wrote in message
>news:Xns945CD57B98FBEnleahcim@63.240.76.16...
>> Hi - I'm using some Laipac "easy link" modules in a custom remote
>> control/home automation device for my house. I'm using the 433.92mhz
>> models, datasheet here:
>http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
>> Can anyone give me any advice about how to design an antenna for this? The
>> reciever will be embedded in an outside wall - so the antenna can be as
>big
>> as it needs to be. The transmitter's antenna will be in a hand held device
>> - so the smaller the better. Can anyone give me any tips as to how to
>> design this antenna? And sorry for cross posting - I wasn't sure which of
>> these two newsgroups this question fit best. Thanks, and happy holidays!
>>
>> Michael
>
>
>
>
>There is a directional yagi design @
>http://picaxe.orcon.net.nz/yagi433.jpg

Very useful for a hand-held device I *don't* think!
--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

6401. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 13:16:45 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <ntcouvcs56jgkf00545khtmss9v9genbqh@4ax.com>
Source record: 102767
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 26 Dec 2003 10:15:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Assuming a roughly all-round, no-particular-direction antenna is required,
>then the most simple antenna is called for. A simple antenna is also the
>most efficient.
>
>The most simple antenna is just a straight, vertical rod fed at its center
>between its two halves. For F = 434 MHz, overall dipole length is crudely
>0.33 metres = 13 inches.

Reg, you obviously know a thing or two about antennas. I need to come
up with a small antenna for a hand-held 40Mhz transmitter. I'd like to
use some sort of rubber duck helicoil to save space if poss. Any ideas
as to dimensions etc? The output impedance of the tx is around 140
ohms.
--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

6402. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 13:51:12 UTC
From: Klaus Vestergaard Kragelund <klauskvik@hotmail.com>
Message-ID: <3fec3cbf$0$9754$edfadb0f@dread14.news.tele.dk>
Source record: 102768
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Michael" <nleahcimathotmaildotcom@nowhere.com> wrote in message
news:Xns945CD57B98FBEnleahcim@63.240.76.16...
> Hi - I'm using some Laipac "easy link" modules in a custom remote
> control/home automation device for my house. I'm using the 433.92mhz
> models, datasheet here:
http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
> Can anyone give me any advice about how to design an antenna for this? The
> reciever will be embedded in an outside wall - so the antenna can be as
big
> as it needs to be. The transmitter's antenna will be in a hand held device
> - so the smaller the better. Can anyone give me any tips as to how to
> design this antenna? And sorry for cross posting - I wasn't sure which of
> these two newsgroups this question fit best. Thanks, and happy holidays!
>

Theese three app. notes were helpfull for me:

www.microdesign.dk/1.pdf
www.microdesign.dk/2.pdf
www.microdesign.dk/3.pdf

Cheers

Klaus

6403. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 16:51:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l3pouvsspirmqkqgt13m20jh7j8hgg5b8m@4ax.com>
Source record: 102669

On Fri, 26 Dec 2003 06:56:06 GMT, Dave J. <dju@nospam.com> wrote:

>2 Meter / 440 question.
>
>I have an RV with a fiberglass roof and a luggage rack on top of the
>roof. I'd like to use the luggage rack as an antenna mount point since
>there's really no other place to attach a mobile antenna if it needs a
>ground plane.
>
>But I doubt if the rack is grounded to the vehicle frame. Should I
>bother running some ground braid down to the frame or will the coaxes
>shield itself provide enough ground to allow normal antenna
>performance.
>
>Thanks.
>
>Dave

Hi Dave,

Depends....

Upon the size of this luggage rack. How big is it in terms of
wavelength? More than a quarter wave for 2M (probably) and it
qualifies as enough metal to do the job. You may also be able to
gamma match to the luggage rack itself and make it an Halo antenna
(provided it has a full circle of continuity); but in that regard, it
is probably too big (perhaps 6M then?).

In real estate they have the three determiners of success: location,
location, location. For us, that is not to far off, but rather:
location, size, wavelength (or Metersï¿½, Metersï¿½, Metersï¿½).

73's
Richard Clark, KB7QHC

6404. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 17:05:15 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <fTZGb.45760$VB2.83730@attbi_s51>
Source record: 102670

Richard Clark wrote:

SNIP

> The ONLY advance we can claim in the last half century, is that no
> power is lost to lighting up filaments in transistors.
>
>

Oh Boy!! 50 years of hamming, 43 years of engineering, 40 years of marriage, 15 years of ministry, and 3+ years of retirement and NOW I FINALLY FIND OUT WHY TRANSISTOR DON'T LIGHT UP!!!

I better hold on to my 3-500 Amplifier so I can demonstrated a ham station to the neighborhood kids ... lots of light!

6405. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 17:20:16 UTC
From: Jerry Bransford <jerrypb@mecox.net>
Message-ID: <m5_Gb.28656$gN.19734@fed1read05>
Source record: 102671

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:fTZGb.45760$VB2.83730@attbi_s51...
> Richard Clark wrote:
>
> SNIP
>
> > The ONLY advance we can claim in the last half century, is that no
> > power is lost to lighting up filaments in transistors.
> >
> >
>
> Oh Boy!! 50 years of hamming, 43 years of engineering, 40 years of
> marriage, 15 years of ministry, and 3+ years of retirement and NOW I
> FINALLY FIND OUT WHY TRANSISTOR DON'T LIGHT UP!!!
>
> I better hold on to my 3-500 Amplifier so I can demonstrated a ham
> station to the neighborhood kids ... lots of light!

I'm dating myself but I miss filaments/vacuum tubes and the wonderful smells/aromas of the hamshacks I used to visit as a kid in the sixties before I got my ham license. Luckily I got to work with enough big vacuum tube tx/rx equipment in the USAF to know how much better what we have now really is. I bought my childhood dream receiver a few years ago, a Hammarlund HQ-180, and it brought back some great memories at mediocre performance. :)

73
Jerry
--
Jerry Bransford
To email, remove 'me' from my email address
KC6TAY, PP-ASEL
See the Geezer Jeep at
http://members.cox.net/jerrypb/

6406. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 18:21:31 UTC
From: Pappy127@usa.net
Message-ID: <3FEC7C2B.6B903C71@usa.net>
Source record: 102677

Dave I installed a radio and 5/8 gain antenna in a ambulance with a fiberglass roof. I used aluminum tape 2 feet long in a cross configuration. It worked great in this application as a ground plane. They use 110 watt VHF radios.

"Dave J." wrote:
>
> 2 Meter / 440 question.
>
> I have an RV with a fiberglass roof and a luggage rack on top of the
> roof. I'd like to use the luggage rack as an antenna mount point since
> there's really no other place to attach a mobile antenna if it needs a
> ground plane.
>
> But I doubt if the rack is grounded to the vehicle frame. Should I
> bother running some ground braid down to the frame or will the coaxes
> shield itself provide enough ground to allow normal antenna
> performance.
>
> Thanks.
>
> Dave

6407. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 18:21:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s6uouv4aaogc7lkgov78r21fq8slmfgnjv@4ax.com>
Source record: 102672

On Fri, 26 Dec 2003 17:05:15 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Richard Clark wrote:
>
>SNIP
>
>> The ONLY advance we can claim in the last half century, is that no
>> power is lost to lighting up filaments in transistors.
>>
>>
>
>Oh Boy!! 50 years of hamming, 43 years of engineering, 40 years of
>marriage, 15 years of ministry, and 3+ years of retirement and NOW I
>FINALLY FIND OUT WHY TRANSISTOR DON'T LIGHT UP!!!
>
>I better hold on to my 3-500 Amplifier so I can demonstrated a ham
>station to the neighborhood kids ... lots of light!

OK Fellows,

Such lackluster response to this single comment!

Lots of light Dave? Really? Then obviously you were not driving hard
enough!

When I broke into this business/hobby back then, I worked for a Ham in
his TV repair business. One of the notable experiences was watching
his final's plates glowing a cheery ruby red and the surrounding
envelope filled with a violet light. The Amp may have not been
"optimized" nor was the output free of spurs; the line voltage sagged
a bit in the effort (another tribute to the Thevenin model); but no
one was analyzing the situation. We didn't need a thermometer to
prove where the calories in plate resistance were.

It gives me the grins when these kind of debates about Thevenin
Resistors ignores the obvious. Some folks demand a carbon composition
resistor to fulfill their imaginings. :-)

73's
Richard Clark, KB7QHC

6408. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 18:34:52 UTC
From: Cougercat <felix1063@comcast.net>
Message-ID: <gb%Gb.663529$Tr4.1667477@attbi_s03>
Source record: 102673

Vent rotor motors work very well. These motors are used in HVAC systems in commercial buildings. They usually take 24 volts to operate and only turn from 0 to a few degrees past 90. Most are settable.

--jj
"Richard" <nearlynews_email@ntlworld.com> wrote in message news:bs954a$aptrk$1@ID-150848.news.uni-berlin.de...
> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
> that it can be either horizontally or vertically polarized? If so, can you
> please direct me to a website or whatever. Preference right now for a
> manual system, but would also take a look at motorised systems.
>
> TIA.
>
> Rich.
>
> (Followup set to rec.radio.amateur.antenna, so all replies will go to this
> group).
>
>

6409. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 18:44:05 UTC
From: "Dave J." <dju@nospam.com>
Message-ID: <rnvouvc47pk9m4ksecljei9km587u83sk3@4ax.com>
Source record: 102674

The rails of my rack look like their about 2 meters long or real close
but there's bars going perpendicular to the rails too to add more
metal. There's not a lot of choices for antenna mounting on the RV but
the rack seems perfect for the truck-mirror or marine-rail type of
antenna mounts. If I don't use the rack then I need some type of
antenna that doesn't need a ground plane, right? Don't know much about
what's available that doesn't need a ground plane.

Dave

On Fri, 26 Dec 2003 16:51:34 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Fri, 26 Dec 2003 06:56:06 GMT, Dave J. <dju@nospam.com> wrote:
>
>>2 Meter / 440 question.
>>
>>I have an RV with a fiberglass roof and a luggage rack on top of the
>>roof. I'd like to use the luggage rack as an antenna mount point since
>>there's really no other place to attach a mobile antenna if it needs a
>>ground plane.
>>
>>But I doubt if the rack is grounded to the vehicle frame. Should I
>>bother running some ground braid down to the frame or will the coaxes
>>shield itself provide enough ground to allow normal antenna
>>performance.
>>
>>Thanks.
>>
>>Dave
>
>Hi Dave,
>
>Depends....
>
>Upon the size of this luggage rack. How big is it in terms of
>wavelength? More than a quarter wave for 2M (probably) and it
>qualifies as enough metal to do the job. You may also be able to
>gamma match to the luggage rack itself and make it an Halo antenna
>(provided it has a full circle of continuity); but in that regard, it
>is probably too big (perhaps 6M then?).
>
>In real estate they have the three determiners of success: location,
>location, location. For us, that is not to far off, but rather:
>location, size, wavelength (or Metersï¿½, Metersï¿½, Metersï¿½).

>
>73's
>Richard Clark, KB7QHC

6410. Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 18:45:51 UTC
From: John Quinn <john.quinn@comcast.net>
Message-ID: <cpvouvkae33ih2v97kro37bvo5ognd7vts@4ax.com>
Source record: 102675

Hi all,
I have a new Eavesdropper-T/Coax antenna that I'd like to install in the attic. Whats the best way to lay it out to maximize the signals from Europe? Also, is there a best practice way to lay it out to get the best signal pickup from all over the world, and not just limit ones self to Europe? I say Europe here as I think they have the most numerous English spoken news stations. Thanks, Jay

6411. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 19:06:57 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <gM6dnVuPtrpIG3GiRVn-jA@comcast.com>
Source record: 102676

Dave,

Why not mount the antenna in the middle of a sheet of plywood (painted if you want), and staple 4 wire radials for 2 and 4 radials for 440 on to the plywood. A 3 foot square piece is more than large enough if you run the 2m radials towards the corners.

Tam/WB2TT
"Dave J." <dju@nospam.com> wrote in message
news:vemnuvsv3fuf9e8kah3mkdr2cco31arrjo@4ax.com...
> 2 Meter / 440 question.
>
> I have an RV with a fiberglass roof and a luggage rack on top of the
> roof. I'd like to use the luggage rack as an antenna mount point since
> there's really no other place to attach a mobile antenna if it needs a
> ground plane.
>
> But I doubt if the rack is grounded to the vehicle frame. Should I
> bother running some ground braid down to the frame or will the coaxes
> shield itself provide enough ground to allow normal antenna
> performance.
>
> Thanks.
>
> Dave

6412. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 19:47:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eq3puvoervfko61pm0iub8q2l4ddjhmhqq@4ax.com>
Source record: 102678

On Fri, 26 Dec 2003 18:44:05 GMT, Dave J. <dju@nospam.com> wrote:

>The rails of my rack look like their about 2 meters long or real close
>but there's bars going perpendicular to the rails too to add more
>metal. There's not a lot of choices for antenna mounting on the RV but
>the rack seems perfect for the truck-mirror or marine-rail type of
>antenna mounts. If I don't use the rack then I need some type of
>antenna that doesn't need a ground plane, right? Don't know much about
>what's available that doesn't need a ground plane.
>
>Dave
>

Hi Dave,

You have more than enough metal to do the job. You will not find a
better situation unless you wrap the RV in aluminum foil (to add about
0.1 dB gain); but then you would run into things because of the
blocked windshield.

73's
Richard Clark, KB7QHC

6413. Antenna for 40 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 20:08:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsi4f7$rl4$1@sparta.btinternet.com>
Source record: 102679
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

> I need to come
> up with a small antenna for a hand-held 40Mhz transmitter. I'd like to
> use some sort of rubber duck helicoil to save space if poss.

==========

Plug a helical antenna into the output socket.

For 40 MHz, wind 140-150 close-wound turns of enamelled 18 gauge wire on a 0.4-inch diameter plastic or cardboard former. The turns will spread over a length of about 8 inches.

Whether or not it works will depend on how far away is the receiver.

You can try matching the output impedance by sqeezing the box harder. How many ohms is your hand + arm + torso + legs to ground?

For helicals of other dimensions download program HELICAL3 from website below.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

6414. Re: Luggage Rack on Fiberglass Roof

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 20:29:21 UTC
From: "Dave J." <dju@nospam.com>
Message-ID: <1e6puvs3o8ddpa4fu2rvie5r961n0qp90e@4ax.com>
Source record: 102680

Thanks to all for the ideas. They all sound good, so now I have
something to work with to get the camper set up with radios.

Merry Christmas and thanks!

Dave

6415. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 20:47:58 UTC
From: Scott Stephens <scottxs@comcast.net>
Message-ID: <281Hb.657851$HS4.4679248@attbi_s01>
Source record: 102681
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

Michael wrote:

> Hi - I'm using some Laipac "easy link" modules in a custom remote
> control/home automation device for my house. I'm using the 433.92mhz
> models, datasheet here: http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
> Can anyone give me any advice about how to design an antenna for this?

Checkout:
http://www.rfm.com/corp/appdata/antenna.pdf
too!

--
Scott

****

DIY Piezo-Gyro, PCB Drill Bot & More Soon!

http://home.comcast.net/~scottxs/

****

6416. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 22:26:55 UTC
From: Ian Jackson <REMOVEPLEASE@g3ohx.demon.co.uk>
Message-ID: <swhrNcAvWL7$Ewrq@g3ohx.demon.co.uk>
Source record: 102682
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

In message <orWGb.164$Kd3.171656@newsfep1-win.server.ntli.net>, Nick
Smith <nospam@nospam.ntlworld.com> writes
>>
>> Before connecting, spray both connectors with WD40 (has negligible
>> effect on signals). Connect. Wipe off WD40 (on outside, of course). Wrap
>> tightly and neatly with self-amalgamating tape. Spray again with WD40.
>> Will last for ever.
>> Ian.
>
>Ian,
>
>Surely the WD40 should not be applied to the electrically connecting surfaces ?
>Isn't oil an insulator ?
>And I wouldn't be happy leaving self amalgamating exposed to the sun - overwrap
>in plastic insulating tape as well with the outermost layer not wrapped
>under much
>tension to stop the tape unwrapping itself when baking in the sun.
>
>Nick
>
>

Nick,
I can't say I've noticed any tendency for WD40 to insulate the
contacting surfaces of connectors (not that I do this very often). There
should normally be sufficient pressure for the contacts to punch through
the oily layer. I reckon that WD40 will be similar to 'Lectrolube' and
similar switch cleaner-lubricants which leave a lubricating layer. Maybe
switch cleaner could be used instead of WD40, but it must be
lubricating, and not just cleaning.

However, I did once have a problem with the points in the ignition
circuit in a car. I put a little too much grease on the cam, and it
eventually worked its way along to the actual contacts. It proved a
surprisingly effective insulator!

As for the effects of sunlight on self-amalgamating tape...
Again, I haven't noticed any obvious deterioration, but the '.co.uk'
part of my e-mail address may offer some explanation! I wouldn't use PVC
tape to overwrap it - PVC always comes adrift eventually. The
old-fashioned black fabric-based electricians' tape would probably be
OK, provided you secure the end with superglue (another sovereign
remedy).

Cheers,
Ian.

--

6417. Re: Shakira getting dirty with dildo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:03:10 UTC
From: Fudge <fudge@nrtco.net>
Message-ID: <e63Hb.20$8W5.6076@news20.bellglobal.com>
Source record: 102685
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

What the Hell does this have to do with Amateur Radio you moron?

John
VA3JQ

"John" <fagljesl@eafkidqk.com> wrote in message
news:FlWGb.76862$031.26844@fe3.columbus.rr.com...
> Shakira spreading on bed with dildo
>
>
>
>

6418. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:05:46 UTC
From: Nick Smith <nospam@nospam.ntlworld.com>
Message-ID: <c53Hb.663$Kd3.1722358@newsfep1-win.server.ntli.net>
Source record: 102683
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

Hi Ian,

> >
> >Surely the WD40 should not be applied to the electrically connecting surfaces ?
> >Isn't oil an insulator ?
> >And I wouldn't be happy leaving self amalgamating exposed to the sun - overwrap
> >in plastic insulating tape as well with the outermost layer not wrapped
> >under much
> >tension to stop the tape unwrapping itself when baking in the sun.
> >
> >Nick
> >
> >
>
> Nick,
> I can't say I've noticed any tendency for WD40 to insulate the
> contacting surfaces of connectors (not that I do this very often). There
> should normally be sufficient pressure for the contacts to punch through
> the oily layer. I reckon that WD40 will be similar to 'Lectrolube' and
> similar switch cleaner-lubricants which leave a lubricating layer. Maybe
> switch cleaner could be used instead of WD40, but it must be
> lubricating, and not just cleaning.
>
> However, I did once have a problem with the points in the ignition
> circuit in a car. I put a little too much grease on the cam, and it
> eventually worked its way along to the actual contacts. It proved a
> surprisingly effective insulator!
>
> As for the effects of sunlight on self-amalgamating tape...
> Again, I haven't noticed any obvious deterioration, but the '.co.uk'
> part of my e-mail address may offer some explanation! I wouldn't use PVC
> tape to overwrap it - PVC always comes adrift eventually. The
> old-fashioned black fabric-based electricians' tape would probably be
> OK, provided you secure the end with superglue (another sovereign
> remedy).
>
> Cheers,
> Ian.

I am fairly certain I saw the S.A. tape tip in RadCom
a while back, also "PVC cables when hot" being a hazard to bare skin..

and I cant bring myself to lubricate fixed contacts before sealing up. Like
car battery terminal posts being smeared with vaseline before fitting the

clamps - just cant do it ! Probably being paranoid here !

Thanks for the reply though

Nick

6419. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:15:33 UTC
From: Mike Rush <miker@avenuenospamcable.com>
Message-ID: <Hi3Hb.69$hU1.2971@eagle.america.net>
Source record: 102684
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

Best is to use a good quality compression connector such as LRC snap n seal. If these connectors are installed properly, the only target for water intrusion is the threads. If you put a small dab of silicone grease on the threads of the female portion of the connection before screwing on the connector (make sure it's on the threads, not the center conductor), no other water proofing is needed. We did an experiment at the cable company I worked at when snap n seal connectors were first introduced. We sealed all four connectors on a tap as above and put the tap in the bottom of a trash barrell under three feet of water. After three months under water, there was no sign of water intrusion.

6420. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:24:57 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <P_qdnb1b156UWXGiRVn-vg@comcast.com>
Source record: 102686

"Cougercat" <felix1063@comcast.net> wrote in message
news:gb%Gb.663529$Tr4.1667477@attbi_s03...
> Vent rotor motors work very well. These motors are used in HVAC systems
in
> commercial buildings. They usually take 24 volts to operate and only turn
> from 0 to a few degrees past 90. Most are settable.

Where do they come from?
I didn't get any hits on google, or ebay.

6421. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:33:03 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3fecc7ac_3@news1.prserv.net>
Source record: 102687

Commercial HVAC (heating, ventilating, air conditioning) dealers. They are
duct mixture control motors.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:P_qdnb1b156UWXGiRVn-vg@comcast.com...
>
> "Cougercat" <felix1063@comcast.net> wrote in message
> news:gb%Gb.663529$Tr4.1667477@attbi_s03...
> > Vent rotor motors work very well. These motors are used in HVAC systems
> in
> > commercial buildings. They usually take 24 volts to operate and only
turn
> > from 0 to a few degrees past 90. Most are settable.
>
> Where do they come from?
> I didn't get any hits on google, or ebay.
>
>

6422. Re: Shakira getting dirty with dildo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-26 23:44:52 UTC
From: jgboyles@aol.com
Message-ID: <20031226184452.01603.00000988@mb-m20.aol.com>
Source record: 102688

>What the Hell does this have to do with Amateur Radio you moron?

Nothing John. Cussin' and calling them names will not shame them or make them stop.
73 Gary N4AST

6423. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 00:14:29 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <joipuv4273smbmgqa3s2ce07p0832a1qnd@4ax.com>
Source record: 102689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

On Wed, 24 Dec 2003 19:23:33 -0500, John Soto
<endor37@skip-the-spam.hotmail.com> wrote:

>I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
>way of making sure the connections are *waterproof* indefinately.

I originally went with RG-11 and found it too unwieldy and went back
to RG-6. You have plenty of signal so unless the cables are *really*
long it's not a problem.

>
>I'm using T&B SNS connectors on the cable and where the connection
>meets the LNB, I'm thinking about using some sorta of silicone grease

DC-4 or DC-5 compound works well when used sparingly and *only* at the
one end of the cable.

The problem with using silicon grease is getting anything to stick
afterwards. You have to be very careful with the stuff.

As others have mentioned, coax seal (tm), or the electrical putty, and
liquid electrical tape all work well as does the flooded heat shrink
tubing. The latter makes the neatest and most mechanically sound
connection, but you don't want to put too much stress on that "F"
connector on the LNB. The RG-11 was putting far too much stress on
mine. I have both the DISH Network and C-Band satellite reception and
found even with 200 foot runs to both the big and little dishes the
RG-6 was preferable, at least in my situation.

>sealant on the threds, plenty of wrapping with Scotch 88 tape and then
>a coat of Skotchcoat.

I prefer simple is better. (on the LNB I just give the F connectors
and cable a couple of coats of liquid electrical tape and a little dab
of DC-4 compound inside) Nor do I use Scotch 88 tape. I have problems
with it in both high temperature and low temperature extremes. In
most cases I've found the "cheap" stuff worked better over a wider
range, but you have to try it first as the quality may vary widely.

One other point, I never flood the connectors in a splice. Only at the
far outside end do I flood the connector. Splices get only the
flooded heat shrink tubing. When shrunk it has a wall thickness about
twice to three times the thickness of the RG-11 jacket. The flooding
compound thoroughly seals the outside of the cable and connectors from
the elements with no additional wrapping.

>
Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

6424. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 00:23:03 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <7rjpuvclebfjhdaof74shsompnac4rku4n@4ax.com>
Source record: 102690
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

On Fri, 26 Dec 2003 13:15:11 -0000, "Nick Smith"
<nospam@nospam.ntlworld.com> wrote:

>>
>> Before connecting, spray both connectors with WD40 (has negligible
>> effect on signals). Connect. Wipe off WD40 (on outside, of course). Wrap
>> tightly and neatly with self-amalgamating tape. Spray again with WD40.
>> Will last for ever.
>> Ian.
>
>Ian,
>
>Surely the WD40 should not be applied to the electrically connecting surfaces ?
>Isn't oil an insulator ?

Sure it is, but that has little to do with the application. WD-40
also works well on moving switch contacts. I'd not recommend it in a
band switch though as getting in the pader caps would be a disaster.

Remember in a switch the pressure "wipes" the surface. In the case of
the connector the pressure of a well tightened connector will press
out any oil giving a good contact. Unfortunately it also provides
some lubrication making for the possibility of over tightening the
connector. I've stripped the threads right out of PL259s and N
connectors when I managed to get some silicon grease on the threads.

>And I wouldn't be happy leaving self amalgamating exposed to the sun - overwrap
>in plastic insulating tape as well with the outermost layer not wrapped under much
>tension to stop the tape unwrapping itself when baking in the sun.

Too complicated a way to go. I don't get that elaborate on high power
UHF and VHF connections.

Simple, liquid electrical tape is as good as any as long as the
surface is dry so it can stick. It forms a very tough film that lasts
a long time even in direct sunlight.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>Nick
>

6425. Re: Antenna for 40 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 00:45:24 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <vdlpuvojjnordorerhtv0ct123uu0e2m8i@4ax.com>
Source record: 102691
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Fri, 26 Dec 2003 20:08:07 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> I need to come
>> up with a small antenna for a hand-held 40Mhz transmitter. I'd like to
>> use some sort of rubber duck helicoil to save space if poss.
>
>==========
>
>Plug a helical antenna into the output socket.
>
>For 40 MHz, wind 140-150 close-wound turns of enamelled 18 gauge wire on a
>0.4-inch diameter plastic or cardboard former. The turns will spread over a
>length of about 8 inches.
>
>
>Whether or not it works will depend on how far away is the receiver.
>
>
>You can try matching the output impedance by sqeezing the box harder. How
>many ohms is your hand + arm + torso + legs to ground?
>
>
>For helicals of other dimensions download program HELICAL3 from website
>below.

Thanks X.05, Reg. What do I use for a ground plane?
--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

6426. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 04:51:13 UTC
From: Murray <vk4aok@kellymed.com>
Message-ID: <3FED0FC1.55A043A1@kellymed.com>
Source record: 102692
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

I have some liquid tape and it is very good for this kind of thing, too.
Also you may want to look for Caltex CopperKote - a copper loaded
grease if you can't stand the thought of putting vaseline or similar
on the plugs first. I also use it on battery posts.

It is used commercially by the power companies when they string up
supply lines. The tiny copper flakes cut thru and make contact.
Cheers.
Murray vk4aok

Roger Halstead wrote:
>
> On Fri, 26 Dec 2003 13:15:11 -0000, "Nick Smith"
> <nospam@nospam.ntlworld.com> wrote:
>
> >>
> >> Before connecting, spray both connectors with WD40 (has negligible
> >> effect on signals). Connect. Wipe off WD40 (on outside, of course). Wrap
> >> tightly and neatly with self-amalgamating tape. Spray again with WD40.
> >> Will last for ever.
> >> Ian.
> > >
> > >Ian,
> > >
> > >Surely the WD40 should not be applied to the electrically connecting surfaces ?
> > >Isn't oil an insulator ?
>
> Sure it is, but that has little to do with the application. WD-40
> also works well on moving switch contacts. I'd not recommend it in a
> band switch though as getting in the pader caps would be a disaster.
>
> Remember in a switch the pressure "wipes" the surface. In the case of
> the connector the pressure of a well tightened connector will press
> out any oil giving a good contact. Unfortunately it also provides
> some lubrication making for the possibility of over tightening the
> connector. I've stripped the threads right out of PL259s and N
> connectors when I managed to get some silicon grease on the threads.
>
> >And I wouldn't be happy leaving self amalgamating exposed to the sun - overwrap
> >in plastic insulating tape as well with the outermost layer not wrapped under much
> >tension to stop the tape unwrapping itself when baking in the sun.
>
> Too complicated a way to go. I don't get that elaborate on high power
> UHF and VHF connections.

>
> Simple, liquid electrical tape is as good as any as long as the
> surface is dry so it can stick. It forms a very tough film that lasts
> a long time even in direct sunlight.
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair?)
> www.rogerhalstead.com
> >
> >Nick
> >

--
****
Murray Kelly vk4aok
mailto://vk4aok@kellymed.com
6 Spyglass Place,
Oxley, QLD. 4075. Australia
ph/fax Intl+ 61 7 3879 7968
****

6427. Re: Antenna for 40 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 07:09:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsjb74$8li$1@hercules.btinternet.com>
Source record: 102693
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

> >
> >You can try matching the output impedance by sqeezing the box harder. How
> >many ohms is your hand + arm + torso + legs to ground?
> >
> >
> >For helicals of other dimensions download program HELICAL3 from website
> >below.
>
> What do I use for a ground plane?

==========

YOU plus the box constitute the groundplane. Otherwise, for example, with a
set of 4 1/4-wave radials you won't be handheld.

Reg

6428. Re: Vacation HF antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 07:46:14 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a54e63b1ca48a159896a0@news-server.socal.rr.com>
Source record: 102694

In article <3fe5da34$0$17855$ba620e4c@reader5.news.skynet.be>,
Gery@duyck-co.be says...
> Hi,
>
> Which antenna sould I use to work with my yaesu FT-100D, on vacation in the
> mountains.
> longwire + tuner, or vertical + tuner or even other solutions.
>
> I think a long wire should be the best, but what should be it's best length?
>
> Any other tips and info is welcome.

You didn't mention the type of situation you're going to be in. If
you're up where you can't really string up a dipole, then a longwire and
tuner would probably be the best option. Set it up in advance of your
trip, though, and work out the bugs so that you get the best performance
for the frequencies you plan to use. Horizontal polarization is better
than vertical, too.

But the best option would be to set up a dipole of some kind.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6429. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 07:46:15 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a54e6e5699fa76d9896a1@news-server.socal.rr.com>
Source record: 102695

In article <3FE7BCBD.1060709@ix.netcom.com>, wa2ise@ix.netcom.com
says...
> I don't think any IT guys use Ethernet cable anymore, so maybe
> you can ask them to save some for you when they gut the ceilings,
> etc at work.

Just make sure you get the "thick" version. The "thin" Ethernet is RG-
58 and not nearly as good, especially on long runs. (Short runs of just
a few feet or so are probably okay.)

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6430. Re: Mechanically rotating your yagi to change polarization

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 13:42:24 UTC
From: Donnie <"look me up"@qrz.com>
Message-ID: <l13ruvcptf3v8jr8v854btu1b63trrku14@4ax.com>
Source record: 102696

On Fri, 26 Dec 2003 18:34:52 GMT, "Cougercat" <felix1063@comcast.net> wrote:

>Vent rotor motors work very well. These motors are used in HVAC systems in
>commercial buildings. They usually take 24 volts to operate and only turn
>from 0 to a few degrees past 90. Most are settable.
>
>--jj
>"Richard" <nearlynews_email@ntlworld.com> wrote in message
>news:bs954a$aptrk$1@ID-150848.news.uni-berlin.de...
>> Hi. Has anyone designed a way to mechanically rotate their VHF/UHF yagi so
>> that it can be either horizontally or vertically polarized? If so, can
>you
>> please direct me to a website or whatever. Preference right now for a
>> manual system, but would also take a look at motorised systems.
>>
>> TIA.
>>
>> Rich.
>>
>> (Followup set to rec.radio.amateur.antenna, so all replies will go to this
>> group).
>>
>>
>
Grainger.com?

Donnie (N4JZH)

''Behold how good and well brethren dwell together in unity''

6431. Oggetto interessante sul sito eBay Italia; numero oggetto 3066313182: Antenna bibanda Comet CA-2x4 MAX 144-430 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 14:01:34 UTC
From: Alpha <alpha_team_70@hotmail.com>
Message-ID: <2hgHb.11351$VW.492966@news3.tin.it>
Source record: 102697

Titolo dell'oggetto: Antenna bibanda Comet CA-2x4 MAX 144-430 MHz
Venditore: adsl_it
Inizio inserzione: 17-Dic-03 21:36:38 CET
Chiusura inserzione: 27-Dic-03 21:36:38 CET
Prezzo corrente: EUR 60,00
Per fare offerte su questo oggetto, vai alla pagina:
http://cgi.ebay.it/ws/eBayISAPI.dll?ViewItem&item=3066313182

Descrizione oggetto:
Usata molto poco, ha subito una piccola riparazione e cio uno dai tubi in
vetronesina stato leggermente accorciato ma perfettamente funzionante!!!
Comprata a circa 400.000 lire qualche anno fa.
RAGAZZI... IL PREZZO DI PARTENZA E' VERAMENTE STACCIATO E QUINDI....
FORZA!!!!!

Features :
- SLC-system, super-linear-converter, realized low-loss and maximum gain.
- Wide-band and no frequency adjustment is required.
- Heavy duty fiberglass guarantee complete water/polution-proof, preventif
QSB.
- Newly invented, ABS-Joint system provides finest beam pattern and easy
assembling works.
- Lightening protection is equipped, wich guards your transmitter.
This antenna is used for LOCAL and SATELLITE QSOs (RS-12/13, RS-10, RS-15).

SPECIFICATIONS:

Electrical :
Frequency Mhz : 144 / 430
Gain : 144 Mhz : 8.5dB / 430 Mhz : 11.9dB
V.S.W.R. : Less than 1.5

Mechanical :
Length : 5.4 m
Weight : 2.6 kgIl 22-dic-03 alle 20:42:00 CET, il venditore ha aggiunto le
seguenti informazioni sull'oggetto:RAGAZZI... VEDO CHE L'ASTA E' UN PO'
MORTA... GUARDATE CHE SI TRATTA DI UN'ANTENNA VERAMENTE OTTIMA!! IL DIFETTO
DI CUI PARLO, E' VERAMENTE MINIMO E SE NON VE LO AVESSI DETTO NON LO AVRESTE
NEANCHE NOTATO!!!
SU FORZA!!!

Visita eBay, il mercato online del mondo http://www.ebay.it

6432. Re: Antenna for 40 MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 16:22:42 UTC
From: Paul Burridge <pb@osiris1.notthisbit.co.uk>
Message-ID: <k7cruv49r7cqbsb404soa6ts9nq6niphhr@4ax.com>
Source record: 102698
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

On Sat, 27 Dec 2003 07:09:24 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> >
>> >You can try matching the output impedance by sqeezing the box harder. How
>> >many ohms is your hand + arm + torso + legs to ground?
>> >
>> >
>> >For helicals of other dimensions download program HELICAL3 from website
>> >below.
>>
>> What do I use for a ground plane?
>
>==========
>
>YOU plus the box constitute the groundplane. Otherwise, for example, with a
>set of 4 1/4-wave radials you won't be handheld.

Thanks Reg! You're a diamond.
--

"I expect history will be kind to me, since I intend to write it."
- Winston Churchill

6433. Re: Oggetto interessante sul sito eBay Italia; numero oggetto 3066313182: Antenna bibanda Comet CA-2x4 MAX 144-4

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 17:25:07 UTC
From: k3bu@aol.comnoUsama
Message-ID: <20031227122507.12363.00001776@mb-m05.aol.com>
Source record: 102699

Ciao Bella!

>- Lightening protection is equipped, wich guards your transmitter.

Finally, I have been looking for it!

6434. Lightning protection for remotely tuned wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 17:31:41 UTC
From: Minnie Bannister <GoonButNotForgotten@myob.net>
Message-ID: <3FEDC1FD.9050002@myob.net>
Source record: 102700

I've read a lot of the stuff on lightning protection, including the famous PolyPhaser technical information, but I haven't found anything that deals with my (intended) situation.

I am planning to use a random wire connected to an Icom AH-4 tuner mounted on the chimney at first, later on the tower when it is in place. I could put a PolyPhaser device in the coax between the tuner and the shack -- and I could perhaps even get in the habit of disconnecting the coax where it enters the building -- but what protects the tuner itself? At the previous QTH the tuner was mounted just below the 2nd-storey window of the shack, and I could disconnect the antenna wire from the tuner and clip it to the ground wire (#6) instead. This approach doesn't work at the new QTH because (a) it's a single-storey house, so the feedpoint of the wire would be too low, and (b) the basement shack has no window.

So what are my options? Spark plug? Relay to ground the wire and the tuner? -- and if so, what kind of relay? Other suggestions?

-=-
Alan AB2OS

6435. 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 17:59:11 UTC
From: Ken Bessler <kg0wxIHATESPAM@yahoo.com>
Message-ID: <bskh9k$dra6l$1@ID-213023.news.uni-berlin.de>
Source record: 102701

I was thinking (rare - lol), what if I used
rat shack 300 ohm twinlead and made a
J-pole for 160 meters? The antenna would
be sling shotted over several nearby trees
or baloon lifted.

Seems too simple to work, eh? Or am I
missing something here?

Ken KG0WX

6436. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 18:24:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <69jruvclgmvs2ph7eebd25birf111v31ib@4ax.com>
Source record: 102702

On Sat, 27 Dec 2003 10:59:11 -0700, "Ken Bessler"
<kg0wxIHATESPAM@yahoo.com> wrote:

>I was thinking (rare - lol), what if I used
>rat shack 300 ohm twinlead and made a
>J-pole for 160 meters? The antenna would
>be sling shotted over several nearby trees
>or baloon lifted.
>
>Seems too simple to work, eh? Or am I
>missing something here?
>
>Ken KG0WX
>

Hi Ken,

Try for the balloon method, but be careful to have a long non
conductive tether to the balloon. The high potential at the end of
the antenna can blast it apart - we won't go into the fate of the
Hindenburg (yes, I know the difference between Hydrogen and Helium,
wanna experiment?).

As for laying it across trees, this hi-Z design will be looking at two
near shorts: the tree limbs it lays across, and the proximity of earth
that would be much closer than if held aloft by the balloon.

73's
Richard Clark, KB7QHC

6437. 80-10 Mtr Hamstick Experiment?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 19:14:41 UTC
From: Marvin Rosen <puns@verizon.net>
Message-ID: <BSkHb.95$E17.73@nwrddc02.gnilink.net>
Source record: 102703

Some zany thoughts on an 80-10 mtr shorty antenna:

1. Two 80 mtr hamsticks in a dipole configuration fed
in the center with ladder line & an appropriate tuner.

2. The same as above except with a 4:1 balun in the
center of the dipole. The low impeadance end of the
balun would be at the center of the dipole.

Either configuration would be placed 65 ft above gnd.
Is there any merit or possibilities concerning the above?

6438. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 19:59:58 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <bskobu$rn7$2@mail.specsol.com>
Source record: 102704

Ken Bessler <kg0wxIHATESPAM@yahoo.com> wrote:
> I was thinking (rare - lol), what if I used
> rat shack 300 ohm twinlead and made a
> J-pole for 160 meters? The antenna would
> be sling shotted over several nearby trees
> or baloon lifted.

> Seems too simple to work, eh? Or am I
> missing something here?

> Ken KG0WX

Well, the slingshot should probably be made from a truck inner tube and the
balloon would be one big balloon.

A six foot helium balloon only has a few pounds of lift.

A few minutes with a calculator and the weight per foot of twinlead
would be enlightening.

--
Jim Pennino

Remove -spam-sux to reply.

6439. Re: 80-10 Mtr Hamstick Experiment?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 22:22:45 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <VCnHb.217185$_M.952526@attbi_s54>
Source record: 102705

1) Why waste money on the balun?

2) If you have 65 feet run a random wire and tune it.

3) The 80 meter hamsticks are mostly turns of wire that radiate poorly.

4) Hamstick dipoles are always a compromise antenna. The two 80 meter sticks on 80 meters will have very narrow bandwidth, very low radiation resistance, about 4 to 6 ohms, and very low efficiency. They will not be much better on the other bands.

5) Your secret weapons is: you have 65 feet so run a sloper and a tuner.

Deacon Dave, W1MCE

Marvin Rosen wrote:

> Some zany thoughts on an 80-10 mtr shorty antenna:
>
> 1. Two 80 mtr hamsticks in a dipole configuration fed
> in the center with ladder line & an appropriate tuner.
>
> 2. The same as above except with a 4:1 balun in the
> center of the dipole. The low impeadance end of the
> balun would be at the center of the dipole.
>
> Either configuration would be placed 65 ft above gnd.
> Is there any merit or possibilities concerning the above?
>
>
>
>
>

6440. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-27 23:37:45 UTC
From: tayl0rr@yahoo.com
Message-ID: <ff33c2c3.0312271537.250eb1fd@posting.google.com>
Source record: 102706

bob <k6rtm@nospam.comcast.net> wrote in message
news:<18122003094218557 3%k6rtm@nospam.comcast.net>...
> Another approach would be to use directional couplers and diode
> detectors to measure forward and reflected power. The combination of
> low power and f>2GHz means care is needed.

I found an article on building a directional coupler and two
detectors. The coupler is simple enough. I checked ebay but I
couldn't find anything in the frequency range that had two taps. The
problem I have is building the detector. This site has a hand drawn
schematic but lists the diode as a Marconi LMR Mixer diode, but not
what an equivalent part number would be that can be ordered.
http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085
This is the hand drawn schematic
http://www.frars.org.uk/sessioncontent/1072564337--1085-image-detector.JPG

What would an equivalent diode be for up to 2.6ghz?

Thanks
Rob

6441. Re: 80-10 Mtr Hamstick Experiment?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 00:03:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEE1DCF.F1D5D923@cwis.net>
Source record: 102707

Marvin,

1. It'll work. Not very well, but it will work.

2. Why? It isn't needed and is just another point of failure.

Are there any merits or possibilities for either? Sure, just
depends
on how limited or restricted you are about antennas. Would
either be
preferable over a full sized antenna at a half or third of the
height?
Not even close! The 'rotatable dipole' may have some benifit
being able
to 'null' out signals, but I seriously doubt if it would be
worth it.
'Doc

6442. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 00:07:30 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEE1EC2.AC1A19FC@cwis.net>
Source record: 102708

Ken,
Too simple to work? Not really, just very impractical to
erect on an 160 meter 'scale'. Pictures after you get one
up would be nice...
'Doc

6443. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 01:59:42 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a57852c9afcd6039896ad@news-server.socal.rr.com>
Source record: 102709

In article <ufcguv07q1f01jd4ueqmd1rede4l2dssp5@4ax.com>,
carlzomer@hotmail.com says...
> Oh, yeah,
> don't forget to recycle the old 10b2 and 10b5 cabling, that's just
> about all it's good for.

How does one go about recycling old coax?

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6444. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 01:59:43 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a5785abe72229929896ae@news-server.socal.rr.com>
Source record: 102711

In article <3FE8C529.7040204@ix.netcom.com>, wa2ise@ix.netcom.com
says...
> > Stop being such a damn cheapskate and buy
> >some good, new coax.
> >
> Wouldn't be a true ham, then.... ;-)

There are several schools of thought on that, but I agree -- it's always
a good idea to try to salvage what you can before having to buy new. I
have quite a "junk box" of stuff -- including old 10Base-2 and 10Base-T
cabling -- for various projects. If what I =have= doesn't do the job,
=then= I head out to the local electronics supplier for what I need.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6445. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 01:59:44 UTC
From: Steve Silverwood <kb6ojs@arrl.net>
Message-ID: <MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com>
Source record: 102710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-the-spam.hotmail.com says...
> I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> way of making sure the connections are *waterproof* indefinately.
>
> I'm using T&B SNS connectors on the cable and where the connection
> meets the LNB, I'm thinking about using some sorta of silicone grease
> sealant on the threds, plenty of wrapping with Scotch 88 tape and then
> a coat of Skotchcoat.

We used to have some stuff in the Air Force called "F-4 tape" which worked great for this sort of thing. It's kind of like a putty tape, in rolls with plastic separating each layer of the tape. You wrap up the connector like you would with electrical tape, only stretching the tape a bit as you go. What happens is the tape molds itself together around the connector and provides a very water-tight seal around the whole tape job. Not sure if it's available on the civilian market but if so it's a great item to have handy.

--

-- //Steve//

Steve Silverwood, KB6OJS
Fountain Valley, CA
Email: kb6ojs@arrl.net

6446. Re: 80-10 Mtr Hamstick Experiment?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 03:02:39 UTC
From: Marvin Rosen <puns@verizon.net>
Message-ID: <jJrHb.73$f3.23@nwrddc01.gnilink.net>
Source record: 102712

I was under the impression that a fair/poor hamstick
dipole up 65' in the clear is preferable over a 65'
random wire ant located between 2 bldgs?
"Marvin Rosen" <puns@verizon.net> wrote in message
news:BSkHb.95$E17.73@nwrddc02.gnilink.net...
> Some zany thoughts on an 80-10 mtr shorty antenna:
>
> 1. Two 80 mtr hamsticks in a dipole configuration fed
> in the center with ladder line & an appropriate tuner.
>
> 2. The same as above except with a 4:1 balun in the
> center of the dipole. The low impeadance end of the
> balun would be at the center of the dipole.
>
> Either configuration would be placed 65 ft above gnd.
> Is there any merit or possibilities concerning the above?
>
>
>
>
>

6447. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 03:58:03 UTC
From: dplatt@radagast.org
Message-ID: <vusl6bbhoqn588@corp.supernews.com>
Source record: 102713
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

In article <MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com>,
Steve Silverwood <kb6ojs@arrl.net> wrote:

>We used to have some stuff in the Air Force called "F-4 tape" which
>worked great for this sort of thing. It's kind of like a putty tape, in
>rolls with plastic separating each layer of the tape.

a.k.a. 3M Scotch 70 Silicone Fusible Backshell Tape, apparently.

Sounds like good stuff... sort of the high-tech, stable-silicone big
brother of the less-expensive self-amalgamating rubber electrical
tape. Not cheap, though... list price for a 1" by 30' roll is on the
order of $30 in quantity, over $38 in onesies. Ouch.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

6448. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 04:37:37 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FEE5E0C.4070903@ix.netcom.com>
Source record: 102714

'Doc wrote:

>Ken,
> Too simple to work? Not really, just very impractical to
>erect on an 160 meter 'scale'. Pictures after you get one
>up would be nice...
> 'Doc
>
>
It'd work fine if he was on the Space Station. But in a 1G gravity
field, there
are definite issues to deal with....

6449. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 05:36:27 UTC
From: Radioman <radio@ptt.edu>
Message-ID: <3FEE6BDB.A4C1E97A@ptt.edu>
Source record: 102715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

> >We used to have some stuff in the Air Force called "F-4 tape" which
> >worked great for this sort of thing. It's kind of like a putty tape, in
> >rolls with plastic separating each layer of the tape.
>
> a.k.a. 3M Scotch 70 Silicone Fusible Backshell Tape, apparently.
>
> Sounds like good stuff... sort of the high-tech, stable-silicone big
> brother of the less-expensive self-amalgamating rubber electrical
> tape. Not cheap, though... list price for a 1" by 30' roll is on the
> order of $30 in quantity, over $38 in onesies. Ouch.

I'll just stick to Coax-Seal (tm)
http://www.coaxseal.com/

6450. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 06:35:08 UTC
From: Tom <NoSpam@NoEmail.com>
Message-ID: <bsltis$p7d$0@pita.alt.net>
Source record: 102716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

"Radioman" <radio@ptt.edu> wrote in message
news:3FEE6BDB.A4C1E97A@ptt.edu...
> >We used to have some stuff in the Air Force called "F-4 tape" which
> >worked great for this sort of thing. It's kind of like a putty tape, in
> >rolls with plastic separating each layer of the tape.
>
> a.k.a. 3M Scotch 70 Silicone Fusible Backshell Tape, apparently.
>
> Sounds like good stuff... sort of the high-tech, stable-silicone big
> brother of the less-expensive self-amalgamating rubber electrical
> tape. Not cheap, though... list price for a 1" by 30' roll is on the
> order of $30 in quantity, over $38 in onesies. Ouch.

I'll just stick to Coax-Seal (tm)
http://www.coaxseal.com/

Same here. I've been using Coax-Seal for years now. I have yet to find
anything better or easier to work with.
When I do have occasion to take the connectors apart the sealant can take
some minutes to remove, but the connections look just as clean as the day I
put them up.
I would suggest one thing. When storing Coax Seal in the shack, especially
after you have opened and used part of it, be sure to store the remainder in
an airtight container of some sort. If you don't, it has a tendency to dry
out and lose it's elasticity. (this takes a couple of years, so don't be
alarmed) I store the unused portion in a simple zip lock sandwhich bag that
I press the air out of before zipping it closed.

6451. TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 07:54:27 UTC
From: eccos <nospam@yahou.com>
Message-ID: <T_vHb.15698$aw2.8946088@newssrv26.news.prodigy.com>
Source record: 102717

Can I ask a tv antenna question here?

My satellite service does not include local channels. I have an indoor antenna that if connected through the satellite receiver gives me very poor reception. (Why?) If I connect the antenna directly to the TV, and not through the receiver, the reception improves dramatically. However, this requires having to manually connect and disconnect cables all the time.

Can you help?

Thanks.

6452. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 08:29:14 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312280029.78b1da8f@posting.google.com>
Source record: 102718

Agilent makes a bunch of possible detector diodes. For example, the
HSMS-2850 series of diodes suggests a sensitivity of "up to 35mV/uW"
at 2.45GHz. So with a 20dB coupler and 10mW (+10dBm) excitation, 40dB
return loss would give you about .3mV out of the detector, plenty to
see on a typical 3.5 digit digital voltmeter on a 200mV range. You'd
be lucky to get your coupler to have "40dB directivity" (that is,
calibrated that accurately to 50 ohms) anyway, unless you have a good
50 ohm precision load to check with. Be careful with such diodes:
they have a very low reverse voltage breakdown, so you shouldn't put
more than about +10dBm directly into a detector built with one of
them. But you can use other Schottky RF diodes with higher breakdown
if you really need to handle higher powers. The Agilent web site
should have selection guides to give you other ideas, if needed.

Cheers,
Tom

tayl0rr@yahoo.com (Robert) wrote in message
news:<ff33c2c3.0312271537.250eb1fd@posting.google.com>...
> bob <k6rtm@nospam.comcast.net> wrote in message
news:<181220030942185573%k6rtm@nospam.comcast.net>...
> > Another approach would be to use directional couplers and diode
> > detectors to measure forward and reflected power. The combination of
> > low power and f>2GHz means care is needed.
>
> I found an article on building a directional coupler and two
> detectors. The coupler is simple enough. I checked ebay but I
> couldn't find anything in the frequency range that had two taps. The
> problem I have is building the detector. This site has a hand drawn
> schematic but lists the diode as a Marconi LMR Mixer diode, but not
> what an equivalent part number would be that can be ordered.
> http://www.frars.org.uk/cgi-bin/render.pl?pageid=1085
> This is the hand drawn schematic
> http://www.frars.org.uk/sessioncontent/1072564337--1085-image-detector.JPG
>
> What would an equivalent diode be for up to 2.6ghz?
>
> Thanks
> Rob

6453. Re: How to design antenna for 433.92mhz signal?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 08:44:15 UTC
From: Rob <rds2665@yahoo.com.au>
Message-ID: <3fee9694$0$1736$5a62ac22@freenews.iinet.net.au>
Source record: 102619
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.design

"Paul Burridge" <pb@osiris1.notthisbit.co.uk> wrote in message
news:tqcouvoph3g81chau0edmcoqrppiafqpbg@4ax.com...
> On Fri, 26 Dec 2003 13:17:51 +0800, "Rob" <rds2665@yahoo.com.au>
> wrote:
>
> >
> >"Michael" <nleahcimathotmaildotcom@nowhere.com> wrote in message
> >news:Xns945CD57B98FBEnleahcim@63.240.76.16...
> >> Hi - I'm using some Laipac "easy link" modules in a custom remote
> >> control/home automation device for my house. I'm using the 433.92mhz
> >> models, datasheet here:
> >http://www.laipac.com/Downloads/Easy/TLPRLP434A.pdf
> >> Can anyone give me any advice about how to design an antenna for this?
The
> >> reciever will be embedded in an outside wall - so the antenna can be as
> >big
> >> as it needs to be. The transmitter's antenna will be in a hand held
device
> >> - so the smaller the better. Can anyone give me any tips as to how to
> >> design this antenna? And sorry for cross posting - I wasn't sure which
of
> >> these two newsgroups this question fit best. Thanks, and happy
holidays!
> >>
> >> Michael
> >
> >
> >
> >
> >There is a directional yagi design @
> >http://picaxe.orcon.net.nz/yagi433.jpg
>
> Very useful for a hand-held device I *don't* think!
> --
>
> "I expect history will be kind to me, since I intend to write it."
> -
Winston Churchill

True! (But I've got big hands.......)
Hopefully it may be of use to others on the NG.

6454. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 08:44:33 UTC
From: Ian Jackson <REMOVEPLEASE@g3ohx.demon.co.uk>
Message-ID: <symL95Axfp7$EwrM@g3ohx.demon.co.uk>
Source record: 102634
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In message <bsltis$p7d$0@pita.alt.net>, Tom <NoSpam@NoEmail.com> writes
>
>"Radioman" <radio@ptt.edu> wrote in message
>news:3FEE6BDB.A4C1E97A@ptt.edu...
>> >We used to have some stuff in the Air Force called "F-4 tape" which
>> >worked great for this sort of thing. It's kind of like a putty tape, in
>> >rolls with plastic separating each layer of the tape.
>>
>> a.k.a. 3M Scotch 70 Silicone Fusible Backshell Tape, apparently.
>>
>> Sounds like good stuff... sort of the high-tech, stable-silicone big
>> brother of the less-expensive self-amalgamating rubber electrical
>> tape. Not cheap, though... list price for a 1" by 30' roll is on the
>> order of $30 in quantity, over $38 in onesies. Ouch.
>
>
>I'll just stick to Coax-Seal (tm)
>http://www.coaxseal.com/
>
>Same here. I've been using Coax-Seal for years now. I have yet to find
>anything better or easier to work with.
>When I do have occasion to take the connectors apart the sealant can take
>some minutes to remove, but the connections look just as clean as the day I
>put them up.
>I would suggest one thing. When storing Coax Seal in the shack, especially
>after you have opened and used part of it, be sure to store the remainder in
>an airtight container of some sort. If you don't, it has a tendency to dry
>out and lose it's elasticity. (this takes a couple of years, so don't be
>alarmed) I store the unused portion in a simple zip lock sandwhich bag that
>I press the air out of before zipping it closed.
>
>

Tom,
From the pictures on the website, 'Coax-Seal' looks exactly like
ordinary self-amalgamating tape (as I know it). The cut-away picture
shows that it does not actually bond to the plastic outer of the coax,
which enables you to open up the connection in the future.
However, I would still prefer to give the parts a spray of WD40 before
the connections are made, make the connection, spray again to ensure
that the threads are wetted, wipe off the obvious surplus (but not
trying too hard, so there are still traces left). You then apply the
tape, stretching it somewhat as you go, ensuring that you keep a nice,

even tension. You end up with a tight-fitting, waterproof rubber boot around the joint, with the WD40 trapped inside to resist any tendency to corrode.
I think the only argument is whether to use WD40 or not.
Ian.

--

6455. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 11:56:00 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <3feec4a3.42182031@news.galilei.com>
Source record: 102620

Get an A-B Switchbox.
Rat Shack used to have remote control A-B Switchboxes.

TTUL
Gary

"eccos" <nospam@yahou.com> verbositized:

>Can I ask a tv antenna question here?
>
>My satellite service does not include local channels. I have an indoor
>antenna that if connected through the satellite receiver gives me very poor
>reception. (Why?) If I connect the antenna directly to the TV, and not
>through the receiver, the reception improves dramatically. However, this
>requires having to manually connect and disconnect cables all the time.
>
>Can you help?
>
>Thanks.
>
>

6456. Re: 80-10 Mtr Hamstick Experiment?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 12:18:57 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEECA31.C819823F@cwis.net>
Source record: 102621

Marvin,
I guess that would depend on the random wire, how well it performs. I can tell you that an 80 meter HamStick isn't the 'best' thing going by a long shot, either in normal mobile use, or as you described. You would almost have to 'work at it' to make some random wire antennas be as 'bad'. Then again, 'some' random wire antennas won't work as well as the Hamstick, which is normal.
If the two buildings you talk about are anywhere near 65 feet tall, then neither antenna will do particularly well (also normal),
and any other antenna less well than if it were clear of surrounding
buildings/objects. I can't say what the differences would be and
neither can anyone else. Give one of the two a try and see what happens. At least then you'll have a basis for comparison.
'Doc

6457. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 12:20:56 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FEECAA8.7DA347F7@cwis.net>
Source record: 102622

Robert,
Sort of impractical, huh?...
'Doc

6458. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 14:24:07 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <bIBHb.156489$8y1.464060@attbi_s52>
Source record: 102623

Robert Casey wrote:

> 'Doc wrote:
>
>> Ken,
>> Too simple to work? Not really, just very impractical to
>> erect on an 160 meter 'scale'. Pictures after you get one
>> up would be nice...
>> 'Doc
>>
>>
> It'd work fine if he was on the Space Station. But in a 1G gravity
> field, there
> are definite issues to deal with....
>

Beginning with a 120 meter self supporting or non-parasitically guyed
vertical.

6459. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 15:25:46 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3feef873_4@news1.prserv.net>
Source record: 102624

See inserted text:

--
Crazy George
Remove N O and S P A M imbedded in return address
"eccos" <nospam@yahou.com> wrote in message
news:T_vHb.15698$aw2.8946088@newssrv26.news.prodigy.com...
> Can I ask a tv antenna question here?
>
> My satellite service does not include local channels. I have an indoor
> antenna that if connected through the satellite receiver gives me very
poor
> reception. (Why?)

Well, it depends on where you are connecting the antenna. If you are disconnecting the dish and plugging in the local antenna there, that input is for a different frequency range and the signal is stray coupling. And, it has DC on the jack, so you may damage the satellite receiver.

On the other hand, if the satelite receiver has an input for an off the air antenna, then the receiver usually has to be off for this input to be activated and passed to the receiver.

If the above is the case, and the signal doesn't come through with the satellite receiver turned offf, then the internal diode switch in the satellite receiver is damaged.

> If I connect the antenna directly to the TV, and not
> through the receiver, the reception improves dramatically. However, this
> requires having to manually connect and disconnect cables all the time.

Gary's suggestion of an A - B switch is the simplest approach, while a hands-off method is to find a satellite system dealer who still has some of the "insertion couplers" which have an input for channel 3 or 4 from the satellite system and another input for an antenna, and produces a combined output for your TV set.

>
> Can you help?
>
> Thanks.
>
>

6460. Re: Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 15:32:03 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3feefa4b_4@news1.prserv.net>
Source record: 102625

Jay:

It is not possible to give a useful answer to that question, since the RF fields from the stations you want to hear are dramatically altered by the surroundings (attic wiring, and any other conductive materials, even the building materials). Installations of this type are strictly cut and try, for this reason. Just moving the antenna a few feet can make remarkable changes in the reception, and optimum for one station may well be bad for another. Big antenna, high and in the clear is the only realistic answer to your question.

Good luck anyway.

--
Crazy George
Remove N O and S P A M imbedded in return address
"John Quinn" <john.quinn@comcast.net> wrote in message
news:cpvouvkae33ih2v97kro37bvo5ognd7vts@4ax.com...
> Hi all,
> I have a new Eavesdropper-T/Coax antenna that I'd like to install in
> the attic. Whats the best way to lay it out to maximize the signals
> from Europe? Also, is there a best practice way to lay it out to get
> the best signal pickup from all over the world, and not just limit
> ones self to Europe? I say Europe here as I think they have the most
> numerous English spoken news stations. Thanks, Jay

6461. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 15:45:28 UTC
From: jder8745@aol.com
Message-ID: <20031228104528.04031.00001951@mb-m07.aol.com>
Source record: 102626

```
Re: Is it possible to have a 1:1 SWR?
--------------------------
Yes!

73 de Jack, K9CUN
```

6462. Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 16:17:50 UTC
From: W5GT <xyzabc11@hotmail.net>
Message-ID: <vuu0h9mt50m5f6@corp.supernews.com>
Source record: 102627

Can a Rohn 25G be safely self-supporting at ~ 40' with a house bracket at 15', or must it be guyed? The beam will be a 10 lb. Mosley 3el mini-beam with only 2.5 sq ft of wind surface area.

Is a concrete base essential under these circumstances? I'm planning on erecting one in the spring and want to plan properly, but don't have much room for guy wires unless it's unsafe not to use them.

Thanks & 73s

Dave - W5GT

6463. VERTICAL ANTENNA TSB-3305 Sapphire?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 16:30:58 UTC
From: Al Cristaldi <megaman@cybernet1.com>
Message-ID: <bsn0g702jdr@enews4.newsguy.com>
Source record: 102629

Seeking information on above listed antenna model. Appears to be an exact copy (weight, dimensions, etc.) of a Diamond X-510MA, need a manual, thanks.

73 DE AL KK7GV

6464. Re: Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 16:39:01 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3fef07a1$1_8@corp.newsgroups.com>
Source record: 102628

W5GT wrote:
> Can a Rohn 25G be safely self-supporting at ~ 40' with a house bracket at
> 15', or must it be guyed? The beam will be a 10 lb. Mosley 3el mini-beam
> with only 2.5 sq ft of wind surface area.

My "25G Bracketed Towers - No Ice" chart shows 7.7 Sq Ft at 90mph for a
bracketed 40 ft tower. It lists two brackets, one at 30 ft and one at
15 ft. It is not clear to me whether this is an either/or situation
involving one bracket or a two-bracket configuration. It's Rohn DWG#
A871302R1 dated 3/17/88
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6465. Re: Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 19:44:59 UTC
From: Ralph Mowery <rmowery@ctc.net>
Message-ID: <_bednXmtFpDHr3KiRVn-hg@ctc.net>
Source record: 102630

> Can a Rohn 25G be safely self-supporting at ~ 40' with a house bracket at
> 15', or must it be guyed? The beam will be a 10 lb. Mosley 3el mini-beam
> with only 2.5 sq ft of wind surface area.
>
> Is a concrete base essential under these circumstances? I'm planning on
> erecting one in the spring and want to plan properly, but don't have much
> room for guy wires unless it's unsafe not to use them.
>

Go here and look in the ON LINE Catalog;

http://www.rohnnet.com/

Look under the GT series of towers.

6466. Re: Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 19:53:55 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <IYudnTNMt99KqXKi4p2dnA@comcast.com>
Source record: 102631

Dave,

I would think it should work. I have an old Wilson 40 foot tubular tower that has a house bracket at about 10 feet. Been there for 24 years. I used some minimum amount of concrete, like about 5 - 6 bags, mixed in a garbage can. The Wilson is a crank up/tiltower; so, I needed enough concrete that the thing did not take off while tilting, with the house bracket removed.

You want to be sure the bracket is fastened to some main horizontal beam, not plywood, or 2x4s that are held in place with a couple of nails.

Tam/WB2TT
"W5GT" <xyzabc11@hotmail.net> wrote in message
news:vuu0h9mt50m5f6@corp.supernews.com...
> Can a Rohn 25G be safely self-supporting at ~ 40' with a house bracket at
> 15', or must it be guyed? The beam will be a 10 lb. Mosley 3el mini-beam
> with only 2.5 sq ft of wind surface area.
>
> Is a concrete base essential under these circumstances? I'm planning on
> erecting one in the spring and want to plan properly, but don't have much
> room for guy wires unless it's unsafe not to use them.
>
> Thanks & 73s
>
> Dave - W5GT
>
>

6467. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 20:05:00 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <QtqdnT7R74vsqnKi4p2dnA@comcast.com>
Source record: 102632

An A/B switch seems like the best bet. This assumes the antenna is 75 Ohms;
if not, you need a 300:75 Ohm transformer. I assume the sat receiver input
is also 75 Ohms. If you connect 300 Ohm twinlead to it, it won't work well.
How do you connect to the TV - F connector, or screw terminals? See if the
TV has 2 antenna inputs. A lot of newer TVs do. That would let you switch
sources using your regular remote control

Tam/WB2TT
"eccos" <nospam@yahou.com> wrote in message
news:T_vHb.15698$aw2.8946088@newssrv26.news.prodigy.com...
> Can I ask a tv antenna question here?
>
> My satellite service does not include local channels. I have an indoor
> antenna that if connected through the satellite receiver gives me very
poor
> reception. (Why?) If I connect the antenna directly to the TV, and not
> through the receiver, the reception improves dramatically. However, this
> requires having to manually connect and disconnect cables all the time.
>
> Can you help?
>
> Thanks.
>
>

6468. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 20:12:25 UTC
From: Tarmo Tammaru <t-tammaru@home.com>
Message-ID: <KaqdnXcQjeywpHKiRVn-hA@comcast.com>
Source record: 102633

Another source for microwave semiconductors is California Eastern Laboratories. I think they are a division of NEC. See www.cel.com

Tam/WB2TT

6469. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 22:14:41 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <kBIHb.3248$Yl5.2008@newssvr29.news.prodigy.com>
Source record: 102635
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
news:MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com...
> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
> the-spam.hotmail.com says...
> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> > way of making sure the connections are *waterproof* indefinitely.
> >
> > I'm using T&B SNS connectors on the cable and where the connection
> > meets the LNB, I'm thinking about using some sorta of silicone grease
> > sealant on the threads, plenty of wrapping with Scotch 88 tape and then
> > a coat of Skotchcoat.

I have had pretty good luck by running a piece of nylon thread along opposite sides of the connector, taping the thread in place, then coating the Coax connector with about an eighth of an inch of Hot melt, then when cool, With a layer or two of electrical tape to protect the Hot melt from the sun. Thought of using Heat shrink, but it soften the Hot Melt! The threads can be used to open the melt to make it easy to remove if I need to access the connector. Some if these connections have gone four years and look Okay!

K7DUP

6470. Broadcast Station Field Strengths..

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 22:20:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsnkv1$lk7$1@sparta.btinternet.com>
Source record: 102636

Could someone please give me an idea of the field strength, in terms of volts/meter, which broadcasters expect will provide a MINIMUM SATISFACTORY service in various sorts of service areas.

Obviously, satisfactory field strength depends on broadcasters' estimates of noise levels, typical antennas, and types of receivers. I am not interested in noise levels. Only in what field strength broadcasters consider necessary to provide a satisafactory grade of service.

It would be nice to have 4, admittedly crude numbers, for -

MF and HF in densely populated, city areas.

MF and HF in rural areas.

Somebody in broadcasting must surely have some ideas about this.

(I am not interested in sand deserts, antarctica and oceans because nobody lives there.)

Reg, G4FGQ

6471. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 23:25:47 UTC
From: tayl0rr@yahoo.com
Message-ID: <ff33c2c3.0312281525.373ee695@posting.google.com>
Source record: 102637

> Agilent makes a bunch of possible detector diodes. For example, the
> HSMS-2850 series of diodes suggests a sensitivity of "up to 35mV/uW"
> at 2.45GHz. So with a 20dB coupler and 10mW (+10dBm) excitation, 40dB
> return loss would give you about .3mV out of the detector, plenty to
> see on a typical 3.5 digit digital voltmeter on a 200mV range. You'd
> be lucky to get your coupler to have "40dB directivity" (that is,
> calibrated that accurately to 50 ohms) anyway, unless you have a good
> 50 ohm precision load to check with. Be careful with such diodes:
> they have a very low reverse voltage breakdown, so you shouldn't put
> more than about +10dBm directly into a detector built with one of
> them.

Ok I looked through the Agilent website and found what I think is the proper diode. An HSMS-2852 two diode in series pack 3 pin surface mount. However I noticed that the specs say it is best below 1.5ghz and recomends the HSMS-282X Series for below 4ghz and above -20dBm.

In either case I can't find a place to purchase any of them in quantities of less than 100. I can't seem to cross reference them to anything that digikey carries. Quantities of 10 or 20 wouldn't be bad but 100 at $.90/per is a little much.

I also found these other possibilities
HSCH-3486
ASI-3486
MA4E928B-54

6472. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 23:27:33 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <2HtNCCBIb27$EArL@ifwtech.co.uk>
Source record: 102639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Ian Jackson wrote:

>From the pictures on the website, 'Coax-Seal' looks exactly like
>ordinary self-amalgamating tape (as I know it).

They are quite different. Self-amalgamating tape is a strong, stretchable tape. 'Coax-Seal' is a form of mouldable putty which just happens to be supplied as a rolled-up strip, but it has no strength as a 'tape'.

>The cut-away picture shows that it does not actually bond to the
>plastic outer of the coax, which enables you to open up the connection
>in the future.

Coax-Seal does bond to the plastic jacket, and also to metal - in both cases, well enough to form a good waterproof seal... but if you use it like the illustration in the ads, you'll have a real mess that is very difficult to remove from the metal parts.

Self-amalgamating tape is much better in that respect, because it can be cut and peeled off to leave clean surfaces. For round shapes that are simple to wrap - like in-line plugs and jacks - it's best to use only self-amalgamating tape. But for shapes like bulkhead connectors you can't wrap tape tightly down onto the flange, so water can seep upward into the connector.

The really useful feature is that Coax-Seal will bond to self-amalgamating tape! That feature lets you use the best possible combination of the two methods.

For a cable plug and a bulkhead socket, mould some Coax-Seal around the base of the socket and a short way up the round part - but don't cover the whole connector. Then wrap self-amalgamating tape down over the cable and plug, and onto the Coax-Seal. That gives a very good seal indeed, and you can cut the tape away at any time to find the metal parts clean, bright and dry.

I've used these methods for many years on large yagi arrays with many coax connections, and they do keep the connections totally waterproof.

>However, I would still prefer to give the parts a spray of WD40 before
>the connections are made, make the connection, spray again to ensure
>that the threads are wetted, wipe off the obvious surplus (but not
>trying too hard, so there are still traces left). You then apply the
>tape, stretching it somewhat as you go, ensuring that you keep a nice,
>even tension. You end up with a tight-fitting, waterproof rubber boot

>around the joint, with the WD40 trapped inside to resist any tendency
>to corrode.
>I think the only argument is whether to use WD40 or not.

If the waterproofing works - and it certainly can - then there won't
be any tendency to corrosion.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

6473. Re: Broadcast Station Field Strengths..

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 23:29:13 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <usudnSCnE8rT-nKiRVn-gg@crocker.com>
Source record: 102638

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bsnkv1$lk7$1@sparta.btinternet.com...
> Could someone please give me an idea of the field strength, in terms of
> volts/meter, which broadcasters expect will provide a MINIMUM SATISFACTORY
> service in various sorts of service areas.
>
>
> Obviously, satisfactory field strength depends on broadcasters' estimates
of
> noise levels, typical antennas, and types of receivers. I am not
interested
> in noise levels. Only in what field strength broadcasters consider
> necessary to provide a satisafactory grade of service.
>
> It would be nice to have 4, admittedly crude numbers, for -
>
> MF and HF in densely populated, city areas.
>
> MF and HF in rural areas.
>
> Somebody in broadcasting must surely have some ideas about this.
>
> (I am not interested in sand deserts, antarctica and oceans because nobody
> lives there.)
> ----
> Reg, G4FGQ
>
>

there is a lot of info here: http://www.uwasa.fi/~jpe/voacap/ but no quick
answer.

6474. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-28 23:48:23 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <JUJHb.13181$WQ3.1404@lakeread05>
Source record: 102640

Your are powering off the satellite receiver when attempting to
receive local channels, right?

Pete

"eccos" <nospam@yahou.com> wrote in message
news:T_vHb.15698$aw2.8946088@newssrv26.news.prodigy.com...
> Can I ask a tv antenna question here?
>
> My satellite service does not include local channels. I have an indoor
> antenna that if connected through the satellite receiver gives me very
poor
> reception. (Why?) If I connect the antenna directly to the TV, and not
> through the receiver, the reception improves dramatically. However, this
> requires having to manually connect and disconnect cables all the time.
>
> Can you help?
>
> Thanks.
>
>

6475. Re: Broadcast Station Field Strengths..

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 00:57:08 UTC
From: Jack Smith <Jack.Smith@cox.net>
Message-ID: <j1uuuvsnvllt02jjp3euenkljo28d65mdi@4ax.com>
Source record: 102641

On Sun, 28 Dec 2003 22:20:17 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Could someone please give me an idea of the field strength, in terms of
>volts/meter, which broadcasters expect will provide a MINIMUM SATISFACTORY
>service in various sorts of service areas.
>
>
With respect to MW broadcasting in the US, the FCC has established a
complex set of values. Here's a quick summary. These are found at 47
C.F.R. Sect. 73.182 if you want more detail.

The four classes of AM broadcast stations (Class A,B,C and D; these
relate to power and frequency) have in general three types of service
areas, i.e., primary, secondary and intermittent. (See Sec. 73.14 for
the definitions of primary, secondary, and intermittent service
areas.) Class A stations render service to all three areas. Class B
stations render service to a primary area but the secondary and
intermittent service areas may be materially limited or destroyed due
to interference from other stations, depending on the station
assignments involved. Class C and Class D stations usually have only
primary service areas. Interference from other stations may limit
intermittent service areas and generally prevents any secondary
service to those stations which operate at night. Complete
intermittent service may still be obtained in many cases depending on
the station assignments involved.

(d) The groundwave signal strength required to render primary
service is 2 mV/m for communities with populations of 2,500 or more
and 0.5 mV/m for communities with populations of less than 2,500. See
Sec. 73.184 for curves showing distance to various groundwave field
strength contours for different frequencies and ground conductivities,
and also see Sec. 73.183, ``Groundwave signals.''

(e) A Class C station may be authorized to operate with a
directional antenna during daytime hours providing the power is at
least 0.25 kW. In computing the degrees of protection which such
antenna will afford, the radiation produced by the directional antenna
system will be assumed to be no less, in any direction, than that
which would result from non-directional operation using a single
element of the directional array, with 0.25 kW.

(f) All classes of broadcast stations have primary service areas
subject to limitation by fading and noise, and interference from other
stations to the contours set out for each class of station.

(g) Secondary service is provided during nighttime hours in areas where the skywave field strength, 50% or more of the time, is 0.5 mV/m or greater (0.1 mV/m in Alaska). Satisfactory secondary service to cities is not considered possible unless the field strength of the skywave signal approaches or exceeds the value of the groundwave field strength that is required for primary service. Secondary service is subject to some interference and extensive fading whereas the primary service area of a station is subject to no objectionable interference or fading. Only Class A stations are assigned on the basis of rendering secondary service.

Primary service area. Means the service area of a broadcast station in which the groundwave is not subject to objectionable interference or objectionable fading.

Secondary service area. Means the service area of a broadcast station served by the skywave and not subject to objectionable interference and in which the signal is subject to intermittent variations in strength.

Intermittent service area. Means the area receiving service from the groundwave of a broadcast station but beyond the primary service area and subject to some interference and fading.

In addition, Section 73.24 of the FCC's Rules require that applicants for MW broadcast licenses must demonstrate that their daytime 5mV/m contour covers 80% of the population of the entire principal community to be served, relaxed to 50% for stations in the 1605-1705 KHz band.

Jack K8ZOA

6476. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 00:59:57 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com>
Source record: 102642
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

On Sun, 28 Dec 2003 22:14:41 GMT, "Roger Gt" <Xenot@pacbell.net>
wrote:

>
>"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
>news:MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com...
>> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
>> the-spam.hotmail.com says...
>> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
>> > way of making sure the connections are *waterproof* indefinitely.
>> >
>> > I'm using T&B SNS connectors on the cable and where the connection
>> > meets the LNB, I'm thinking about using some sorta of silicone grease
>> > sealant on the threads, plenty of wrapping with Scotch 88 tape and then
>> > a coat of Skotchcoat.
>
>I have had pretty good luck by running a piece of nylon thread along
>opposite sides of the connector, taping the thread in place, then coating
>the Coax connector with about an eighth of an inch of Hot melt, then when
>cool, With a layer or two of electrical tape to protect the Hot melt from
>the sun. Thought of using Heat shrink, but it soften the Hot Melt! The

You can purchase heat shrink with the hot melt glue on the inside.
When you shrink the tube (starting at the center and working out) the
hot melt glue coats everything and the tube is much stronger than the
stuff you get at radio shack.

>threads can be used to open the melt to make it easy to remove if I need to
>access the connector. Some if these connections have gone four years and
>look Okay!

When you want to remove the cover, just heat a bit and use a box
cutter, or sharp knife to cut it away. (wear leather gloves)

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com

>
>K7DUP
>

6477. Re: Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 01:37:49 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <fzLHb.30580$PK3.16461@okepread01>
Source record: 102643

In the 60's I had 40 ft of 25G on a brake over base (5 -6 bags concrete under it) and bracketed at 10 -12 ft to the house. Hang on to your hat, it was topped off with a 4 element CB Hornet (24 ft boom). It stayed up until I got tired of the nonsense, maybe 4 - 5 years. I'm in the middle of tornado alley (NE Okla) and I'm sure it saw some good hard 80 - 90 mph wind. RM~
>

6478. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 01:43:48 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <oFLHb.3283$bb7.2901@newssvr29.news.prodigy.com>
Source record: 102644
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
> On Sun, 28 Dec 2003 22:14:41 GMT, "Roger Gt" <Xenot@pacbell.net>
> wrote:
> >"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
> >news:MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com...
> >> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
> >> the-spam.hotmail.com says...
> >> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the
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> >> > way of making sure the connections are *waterproof* indefinitely.
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> >> > I'm using T&B SNS connectors on the cable and where the connection
> >> > meets the LNB, I'm thinking about using some sorta of silicone grease
> >> > sealant on the threads, plenty of wrapping with Scotch 88 tape and
then
> >> > a coat of Skotchcoat.
> >
> >I have had pretty good luck by running a piece of nylon thread along
> >opposite sides of the connector, taping the thread in place, then coating
> >the Coax connector with about an eighth of an inch of Hot melt, then when
> >cool, With a layer or two of electrical tape to protect the Hot melt from
> >the sun. Thought of using Heat shrink, but it soften the Hot Melt! The
>
> You can purchase heat shrink with the hot melt glue on the inside.
> When you shrink the tube (starting at the center and working out) the
> hot melt glue coats everything and the tube is much stronger than the
> stuff you get at radio shack.
>
> >threads can be used to open the melt to make it easy to remove if I need
to
> >access the connector. Some if these connections have gone four years and
> >look Okay!
>
> When you want to remove the cover, just heat a bit and use a box
> cutter, or sharp knife to cut it away. (wear leather gloves)
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair?)
> www.rogerhalstead.com
>

I'll look for it. Sounds easier!!! Thanks!
K7DUP

6479. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 02:38:31 UTC
From: Ron McConnell <rcmcc@earthlink.net>
Message-ID: <HsMHb.4520$d4.1392@newsread1.news.atl.earthlink.net>
Source record: 102645

Ken Bessler, KG0WX wrote:
> I was thinking (rare - lol), what if I used
> rat shack 300 ohm twinlead and made a
> J-pole for 160 meters?

Hi, Ken,

Some suggestions:

1. go to http://www.cq-magazine.com

and download VE3ERP's (George Murphy) HAMCALC
freeware package of 250+ ham radio programs,
one of which is Murph's version of my version
of N3GO's (Gary O'Neill) J-pole design program
from his Communications Quarterly article.

2. Check out AA5TB's (Steve Yates) web site
that discusses J-poles and horizontal Zepp antennas.

http://www.qsl.net/aa5tb/

including a link to N3GO's article.

3. You can use just single wire for the half-wave radiator
and the twinlead for the not-quite-quarter-wave matching section.
For 3850kHz their lengths would be about 121.3 feet
and 58 feet tapped at 21.6 feet from the shorted end
for a 50 ohm feed tap. This assumes about a 1000 ohm
feed impedance for a low, horizontal half-wave radiator.
A vertical radiator feed impedance would be more
like 2000 to 4000 ohms. The matching section can be
at right angles to the radiator if you don't have
180 feet to stretch it out.

This is the theory. Go measure and cut copper
and plastic and let us know how you make out
in real life.

Have fun.

Cheers, 73,

Ron McConnell

w2iol@arrl.net

N 40ï¿½ 46' 57.9" W 74ï¿½ 41' 21.9"
FN20ps77GU46 [FN20ps77GV75]

http://home.earthlink.net/~rcmcc

6480. Re: Broadcast Station Field Strengths..

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 02:54:34 UTC
From: richardharrison@webtv.net
Message-ID: <8275-3FEF976A-97@storefull-2314.public.lawson.webtv.net>
Source record: 102646

Reg, G4FGQ wrote
"It would be nice to have 4, admittedly crude numbers for - MF and HF in densely populated city areas. MF and HF in rural areas ."

In the USA, the Federal Communications Commission defines three different types of service area for medium wave broadcasting stations. The primary service area is the area where groundwave from the station is not subject to fading. The secondary service area is served by the station`s skywave such that there is no objectionable groundwave interference. Nevertheless, skywave signals are subject to fading. The third service area lies between the primary and secondary service areas. It is subject to interference and fading. It is called an intermittent service area. Assignments are made in an attempt to keep primary and secondary service areas clear of objectionable interference.

FCC defines local channels as those frequencies reserved for stations of 1 KW daytime, and 250 watts nighttime, or less. Primary service is limited by interference.

Regional channels are reserved for stations of 5 KW or less. Directional patterns are often used by new stations to avoid interference in service areas of existing stations.

Clear channels no longer are the sole domain of some high power lonely US broadcast station. Clear channels are now often shared with one or more high powered stations, and perhaps also shared with lower powered stations during daytime hours, in an attempt to make better use of the frequency while the high powered stations still serve wide areas.

The FCC specifies the following minimum field intensities:

City business or factory area------10 to 50 mV/m

City residential area------------------2 to 10 mV/m

Rural--all areas during winter or northern areas during summer----------------------0.1 to 0.5 mV/m

Southern areas during summer 0.25 to 1.0 mV/m

The FCC has published additional guidelines for signal strengths in towns of certain populations, to overcome often encountered noise:

Up to 2500 inhabitants----------0.5 mV/m

2500 to 10,000 inhabitants---2.0 mV/m

The needed signal intensity depends on interfering signal levels and all other noise.

At higher frequencies, groundwave propagation goes away but noise declines too. The FCC field intensities needed for satisfaction at mediumwave broadcasting may be more than required for amateur communications.

The information above is provided by John E. Cunningham in "The Complete Broadcast Handbook".

The answer to Reg`s questions are incomplete, but I hope they help.

Best regards, Richard Harrison, KB5WZI

6481. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 06:49:20 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312282249.7ca7027e@posting.google.com>
Source record: 102647

tayl0rr@yahoo.com (Robert) wrote in message
news:<ff33c2c3.0312281525.373ee695@posting.google.com>...
...
> Ok I looked through the Agilent website and found what I think is the
> proper diode. An HSMS-2852 two diode in series pack 3 pin surface
> mount. However I noticed that the specs say it is best below 1.5ghz
> and recomends the HSMS-282X Series for below 4ghz and above -20dBm.
>
> In either case I can't find a place to purchase any of them in
> quantities of less than 100. I can't seem to cross reference them to
> anything that digikey carries. Quantities of 10 or 20 wouldn't be bad
> but 100 at $.90/per is a little much.

Yeah, that's a problem, I admit! :-) I generally just get samples of
small quantities. Tam posted another site to check out. And I'd
expect that Philips and some others have some decent GHz
detector-style Schottky diodes. You should be able to find some
vendor willing to sell you just a few of some appropriate diode. If
you have a way to check the response (a generator with calibrated
level, or even just step attenuators after a relatively uncalibrated
generator), you should be able to use diodes not necessarily optimal
for 2.5GHz, for a ratiometric application like SWR detection. By the
way, I think Agilent has one or more detector diode application notes
on their web site; they are in the data book anyway. They are worth
having a look at. Also, I'm not sure why you need two diodes...a
single diode should do the trick nicely. If that works for you, I
might be able to spare a couple HSMS-2850's, but I'd have to check how
many I have left.

Cheers,
Tom

>
>
> I also found these other possibilities
> HSCH-3486
> ASI-3486
> MA4E928B-54

6482. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 06:57:10 UTC
From: k7itm@aol.com
Message-ID: <3200347.0312282257.1319899b@posting.google.com>
Source record: 102648

A J-pole is just an end-fed half-wave and a matching section (which also radiates some). On 160, the matching section won't be particularly efficient if made from twinlead. Look for the discussion that went on here earlier this year, I believe, about the Q of a transmission line resonator. It's pretty terrible for small line at lower HF frequencies, but is quite good for the same size line up at UHF. So, you're probably much better off to use an "L" network made from a series inductor and shunt capacitor, and to provide some sort of counterpoise or ground system to operate against. Then you only have to hoist 1/2 a wave of single-conductor wire with your balloon -- or something up in the trees but I hope fairly well insulated from them.

Cheers,
Tom

"Ken Bessler" <kg0wxIHATESPAM@yahoo.com> wrote in message
news:<bskh9k$dra6l$1@ID-213023.news.uni-berlin.de>...
> I was thinking (rare - lol), what if I used
> rat shack 300 ohm twinlead and made a
> J-pole for 160 meters? The antenna would
> be sling shotted over several nearby trees
> or baloon lifted.
>
> Seems too simple to work, eh? Or am I
> missing something here?
>
> Ken KG0WX

6483. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 07:02:04 UTC
From: eccos <nospam@yahou.com>
Message-ID: <MjQHb.15918$aw2.9171427@newssrv26.news.prodigy.com>
Source record: 102649

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:JUJHb.13181$WQ3.1404@lakeread05...
| Your are powering off the satellite receiver when attempting to
| receive local channels, right?

No, I usually don't. I simply unplug the receiving cable from the dish to
the tv, and plug the cable of the indoor antenna.

6484. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 07:02:05 UTC
From: eccos <nospam@yahou.com>
Message-ID: <NjQHb.15919$aw2.9171401@newssrv26.news.prodigy.com>
Source record: 102650

"Tarmo Tammaru" <t-tammaru@home.com> wrote in message
news:QtqdnT7R74vsqnKi4p2dnA@comcast.com...
| An A/B switch seems like the best bet. This assumes the antenna is 75
Ohms;
| if not, you need a 300:75 Ohm transformer. I assume the sat receiver input
| is also 75 Ohms. If you connect 300 Ohm twinlead to it, it won't work
well.
| How do you connect to the TV - F connector, or screw terminals? See if the
| TV has 2 antenna inputs. A lot of newer TVs do. That would let you switch
| sources using your regular remote control

This is way over my head. Can you walk me through this?

How do I know if the antenna is 75 Ohms? What is a 300:75 Ohm transformer?

Thanks.

6485. Radiio Shack FM BC band convert...

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 08:36:44 UTC
From: D&B Rude <brewman@merr.com>
Message-ID: <3fefcb0a$1_2@newspeer2.tds.net>
Source record: 102653

Happy New Year to All!
I am looking for an article that appeared some years ago concerning the cutting and phasing of Radio Shack FM broadcast band beams. They make a six element beam that when cut down (two of them) and phased, make an excellent light weight, narrow beamwidth, good gain, inexpensive beam for 2 meters. I have a pair polarized vertically, and they work great.

Problem is, someone gave me this great set up and he can not remember where he got the info for cutting to length, and is also looking for the info. I do know that it was not in QST. can anyone help? Please use my email adr, brewman@merr.com as I don't always have time to hit the NX groups.

Also looking for a schematic for a friend, for a Gonset 2M AM Communicator IV. Thanks
Dave
KA9SRU

6486. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 08:41:47 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <2hnvuvo64lilld6m179bfmqu1ili5cgqgn@4ax.com>
Source record: 102652
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

```
On Mon, 29 Dec 2003 01:43:48 GMT, "Roger Gt" <Xenot@pacbell.net>
wrote:

>
>"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
>news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
>> On Sun, 28 Dec 2003 22:14:41 GMT, "Roger Gt" <Xenot@pacbell.net>
>> wrote:
>> >"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
>> >news:MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com...
>> >> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
>> >> the-spam.hotmail.com says...
>> >> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the
>best
>> >> > way of making sure the connections are *waterproof* indefinitely.
>> >> >
>> >> > I'm using T&B SNS connectors on the cable and where the connection
>> >> > meets the LNB, I'm thinking about using some sorta of silicone grease
>> >> > sealant on the threads, plenty of wrapping with Scotch 88 tape and
>then
>> >> > a coat of Skotchcoat.
>> >
>> >I have had pretty good luck by running a piece of nylon thread along
>> >opposite sides of the connector, taping the thread in place, then coating
>> >the Coax connector with about an eighth of an inch of Hot melt, then when
>> >cool, With a layer or two of electrical tape to protect the Hot melt from
>> >the sun. Thought of using Heat shrink, but it soften the Hot Melt! The
>>
>> You can purchase heat shrink with the hot melt glue on the inside.
>> When you shrink the tube (starting at the center and working out) the
>> hot melt glue coats everything and the tube is much stronger than the
>> stuff you get at radio shack.
>>
>> >threads can be used to open the melt to make it easy to remove if I need
>to
>> >access the connector. Some if these connections have gone four years and
>> >look Okay!
>>
>> When you want to remove the cover, just heat a bit and use a box
>> cutter, or sharp knife to cut it away. (wear leather gloves)
>>
>> Roger Halstead (K8RI & ARRL life member)
>> (N833R, S# CD-2 Worlds oldest Debonair?)
```

>> www.rogerhalstead.com
>>
The stuff is made by 3M in two sizes that I've seen
800 IMCSN .80"/.22" 20/5.6 mm
and .400 IMCSN .40"/.12" 10/3.1 mm
It's a tad over a dollar a foot.

Also Times wire packages a piece with their N connectors.

I have some photos of both sizes of tubing as well as the connector
and I have one splice that has been taken apart.

I cut the splice out of the line as I though there was a problem with
it, which there was, but it was the last thing I expected. It turns
out the barrel connector had shorted and the other connectors were
still good, or would have been if I hadn't cut them out.

I'll try and get some shots up on my web page Monday or tuesday.
My home page is www.rogerhalstead.com and the URL for the coax splices
and heat shrink tubing *will* be
http://www.rogerhalstead.com/ham_files/connectors.htm when it goes up.
As it's past 3:00 AM, I have to create the page, resize the images and
then ftp it up to the server, I think it's gonna wait. To top it off I
have to spend most of tomorrow (Monday) out at the airport, finishing
up a demolition project and then cleaning up... soooo, if my memory
holds that long, I'll try and get the page up Monday evening.

OK, I did get the page up, but only small images. Links to larger 800
X 600 images this evening.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>

>
>I'll look for it. Sounds easier!!! Thanks!
>K7DUP
>
>

6487. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 09:18:41 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <wjSHb.16058$7D3.8118@fed1read02>
Source record: 102651

"JDer8745" <jder8745@aol.com> wrote in message
news:20031228104528.04031.00001951@mb-m07.aol.com...
> Re: Is it possible to have a 1:1 SWR?
> --------------------------
> Yes!
>
> 73 de Jack, K9CUN

Agreed! I get it all the time with my dummy load.

Ed
WB6WSN

6488. Auto Ant. Tuner Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 12:22:50 UTC
From: Marvin Rosen <puns@verizon.net>
Message-ID: <u0VHb.5185$f3.4775@nwrddc01.gnilink.net>
Source record: 102654

I'm considering the purchase of an Icom-
AH-4 auto tuner. I am planning to use it
with a 100 watt output rig. My questions
are as follows:

1. I suspect because of the numerous
components within the tuner there is
more to go wrong than a manual tuner?
2. The only advantage of an auto tuner
is convenience?
3. Distant lightning, snow & heavy wind can
cause static which may ruin the tuner?

Any worthwhile comments would be appreciated.

6489. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 13:38:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bspapd$j15$1@sparta.btinternet.com>
Source record: 102655

Dear Rich, your patience is admirable.

The world of electrical engineering would have been a far more more understandable place if Thevenin and other trivial theorem inventors of his ilk had never existed. As things are, the only purpose served by such superfluous statements of the bleeding obvious is to assist university professors and Ph.D's in justifying their grants and salaries.

But people must be allowed to make livings and reputations in the best way they can even if, inadvertently, they turn out to be a handicap. The human race is now so wealthy the economy can well afford them. ;o)

By the way, what DID Thevenin say? I don't recall ever having knew. Have I never progressed beyond V = I*R ?

Reg

6490. Re: Auto Ant. Tuner Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 14:05:03 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FF0348F.7D1BAA99@cwis.net>
Source record: 102656

Marvin,

> 1. I suspect because of the numerous
> components within the tuner there is
> more to go wrong than a manual tuner?

True.

> 2. The only advantage of an auto tuner
> is convenience?

True.

> 3. Distant lightning, snow & heavy wind can
> cause static which may ruin the tuner?

False. (Because of the 5 words after "static".)

'Doc

6491. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 14:14:20 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <H6ecnUR7Y9_OpG2iUSdV9g@ptd.net>
Source record: 102657
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
>
> You can purchase heat shrink with the hot melt glue on the inside.
> When you shrink the tube (starting at the center and working out) the
> hot melt glue coats everything and the tube is much stronger than the
> stuff you get at radio shack.

Roger,

Would you be so kind as to provide a source/brand name for the
glue-lined heat shrink tubing you mention above?

73,
Carl - wk3c

6492. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 14:27:19 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <3ff03c42_4@news1.prserv.net>
Source record: 102658

Ummmm, it would help if you were a little more careful with your
phraseology. The connections go: Dish - DSS box - TV, right?

Below, you write:
"I simply unplug the receiving cable from the dish to the tv,"
Which leaves out a relatively significant component. While all those cable
connectors are interchangeable, connecting the right cable to the right box
makes a difference, as you have observed.

Which DSS (what you call "dish") do you have? What are the cable connectors
on the rear labeled? Do you have the manual for it?

--
Crazy George
Remove N O and S P A M imbedded in return address
"eccos" <nospam@yahou.com> wrote in message
news:MjQHb.15918$aw2.9171427@newssrv26.news.prodigy.com...
>
> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:JUJHb.13181$WQ3.1404@lakeread05...
> | Your are powering off the satellite receiver when attempting to
> | receive local channels, right?
>
> No, I usually don't. I simply unplug the receiving cable from the dish to
> the tv, and plug the cable of the indoor antenna.
>
>

6493. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 15:25:50 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <yDXHb.13346$WQ3.2592@lakeread05>
Source record: 102659

"eccos" <nospam@yahou.com> wrote in message
news:MjQHb.15918$aw2.9171427@newssrv26.news.prodigy.com...
>
> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:JUJHb.13181$WQ3.1404@lakeread05...
> | Your are powering off the satellite receiver when attempting to
> | receive local channels, right?
>
> No, I usually don't. I simply unplug the receiving cable from the dish to
> the tv, and plug the cable of the indoor antenna.
>
There should be a F connector on the receiver for a cable or TV antenna
input. The TV automatically is switched to this input when the receiver is
powered off.

Pete

>

6494. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 15:59:30 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff04fe0_7@corp.newsgroups.com>
Source record: 102660

eccos wrote:
> How do I know if the antenna is 75 Ohms? What is a 300:75 Ohm transformer?

TV coaxial line is 75 ohms. TV twinlead is 300 ohms. 300 ohms is the
older standard for TVs that once had two antenna screw terminals.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6495. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 16:06:51 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff05199_7@corp.newsgroups.com>
Source record: 102661

Reg Edwards wrote:
> By the way, what DID Thevenin say?

Here's what Ramo and Whinnery said about Thevenin: "It must be emphasized,
as in any Thevenin equivalent circuit, that the equivalent circuit was
derived to tell what happens in the load under different load conditions,
and significance cannot be automatically attached to a calculation of
power loss in the internal impedance of the equivalent circuit."
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6496. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 16:39:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3gl0vvg2v3bqqd4bcdrtfdrjd4gveo8kt3@4ax.com>
Source record: 102662

On Mon, 29 Dec 2003 13:38:53 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The world of electrical engineering would have been a far more more
>understandable place if Thevenin and other trivial theorem inventors of his
>ilk had never existed.

Hi Reg,

Your observation reminds me of Arthur Dent's outrage with Ford
Prefect's considered opinion of the importance of Earth within the
scheme of the Universe:
"Mostly harmless"

73's and remember where your towel is,
Richard Clark, KB7QHC

6497. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 16:49:40 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312290849.74a10d37@posting.google.com>
Source record: 102663
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

Gentlemen,
As a long time experimentor I have used all of the suggestions given
in this thread. But science has moved on. 'Plastic dip' is now made in
spray form so I use that instead of the semi liguid stuff supplied in
cans which I also use for encapsulating.
The spray form puts a thin film over the joints which can readily be
peeled off
when reworking the joint. The sprayed plastic dip also shrinks
somewhat after application. Cost is around $6 per can of either form
in any hardware store.
Regards
Art

Roger Halstead <mynews@rogerhalstead.com> wrote in message
news:<2hnvuvo64lilld6m179bfmqu1ili5cgqgn@4ax.com>...
> On Mon, 29 Dec 2003 01:43:48 GMT, "Roger Gt" <Xenot@pacbell.net>
> wrote:
>
> >
> >"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
> >news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
> >> On Sun, 28 Dec 2003 22:14:41 GMT, "Roger Gt" <Xenot@pacbell.net>
> >> wrote:
> >> >"Steve Silverwood" <kb6ojs@arrl.net> wrote in message
> >> >news:MPG.1a57a0c1b8ac35089896af@news-server.socal.rr.com...
> >> >> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
> >> >> the-spam.hotmail.com says...
> >> >> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the
> best
> >> >> > way of making sure the connections are *waterproof* indefinitely.
> >> >> >
> >> >> > I'm using T&B SNS connectors on the cable and where the connection
> >> >> > meets the LNB, I'm thinking about using some sorta of silicone grease
> >> >> > sealant on the threads, plenty of wrapping with Scotch 88 tape and
> then
> >> >> > a coat of Skotchcoat.
> >> >
> >> >I have had pretty good luck by running a piece of nylon thread along
> >> >opposite sides of the connector, taping the thread in place, then coating
> >> >the Coax connector with about an eighth of an inch of Hot melt, then when
> >> >cool, With a layer or two of electrical tape to protect the Hot melt from
> >> >the sun. Thought of using Heat shrink, but it soften the Hot Melt! The
> >>

> >> You can purchase heat shrink with the hot melt glue on the inside.
> >> When you shrink the tube (starting at the center and working out) the
> >> hot melt glue coats everything and the tube is much stronger than the
> >> stuff you get at radio shack.
> >>
> >> >threads can be used to open the melt to make it easy to remove if I need
> to
> >> >access the connector. Some if these connections have gone four years and
> >> >look Okay!
> >>
> >> When you want to remove the cover, just heat a bit and use a box
> >> cutter, or sharp knife to cut it away. (wear leather gloves)
> >>
> >> Roger Halstead (K8RI & ARRL life member)
> >> (N833R, S/# CD-2 Worlds oldest Debonair?)
> >> www.rogerhalstead.com
> >>
> The stuff is made by 3M in two sizes that I've seen
> 800 IMCSN .80"/.22" 20/5.6 mm
> and .400 IMCSN .40"/.12" 10/3.1 mm
> It's a tad over a dollar a foot.
>
> Also Times wire packages a piece with their N connectors.
>
> I have some photos of both sizes of tubing as well as the connector
> and I have one splice that has been taken apart.
>
> I cut the splice out of the line as I though there was a problem with
> it, which there was, but it was the last thing I expected. It turns
> out the barrel connector had shorted and the other connectors were
> still good, or would have been if I hadn't cut them out.
>
> I'll try and get some shots up on my web page Monday or tuesday.
> My home page is www.rogerhalstead.com and the URL for the coax splices
> and heat shrink tubing *will* be
> http://www.rogerhalstead.com/ham_files/connectors.htm when it goes up.
> As it's past 3:00 AM, I have to create the page, resize the images and
> then ftp it up to the server, I think it's gonna wait. To top it off I
> have to spend most of tomorrow (Monday) out at the airport, finishing
> up a demolition project and then cleaning up... soooo, if my memory
> holds that long, I'll try and get the page up Monday evening.
>
> OK, I did get the page up, but only small images. Links to larger 800
> X 600 images this evening.
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S/# CD-2 Worlds oldest Debonair?)
> www.rogerhalstead.com
> >
>

>
>
> >
> >I'll look for it. Sounds easier!!! Thanks!
> >K7DUP
> >
> >

6498. 1/2 of a wavelength inside of 72 ohm RG-59 TV coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 17:08:53 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87zndbh7q2.fsf@jidanni.org>
Source record: 102477

In http://www.scannerway.8m.com/cgi-bin/framed/2597/antennas.html it says
(eg. 2953/144Mhz = 20.5 inches). This is 1/4th of a wavelength...
(eg. 8,859/144Mhz = 61.5 inches) This is 1/2 of a wavelength inside of 72 ohm RG-59 TV coax.
I don't get it, doesn't he mean 3/4? And isn't the wavelength the same within or without? I suppose aside from this, the instructions are good, no?

6499. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 17:53:32 UTC
From: eccos <nospam@yahou.com>
Message-ID: <wSZHb.15992$aw2.9259892@newssrv26.news.prodigy.com>
Source record: 102664

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:3ff03c42_4@news1.prserv.net...
| Ummmm, it would help if you were a little more careful with your
| phraseology.

You are right. Sorry.

| The connections go: Dish - DSS box - TV, right?

Correct.

| Below, you write:
| "I simply unplug the receiving cable from the dish to the tv,"
| Which leaves out a relatively significant component. While all those
cable
| connectors are interchangeable, connecting the right cable to the right
box
| makes a difference, as you have observed.
|
| Which DSS (what you call "dish") do you have?

Dish Network

| What are the cable connectors on the rear labeled? Do you have the manual
for it?

No, I don't have a manual.

On the rear of the TV? There is only one connector, and it's labeled
ANTENNA, and to which a cable is connected that comes from the DDS receiver.
That connector on the rear of the receiver is labeled TV SET OUT. Let's
call this "scenario 1", where I switch my TV set to Channel 3, and from
there I can select the various programming available.

[I am a little afraid I am not explaining this properly, again. Please bear
with me.]

Now, the problem occurs when I connect a cable from the DDS receiver
(connector labeled TV ANTENNA/CABLE IN) to the TV (connector labeled
ANTENNA). I use a splitter to accommodate that makes the two connections I
just described. Let's call this "scenario 2," where I can view DDS
programming on Channel 3, or local TV station on other channels, say, 12,
18, 58, etc. Well, when I swith to these "other" channels, the reception is
poor. The reception improves dramatically if I remove the DDS connection to
the TV set, and connect to it a cheap indoor antenna.

Wheew. Does this make sense?

[You know, now that I just got done explaining this, I think I know what the problem may be. In "scenario 1" I have no antenna help whatsoever. Whereas in "scenario 2," however cheap, I have some antenna, and for this reason the reception is better. Duh! If my assumption is correct, then the question is how to add an indoor antenna to "scenario 1."]

|
| --
| Crazy George
| Remove N O and S P A M imbedded in return address
| "eccos" <nospam@yahou.com> wrote in message
| news:MjQHb.15918$aw2.9171427@newssrv26.news.prodigy.com...
| >
| > " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
| > news:JUJHb.13181$WQ3.1404@lakeread05...
| > | Your are powering off the satellite receiver when attempting to
| > | receive local channels, right?
| >
| > No, I usually don't. I simply unplug the receiving cable from the dish
to
| > the tv, and plug the cable of the indoor antenna.
| >
| >
|
|

6500. Re: Rohn 25G non-guyed?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 18:12:17 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <bspqq6$2tfr$1@news1.tribune.com>
Source record: 102666

WARNING, any deviation you choose to make from Rohn specs is at your own risk.

HAVING SAID THAT.

My Rohn 25 is 30 feet, with a 10 foot mast that sticks out of the top by 5 feet. The rotator is inside the tower at the lower end of the mast. A 2 element 5 band Quad (13 foot arms) is at the 34 foot level, and a 2meter discone is at the 36 foot level. I used to have a TA33JR at the 35 foot level, before I switched to the Quad.

I can find no place where Rohn authorizes these kind of loads more than 10 feet above the top guys.

I have NO base under my tower. There is about 3 inches of air between my tower legs and the ground, with the only connection being a set of heavy ground wires going to a driven ground rod.

I have an "owner designed and constructed" bracket which is bolted through the garage foundation wall. It took me about an hour to drill the two 1/2 inch holes through the foundation wall using a 1/2 inch "consumer" hammer drill. A commercial hammer drill would have done the job in much less time. Making the (welded) brackets from scrap steel took me about 30 minutes. (Digging a hole is much more work.)

At the 13 foot level I have a house bracket, which is tied back to the ridge pole as well as 2 other points of the garage roof, on the INSIDE of the garage.

If my tower falls it will strike a nieghbors garage, NOT his living quarters. There are NO above ground Power lines in my Nieghborhood.

I climb the tower to install antennas as it does not tilt over.

This arrangement has survived more than one storm with 70 mph winds that have taken out trees in the area.

The most serious problem I have is that I have to keep cutting the trees to keep them out of the quad.

John
KA9CAR

"W5GT" <xyzabc11@hotmail.net> wrote in message
news:vuu0h9mt50m5f6@corp.supernews.com...
> Can a Rohn 25G be safely self-supporting at ~ 40' with a house bracket at
> 15', or must it be guyed? The beam will be a 10 lb. Mosley 3el mini-beam
> with only 2.5 sq ft of wind surface area.

>
> Is a concrete base essential under these circumstances? I'm planning on
> erecting one in the spring and want to plan properly, but don't have much
> room for guy wires unless it's unsafe not to use them.
>
> Thanks & 73s
>
> Dave - W5GT
>
>

6501. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 18:17:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0jr0vvs81o2rptgvvhhosv6on5nkgv2sim@4ax.com>
Source record: 102665

On Mon, 29 Dec 2003 17:53:32 GMT, "eccos" <nospam@yahou.com> wrote:

> In "scenario 1" I have no antenna help whatsoever. Whereas
>in "scenario 2," however cheap, I have some antenna, and for this reason the
>reception is better. Duh! If my assumption is correct, then the question
>is how to add an indoor antenna to "scenario 1."]

Hi OM,

Successful engineering consists of explaining the problem correctly
(because it is also the answer).

Connect your cheap antenna to the DSS connector labeled TV
ANTENNA/CABLE IN (which is an input, you were using it as an output)
and when you turn off the DSS, it should allow cable or antenna
signals through to be tuned by your TV. This means that the DSS acts
as the splitter you are trying to add to this problem.

73's
Richard Clark, KB7QHC

6502. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 19:21:08 UTC
From: eccos <nospam@yahou.com>
Message-ID: <E8%Hb.16011$aw2.9275303@newssrv26.news.prodigy.com>
Source record: 102667

| Hi OM,
|
| Successful engineering consists of explaining the problem correctly
| (because it is also the answer).

Are you saying that I WAS able to get my point across (albeit somewhat
roughly)?

| Connect your cheap antenna to the DSS connector labeled TV
| ANTENNA/CABLE IN (which is an input, you were using it as an output)
| and when you turn off the DSS, it should allow cable or antenna
| signals through to be tuned by your TV. This means that the DSS acts
| as the splitter you are trying to add to this problem.

Thanks. Why didn't I think of that?

|
| 73's
| Richard Clark, KB7QHC

6503. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 20:57:56 UTC
From: alt <spamtrap@gwsn.com>
Message-ID: <oz0Ib.859844$6C4.584495@pd7tw1no>
Source record: 102668

Steve Silverwood wrote:

> In article <3FE7BCBD.1060709@ix.netcom.com>, wa2ise@ix.netcom.com
> says...
>> I don't think any IT guys use Ethernet cable anymore, so maybe
>> you can ask them to save some for you when they gut the ceilings,
>> etc at work.
>
> Just make sure you get the "thick" version. The "thin" Ethernet is RG-
> 58 and not nearly as good, especially on long runs. (Short runs of just
> a few feet or so are probably okay.)
>

RG-58 is still widely used in UHF and VHF commercial communications for runs in Vehicles. Typically these are anywhere from 4' to 12' depending on the vehicle.

--
Donovan Hill

6504. Re: Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 21:33:31 UTC
From: John Quinn <john.quinn@comcast.net>
Message-ID: <9s61vv0ttmj6tb7vioenehfpctflbeufej@4ax.com>
Source record: 102469

Ok, lets assume that I'll erect a couple of PVC poles to string the
guy nylon rope and 43'-0" wire antenna between, say, about 10 feet off
the ground and free and clear of anything screwing up the signal.
Then what would be the best layout if in Dallas, TX? Lay it out North
to South as to best pick up the European county broadcasts, being that
it's more or less due east of my location?

On Sun, 28 Dec 2003 09:32:03 -0600, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Jay:
>
>It is not possible to give a useful answer to that question, since the RF
>fields from the stations you want to hear are dramatically altered by the
>surroundings (attic wiring, and any other conductive materials, even the
>building materials). Installations of this type are strictly cut and try,
>for this reason. Just moving the antenna a few feet can make remarkable
>changes in the reception, and optimum for one station may well be bad for
>another. Big antenna, high and in the clear is the only realistic answer to
>your question.
>
>Good luck anyway.

6505. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 21:56:31 UTC
From: whagen6@cs.com
Message-ID: <20031229165631.03799.00002133@mb-m07.news.cs.com>
Source record: 102470

as a vertical, I think this antenna exceeds the max hieght of an amateur antenna, which is 220 feet.
a half wave with a quarter wave at 160 is 80 meters plus 40 meters approx, which is approx 360 feet vertical.

6506. 300 ohm TV ribbon no longer available in city of 1,000,000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 22:14:08 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <878ykvgtlb.fsf@jidanni.org>
Source record: 102478

In my quest to buy a reel of 300 ohm TV flatwire in Taiwan's 3rd
largest city, Taizhong, it appeared to be a losing cause, so I have
given up the thought, despite pages like
http://www.morsex.com/dipole/index.htm , and decided to get with the coax.

6507. Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 22:19:28 UTC
From: fractenna@aol.com
Message-ID: <20031229171928.21716.00001056@mb-m26.aol.com>
Source record: 102471

Hi!

If anyone has a copy to sell of S &F's: 'Antennas, Theory and Practice', please drop me an e-mail.

Best to all in 2004,
Chip N1IR

6508. Re: Auto Ant. Tuner Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 22:53:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Ff2Ib.690790$Tr4.1721114@attbi_s03>
Source record: 102472

Marvin Rosen wrote:

> I'm considering the purchase of an Icom-
> AH-4 auto tuner. I am planning to use it
> with a 100 watt output rig. My questions
> are as follows:
>
> 1. I suspect because of the numerous
> components within the tuner there is
> more to go wrong than a manual tuner?

True! But unlikely. Reliability is a function of design, stress and derating. A poorly designed manual tuner will fail just as easily as a poorly design auto tuner.

> 2. The only advantage of an auto tuner
> is convenience?

The AH-4 mounts at the antenna, not in the shack, and provides a matched line from the antenna to the shack.

Speed. My AH-4 will tune any band in under 2 seconds. In my base station I may need 10 to 20 seconds to adjust my 2KW manual tuner.

With my IC706MKIIg setup I just key the mike when I change bands and it tunes autoamtically!!

> 3. Distant lightning, snow & heavy wind can
> cause static which may ruin the tuner?

Are you kidding?? The AH-4 is 100% weather sealed. The output circuits are rugged [100 watts at high VSWR/high load impedance can produce significant rf voltage at the connector.

>
> Any worthwhile comments would be appreciated.
>
>

6509. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 22:59:54 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <b1c1vv8v1cn4ruijn0vqop3rhn126jparr@4ax.com>
Source record: 102473
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

On Mon, 29 Dec 2003 14:14:20 -0000, "Carl R. Stevenson"
<wk3cqth@wk3c.com> wrote:

>
>"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
>news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
>>
>> You can purchase heat shrink with the hot melt glue on the inside.
>> When you shrink the tube (starting at the center and working out) the
>> hot melt glue coats everything and the tube is much stronger than the
>> stuff you get at radio shack.
>
>Roger,
>
>Would you be so kind as to provide a source/brand name for the
>glue-lined heat shrink tubing you mention above?
>
It's made by 3M and sold by many electrical supply firms.
The first photo in the link below shows the two types they offer.

The numbers are 800 which is 0.800/0.22", or 20/5/6 mm.
The first number is the diameter "un shrunk" while the second is the
smallest working shrunk diameter.

They also make a 400 which is 0.400/.12", or 10/3.1 mm tube.

These are coated internally with something akin to, or it really is,
hot melt glue.

http://www.rogerhalstead.com/ham_files/connectors.htm

The price has gone up some, but I think the last I purchased was a bit
over $10 for a 3 foot length of the 800.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>73,
>Carl - wk3c

6510. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 23:20:49 UTC
From: jder8745@aol.com
Message-ID: <20031229182049.04365.00001977@mb-m29.aol.com>
Source record: 102474

Someone sed:

"The world of electrical engineering would have been a far more more
understandable place if Thevenin and other trivial theorem inventors of his ilk
had never existed."
==========

Spoken by a person who is extremely ignorant of what he writes about.

It is because of Thevenin's theorem that complicated circuits can be reduced to
the equivalent circuit consisting of only two components: a voltage source and
an impedance. This is a powerful tool. If I didn't know it, I'd learn it.

73 de Jack, K9CUN

6511. "Homebrew FM tap" for the mobile ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 23:34:02 UTC
From: Joe <joe.amp@NOSPAMverizon.net>
Message-ID: <KR2lb.1910$qS3.1555@nwrdny03.gnilink.net>
Source record: 102475

Hi all Any of you guys experimented building a "FM tap" for the mobile ?
I want to use a Fender mounted CB antenna for the car's AM/FM radio also

A center loaded mobile antenna directly threads on to my Blazers AM/FM+
RG-58 hardware
(just added PL259 plus devise a safe way of shunting the RF on transmit.

1.7:1 SWR confirmed
Now I need to make a tap perhaps:
68pf + 10K resistor to 2 detector diodes back to
back + 10:1 for 50mv shunt ?

-Joe (NOSPAM in effect)

6512. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-29 23:40:51 UTC
From: iF yoU Cee Kay <atfb@usa.net>
Message-ID: <1re1vvsjvelscuve3o8ckfo8k5kuqoj8pa@4ax.com>
Source record: 102476
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

why would you be using RG-11? much bigger than RG-6 and will be hard
to terminate...

On Mon, 29 Dec 2003 22:59:54 GMT, Roger Halstead
<mynews@rogerhalstead.com> wrote:

>On Mon, 29 Dec 2003 14:14:20 -0000, "Carl R. Stevenson"
><wk3cqth@wk3c.com> wrote:
>
>>
>>"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
>>news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
>>>
>>> You can purchase heat shrink with the hot melt glue on the inside.
>>> When you shrink the tube (starting at the center and working out) the
>>> hot melt glue coats everything and the tube is much stronger than the
>>> stuff you get at radio shack.
>>
>>Roger,
>>
>>Would you be so kind as to provide a source/brand name for the
>>glue-lined heat shrink tubing you mention above?
>>
>It's made by 3M and sold by many electrical supply firms.
>The first photo in the link below shows the two types they offer.
>
>The numbers are 800 which is 0.800/0.22", or 20/5/6 mm.
>The first number is the diameter "un shrunk" while the second is the
>smallest working shrunk diameter.
>
>They also make a 400 which is 0.400/.12", or 10/3.1 mm tube.
>
>These are coated internally with something akin to, or it really is,
>hot melt glue.
>
>http://www.rogerhalstead.com/ham_files/connectors.htm
>
>The price has gone up some, but I think the last I purchased was a bit
>over $10 for a 3 foot length of the 800.
>
>Roger Halstead (K8RI & ARRL life member)
>(N833R, S# CD-2 Worlds oldest Debonair?)
>www.rogerhalstead.com
>>73,

>>Carl - wk3c

6513. Re: 300 ohm TV ribbon no longer available in city of 1,000,000

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 00:00:21 UTC
From: jgboyles@aol.com
Message-ID: <20031229190021.21698.00001239@mb-m26.aol.com>
Source record: 102479

>In my quest to buy a reel of 300 ohm TV flatwire in Taiwan's 3rd
>largest city,
> losing cause
>decided to get with the coax

Sounds like a good idea. What's your question to the group?

73 Gary N4AST

6514. Re: 1/2 of a wavelength inside of 72 ohm RG-59 TV coax

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 00:12:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4eg1vvsuo7sj8kdedo9bpsvli4u66r3hvm@4ax.com>
Source record: 102480

On Tue, 30 Dec 2003 01:08:53 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>In http://www.scannerway.8m.com/cgi-bin/framed/2597/antennas.html it says
> (eg. 2953/144Mhz = 20.5 inches). This is 1/4th of a wavelength...
> (eg. 8,859/144Mhz = 61.5 inches) This is 1/2 of a wavelength inside of 72 ohm RG-59 TV
coax.
>I don't get it, doesn't he mean 3/4? And isn't the wavelength the same
>within or without? I suppose aside from this, the instructions are good, no?

Hi Dan,

You've forgotten the velocity of propagation inside a transmission
line is different from a wire in free space (the author suspects it is
66% of free space).

The outside electrical dimension of coax is not the same as wire in
free space either, as it has a thick dielectric covering (and there
are variations for conductor thickness as well). This is why the
common advice of cut long and tune to resonance so often attends
construction projects.

73's
Richard Clark, KB7QHC

6515. Open Wire Feeder Switching Ideas ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 00:58:01 UTC
From: DOUGLAS SNOWDEN <SNOWDEN@peoplepc.com>
Message-ID: <vv1jcpnnkp9390@corp.supernews.com>
Source record: 102481

I am debating with myself whether I want to spend a lot
of money on harline for a 250ft run to a remote tower or
to use open wire feeders and switch the main line between
several antennas. The tower will hold wire antennas - no
beam. Since it is 250ft I'd like to use open wire. I plan
on putting yet another 80m vertical another 100ft further
than the first tower and feed it with open wire to a balun.
I suppose for open wire switch I could use run of the mill relays in a box.

I know coax is the popular way to go - but decent hardline is really
expensive. Any of you use open wire
like this?

Doug N4IJ

6516. Re: Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 01:00:26 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff0ceaa_1@corp.newsgroups.com>
Source record: 102482

John Quinn wrote:
> Then what would be the best layout if in Dallas, TX? Lay it out North
> to South as to best pick up the European county broadcasts, being that
> it's more or less due east of my location?

For broadside reception from Europe to Texas, run your antenna NW to SE.
Radio waves tend to follow great circles, not lines of latitude.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6517. Re: Open Wire Feeder Switching Ideas ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 01:02:16 UTC
From: k9sqg@aol.com
Message-ID: <20031229200216.19782.00001316@mb-m01.aol.com>
Source record: 102483

I have some open frame ceramic insulated relays ideal for open wire line switching. Have DPDT and 3PDT configurations.

73s,

Evan

6518. Re: Magnetic field and loop antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 02:45:05 UTC
From: Chris Trask <christrask@earthlink.net>
Message-ID: <RE5Ib.11226$lo3.8252@newsread2.news.pas.earthlink.net>
Source record: 102484

"Joe Strain" <jstrain1@cfl.rr.com> wrote:

>
> DIDNT SEE ANYTHING IN SPRING 2003 so I thought the product was
> vaporware. I am a prospect, but I am a SWL and dont need & wont
> pay for a product set up for transmitters
>

You might want to look at my 2-part series on active receiving loop
antennas that appeared in QEX earlier this year.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlink.net
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6519. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 02:49:04 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <5mp1vv437l4dpkhi53mnp223nc2hli4pdi@4ax.com>
Source record: 102485
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

On Mon, 29 Dec 2003 17:40:51 -0600, iF yoU Cee Kay <atfb@usa.net>
wrote:

>why would you be using RG-11? much bigger than RG-6 and will be hard
>to terminate...

I'm not. Like you I suggested RG11 might be a bit large.
I tried it here and replaced it with RG-6 for the satellite feed lines
for both the small dish and C-band.

I found it placed too much stress on the LNBs.

However terminating the RG-11 is easy as they make a connector that
slips right on the cable and has an F connector on the other end.
They are more of a "press on" rather than crimp. Work very well.
OTOH they do nothing to relieve the stress imparted to the LNB
connector by the large cable.

Roger Halstead (K8RI & ARRL life member)
(N833R, S/# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>
>
>On Mon, 29 Dec 2003 22:59:54 GMT, Roger Halstead
><mynews@rogerhalstead.com> wrote:
>
>>On Mon, 29 Dec 2003 14:14:20 -0000, "Carl R. Stevenson"
>><wk3cqth@wk3c.com> wrote:
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>>>
>>>>"Roger Halstead" <mynews@rogerhalstead.com> wrote in message
>>>news:mvuuuvcco4rs6o8lhg95o5in9rrul717ur@4ax.com...
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>>>> When you shrink the tube (starting at the center and working out) the
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>>The first number is the diameter "un shrunk" while the second is the
>>smallest working shrunk diameter.
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>>They also make a 400 which is 0.400/.12", or 10/3.1 mm tube.
>>
>>These are coated internally with something akin to, or it really is,
>>hot melt glue.
>>
>>http://www.rogerhalstead.com/ham_files/connectors.htm
>>
>>The price has gone up some, but I think the last I purchased was a bit
>>over $10 for a 3 foot length of the 800.
>>
>>Roger Halstead (K8RI & ARRL life member)
>>(N833R, S# CD-2 Worlds oldest Debonair?)
>>www.rogerhalstead.com
>>>73,
>>>Carl - wk3c

6520. Diamond Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 03:32:11 UTC
From: Troy - VK2HXY <NOSPAMvk2hxy@hotmail.com>
Message-ID: <uk6Ib.89$uQ3.4091@nnrp1.ozemail.com.au>
Source record: 102486

I have a Diamond X510 dual band antenna (2/70), which has an SO239 socket for termination. Has anyone changed this to an 'N' Type before? Say by using an N type chassis mount? I don't want to rip the antenna down and apart before I know whether it's been done and if it's a huge task or not.

I have some LDF450 to replace the lossy RG213, the cable already has N type termination, so rather than fork out for a LDF PL259 type connector (Aus $70.00) I'd prefer to change the antenna connection.

Any advice gents?

I have looked for an PL259 to N connector, none appear available. Yet plenty the other way around (always the way)

Thanks in advance

73

Troy

6521. Re: Ethernet "thicknet" coax thru walls of house for ham radio antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 03:48:54 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <3FF0F5A4.8080105@ix.netcom.com>
Source record: 102487

Steve Silverwood wrote:

>In article <3FE7BCBD.1060709@ix.netcom.com>, wa2ise@ix.netcom.com
>says...
>
>
>>I don't think any IT guys use Ethernet cable anymore, so maybe
>>you can ask them to save some for you when they gut the ceilings,
>>etc at work.
>>
>>
>
>Just make sure you get the "thick" version. The "thin" Ethernet is RG-
>58 and not nearly as good, especially on long runs. (Short runs of just
>a few feet or so are probably okay.)
>
>
>
Got lots of that too. Pro: no vampire taps, Con: lossier, same as RG58
pretty much.
Some people even say that a few vampire tap holes in thicknet used
indoors doesnt
much matter for HF, but I only selected vampire tap free thicknet when I
was dumpster
diving....

6522. Re: Open Wire Feeder Switching Ideas ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 05:20:58 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <_W7Ib.4375$I07.10249@attbi_s53>
Source record: 102488

I have 850 feet of open wire line. You can see photos
of it on my web site www.n6rk.com. You might
consider latching vacuum relays. You can get them
from maxgain systems. At 1.5 KW, there is 821 volts
on a matched 450 ohm line. With any mismatch,
you're soon over 1000 volts. Ordinary 240VAC
relays are probably questionable for this application.

BTW, I run my line "flat" (ie low SWR). There
are 50 ohm to 450 ohm baluns at both ends.
In my case, I switch after converting to 50 ohms,
so any ordinary relay will do.

Rick N6RK

"DOUGLAS SNOWDEN" <SNOWDEN@peoplepc.com> wrote in message
news:vv1jcpnnkp9390@corp.supernews.com...
> I am debating with myself whether I want to spend a lot
> of money on harline for a 250ft run to a remote tower or
> to use open wire feeders and switch the main line between
> several antennas. The tower will hold wire antennas - no
> beam. Since it is 250ft I'd like to use open wire. I plan
> on putting yet another 80m vertical another 100ft further
> than the first tower and feed it with open wire to a balun.
> I suppose for open wire switch I could use run of the mill relays in a
box.
>
> I know coax is the popular way to go - but decent hardline is really
> expensive. Any of you use open wire
> like this?
>
> Doug N4IJ
>
>

6523. Re: Open Wire Feeder Switching Ideas ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 07:26:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k0a2vvsd49ivnns7raj6u03deopba7sk3u@4ax.com>
Source record: 102489

On Mon, 29 Dec 2003 19:58:01 -0500, "DOUGLAS SNOWDEN"
<SNOWDEN@peoplepc.com> wrote:

>I am debating with myself whether I want to spend a lot
>of money on harline for a 250ft run to a remote tower or
>to use open wire feeders and switch the main line between
>several antennas. The tower will hold wire antennas - no
>beam. Since it is 250ft I'd like to use open wire. I plan
>on putting yet another 80m vertical another 100ft further
>than the first tower and feed it with open wire to a balun.
>I suppose for open wire switch I could use run of the mill relays in a box.
>
>I know coax is the popular way to go - but decent hardline is really
>expensive. Any of you use open wire
>like this?
>
>Doug N4IJ
>

Hi Doug,

One frequent suggestion is to check with your local cable TV installer
shop for spool ends. You might find them getting ready to take it to
the landfill.

73's
Richard Clark, KB7QHC

6524. TV reception challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 07:40:54 UTC
From: ComputerDoctor <davekimble@austarnet.com.au>
Message-ID: <bsra65$20s$1@austar-news.austar.net.au>
Source record: 102490

I live in a small steep valley in a very hilly area (Innisfail, Queensland, Australia) with a nearby ridge just preventing 'line-of-sight' to the TV broadcast tower (Mt. Bellenden Ker, picture: http://www.gu.edu.au/ins/collections/webb/html/16-17.html). To make matters worse, there is a wall of trees in the way, and the electricity powerlines run both line-of-site (to the house) and sideways on (along the street).

Amazingly, I can get 2 VHF and 3 UHF channels on rabbit ears, but the channel with the cricket on (604-610 MHz) is so snowy I can't really see the ball, which is very frustrating. The only thing I have going for me (I think) is that the back yard is so steep that I can see over the house from 30 metres away.

Is it worthwhile trying to run some twin cable up the hill to a dipole strung between 2 trees?
Would it be: 75-300 ohm balun + any length of ribbon + 232 mm dipole?
Is there a simple way to fine tune the arrangement at the TV end once its up?

Or can I use the garden fence mesh (see http://home.austarnet.com.au/davekimble/gardenfence.jpg) by tapping into it at 2 well-chosen points? It seems a pity to waste all that wire.

I am a novice (you guessed) so please talk slowly.

Dave

6525. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 07:50:31 UTC
From: Moe <moebush@thaimail.org>
Message-ID: <pan.2003.12.30.07.50.32.853305@thaimail.org>
Source record: 102491

On Mon, 29 Dec 2003 22:19:28 +0000, Fractenna wrote:

> Hi!
>
> If anyone has a copy to sell of S &F's: 'Antennas, Theory and Practice', please
> drop me an e-mail.
>
> Best to all in 2004,
> Chip N1IR

Got Kraus "Antennas"

AH6JR

6526. Re: TV reception challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 08:05:12 UTC
From: whagen6@cs.com
Message-ID: <20031230030512.15426.00001679@mb-m12.news.cs.com>
Source record: 102492

the problem with tv signals are the reflections bouncing all over the place. This is why a dipole doesnt work too well, because they recieve equally well all the scattered signals, which gives the snow and ghosting, the signals are out of phase. What you need is a beam antenna, the typical tv antenna with many elements shaped like an arrowhead. This selects the strongest signal from only one direction, eliminating (hopefully), the snow and ghosting. A signal amplifier mounted directly at the antenna will also help with the losses of a long twinlead run. The antennas are typically designed with a 300 ohm impedance, jthus 300 ohm twinlead is the match. If your tv reciever or vcr or whatever you have in the house has a direct connection for twinlead, then just hook up to the two screws. If it is designed for a coax cable, you will need the little gismo that has the two screws on one end and a cable connect on the other. This little guy is theadaptor that is the impedance transformer from twinlead to 75ohm cable.
Good luck
your results may vary.
Don't look at the laserbeam with your remaining eye.

6527. Feeding a doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 08:44:06 UTC
From: Adrian <adrian@ambquality.co.uk>
Message-ID: <utd2vv8edk50fkv0ob5dgjodtud22j9u5o@4ax.com>
Source record: 102493

Hi all

With a bit of luck I'm finally going to get my HF doublet up in the air in the next week or so. I'm planing on about 150ft per top 'leg', and will need a couple of hundred feet of open-wire feeder (going to try heavy-duty 'slotted' ribbon for starters) .

Here's the question...
Due to the geography of the site, the shack is pretty well in line with the antenna - which will be at about 20ft above ground on 3 poles. The site slopes, so that the eaves of the shack are about level with the bottom of the nearest pole. In all the books, diagrams show the feeder joining onto the 'aerial' at right angles - but I'm wondering how best ot compromise on this in my situation.

Would it be better to take the ribbon feeder straight to the bottom of the first pole & then run it underneath & in line with the aerial (say a couple of feet off the ground) until it meets the centre pole - then run it up to the feedpoint ......- or would it be any better to run the feeder at low-level but parallel with the aerial (could be about 20-30 ft apart) and then make a right-angled turn up to the feedpoint...?

Possibly, in terms of the wavelengths involved it'll make little difference - and I'm quite prepared to try it & see.. but I just wondered what opinions / experiences group members could share.

I'm planning on the doublet to make the best use of the space available, and to reduce the possibility of TVI (we're in a weak TV signal area and effective earths for a long-wire aren't easy because we have very dry, sandy soil).

Thanks in advance for any suggestions / comments
Adrian G0THW
Suffolk UK

6528. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 10:47:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsrl36$5jg$1@titan.btinternet.com>
Source record: 102494

> "The world of electrical engineering would have been a far more more
> understandable place if Thevenin and other trivial theorem inventors of
his ilk
> had never existed."
> ==========================
>
> Spoken by a person who is extremely ignorant of what he writes about.
>
> It is because of Thevenin's theorem that complicated circuits can be
reduced to
> the equivalent circuit consisting of only two components: a voltage source
and
> an impedance. This is a powerful tool. If I didn't know it, I'd learn
it.
>
> 73 de Jack, K9CUN

==========================

For heaven's sake Jack, is THAT all what it's about ?

How come 95% of the contributors to this newsgroup come to blows with each other about the manner of its application? Apparently Thevenin is a severe educational handicap rather than an asset. But perhaps newsgroup Guru's at loggerheads with each other are not representative of the engineering fraternity in general.

Normal sixteen year-old students, with the right teacher, grasp the idea immediately without they or their teacher ever having heard of Thevenin. It can then be forgotten. It's so bleeding obvious!

As John Cleese implies - students, even at that tender age, should be endowed with a first-class honors degree, including cap and gown, in the venerable practice of the ancient Babylonians, Hittites and Egyptians in stating the obvious.

In this more recent age, can we soon expect a graduate of that rat-infested campus of the Rio de Janerio sewers to announce in a blaze of glory that "A complicated circuit is reduceable to an equivalent circuit consisting merely of two components: a current source and an impedance."? Let's hope his name will be pronounceable.

Yours, Reg. ;o)

6529. Re: TV reception challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 12:21:23 UTC
From: ON5MJ <my_call_sign@skynet.be>
Message-ID: <3ff16cf7$0$20081$ba620e4c@news.skynet.be>
Source record: 102495

Hi Dave,

I do agree with William. In this case put an antenna with gain as high as possible, beamed to the right direction. If necessary you have to put your antenna at a remote and elevated location. In this case (due to length of line) you will have to amplify AT THE ANTENNA (not at the receiver).
Other solution: ask the players to use red painted balls ;-)
73 de ON5MJ - Jacques

6530. Re: Best Ways to *Waterproof* Coax Connections

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 13:49:55 UTC
From: "Eike Lantzsch, ZP6CGE" <eikelan@gmx.net>
Message-ID: <slrnbv30k3.if6.eikelan@ID-77364.user.uni-berlin.de>
Source record: 102496
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,alt.dss.hack

["Followup-To:" header set to rec.radio.amateur.antenna.]
Steve Silverwood wrote:
> In article <qeakuvo4mshvplkuvtb3ub28drp0mg2u8t@4ax.com>, endor37@skip-
> the-spam.hotmail.com says...
> > I'm planning to run 6 RG11 feeds for my DishTV setup. What is the best
> > way of making sure the connections are *waterproof* indefinately.
> >
> > I'm using T&B SNS connectors on the cable and where the connection
> > meets the LNB, I'm thinking about using some sorta of silicone grease
> > sealant on the threds, plenty of wrapping with Scotch 88 tape and then
> > a coat of Skotchcoat.
>
> We used to have some stuff in the Air Force called "F-4 tape" which
> worked great for this sort of thing. It's kind of like a putty tape, in
> rolls with plastic separating each layer of the tape. You wrap up the
> connector like you would with electrical tape, only stretching the tape
> a bit as you go. What happens is the tape molds itself together around
> the connector and provides a very water-tight seal around the whole tape
> job. Not sure if it's available on the civilian market but if so it's a
> great item to have handy.
>

It is made by Pirelli too with a different name. We use it for coax
and for electrical. The connections for sleave pumps 80m down into
a well (= under water) perform - just well ;-)
Never had a coax soaked using this method for over 10 years.

Kind regards, Eike

6531. Re: Diamond Antenna Question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 14:11:59 UTC
From: Vito <vito@crosslink.net>
Message-ID: <3ff187b3$0$3635@dingus.crosslink.net>
Source record: 102497

http://www.electronics-plus.com/Merchant/merchant.mv?

Item # 03-035 = Nf to UHFm $3.49(US)

"Troy - VK2HXY" <NOSPAMvk2hxy@hotmail.com> wrote in message
news:uk6Ib.89$uQ3.4091@nnrp1.ozemail.com.au...
> I have a Diamond X510 dual band antenna (2/70), which has an SO239 socket
> for termination. Has anyone changed this to an 'N' Type before? Say by
> using an N type chassis mount? I don't want to rip the antenna down and
> apart before I know whether it's been done and if it's a huge task or not.
>
> I have some LDF450 to replace the lossy RG213, the cable already has N
type
> termination, so rather than fork out for a LDF PL259 type connector (Aus
> $70.00) I'd prefer to change the antenna connection.
>
> Any advice gents?
>
> I have looked for an PL259 to N connector, none appear available. Yet
> plenty the other way around (always the way)
>
> Thanks in advance
>
> 73
>
> Troy
>
>

6532. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 14:52:09 UTC
From: eccos <nospam@yahou.com>
Message-ID: <tigIb.16227$aw2.9497755@newssrv26.news.prodigy.com>
Source record: 102498

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:0jr0vvs81o2rptgvvhhosv6on5nkgv2sim@4ax.com...
| On Mon, 29 Dec 2003 17:53:32 GMT, "eccos" <nospam@yahou.com> wrote:
|
| > In "scenario 1" I have no antenna help whatsoever. Whereas
| >in "scenario 2," however cheap, I have some antenna, and for this reason
the
| >reception is better. Duh! If my assumption is correct, then the
question
| >is how to add an indoor antenna to "scenario 1."]
|
| Hi OM,
|
| Successful engineering consists of explaining the problem correctly
| (because it is also the answer).
|
| Connect your cheap antenna to the DSS connector labeled TV
| ANTENNA/CABLE IN (which is an input, you were using it as an output)
| and when you turn off the DSS, it should allow cable or antenna
| signals through to be tuned by your TV. This means that the DSS acts
| as the splitter you are trying to add to this problem.
|
| 73's
| Richard Clark, KB7QHC

Richard,
I tried your suggestion, and I get damn near perfect reception. Wow!
Thanks again.

6533. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 15:43:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6573vvg1a628ro6r6mkoflvpnftckqv3rv@4ax.com>
Source record: 102499

On Tue, 30 Dec 2003 14:52:09 GMT, "eccos" <nospam@yahou.com> wrote:

>
>Richard,
>I tried your suggestion, and I get damn near perfect reception. Wow!
>Thanks again.
>

Hi OM,

Give yourself more credit. Like I said, the answer is usually in the
question when you put your mind to it. You were already on the trail.

73's
Richard Clark, KB7QHC

6534. Patch antenna on FR4 PCB

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 17:02:56 UTC
From: OZ1IPU - John <oz1ipu@mail.dk>
Message-ID: <3ff1aee1$0$95054$edfadb0f@dread11.news.tele.dk>
Source record: 102500

Hello

I am looking for a design on a 2,4GHz RHCP Patch for my dish, it need to be on FR4, PCB, (no mechanics Patch in metal!). are there somebody there have a design with layout for FR4????.

Vy 73 John OZ1IPU

oz1ipu@mail.dk

6535. 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 18:52:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsshhv$9mm$1@titan.btinternet.com>
Source record: 102501

It is well known 3-phase power line transmission is more efficient than the regular single phase. The PA is OK. Can anyone provide a circuit diagram for a 3 -phase SWR/Forward & Reflected Power meter. Thanks in advance.

Reg.

6536. Re: Low Power SWR Meter for 2.3ghz and above?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 18:55:03 UTC
From: richardharrison@webtv.net
Message-ID: <23640-3FF1CA07-44@storefull-2318.public.lawson.webtv.net>
Source record: 102502

Rob wrote:
"What would the equivalent diode be for up to 2.6GNz ?"
The microwave SWR meter page reference Rob gives says: "---a good quality microwave diode would be used ---."

I recall using the venerable 1N23 for many microwave applications. My ancient ECG Manual says that Sylvania`s ECG equivalent was 1N415C or 1N415E.

The 1N415C is tested at 9375 MHz for a maximum noise figure of 9,5 dB as a mixer. The 1N415E is tested at 9375 MHz for a maximum noise figure of 7.5 dB as a mixer.

For a meter rectifier, you don`t care what the noise figure is, so either diode would work just fine as the diodes are otherwise equivalent.

A generic microwave silicon diode should be fine. The lower junction voltage of a hot-carrier diode will allow greater sensitivity in a power meter but may burn out more easily. The silicon diode will withstand 2 ergs.

Best regards, Richard Harrison, KB5WZI

6537. Patch Cords

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 19:25:51 UTC
From: Jerry <me8@privacy.net>
Message-ID: <3FF1D13F.3050300@privacy.net>
Source record: 102503

Hey, I'm on a roll.....need to make a bunch more of those patch cords.
Do you have another dozen or so of the Pl's and RGX8 centers? If not,
I'll order some from Davis R.F. Tnx
Jerry

6538. Re: Patch Cords

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 19:26:45 UTC
From: Jerry <me8@privacy.net>
Message-ID: <3FF1D175.5090706@privacy.net>
Source record: 102504

Oops...forgot I was still the mail group...forgive me.
Jerry
K7LY

On 12/30/2003 12:25 PM, Jerry wrote:
> Hey, I'm on a roll.....need to make a bunch more of those patch cords.
> Do you have another dozen or so of the Pl's and RGX8 centers? If not,
> I'll order some from Davis R.F. Tnx
> Jerry
>

6539. Re: Open Wire Feeder Switching Ideas ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 19:37:56 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FF1D414.98178BE1@cwis.net>
Source record: 102505

Doug,
Have you thought about ~not~ switching between antennas
and just connecting them all to the same feed point?
'Doc

6540. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 19:43:35 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <s49QnEjnVd8$EwTg@pickmere.demon.co.uk>
Source record: 102506

In message <bsshhv$9mm$1@titan.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> writes
>It is well known 3-phase power line transmission is more efficient than the
>regular single phase. The PA is OK. Can anyone provide a circuit diagram
>for a 3 -phase SWR/Forward & Reflected Power meter. Thanks in advance.

You will need the 3-phase aerial first, Reg.

Mike
--
M.J.Powell

6541. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 19:58:48 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff1d97a_8@corp.newsgroups.com>
Source record: 102507

Reg Edwards wrote:
> It is well known 3-phase power line transmission is more efficient than the
> regular single phase. The PA is OK. Can anyone provide a circuit diagram
> for a 3 -phase SWR/Forward & Reflected Power meter. Thanks in advance.

Most three-phase power meters in my old college textbooks assume
that the voltages are balanced. Is that a good assumption?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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6542. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 20:02:31 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff1da58_8@corp.newsgroups.com>
Source record: 102508

M. J. Powell wrote:
> You will need the 3-phase aerial first, Reg.

That's easy to model with EZNEC and three sources.
What I want to know is whether it is Y fed (four wires)
or delta fed (three wires)?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

6543. Re: jury-rigging radio antenna for HDTV use?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 20:18:32 UTC
From: jaepstein_63@yahoo.com
Message-ID: <27e4d2e8.0312301218.693ffe98@posting.google.com>
Source record: 102509

Thanks for all the detail which I've received here and elsewhere.
This seems like very sage advice, so I decided to follow it. I have a
bit more splicing and/or jack relocation to perform, but at this point
I already have beautiful HDTV and analog reception using the existing
TV antenna.

Thanks again to all who responded!

Jonathan

> A satellite dish and cable have their own issues. It best to keep
> these separate.

6544. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 22:01:55 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <B5gL37tTXf8$Ew2l@pickmere.demon.co.uk>
Source record: 102510

In message <3ff1da58_8@corp.newsgroups.com>, Cecil Moore
<Cecil.A.Moore@ieee.ONEDOT.org> writes
>M. J. Powell wrote:
>> You will need the 3-phase aerial first, Reg.
>
>That's easy to model with EZNEC and three sources.
>What I want to know is whether it is Y fed (four wires)
>or delta fed (three wires)?

Star feed would mean that there would be an earth up there. Might be
useful for grounding?

Mike
--
M.J.Powell

6545. What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 22:23:40 UTC
From: info@activesignals.com
Message-ID: <MPG.1a5bc4fab366f4a989696@news.buckeye-express.com>
Source record: 102511
Cross-posted to: alt.ham-radio.am,alt.ham-radio.amtor,es.rec.radio.amateur,fr.rec.radio.amateur,git.radio.amateur,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

I will try this again. With do you think is the best equipment to start
out as a ham. Thanks
--
Keep the volume up

www.activesignals.com has a forum board.
www.activesignals.com for all listeners.
www.activesignals.com is a lot of fun.
www.activesignals.com is worth the look.

6546. Re: What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 22:42:39 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FF1FF5F.528D8D96@cwis.net>
Source record: 102512

Considering all that you haven't said about what you want
to do, and what you might enjoy about the hobby, the best
advice anyone can give you is to get the equipment that you can
afford, and that will do what you want to do.
Kind of a 'broad' answer? Yep, but it was an even 'broader'
question...
'Doc

6547. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 23:27:17 UTC
From: eccos <nospam@yahou.com>
Message-ID: <pRnIb.16338$aw2.9585468@newssrv26.news.prodigy.com>
Source record: 102513

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:6573vvg1a628ro6r6mkoflvpnftckqv3rv@4ax.com...
| On Tue, 30 Dec 2003 14:52:09 GMT, "eccos" <nospam@yahou.com> wrote:
|
| >
| >Richard,
| >I tried your suggestion, and I get damn near perfect reception. Wow!
| >Thanks again.
| >
|
| Hi OM,
|
| Give yourself more credit. Like I said, the answer is usually in the
| question when you put your mind to it. You were already on the trail.
|
| 73's
| Richard Clark, KB7QHC

Forgive the ignorance, but what's OM?

6548. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 23:55:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <yfolb.10670$I07.19688@attbi_s53>
Source record: 102514

Cecil Moore wrote:

> Reg Edwards wrote:
>
>> It is well known 3-phase power line transmission is more efficient
>> than the
>> regular single phase. The PA is OK. Can anyone provide a circuit
>> diagram
>> for a 3 -phase SWR/Forward & Reflected Power meter. Thanks in advance.
>
>
> Most three-phase power meters in my old college textbooks assume
> that the voltages are balanced. Is that a good assumption?

Only if the three sources and three loads are balanced!

Hmmm ... Three phase coherent amplifiers, 0, 120, and 240 degree phase
shift, driving three antennas with uniform mutual coupling coefficients,
being measured by a three phase SWR/Forward & Reflected Power meter.

Sounds like an interesting system!!

I think the US Navy found an easier solution with variable phased arrays!

DD, W1MCE

6549. Re: What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-30 23:55:37 UTC
From: Mike <mlawson1@twcny.rr.com>
Message-ID: <ZfoIb.20853$q55.16542@twister.nyroc.rr.com>
Source record: 102515
Cross-posted to: alt.ham-radio.am,alt.ham-radio.amtor,es.rec.radio.amateur,fr.rec.radio.amateur,git.radio.amateur,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

Depends...
1. BUDGET?
2. Operations
3. And how far you want to go.

1.Budget.. you need to know how much you want or can spend. A modest mobile rig will go for about $150. While a handheld a little less pending bells and whistles.

2. Operations.. what do you want to do? Local repeater work? Maybe work some DX on 6 meters? Or maybe the fav of HF? How about satellite? Packet? Slowscan TV, Fast Scan TV? APRS? Oppurtunites are endless.

3. How far do you want to go...? Some people are fine with doing local work on one antenna. Others seem compelled to have a tower farm. Again, oppurtunites are endless, and so is the price tag.
As far as experience goes with equipment, stay away from the Radio Shack HTX-252 2 meter (144MHZ)25 watt mobile radio. It only has 10 memories and is a POS! Price the same as the Icom 2100, with 100 memories, 50 watts of power, dual color display. Etc etc.

$200 will get you a decent 2 meter rig and antenna for the car.
$250 same rig and base antenna for house.
Again, depending on what you want will depend on the price.
Good luck and happy hamming.
Mike
KC2JGA

"www.activesignals.com" <info@activesignals.com> wrote in message news:MPG.1a5bc4fab366f4a989696@news.buckeye-express.com...
> I will try this again. With do you think is the best equipment to start
> out as a ham. Thanks
> --
> Keep the volume up
>
> www.activesignals.com has a forum board.
> www.activesignals.com for all listeners.
> www.activesignals.com is a lot of fun.
> www.activesignals.com is worth the look.

6550. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 00:11:58 UTC
From: jgboyles@aol.com
Message-ID: <20031230191158.21716.00001088@mb-m26.aol.com>
Source record: 102516

>What I want to know is whether it is Y fed (four wires)
>or delta fed (three wires)?

If it is Y fed, and the voltages are balanced, you don't need a fourth wire. Everything will be nice like a balanced delta feed. As you know, when things get unbalanced, both systems have their disadvantages.
73 Gary N4AST

6551. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 00:34:44 UTC
From: Roger Gt <Xenot@pacbell.net>
Message-ID: <EQoIb.3859$Ah.113@newssvr29.news.prodigy.com>
Source record: 102517

"eccos" <nospam@yahou.com> wrote in message
news:pRnIb.16338$aw2.9585468@newssrv26.news.prodigy.com...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:6573vvg1a628ro6r6mkoflvpnftckqv3rv@4ax.com...
> | On Tue, 30 Dec 2003 14:52:09 GMT, "eccos" <nospam@yahou.com> wrote:
> | >
> | >Richard,
> | >I tried your suggestion, and I get damn near perfect reception. Wow!
> | >Thanks again.
> |
> | Hi OM,
> |
> | Give yourself more credit. Like I said, the answer is usually in the
> | question when you put your mind to it. You were already on the trail.
> | 73's
> | Richard Clark, KB7QHC
>
> Forgive the ignorance, but what's OM?

Ham Speak! "Old Man" an title of respect!

6552. Re: Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 00:41:04 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <vv46nldq3ur919@corp.supernews.com>
Source record: 102518

Dear John:
A wire antenna for short-wave (HF) that is ten feet above ground is
likely not to have strong directional preferences. In other words, the
orientation of the wire antenna is unlikely to make any significant
difference in your reception. However, if in an urban environment, some
orientations are likely to pick up more locally generated noise than
other orientations.
Experimentation is called for. More height is desirable. 73 Mac
N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"John Quinn" <john.quinn@comcast.net> wrote in message
news:9s61vv0ttmj6tb7vioenehfpctflbeufej@4ax.com...
> Ok, lets assume that I'll erect a couple of PVC poles to string the
> guy nylon rope and 43'-0" wire antenna between, say, about 10 feet off
> the ground and free and clear of anything screwing up the signal.
> Then what would be the best layout if in Dallas, TX? Lay it out North
> to South as to best pick up the European county broadcasts, being that
> it's more or less due east of my location?
>

6553. Re: Feeding a doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 01:46:25 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <RTpIb.16188$IM3.12126@newsread3.news.atl.earthlink.net>
Source record: 102519

"Adrian" <adrian@ambquality.co.uk> wrote in message
news:utd2vv8edk50fkv0ob5dgjodtud22j9u5o@4ax.com...
> Hi all
>
> With a bit of luck I'm finally going to get my HF doublet up in the
> air in the next week or so. I'm planing on about 150ft per top 'leg',
> and will need a couple of hundred feet of open-wire feeder (going to
> try heavy-duty 'slotted' ribbon for starters) .
>
> Here's the question...
> Due to the geography of the site, the shack is pretty well in line
> with the antenna - which will be at about 20ft above ground on 3
> poles. The site slopes, so that the eaves of the shack are about level
> with the bottom of the nearest pole. In all the books, diagrams show
> the feeder joining onto the 'aerial' at right angles - but I'm
> wondering how best ot compromise on this in my situation.
>
> Would it be better to take the ribbon feeder straight to the bottom
> of the first pole & then run it underneath & in line with the aerial
> (say a couple of feet off the ground) until it meets the centre pole -
> then run it up to the feedpoint .....- or would it be any better to
> run the feeder at low-level but parallel with the aerial (could be
> about 20-30 ft apart) and then make a right-angled turn up to the
> feedpoint...?
>
> Possibly, in terms of the wavelengths involved it'll make little
> difference - and I'm quite prepared to try it & see.. but I just
> wondered what opinions / experiences group members could share.
>
> I'm planning on the doublet to make the best use of the space
> available, and to reduce the possibility of TVI (we're in a weak TV
> signal area and effective earths for a long-wire aren't easy because
> we have very dry, sandy soil).
>
> Thanks in advance for any suggestions / comments
> Adrian G0THW
> Suffolk UK

Why complicate things Adrian. Put the thing together and see what happens.
Work out the details later. If it works , dont fix it.

HNY

Dan/W4NTI

6554. Re: What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 01:48:47 UTC
From: Bob Miller <bxmiller@texas.netNOSPAM>
Message-ID: <n6a4vvkm1kq529l5qmift3pijph2d549pa@4ax.com>
Source record: 102520

On Tue, 30 Dec 2003 17:23:40 -0500, info@activesignals.com
(www.activesignals.com) wrote:

>I will try this again. With do you think is the best equipment to start
>out as a ham. Thanks

It would help to know your name, call sign and license level, or
whether you're still studying for your license.

Your best bet would be a general purpose transceiver that allows you
to sample as much of amateur radio as possible, such as an Icom 706.
It covers all of the high frequency ham bands, 160 through 10 meters,
as well as several vhf/uhf bands, 6 meters, 2 meters and 70
centimeters. It works on the most popular transmitting modes, single
sideband, FM, CW and AM. And has a decent amount of power, about 100
watts out.

With this rig, you can get a good idea of what most hams are doing,
and when you're ready to get more specialized equipment, it's still a
good back-up rig. Price is about $750, plus about $150 for a power
supply.

Any questions?

Bob
k5qwg

6555. Re: What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 02:08:42 UTC
From: John LeMay <jlemay@njmc.com>
Message-ID: <pan.2003.12.31.02.08.40.906000@njmc.com>
Source record: 102521
Cross-posted to: alt.ham-radio.am,alt.ham-radio.amtor,es.rec.radio.amateur,fr.rec.radio.amateur,git.radio.amateur,nl.radio.amateur,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment

On Tue, 30 Dec 2003 17:23:40 -0500, www.activesignals.com wrote:

> I will try this again. With do you think is the best equipment to start
> out as a ham. Thanks

Purchase what you can afford for use on bands you want to use. Chances are
you will get the most "bang for the buck" out of an HT as your
first rig. I went with a Kenwood TH-F6A as my first rig when I got my
ticket back in January. I've since added a couple dual band mobile rigs to
my equipment list. If I were buying an HT now, I'd probably go for the
new Yaesu.

--
John LeMay
Senior Technical Manager
NJMC, LLC
Technology Solutions for Business

6556. Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 02:51:26 UTC
From: Dave Woolf <NOSPAMdwoolf@worldnet.att.net>
Message-ID: <3FF239DC.8000603@worldnet.att.net>
Source record: 102522
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Just wonder what other's might do to keep moisture
from getting into the semi-hollow 9913 type low
loss coax. It would seem inevitiable with changes
in temperature and pressure that moist air would
eventually work its way into the coax and then
condense.

I had a fellow ham that took the precaution of
pressurizing this type of coax to maintain
positive pressure and keep out outside air.
Seemed like a lot of effort but maybe it is necessary.

I have tried to seal the ends of the coax with silicone
sealant but I am not really sure that this has been
effective in the long term.

What do others do? What has been your experience?

Dave - K8RSP
(to reply to me directly remove NOSPAM from above
address)

6557. Re: Shakira getting dirty with dildo

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 02:57:46 UTC
From: johnfofawn@hotmail.com
Message-ID: <d89364bd.0312301857.4e2a0beb@posting.google.com>
Source record: 102523

jgboyles@aol.com (JGBOYLES) wrote in message
news:<20031226184452.01603.00000988@mb-m20.aol.com>...
> >What the Hell does this have to do with Amateur Radio you moron?
>
> Nothing John. Cussin' and calling them names will not shame them or make them
> stop.
> 73 Gary N4AST

Not quite Shakira, but....

What's the difference between a Christina Aguilera video and a porno?

The music is better in the porno.

Hehehe :-)

I wish I could find some cheap HAM gear so I can get back into the hobby.

John

6558. opinions of GAP Voyager

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 04:26:53 UTC
From: fjx1@aol.comnospam
Message-ID: <20031230232653.21935.00001071@mb-m26.aol.com>
Source record: 102524

Can't run wires for 80 or 160. Any opinions on Gap Voyager?

73

fjx1@aol.com

6559. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 04:54:04 UTC
From: richardharrison@webtv.net
Message-ID: <23771-3FF2566C-192@storefull-2315.public.lawson.webtv.net>
Source record: 102525

Reg, G4FGQ wrote:
"A complicated circuit is reduceable to an equivalent circuit consisting merely of two components: a current source and an impedance."? "Let`s hope his name will be pronounceable."

True. Does the name "Norton", as in Norton`s Theorem, seem pronounceable? Reg`s assertion is indubitable.

In a linear circuit, any generator of electric power may be considered equivalent, at specified frequency, to a current generator whose current is equal to the short-circuit current in shunt with an admittance whose magnitude is equal to that when the generator is inactive and there is no load connected to it, says Henney in his "Radio Engineering Handbook".

The Thevenin`s Theorem impedance is the open-circuit voltage divided by the short-circuit current.

Terman says on page 95 of his 1937 2nd edition of "Radio Engineering":

"According to Thevenin`s theorem, any linear network containing one or more sources of voltage and having two terminals behaves, insofar as a load impedance connected across the terminals is concerned, as though the network and its generators were equivalent to a simple generator having an internal impedance Z and a generator voltage E, where E is the voltage that appears when no load is connected and Z is the impedance that is measured between the terminals when all sources of voltage in the network are short-circuited."

We have argued about the linearity required to make the Thevenin equivalent valid. Terman says that linearity is the only limitation to validity.

Best regards, Richard Harrison, KB5WZI

6560. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 05:04:34 UTC
From: Dale and Nancy Chidester <dalechid@cox.net>
Message-ID: <eSsIb.16586$7D3.14307@fed1read02>
Source record: 102527

Ken,

Think helical. Several years ago I made a 40 meter J-pole using twin lead. Wound it around 10 ft. of 1" PVC pipe. Worked well for field day, signal strengths comparable to those from a full sized dipole... but with the advantage of being omni-directional. Get some 4" or 6" PVC sewer pipe and do the math for length. Should be interesting. Hmm, think I'll go visit Radio Shack soon!

73,
Dale NJ7C

6561. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 05:08:10 UTC
From: Matt <pissoff@spammers.suck.com>
Message-ID: <bstljd$2729$1@otis.netspace.net.au>
Source record: 102526
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

As with all of my external cable connections (excluding mobile
installs), I use good quality plugs that physically screw together. The
when I am finished, I use self amalgamating tape (costs about $20 Aust
per roll) which provides a weatherproof seal around the connection -
have cut the tape off plugs which I have done ten or more years
previously to find them as dry as the day I put them together. On top
of the self amalgamating tape, I use the normal electrical tape to give
the birds something to peck at before they reach the self amalgamating
tape (bloody cockies can be ferocious with antennas and coaxial cable
here).
I believe that the only way that coax is going to become water effected
is if it directly exposed to water (i.e. rain), and once you have put
the connector on the end of the cable, screwed it into the antenna and
taped it up, the chances of water getting into it are very remote (bar
the outer layer being cracked, cut or abraded). In my opinion,
pressurising the cable is not something that is needed for the average
hobbyist.

Matt

Dave Woolf <NOSPAMdwoolf@worldnet.att.net> wrote in message
news:3FF239DC.8000603@worldnet.att.net...
>
> Just wonder what other's might do to keep moisture
> from getting into the semi-hollow 9913 type low
> loss coax. It would seem inevitiable with changes
> in temperature and pressure that moist air would
> eventually work its way into the coax and then
> condense.
>
> I had a fellow ham that took the precaution of
> pressurizing this type of coax to maintain
> positive pressure and keep out outside air.
> Seemed like a lot of effort but maybe it is necessary.
>
> I have tried to seal the ends of the coax with silicone
> sealant but I am not really sure that this has been
> effective in the long term.
>
> What do others do? What has been your experience?
>
> Dave - K8RSP
> (to reply to me directly remove NOSPAM from above
> address)

>

6562. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 05:34:18 UTC
From: richardharrison@webtv.net
Message-ID: <23639-3FF25FDA-146@storefull-2318.public.lawson.webtv.net>
Source record: 102528

Reg, G4FGQ wrote:
"Can anyone provide a circuit diagram for a 3-phase SWR / Forward & Reflected Power meter?"

Sure. It is provided by Bird Electronic Corporation.

Connect the 3-phase source and load in the Y-configuration. This permits (3) 50-ohm coax cables to be used between source and load, the shields being the common connections for the Y-configuration. Circuit delay in the three cables must be made the same to preserve the 120-degree phase relationship between phases. Equal length cables or phasing networks can be used to acomplish this.

Because of the foregoing, W1, W2, and W3, measured in the loads by the Bird wattmeter are valid regardless of power factor, degree of balance, etc.

The total power:

PT = W1 + W2 + W3

The above is from "Industrial Electricity (Part 2)"
by Chester L. Dawes, McGraw-Hill 1942, page 141, which was one of my first text books, and surprisingly to me, I still have it. A GI-Bill gift from the U.S. Government at the end of WW-2.

Best regards, Richard Harrison, KB5WZI

6563. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 05:49:22 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <hlo4vvgiumqqmmofndfifjosiqboag80bi@4ax.com>
Source record: 102529
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

On Wed, 31 Dec 2003 16:08:10 +1100, "Matt" <pissoff@spammers.suck.com>
wrote:

>As with all of my external cable connections (excluding mobile
>installs), I use good quality plugs that physically screw together. The
>when I am finished, I use self amalgamating tape (costs about $20 Aust
>per roll) which provides a weatherproof seal around the connection -
>have cut the tape off plugs which I have done ten or more years
>previously to find them as dry as the day I put them together. On top
>of the self amalgamating tape, I use the normal electrical tape to give
>the birds something to peck at before they reach the self amalgamating
>tape (bloody cockies can be ferocious with antennas and coaxial cable
>here).
>I believe that the only way that coax is going to become water effected
>is if it directly exposed to water (i.e. rain), and once you have put
>the connector on the end of the cable, screwed it into the antenna and
>taped it up, the chances of water getting into it are very remote (bar
>the outer layer being cracked, cut or abraded). In my opinion,
>pressurising the cable is not something that is needed for the average
>hobbyist.
>

It only took one lightening strike to change my mind about
waterproofing 9913.

I used coax seal and taped over that. The tower took a hit that
removed every single bit of tape and coax seal from up there. I found
the coax seal on the ground. It looked like some one had cut down one
side and peeled it off. Then cut it so it looked like one of those
pieces of expanded metal. It even removed the silver plating from the
connectors.

15 minutes after the lightening strike I had water running out of my
2-meter rig.

I ordered 1500 feet of LMR 400 right soon after.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>
>
>Matt
>

>Dave Woolf <NOSPAMdwoolf@worldnet.att.net> wrote in message
>news:3FF239DC.8000603@worldnet.att.net...
>>
>> Just wonder what other's might do to keep moisture
>> from getting into the semi-hollow 9913 type low
>> loss coax. It would seem inevitiable with changes
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>> eventually work its way into the coax and then
>> condense.
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>> pressurizing this type of coax to maintain
>> positive pressure and keep out outside air.
>> Seemed like a lot of effort but maybe it is necessary.
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>> I have tried to seal the ends of the coax with silicone
>> sealant but I am not really sure that this has been
>> effective in the long term.
>>
>> What do others do? What has been your experience?
>>
>> Dave - K8RSP
>> (to reply to me directly remove NOSPAM from above
>> address)
>>
>

6564. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 06:41:35 UTC
From: richardharrison@webtv.net
Message-ID: <23639-3FF26F9F-156@storefull-2318.public.lawson.webtv.net>
Source record: 102531

Moe wrote:
"Got Kraus "Antennas."

Moe picked one of the very best. Fortunately, I have Kraus too, the 1950 edition, and the 2003 third edition. Kraus borrowed from Schelkunoff and Friis. Kraus (born 1910) starts his indexes with the names of those he`s borrowed from and the pages containing the references. You can find many references to Schelkunoff, S.A. and Friis, H.T.

I don`t know that Chip already has J.D. Kraus` "Antennas", but I`d be surprised if he does not have copies. He may need additional copies, but he asked for Schelkunoff and Friis.

Chip sought and found a copy of Ed Laport`s "Antenna Engineering", not too long ago. When he posted his request, I commented I was looking too. Chip graciously offered to help me find a copy too. By then, a copy of "Antenna Engineering" turned up in my father-in-law`s estate (W1DBM) which I was able to get. I very much appreciate Chip`s kind offer to help. I had left my original copy of Ed`s fine book in Tierra del Fuego in 1960 because people there needed it more than I did and back in the States it was easily replaceable I thought. Phil, W1DBM dated his copy (1950) when he bought it I suppose. Fortunately my copy did turn out to be replaceable back in the States, but not as I had imagined.

Best regards, Richard Harrison, KB5WZI

6565. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 06:44:21 UTC
From: Matt <pissoff@spammers.suck.com>
Message-ID: <bstr7p$287s$1@otis.netspace.net.au>
Source record: 102530
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Nasty, but unusual - in 20 years of playing with radios, I have not had the problem that you have mentioned, but then again, I guess that I don't have a huge lightening rod of a tower that you do (bloody nice BTW). For the average user, the procedures I have mentioned will suffice 99.99% of the time (looks anxiously up into the sky to check for lightening<g>).

Matt

Roger Halstead <mynews@rogerhalstead.com> wrote in message news:hlo4vvgiumqqmmofndfifjosiqboag80bi@4ax.com...
> On Wed, 31 Dec 2003 16:08:10 +1100, "Matt" <pissoff@spammers.suck.com>
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> Roger Halstead (K8RI & ARRL life member)
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> >
> >
> >
> >Matt
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> >> from getting into the semi-hollow 9913 type low
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> >> in temperature and pressure that moist air would
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> >> Dave - K8RSP
> >> (to reply to me directly remove NOSPAM from above
> >> address)
> >>
> >>
>

6566. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 07:11:34 UTC
From: Zoran Brlecic <...WA7AA...@get.lost>
Message-ID: <3FF276B3.3030008@get.lost>
Source record: 102532
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Dave Woolf wrote:

> I had a fellow ham that took the precaution of
> pressurizing this type of coax to maintain
> positive pressure and keep out outside air.
> Seemed like a lot of effort but maybe it is necessary.

Just out of curiosity: how exactly did he do this?

73 .... WA7AA

--

Anti-spam measure: look me up on qrz.com if you need to reply directly

6567. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 07:44:28 UTC
From: richardharrison@webtv.net
Message-ID: <24790-3FF27E5C-186@storefull-2311.public.lawson.webtv.net>
Source record: 102533

Reg, G4FGQ wrote:
"---students, even at that tender age, should be endowed with a first-class honors degree, including cap and gown---"

Ha ratos com toda a certeza nas "favelas" de Rio, mas nao somente nos esgotos, e tambem, nao tengo certeza que os estudantes se usem beretes e capas para mostrar seus elevacoes de grau.

It`s been more than 50 years since my 2 weeks of Berlitz instruction in spoken Portuguese, and I`m out of practice and don`t have a dictionary handy but this is what I tried to write above:

It is certain that there are rats in the "bean shacks" of Rio, but not only in the sewers, and also, I am not certain that the students use caps and gowns to show their advancements in grade.

My grammer may be fractured and my spelling may be poor, but I`ve lived in Lisbon though long ago, and I`ve been to Rio. I think a resident of Rio could decipher what I`ve written. I could more easily write it it in Spanish, which we hear in Texas every day, but it`s different from Portuguese. It`s over 3 months since I was in England, so I`m not so sure I`m doing so well in English either. Spanglish is often spoken here.

Best regards, Richard Harrison, KB5WZI

6568. Re: TV antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 08:20:41 UTC
From: eccos <nospam@yahou.com>
Message-ID: <tFvIb.16451$aw2.9683433@newssrv26.news.prodigy.com>
Source record: 102534

```
<lysander@uk2.net> wrote in message
news:cq74vvc98nb6jpdb6ov7s1nsdklc0kathb@4ax.com...
| On Wed, 31 Dec 2003 00:34:44 GMT, "Roger Gt" <Xenot@pacbell.net>
| wrote:
|
| >
| >"eccos" <nospam@yahou.com> wrote in message
| >news:pRnIb.16338$aw2.9585468@newssrv26.news.prodigy.com...
| >>
| >> "Richard Clark" <kb7qhc@comcast.net> wrote in message
| >> news:6573vvg1a628ro6r6mkoflvpnftckqv3rv@4ax.com...
| >> | On Tue, 30 Dec 2003 14:52:09 GMT, "eccos" <nospam@yahou.com> wrote:
| >> | >
| >> | >Richard,
| >> | >I tried your suggestion, and I get damn near perfect reception.
Wow!
| >> | >Thanks again.
| >> |
| >> | Hi OM,
| >> |
| >> | Give yourself more credit. Like I said, the answer is usually in the
| >> | question when you put your mind to it. You were already on the
trail.
| >> | 73's
| >> | Richard Clark, KB7QHC
| >>
| >> Forgive the ignorance, but what's OM?
| >
| >
| >Ham Speak! "Old Man" an title of respect!
| >
|
| Also a merchant marine abbreviation for a ship's Master.

My kids call me "old fart." So this is a tremendous improvement.
```

6569. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 08:34:03 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <5u15vvctp3gkedc5vj12v4vtmv6gqbvv21@4ax.com>
Source record: 102535
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

On Wed, 31 Dec 2003 17:44:21 +1100, "Matt" <pissoff@spammers.suck.com>
wrote:

>Nasty, but unusual - in 20 years of playing with radios, I have not had
>the problem that you have mentioned, but then again, I guess that I
>don't have a huge lightening rod of a tower that you do (bloody nice
>BTW). For the average user, the procedures I have mentioned will
>suffice 99.99% of the time (looks anxiously up into the sky to check for
>lightening<g>).

The hit was on the old tower, but that still put the base of the
repeater antenna at 90 feet, so the top would have been close to 112
feet. It hasn't been up in years.

The surprising thing is the bolt took out the 7/8" Heliax about 30
feet down from the top of the tower. I did lose the front end out of
one solid state 2-meter rig, but that was it. Everything else was
still working including the one with the water running out.

The current tower and even the old were getting hit about three times
a year, but there hasn't been any damage in a while.

My neighbor was looking across his back yard this past summer when the
top took a direct hit. It apparently really impressed him. Now the
neighbors really believe me when I tell them it's the neighborhood
lightening rod<:-)). OTOH I was out by the end of the driveway
talking to the neighbor across the road with a storm in the distance.
A strong bolt hit the power pole about 30 feet from us. We both
decided we needed to be some where else... Quickly.

Currently my biggest concern from lightening is the computer network.
It's a 130 foot run to the shop and 25 feet in the other direction to
my wife's computer. The pone line comes in underground, but it
doesn't take much induced current to cost many dollars.

So far, I haven't had any problems with the satellite dishes and
feeds, but I have lost the antenna mounted preamp to the top UHF TV
antenna. Course that may have been due to 2-meters instead of
lightening.<:-))

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>
>

>Matt
>
>Roger Halstead <mynews@rogerhalstead.com> wrote in message
>news:hlo4vvgiumqqmmofndfifjosiqboag80bi@4ax.com...
>> On Wed, 31 Dec 2003 16:08:10 +1100, "Matt" <pissoff@spammers.suck.com>
>> wrote:
>>
>> >As with all of my external cable connections (excluding mobile
>> >installs), I use good quality plugs that physically screw together.
>The
>> >when I am finished, I use self amalgamating tape (costs about $20
>Aust
>> >per roll) which provides a weatherproof seal around the connection -
>> >have cut the tape off plugs which I have done ten or more years
>> >previously to find them as dry as the day I put them together. On
>top
>> >of the self amalgamating tape, I use the normal electrical tape to
>give
>> >the birds something to peck at before they reach the self
>amalgamating
>> >tape (bloody cockies can be ferocious with antennas and coaxial cable
>> >here).
>> >I believe that the only way that coax is going to become water
>effected
>> >is if it directly exposed to water (i.e. rain), and once you have put
>> >the connector on the end of the cable, screwed it into the antenna
>and
>> >taped it up, the chances of water getting into it are very remote
>(bar
>> >the outer layer being cracked, cut or abraded). In my opinion,
>> >pressurising the cable is not something that is needed for the
>average
>> >hobbyist.
>> >
>>
>> It only took one lightening strike to change my mind about
>> waterproofing 9913.
>>
>> I used coax seal and taped over that. The tower took a hit that
>> removed every single bit of tape and coax seal from up there. I found
>> the coax seal on the ground. It looked like some one had cut down one
>> side and peeled it off. Then cut it so it looked like one of those
>> pieces of expanded metal. It even removed the silver plating from the
>> connectors.
>>
>> 15 minutes after the lightening strike I had water running out of my
>> 2-meter rig.
>>
>> I ordered 1500 feet of LMR 400 right soon after.
>>

>> Roger Halstead (K8RI & ARRL life member)
>> (N833R, S# CD-2 Worlds oldest Debonair?)
>> www.rogerhalstead.com
>> >
>> >
>> >
>> >Matt
>> >
>> >Dave Woolf <NOSPAMdwoolf@worldnet.att.net> wrote in message
>> >news:3FF239DC.8000603@worldnet.att.net...
>> >>
>> >> Just wonder what other's might do to keep moisture
>> >> from getting into the semi-hollow 9913 type low
>> >> loss coax. It would seem inevitiable with changes
>> >> in temperature and pressure that moist air would
>> >> eventually work its way into the coax and then
>> >> condense.
>> >>
>> >> I had a fellow ham that took the precaution of
>> >> pressurizing this type of coax to maintain
>> >> positive pressure and keep out outside air.
>> >> Seemed like a lot of effort but maybe it is necessary.
>> >>
>> >> I have tried to seal the ends of the coax with silicone
>> >> sealant but I am not really sure that this has been
>> >> effective in the long term.
>> >>
>> >> What do others do? What has been your experience?
>> >>
>> >> Dave - K8RSP
>> >> (to reply to me directly remove NOSPAM from above
>> >> address)
>> >>
>> >
>>
>

6570. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 08:43:46 UTC
From: Roger Halstead <mynews@rogerhalstead.com>
Message-ID: <ug25vvcavqpif96bvktnqhqf7fv9ks1e2m@4ax.com>
Source record: 102536
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

On Wed, 31 Dec 2003 07:11:34 GMT, Zoran Brlecic <...WA7AA...@get.lost>
wrote:

>Dave Woolf wrote:
>
>> I had a fellow ham that took the precaution of
>> pressurizing this type of coax to maintain
>> positive pressure and keep out outside air.
>> Seemed like a lot of effort but maybe it is necessary.
>
>Just out of curiosity: how exactly did he do this?

I'd go the commercial way and just purge it with a slight positive
pressure.

With 9913 you can seal the ends and use a small plastic tube in
through the side. Flood the bottom connector to seal it (just the
opposite of normal) then work a small hole through the jacket, braid,
and into the inner tube. You can build a tap sorta like they use for
a gas line, or water line, but smaller. You can also put a tap on the
side of the coax connector. As far as I know you'd have to make your
own as I've not seen any for the PL259s or N connectors although they
may be available. The only coax I've ever seen purged was commercial
hard line. (It looks like copper water pipe) They actually had a tap
soldered on the side of the line with a flow meter connected. It was
a very low flow and on a 900 foot run that was gasketed. They
replaced it with what appeared to be 4" Heliax. (How'd you like to
lift 900 feet of that?) You hook up a tank of N2, only run a few
inches of water pressure and use a small flow meter to regulate the
flow. Typically you'd purge the thing and then flood the top as well.
you will still get a small flow. If the coax seal loses integrity the
flow will increase.

Lot of work and about $20 to $30 for N2 every few months.

It's almost impossible to keep something like 9913 completely sealed.
Even the PL259s and N connectors will leak through some.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair?)
www.rogerhalstead.com
>
>73 .... WA7AA

6571. Re: What should I start with?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 09:46:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsu5sr$3mv$1@hercules.btinternet.com>
Source record: 102537

> What do you think is the best equipment to start out as a ham?
>
Start at the begining.

Get yourself a 200-feet reel of 18 awg enamelled copper wire, an empty toilet roll tube, a 500 pF variable capacitor, a germanium diode, a 470 pF capacitor, a pair of 4000-ohm headphones, a used 3-hole razor blade, and a dozen miniature alligator clips.

You will never regret it!

Reg, G4FGQ

6572. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 10:06:31 UTC
From: Matt <pissoff@spammers.suck.com>
Message-ID: <bsu72t$2bqk$1@otis.netspace.net.au>
Source record: 102538
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

Damn lightning - there should be a law against it <g>. I saw your tower raising epic on one of your webpages, and was very impressed with it - would love that at my QTH, but am currently renting, and as I move around very frequently with work (10 times in the last 13 years), a tower would need to be very portable, and the hassles of doing something like your setup every 18 months or so would really piss me off. Currently I use a variety of wire antennas, and a number of poles to get the verticals at about the 25 foot level. Certainly no powerhouse, but able to get to pretty much wherever I want to (within reason of course).

Matt

Roger Halstead <mynews@rogerhalstead.com> wrote in message news:5u15vvctp3gkedc5vj12v4vtmv6gqbvv21@4ax.com...
> On Wed, 31 Dec 2003 17:44:21 +1100, "Matt" <pissoff@spammers.suck.com>
> wrote:
>
> >Nasty, but unusual - in 20 years of playing with radios, I have not
had
> >the problem that you have mentioned, but then again, I guess that I
> >don't have a huge lightening rod of a tower that you do (bloody nice
> >BTW). For the average user, the procedures I have mentioned will
> >suffice 99.99% of the time (looks anxiously up into the sky to check
for
> >lightening<g>).
>
> The hit was on the old tower, but that still put the base of the
> repeater antenna at 90 feet, so the top would have been close to 112
> feet. It hasn't been up in years.
>
> The surprising thing is the bolt took out the 7/8" Heliax about 30
> feet down from the top of the tower. I did lose the front end out of
> one solid state 2-meter rig, but that was it. Everything else was
> still working including the one with the water running out.
>
> The current tower and even the old were getting hit about three times
> a year, but there hasn't been any damage in a while.
>
> My neighbor was looking across his back yard this past summer when the
> top took a direct hit. It apparently really impressed him. Now the
> neighbors really believe me when I tell them it's the neighborhood
> lightening rod<:-)). OTOH I was out by the end of the driveway
> talking to the neighbor across the road with a storm in the distance.
> A strong bolt hit the power pole about 30 feet from us. We both

> decided we needed to be some where else... Quickly.
>
> Currently my biggest concern from lightening is the computer network.
> It's a 130 foot run to the shop and 25 feet in the other direction to
> my wife's computer. The pone line comes in underground, but it
> doesn't take much induced current to cost many dollars.
>
> So far, I haven't had any problems with the satellite dishes and
> feeds, but I have lost the antenna mounted preamp to the top UHF TV
> antenna. Course that may have been due to 2-meters instead of
> lightening.<:-))
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair?)
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> >
> >
> >
> >Matt
> >
> >Roger Halstead <mynews@rogerhalstead.com> wrote in message
> >news:hlo4vvgiumqqmmofndfifjosiqboag80bi@4ax.com...
> >> On Wed, 31 Dec 2003 16:08:10 +1100, "Matt"
<pissoff@spammers.suck.com>
> >> wrote:
> >>
> >> >As with all of my external cable connections (excluding mobile
> >> >installs), I use good quality plugs that physically screw
together.
> >The
> >> >when I am finished, I use self amalgamating tape (costs about $20
> >Aust
> >> >per roll) which provides a weatherproof seal around the
connection -
> >> >have cut the tape off plugs which I have done ten or more years
> >> >previously to find them as dry as the day I put them together. On
> >top
> >> >of the self amalgamating tape, I use the normal electrical tape to
> >give
> >> >the birds something to peck at before they reach the self
> >amalgamating
> >> >tape (bloody cockies can be ferocious with antennas and coaxial
cable
> >> >here).
> >> >I believe that the only way that coax is going to become water
> >effected
> >> >is if it directly exposed to water (i.e. rain), and once you have
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> >> >the connector on the end of the cable, screwed it into the antenna
> >and

> >> >taped it up, the chances of water getting into it are very remote
> >(bar
> >> >the outer layer being cracked, cut or abraded). In my opinion,
> >> >pressurising the cable is not something that is needed for the
> >average
> >> >hobbyist.
> >> >
> >>
> >> It only took one lightening strike to change my mind about
> >> waterproofing 9913.
> >>
> >> I used coax seal and taped over that. The tower took a hit that
> >> removed every single bit of tape and coax seal from up there. I
found
> >> the coax seal on the ground. It looked like some one had cut down
one
> >> side and peeled it off. Then cut it so it looked like one of those
> >> pieces of expanded metal. It even removed the silver plating from
the
> >> connectors.
> >>
> >> 15 minutes after the lightening strike I had water running out of
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> >> 2-meter rig.
> >>
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> >>
> >> Roger Halstead (K8RI & ARRL life member)
> >> (N833R, S# CD-2 Worlds oldest Debonair?)
> >> www.rogerhalstead.com
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> >> >
> >> >
> >> >Matt
> >> >
> >> >Dave Woolf <NOSPAMdwoolf@worldnet.att.net> wrote in message
> >> >news:3FF239DC.8000603@worldnet.att.net...
> >> >>
> >> >> Just wonder what other's might do to keep moisture
> >> >> from getting into the semi-hollow 9913 type low
> >> >> loss coax. It would seem inevitiable with changes
> >> >> in temperature and pressure that moist air would
> >> >> eventually work its way into the coax and then
> >> >> condense.
> >> >>
> >> >> I had a fellow ham that took the precaution of
> >> >> pressurizing this type of coax to maintain
> >> >> positive pressure and keep out outside air.
> >> >> Seemed like a lot of effort but maybe it is necessary.
> >> >>

> >> >> I have tried to seal the ends of the coax with silicone
> >> >> sealant but I am not really sure that this has been
> >> >> effective in the long term.
> >> >>
> >> >> What do others do? What has been your experience?
> >> >>
> >> >> Dave - K8RSP
> >> >> (to reply to me directly remove NOSPAM from above
> >> >> address)
> >> >>
> >> >
> >>
> >
>

6573. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 12:56:20 UTC
From: fractenna@aol.com
Message-ID: <20031231075620.29591.00001443@mb-m02.aol.com>
Source record: 102539

Hi Richard--

Well, am looking for S&F:-)! (Obviously have other books mentioned BTW). If anyone else is looking for/found a copy let me know. So far, nothing. It is a very obscure book to this generation.

E-mail me if you still need LaPort.

73 and best to all in 2004,
Chip N1IR

6574. 6.0 ft offset antenna design wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 13:38:58 UTC
From: ophillips@yahoo.com
Message-ID: <81090f5d.0312310538.d7a0540@posting.google.com>
Source record: 102540

I intend to construct a 6 or 8ft offset dish and need some design
information, can someone point me to such. I have looked around but
havent found anything that gives me enough details.
Thanks.
Orville.

6575. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 13:57:42 UTC
From: tdonaly@aol.com
Message-ID: <20031231085742.16180.00001375@mb-m22.aol.com>
Source record: 102541

Chip wrote,
>
>Hi Richard--
>
>Well, am looking for S&F:-)! (Obviously have other books mentioned BTW). If
>anyone else is looking for/found a copy let me know. So far, nothing. It is a
>very obscure book to this generation.
>
>E-mail me if you still need LaPort.
>
>73 and best to all in 2004,
>Chip N1IR
>

Hi Chip,
try aol.alibris.com. The price is a shocker, though: $360.00.
Why is this book so expensive?
73,
Tom Donaly, KA6RUH

6576. Re: opinions of GAP Voyager

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 15:01:02 UTC
From: Keyboard In The Wilderness <KIYW@zilch.net>
Message-ID: <OwBIb.43027$m83.9984@fed1read01>
Source record: 102542

Fourteen opinions of the GAP Voyager at URL:

http://www.eham.net/reviews/detail/127
--
73 From The Wilderness Keyboard

"Fjx1" <fjx1@aol.comnospam> wrote in message
news:20031230232653.21935.00001071@mb-m26.aol.com...
> Can't run wires for 80 or 160. Any opinions on Gap Voyager?
>
> 73
>
> fjx1@aol.com

6577. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 15:11:27 UTC
From: fractenna@aol.com
Message-ID: <20031231101127.15401.00002311@mb-m03.aol.com>
Source record: 102543

Thanks Tom,

Because only old fogies like me know its worth something;-)

I will check it out and thanks again.

73,
Chip N1IR

6578. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 15:20:32 UTC
From: Ron <ron@home.local>
Message-ID: <pan.2003.12.31.15.23.01.781234@home.local>
Source record: 102544
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

On Wed, 31 Dec 2003 02:51:26 +0000, Dave Woolf wrote:

> Just wonder what other's might do to keep moisture from getting into the
> semi-hollow 9913 type low loss coax. It would seem inevitiable with
> changes in temperature and pressure that moist air would eventually work
> its way into the coax and then condense.
>
> I had a fellow ham that took the precaution of pressurizing this type of
> coax to maintain positive pressure and keep out outside air. Seemed like
> a lot of effort but maybe it is necessary.
>
> I have tried to seal the ends of the coax with silicone sealant but I am
> not really sure that this has been effective in the long term.
>
> What do others do? What has been your experience?
>
> Dave - K8RSP
> (to reply to me directly remove NOSPAM from above address)

Butyl rubber based self amalgamating tape, Electrical Tape, Top Coat, I use a coat of UV Stabilized clear Spray paint Tape:
http://www.surplussales.com/Antennas/Antennas-7.html

Over the years I have cleaned up a lot of messes where they connectors were not sealed properly. I have taken apart my connections to replace Damaged antennas and the connections are dry as a bone. after 10 years of more in the air.

IMHO: Take a close look at Times Microwave cables, I think it's a better products than the equivalent Beldon.

Ron

6579. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 15:29:36 UTC
From: Ron <ron@home.local>
Message-ID: <pan.2003.12.31.15.32.11.646972@home.local>
Source record: 102545

On Thu, 18 Dec 2003 07:29:39 +0000, William F. Hagen wrote:

> an antenna has an impedence at the frequency it is being used at, and an
> impedence at its resonant frequency. If either of these impedences
> happen to be 50 ohms and the coax being used is 50 ohms, and the
> transciever is working at 50 ohms, then the swr is 1:1, and the swr is
> on the transmission line, not on the antenna.
>
> The antenna does not have to have an impedence of 50 ohms at either the
> frequency being used at or at its resonant frequency, and these two
> freqeuncies could be the same, and the transmission line does not have
> to be at 50 ohms, and for that matter neither does the transciever. If
> any one of these is mismatched, then the swr is not 1:1.
> An impedence transformer at the antenna-transmission line junction will
> transform a mismatch so there is no reflection on the transmission line,
> amd if this impedence is the same as that of the transmitter, then the
> swr is 1:1, if the impedence is not the same, then the swr is not 1:1
> unless it is also transformed at the transmitter, and again the swr
> would be 1:1 on the transmission line, which is where the swr is, it
> is not on the antenna.

I was going to say something similar. a 1:1 SWR means that the Load
matches the Transmission line. It says nothing about the condition of the
antenna. Most antennas have a matching system or "Tunner" built into
them, like a Gama Match for example, to transform their Impedance back to
the standard 50ohm coaxial transmission line.

Ron

6580. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 15:39:26 UTC
From: fractenna@aol.com
Message-ID: <20031231103926.15401.00002312@mb-m03.aol.com>
Source record: 102546

Thanks again Tom;

Thread now closed:-)

73,
Chip N1IR

6581. Re: Max Signal gain from my antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 16:43:32 UTC
From: John Quinn <john.quinn@comcast.net>
Message-ID: <osu5vv0setukrfajqtuts73tv8vf3is669@4ax.com>
Source record: 102547

What would be a recommended height in an urban area? I'm in a residential area, there aren't such things as large buildings, but stuff like a two story house next door to my single floor home. I don't want to get it too high and attract the attention of the City Orindance Police.

On Tue, 30 Dec 2003 19:41:04 -0500, "J. McLaughlin" <JCM@Power-Net.Net> wrote:

>Dear John:
> A wire antenna for short-wave (HF) that is ten feet above ground is
>likely not to have strong directional preferences. In other words, the
>orientation of the wire antenna is unlikely to make any significant
>difference in your reception. However, if in an urban environment, some
>orientations are likely to pick up more locally generated noise than
>other orientations.
> Experimentation is called for. More height is desirable. 73 Mac
>N8TT

6582. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 16:54:00 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff2ffaa$1_6@corp.newsgroups.com>
Source record: 102548

Dale and Nancy Chidester wrote:
> Ken,
>
> Think helical. Several years ago I made a 40 meter J-pole using twin lead.
> Wound it around 10 ft. of 1" PVC pipe. Worked well for field day, signal
> strengths comparable to those from a full sized dipole... but with the
> advantage of being omni-directional.

Hmmmmm, 6 dBi omni-directional gain - quite impressive - usually
requires a phased array.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6583. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 17:06:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsuvmamnl1@titan.btinternet.com>
Source record: 102549

When the so-called SWR meter is located immediately at the output the transmitter, or inside it, as it usually is -

THE METER TELLS YOU NOTHING ABOUT THE SWR ON THE TRANSMISSION LINE TO THE ANTENNA.

It only indicates WHETHER or NOT the load on the transmitter has a particular value, usually a nominal 50 ohms. And nothing more.

In all other respects, SWR meters and the corresponding reflected power meters, are a hoax, a scam, a swindle. It's time they were, or at the very least their name, consigned to oblivion.

Call out the riot police!

Reg, G4FGQ

6584. Do you recognize yourself ?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 17:17:37 UTC
From: Stef <vee_ee_too_oh_doubleyou_ell@rac.ca>
Message-ID: <r906vvk9q09k6npsf0idbl01jav813uudt@4ax.com>
Source record: 102551

How many addicts of the internet forums is it necessary to change an electric light bulb?

1 to change the light bulb and write to say that the light bulb in has been changed.
14 to say that they also changed a light bulb one day and to evoke the various manners to make it.
7 to warn dangers to change a light bulb.
27 to indicate the spelling mistakes in messages concerning the change of an electric light bulb.
53 to abuse the correcters of spelling mistakes.
41 to correct those who abuse the correcters of spelling mistakes.
6 to discuss that it is necessary to say " electric light bulb " or "lamp".
6 to consider the 6 precedents of clamped by the bottom.
2 professionals of the industry to say that the correct term is "incadescent light bulb".
15 know-it-all who pretend to have been in the industry and that to say " electric light bulb " is perfectly correct.
109 to indicate that this forum does not concern the electric light bulbs and that, please, to discuss that on the forum " electric light bulbs ".
111 to defend the subject because everybody uses an electric light bulb thus the aforementioned subject has its place here.
306 to discuss to know the best technique to change
a light bulb, where to buy the best electric light bulbs, which brand is the best adapted to this technique and which it is necessary to avoid.
27 to send url where we can discover the various electric light bulbs.
40 to say that they do not trust in an electric light bulb and who give links for pseudo-scientific sites which claim to know alternative solutions to produce some light.
12 to indicate that the right for the light is not in the constitution.
1 army retiree who used to be in a special elite group changing light bulbs very efficiently.
12 more to agree that they don't make lght bulbs as they used to be.
1 to send the photo of an electric light bulb and other one of a type which looks like an electric light bulb.
14 to indicate that the indicated url contains errors and send the maids.
1 to say that he replaced his light bulbs by fluorescent lamps and that, he rarely changes his electric light bulbs.
12 to say that they drop the forum because they understand nothing in

the debate concerning the electric light bulbs.
4 to say that is needed a FAQ concerning the electric light bulbs.
44 to ask for what is a "FAQ".
13 to say that in any well held house, there should be candles somewhere, in case a light bulb would roast.
5 to say that they do not use electric light bulbs, only candles.
4 to ask " didn't we already talked of that here not such a long time ago? "
143 to advise to make a search about the electric light bulbs with Google before launching a discussion concerning the electric light bulbs.
1 bastard to answer the first message 6 months later and relaunch everything

6585. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 17:25:54 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <_ZudnenLCrA3m26i4p2dnA@crocker.com>
Source record: 102550

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:bsuvmamnl1@titan.btinternet.com...
>
> When the so-called SWR meter is located immediately at the output the
> transmitter, or inside it, as it usually is -
>
> THE METER TELLS YOU NOTHING ABOUT THE SWR ON THE TRANSMISSION LINE TO THE
> ANTENNA.
>
> It only indicates WHETHER or NOT the load on the transmitter has a
> particular value, usually a nominal 50 ohms. And nothing more.
>
> In all other respects, SWR meters and the corresponding reflected power
> meters, are a hoax, a scam, a swindle. It's time they were, or at the
very
> least their name, consigned to oblivion.
>
>
> Call out the riot police!
> ----
> Reg, G4FGQ
>
>
give up reg, while you may be convinced that swr meters don't measure swr...
the name is deeply embedded in the culture and won't go away. and while
maybe they aren't exactly measuring what you would like them to given the
name, they do provide useful indications... and that is the best thing about
them, they provide an indication that can be used for really using your
station. they may not be accurate, they may not be good for detailed system
engineering, they may not measure what you think they should, but they are
useful to the everyday ham... and after all that is what most of us reading
this group are.

6586. horzloopant/Belton ham?????????

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 17:35:30 UTC
From: lorentzsonci@lycos.com
Message-ID: <q626vvsavo315a3du512v28iq8uptcl13e@4ax.com>
Source record: 102552

I am looking for a ham operator, that I bought a two meter horz
groundplane bigwheel antenna from several years ago, at Belton
Texas. He built both two/440mhz antennas. I 'think' he lived in Dallas
and just came down to Belton for the hamfest. Would like to get back in
touch,if possible, to purchase another two meter, like the one I have.
thanks in advance. 73
"remove 'z' from email address

6587. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 18:30:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m556vvcv519kd4lnmt6rb2ves8uvsfki98@4ax.com>
Source record: 102553

On Tue, 30 Dec 2003 18:52:47 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Can anyone provide a circuit diagram
>for a 3 -phase SWR/Forward & Reflected Power meter. Thanks in advance.
>----
>Reg.

On Wed, 31 Dec 2003 17:06:18 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:
>SWR meters and the corresponding reflected power
>meters, are a hoax, a scam, a swindle.

Ah Punchinello,

In the space of less than 24 hours and we find you on both sides of
the argument ringing in the new year. Thus was it ever.... :-)

Would you like to super-size your Friis?

73's
Richard Clark, KB7QHC

6588. Re: opinions of GAP Voyager

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 18:54:05 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <hXEIb.17234$IM3.2871@newsread3.news.atl.earthlink.net>
Source record: 102554

It works vfb on 80 and 40. Totally sucks on 20 and not much better on 160.
Its a one call dx antenna on 80/40 so that compensates somewhat.

Got one lying on the ground. One day I'll get it up again.

Dan/W4NTI

"Keyboard In The Wilderness" <KIYW@zilch.net> wrote in message
news:OwBIb.43027$m83.9984@fed1read01...
> Fourteen opinions of the GAP Voyager at URL:
>
> http://www.eham.net/reviews/detail/127
> --
> 73 From The Wilderness Keyboard
>
> "Fjx1" <fjx1@aol.comnospam> wrote in message
> news:20031230232653.21935.00001071@mb-m26.aol.com...
> > Can't run wires for 80 or 160. Any opinions on Gap Voyager?
> >
> > 73
> >
> > fjx1@aol.com
>
>

6589. Re: Calculating Coaxial Cable Loss

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 19:31:40 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <GL-dnUGVV425uW6i4p2dnA@crocker.com>
Source record: 102556

"Michael Melland" <w9wis@charter.net> wrote in message
news:vv68bllbrj18d0@corp.supernews.com...
> If a cable, any cable ..... for argument sake... say Andrew LDF2-50... has
a
> specified loss at.... say 1000 MHz.... of 3.52 dB in 100 ft... is there a
> way to calculate what the loss would be in different lengths ? Say for 50
> feet ?
>
> The cable above is an example.... but is there a rule for calculating loss
> for cables of any kind under 100 feet ? Would loss at 50 feet be exactly
> 1/2 of that at 1000 feet ?
>

for a 1:1 swr the loss is a linear function of length. so the loss at 50'
would be 1/2 that at 100' (not 1000' as you typed above!). if the swr is
greater than 1:1 its not so straight forward.

oh, just fair warning... questions like this often attract nit-picky trolls
who will turn this thread into a never ending discussion of why swr isn't,
and how lossy cables change the world... ignore them for your own sanity.

6590. Re: 160m J-pole?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 20:28:15 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FF3315F.7C9DDD06@cwis.net>
Source record: 102557

William,
As long as the FAA and NASA don't object, and you have the
money
to pay for it, there is no maximum height for amateur antennas.
There is a practical one, though. Who would you get to climb it
to
change the lights when they burned out?
'Doc

6591. Incoming radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 20:33:11 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0312311233.16937c69@posting.google.com>
Source record: 102558

Looking for a site or information on incoming
radiation angles specifically for 160 metres.

1 How is it measured ?
1a Can it discriminate between vertical and horizontal
or what ever polarisation

2 What is the angles per percentage of contacts

3 Are they all horizontally polarised when subject to skip?
for distances over say 1000 miles distance

One well known DXer (Tom) stated on this
newsgroup that a horizontal dipole at 1/2 wave
length was inferior to his other antennas, but
no specifics given!

Appreciate any pointers on the above.
Happy New Year
Art

6592. Re: Feeding a doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 20:38:54 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <3FF333DE.FC22B988@cwis.net>
Source record: 102559

Adrian,
It really isn't going to make all that much difference.
Run the feed line as best you can, see what the 'problems'
are and then try to minimize them. Needless to say, at 20
feet height, on 80 meters, how you run the feed line isn't
one of the 'biggies' to worry about. That's not to say that
you shouldn't do it as 'correctly' as possible, just don't
loose a lot of sleep over it.
'Doc

6593. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:09:42 UTC
From: richardharrison@webtv.net
Message-ID: <18035-3FF33B16-99@storefull-2312.public.lawson.webtv.net>
Source record: 102560

Reg, G4FGQ wrote:
"Call out the riot police!"

And a riotous new year to you too!

An SWR meter is a built-in or external circuit which measures the standing-wave-ratio at the transciever end of the feedline. Actually it measures the degree of mismatch which causes SWR.

SWR = R/Zo or Zo/R, as required for a quotient>1.

At the junction of a uniform feedline and a mismatched antenna load, the reflection coefficient is a vector ratio between the electric fields associated with the reflected and incident waves. The magnitude of Rho, the reflection coefficient, is related to VSWR by:

Rho = VSWR - 1 / VSWR + 1

So, mismatch produces reflection, the magnitude of which depends on how great the mismatch. The reflected wave traveling back toward the source of the incident wave makes a standing-wave-pattern. SWR is the ratio of the maximum of voltage (or current) along the line if the line is long enough. If not, an SWR may be inferred from the forward and reflected powers for practical purposes.

The built-in or external meter that indicates severity of mismatch, is usually labeled "SWR" because the determination was traditionally made by sensing the sum of forward and reverse fields, either electric or magnetic, along the transmission line. The ratio of maximum to minimum is SWR.

The meter could have been called a "mismatch meter", but that won`t happen. "SWR meter" is ingrained.

"Water Tank" was a code name given the military vehicle by its British developers during WW-1 to maintain secrecy. After they were fielded, attempts were made to no avail to call the vehicles "assault carriages" or "combat cars". "Tank" is the name now and forever. Same with "SWR meter".

Best regards, Richard Harrison, KB5WZI

6594. Calculating Coaxial Cable Loss

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:20:38 UTC
From: Michael Melland <w9wis@charter.net>
Message-ID: <vv68bllbrj18d0@corp.supernews.com>
Source record: 102555

If a cable, any cable ..... for argument sake... say Andrew LDF2-50... has a specified loss at.... say 1000 MHz.... of 3.52 dB in 100 ft... is there a way to calculate what the loss would be in different lengths ? Say for 50 feet ?

The cable above is an example.... but is there a rule for calculating loss for cables of any kind under 100 feet ? Would loss at 50 feet be exactly 1/2 of that at 1000 feet ?

--
Michael Melland, W9WIS
Winneconne, WI USA
http://webpages.charter.net/w9wis

6595. How do aluminum pipe sizes work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:28:17 UTC
From: mmelendez@celeridad.net
Message-ID: <6298a68d.0312311328.105e0d1c@posting.google.com>
Source record: 102561

Anyone know how aluminum pipe sizes work? Is there some kind of industry standard that manufacturers follow and you can look up (for finding wall thickness, telecoping lengths, etc)?

I've seen a couple of tables with specifications, however those seem to always jump from 1/2" to 3/4" to 1"... at my local hardware store I can get the 1/8"'s sizes in between (3/8, 5/8, 7/8, etc) which has me confused. Are those 1/8" based sizes standard, or some kind of non standard product?

6596. Re: Incoming radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:36:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bnf6vv4jrlftbmg63vkojj6q4nhlhkmis4@4ax.com>
Source record: 102562

On 31 Dec 2003 12:33:11 -0800, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Looking for a site or information on incoming
>radiation angles specifically for 160 metres.

0ï¿½ with respect to the horizon.

>
> 1 How is it measured ?

You could use a spirit level.

> 1a Can it discriminate between vertical and horizontal
>or what ever polarisation

Spirit levels usually only work one way, for an angle relative to
tangential to earth's surface.
>
> 2 What is the angles per percentage of contacts

Vertical/useful

Conduct your own poll. How many remote BCB's can you copy for each?
>
> 3 Are they all horizontally polarised when subject to skip?
> for distances over say 1000 miles distance

160M skip? Perform poll above.

>
> One well known DXer (Tom) stated on this
>newsgroup that a horizontal dipole at 1/2 wave
>length was inferior to his other antennas, but
>no specifics given!

He was being generous.
>
>Appreciate any pointers on the above.

Think local, act global.

>Happy New Year
>Art

73's & Season's Groanings,
Richard Clark, KB7QHC

6597. Re: Keeping moisture out of 9913 type coax?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:47:37 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <qpHIb.14758$WQ3.6287@lakeread05>
Source record: 102563
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf,rec.radio.amateur.space

"Ron" <ron@home.local> wrote in message
news:pan.2003.12.31.15.23.01.781234@home.local...
> On Wed, 31 Dec 2003 02:51:26 +0000, Dave Woolf wrote:
>
>
> > Just wonder what other's might do to keep moisture from getting into the
> > semi-hollow 9913 type low loss coax. It would seem inevitiable with
> > changes in temperature and pressure that moist air would eventually work
> > its way into the coax and then condense.
> >
>

I'd think it makes sense to seal the top, but let the connectors at the
bottom
breath, that would alleviate moisture ladden air from being drawn in at
the top. Especially during rain storms! Another idea would be having the
top sealed, and the bottom allowed to breathe through a plastic jar of
desiccant.

Pete

6598. Re: Is it possible to have a 1:1 SWR?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 21:54:08 UTC
From: Cecil Moore <Cecil.A.Moore@ieee.ONEDOT.org>
Message-ID: <3ff34608_7@corp.newsgroups.com>
Source record: 102564

Reg Edwards wrote:
> THE METER TELLS YOU NOTHING ABOUT THE SWR ON THE TRANSMISSION LINE TO THE
> ANTENNA.

Minimum 50 ohm SWR occurs at a current maximum point on my ladder-line.
Given that the current maximum point is purely resistive and knowing
the 50 ohm SWR allows me to calculate the only two possibilities for
the SWR on the ladder-line. Knowing the approximate feedpoint impedance
for my antenna and the exact length of the ladder-line allows me to
select which of the two SWRs is the valid one. In other words, knowing
the 50 ohm SWR allows me to estimate, with good accuracy, the SWR on
the ladder-line. These estimates agree closely with actual ladder-line
SWR measurements. Moral: In a previously characterized antenna system,
the SWR meter tells you virtually everything about the SWR on the
transmission line.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

6599. Re: How do aluminum pipe sizes work?

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:31:22 UTC
From: David Robbins <noone@nowhere.com>
Message-ID: <gcydnWyxc_ne026iRVn-sQ@crocker.com>
Source record: 102565

"Q" <mmelendez@celeridad.net> wrote in message
news:6298a68d.0312311328.105e0d1c@posting.google.com...
> Anyone know how aluminum pipe sizes work? Is there some kind of
> industry standard that manufacturers follow and you can look up (for
> finding wall thickness, telecoping lengths, etc)?
>
> I've seen a couple of tables with specifications, however those seem
> to always jump from 1/2" to 3/4" to 1"... at my local hardware store I
> can get the 1/8"'s sizes in between (3/8, 5/8, 7/8, etc) which has me
> confused. Are those 1/8" based sizes standard, or some kind of non
> standard product?

first a nit... most of what you see is aluminum tubing not pipe... a minor but very important point. pipe is usually specified by the inside diameter and a 'schedule' number that determines how thick the wall is. it is usually not rated for structural strength. tubing is described by outside diameter and wall thickness. it is usually rated for structural use and is available in a much wider variety of sizes and materials.

now, as for sizes that are available. that will depend on the manufacturer. if you look at a typical supplier like texas towers http://www.texastowers.com/aluminum.htm you will see sizes in 1/8" increments with .058" wall thicknes. this combination makes for nicely telescoping sections for building antennas.

beware of hardware store aluminum. unless they are a very good store the stuff they sell is probably relatively soft and weak, mostly good for tent poles and stuff like that. for antennas you want to get something like 6061-t6 or 6063-t832 materials that are basically aircraft quality material.

6600. Lil Wil 36 inch 11 meter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:36:00 UTC
From: nightowls627@aol.comnojunk
Message-ID: <20031231173600.08176.00001839@mb-m16.aol.com>
Source record: 102566

I have a htx 10 and have limited funds. I bought a lil wil and tried to do swr but could not get lower than 1.7:1. I think I have cut the antenna too short. Can I replace it with the same diameter stainless steel piece from a hardware store and cut it to 36" I have left something out. After trying to adjust a little lower in swr, my meter just kept reading >3.0. That is why I think I cut it too short. I should have left it at 1.7!

Thanks

73
Greg
ki4bbl@arrl.net

6601. Re: Book wanted: Schelkunoff and Friis

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:45:23 UTC
From: tdonaly@aol.com
Message-ID: <20031231174523.12223.00002400@mb-m05.aol.com>
Source record: 102567

Chip wrote,
>
>Thanks Tom,
>
>Because only old fogies like me know its worth something;-)
>
>I will check it out and thanks again.
>
>73,
>Chip N1IR
>

Hi Chip,
Well, it's not a Gutenburg bible, but evidently there are
people who collect old antenna books. Good luck.
73,
Tom Donaly

6602. Re: Feeding a doublet

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:48:05 UTC
From: Adrian <adrian@ambquality.co.uk>
Message-ID: <e7k6vvo03rscmk1t6sa38hgph87ck9gn1s@4ax.com>
Source record: 102569

HI Doc / Dan

>
>
>Adrian,
> It really isn't going to make all that much difference.
>Run the feed line as best you can, see what the 'problems'
>are and then try to minimize them. Needless to say, at 20
>feet height, on 80 meters, how you run the feed line isn't
>one of the 'biggies' to worry about. That's not to say that
>you shouldn't do it as 'correctly' as possible, just don't
>loose a lot of sleep over it.

Thanks for the comments.
I know that 20ft is a bit on the 'low' side - but the poles are going to be close to the skyline, and there are people about the area who might well object if the poles grew any taller.....

I had another thought today. There's a nice wooden fence surrounding this piece of land - I could probably string about 500 - 600 ft of wire around this in a big loop, and feed it with the open-wire feeder.

OK - so it would only be about 4ft off the ground - but it might possibly work ....? I might try this approach first (before 'planting' the other two 20ft poles.....

..... but not tonight - it's dark, close on freezing, and there's a force 5 gale coming down over the paddock

Thanks again & Happy New Year

Adrian
Suffolk UK

6603. Re: Incoming radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:53:06 UTC
From: "M. J. Powell" <mike@pickmere.demon.co.uk>
Message-ID: <PEAY4rwSN18$EwVR@pickmere.demon.co.uk>
Source record: 102570

In message <85ed38d.0312311233.16937c69@posting.google.com>, Art Unwin KB9MZ <aunwin@insightbb.com> writes
>Looking for a site or information on incoming
>radiation angles specifically for 160 metres.
>
> 1 How is it measured ?

The same way it was measured in the 20's for B/C reception. Two separated antennas at different heights feeding an oscilloscope to produce an ellipse. The phase difference between the antennas allows the angle to be calculated.

Mike

--
M.J.Powell

6604. Re: Calculating Coaxial Cable Loss

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 22:58:10 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <bsvk9p$1tru4$1@ID-175933.news.uni-berlin.de>
Source record: 102568

Bravo and kudos to Mr. Robbins for his comments below.

To elaborate, the equation to calculate the loss in a specific length of coax when its loss per 100' is known for a given frequency is:

Loss in decibels = (published loss per 100 feet) (decimal number of hundreds of feet in the system)

When the total loss of the coax in decibels is known...

Coax system efficiency = 1/10^(loss, total/10)

These equations are based on 1:1 SWR within the coax, and its terminations. While this is not likely in the real world, nevertheless it is the basis upon which the FCC sets and licenses the operating powers of AM, FM & TV broadcast stations in the US.

RF

Visit http://rfry.org for FM broadcast RF system papers.

"David Robbins" <noone@nowhere.com> wrote in message news:GL-dnUGVV425uW6i4p2dnA@crocker.com...
>
> "Michael Melland" <w9wis@charter.net> wrote in message
> news:vv68bllbrj18d0@corp.supernews.com...
> > If a cable, any cable ..... for argument sake... say Andrew LDF2-50... has
> a
> > specified loss at.... say 1000 MHz.... of 3.52 dB in 100 ft... is there a
> > way to calculate what the loss would be in different lengths ? Say for 50
> > feet ?
> >
> > The cable above is an example.... but is there a rule for calculating loss
> > for cables of any kind under 100 feet ? Would loss at 50 feet be exactly
> > 1/2 of that at 1000 feet ?
> >
>
> for a 1:1 swr the loss is a linear function of length. so the loss at 50'
> would be 1/2 that at 100' (not 1000' as you typed above!). if the swr is
> greater than 1:1 its not so straight forward.

>
> oh, just fair warning... questions like this often attract nit-picky
trolls
> who will turn this thread into a never ending discussion of why swr isn't,
> and how lossy cables change the world... ignore them for your own sanity.
>
>

6605. Re: Incoming radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 23:50:30 UTC
From: richardharrison@webtv.net
Message-ID: <23846-3FF360C6-238@storefull-2316.public.lawson.webtv.net>
Source record: 102572

Art, K9MZ wrote:
"---radiation angles specifically for 160 meters.
1. How is it measured?"

In degrees above the horizon. It`s geometrical. The effective height of the reflecting layer above the earth has been observed for a long time and can be predicted with some accuracy, based upon location, time, solar radiation, etc.

The angle of incidence is equal to the angle of reflection to a reference normal to the reflecting plane. So, low angles serve for long distances between stations, and high angles for short distances that are too distant to be reached by the groundwave.

Capt. Paul H. Lee, USNR, K6TS has a chart of degrees above the horizon versus distance to the first reflection zone (a single hop) on page 11 of "Vertical Antenna Handbook", a "CQ" publication. As the height of the latyer is variable, this is an approximation based on probabilities.

A 5/8-wave vertical gives optimum low-angle radiation between 3 and 27 degrees. The latter angle gets you out to about 500 miles. Lower angles get you out to about 2000 miles on one hop.

Vertical antennas work with vertically polarized waves. Once the wave is reflected by the ionosphere, polarization of the reflection is more or less random.

"2. What is the angles per percentage of contacts?"

Depends on where your station is in respect to the majority of stations you want to contact.

"3. Are they all horizontally polarized when subject to skip?"

No. The ionosphere does not care what the wave polarization is. It will reflect whatever strikes it at various polarizations. It won`t maintain polarizations! You can receive via the ionosphere almost equally well, on average, with any polarization regardless of what was transmitted. Noise reception is likely worse using a vertical receiving antenna.

"Tom stated on this newsgroup that a horizontal dipole at 1/2-wavelength was inferior to his other antennas---."

Can`t argue with Tom`s observation about his antennas, but it does not correspond with most observations of horizontal antenna performance when you have a resonant dipole at 1/2-wave above the earth. Look at Fig 12-D on page 3-11 of the 19th edition of the ARRL Antenna Book. Maximum radiation is at 30-degrees above the horizon. From Capt. Lee`s diagram,

that would get you stations as close as 500 miles, and beyond 1000 miles due to the range of strong elevation angles in the pattern.

I don`t know what Ton`s problems are but suspect that he ignores some of the ground effects. He has expressed dissatisfaction with his verticals too.

Vertivcals in particular are sensitive to good earth under and around the antenna.

Horizontal polarization isn`t bad for HF. Most of the world`s HF commercial stations use horizontal antennas for skywave propagation.

Best regards, Richard Harrison, KB5WZI

6606. Re: 3-phase SWR/Power meter.

Newsgroup: rec.radio.amateur.antenna
Date: 2003-12-31 23:55:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <bsvnlu$3k7$1@sparta.btinternet.com>
Source record: 102571

Dear Richard,

Your complete lack of success in searching for technical reasons for objections to my proposals is noted. Your support for the abolition of so-called SWR-meters is appreciated.

Let's make 2004 "The Year of the TLI".

(Readers will understand the problems involved with explaining revolutionary ideas when obliged to use misunderstood, flogged-to-death terminology.)

Reg, G4FGQ

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> >SWR meters and the corresponding reflected power
> >meters, are a hoax, a scam, a swindle.
>
> Ah Punchinello,
>
> In the space of less than 24 hours and we find you on both sides of
> the argument ringing in the new year. Thus was it ever.... :-)
>
> Would you like to super-size your Friis?
>
> 73's
> Richard Clark, KB7QHC